AIPHONE®

Installation Manual

IXG Series

IXG-MK Guard Station / IXG-DM7, IXG-DM7-HIDA, IXG-DM7-10K Video Entrance Station / IXG-DM7-BOX Back Box for Entrance Station / IXGW-LC Lift Control Adaptor / IXGW-GW Gateway Adaptor / IXGW-TGW.E1/E2/E3 Telephone Gateway Adaptor (n : Destination No.)

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/support/software-document/".
- 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.
- IXGW-TGW.E1 is designed and manufactured to be used in the United States and Canada only, IXGW-TGW.E2 is designed and manufactured to be used in the EU and UK only, and IXGW-TGW.E3 is designed and manufactured to be used in Australia and New Zealand only. Please note that Aiphone is not responsible for any consequences from the operation of the products outside their intended countries.
  In this manual, IXGW-TGW.E1, IXGW-TGW.E2, and IXGW-TGW.E3 are referred to collectively as "IXGW-TGW.En." (n : Destination No.)

- 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 product.

Literature information

The important information concerning correct operation and what you should observe is marked with the following symbols.

	Indicates that users may require caution (including warning / caution).
	Alerts users to prohibited actions.
	Restricts user actions / provides instructions.
	Tips and additional information for operation.

Precautions

Warning — Negligence could result in death or serious injury.

Do not disassemble or modify the station.
This may result in fire or electrical shock.

This product is not designed to explosion-proof specifications. Do not install or use in locations that can contain flammable gases.
This may result in fire or explosion.

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

Do not use with a power supply rated above the specified voltage.
This may result in fire or electrical shock.

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

Do not install or connect the station with the power on.
This may result in electrical shock or malfunction.

Make sure the wiring is correct and there are no wiring shorts before switching on the station.
This may result in fire or electrical shock.

Do not install the station in a place subject to frequent vibration or impact.
This may result in injury.

Install in a place where the station will not get easily bumped.
This may result in injury.

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

General Precautions

- Install low-voltage lines at least 30cm (12") away from high-voltage lines (AC100V - 240V), especially inverter air conditioner wiring. This may result in interference or malfunction.
- When installing or using the station, 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.
- Do not install the station in the ceiling or on the floor. Doing so would prevent maintenance inspections and repairs from being carried out. This may result in malfunction.
- Keep the unit more than 1m (3.3') away from radio or TV set.

Notice

- If the station is used in areas where there are business-use wireless devices such as a transceiver or mobile phones, it may cause malfunction.
- If the station 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.
- A human body detection sensor detects temperature changes within the detection range, but it may not detect or the sensitivity may change depending on the ambient temperature and environment.
- Installing this product near dimmers, inverter electrical devices, remote controls for water/floor heaters, or other wireless devices could result in noise or malfunction.
- Wearing gloves may interfere with touch screen operation.
- This UL Listing does not include efficacy, reliability, interoperability, and functionality of equipment associated with life safety technology as covered by UL Marks associated with UL Security and /or Signaling Certification Services.
- If water drops are attached to the LCD display, it may be difficult to react when touched.

Precautions for mounting

- Installing the station in the following locations as is may affect the clarity of the image:
  - Where the device is installed in a dark location and there is light behind the subject
  - Where lights will shine directly into the camera at night time
  - Where direct sunlight is present
- Installing the device in the following locations could cause malfunction:
  - **Locations under direct sunlight**
  - **Locations near heating equipment**
  - **Locations subject to liquid, iron filings, dust, oil, or chemicals**
  - **Locations subject to moisture and humidity extremes**
  - **Locations where the temperature is quite low**
  - **Locations subject to steam or oil smoke**
  - **Sulphurous environments**
  - **Locations close to the sea or directly exposed to sea breeze**
- In 50Hz regions, if a strong fluorescent light enters directly into the camera, it may cause the image to flicker. Either shield the camera from the light or use an inverter fluorescent light.
- If existing wiring is used, the device may not operate properly. In that case, it will be necessary to replace the wiring.
- Do not use an impact driver to fasten screws. Doing so may cause damage to the device.
- IXG-MK, IXGW-LC, IXGW-GW, IXGW-TGW.En is designed for indoor use only. Do not install at outdoor location.
- Observe the following restrictions for installing entrance stations.
  - When cleaning the wall with a high-pressure washing machine, avoid to spray on the entrance station.
  - Do not mount the entrance station so that if faces obliquely upward. Rain water or moisture may penetrate the station and damage the unit.
  - Do not block the bottom of entrance station by caulking.
- Avoid installing the master monitor station in concave space of a wall to prevent disconnection of communication.
- If the LCD display comes into contact with rain, it may not respond when touched or cause false reactions to occur. Please install the unit in an area where it doesn't come in contact with rain.
- For wiring, separate them for audio/video and door release and keep them more than 10cm (3-15/16") away from each other.
- Install the device with at least 20 cm (7-7/8") of space on the top, bottom, left and right sides to prevent malfunctions and dropped calls.
- When using existing wiring, make sure there are no short circuits or broken wires before installing the device.

- HID is a trademark or a registered trademark of HID Global in the United States.
- MIFARE® is a registered trademark of NXP Semiconductors.
- LTE is a registered trademark of the European Telecommunications Standards Institute (ETSI).
- VIGIK is a trademark or registered trademark of the French company La Poste.

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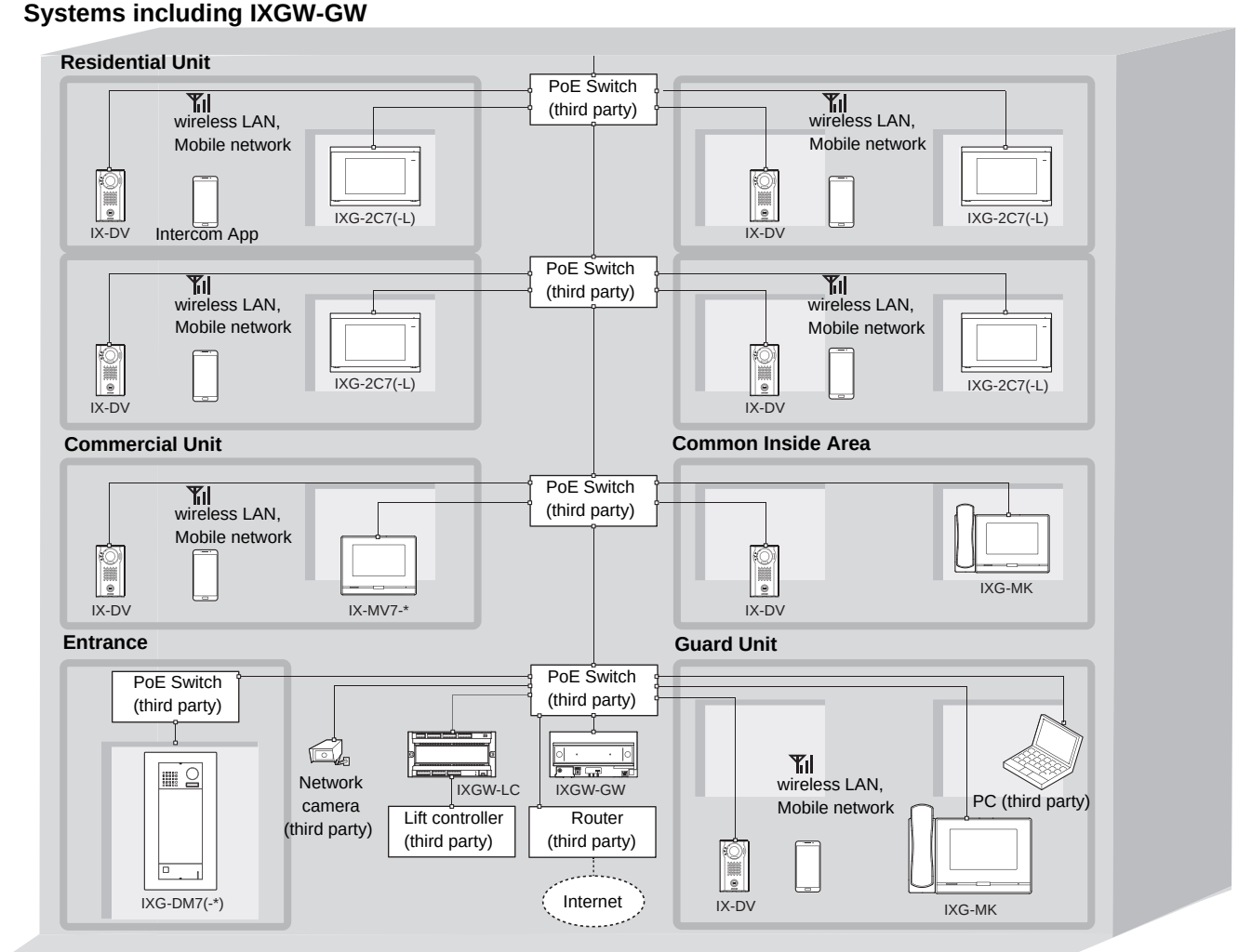
Example of System Configuration

A maximum of 9,999 of the following stations and adaptors can be connected:
IXG-2C7(-L), IXG-DM7(-*), IXG-MK, IX-MV7-*, IXGW-LC, IXGW-GW, IXGW-TGW.En, IX-RS-*, door stations (IX-DA, IX-DB, IX-BA, IX-BB, IX-DV(M), IX-DVF(-*), IX-SS-2G, IX-SSA(-*), IX-EA), IX-SOFT, IXW-MA, VoIP Phone
A maximum of 9,999 units x 8 Intercom App (AIPHONE IXG) can be connected
A maximum of 9,999 phones (devices using phone numbers) can be connected

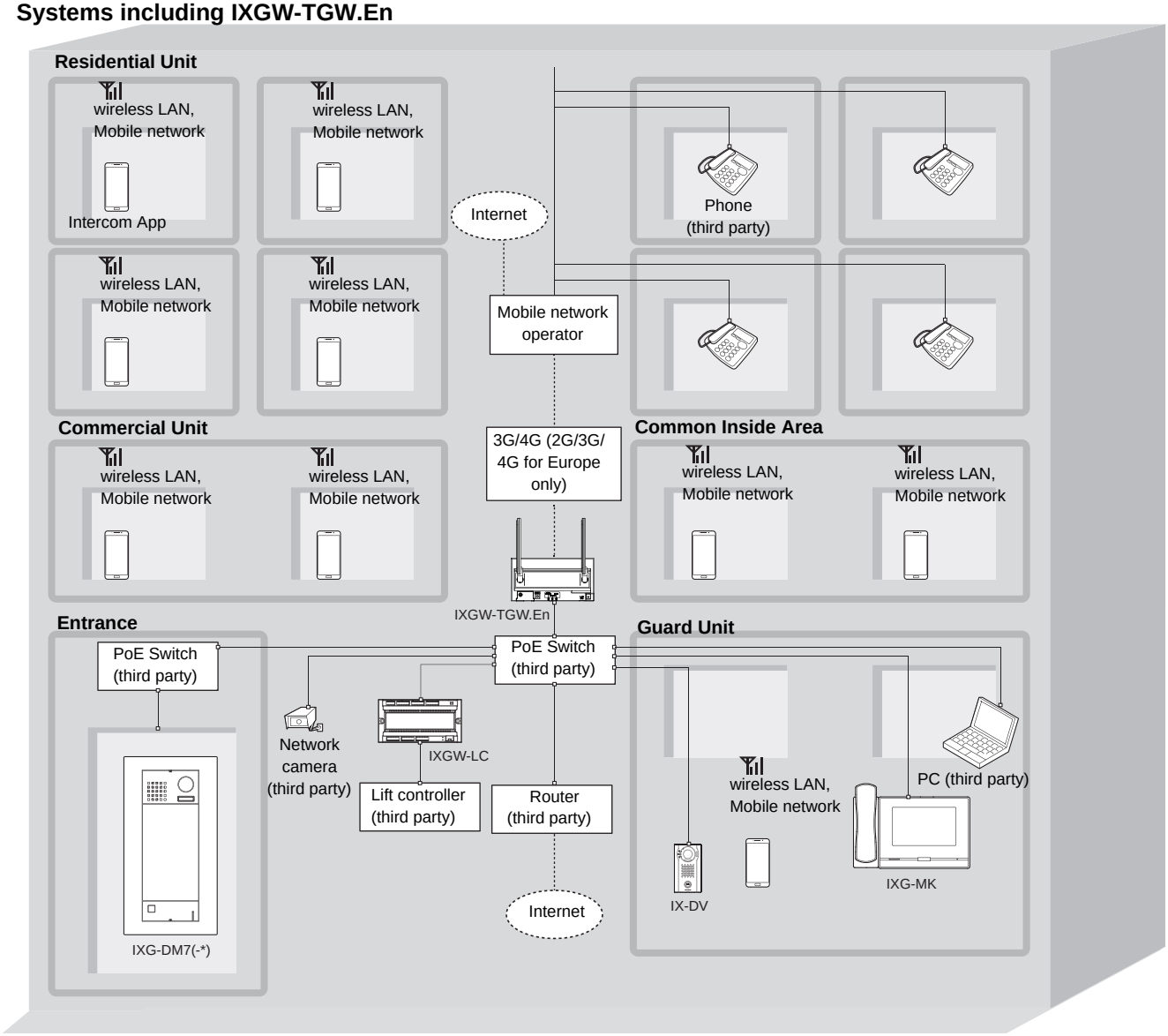
Residential Unit	IXG-2C7(-L) or IX-RS-* (max.8 per unit), Intercom App (max.8 per unit), door station (max.2 per unit), phone (max.1 per unit)
Commercial Unit	IX-MV7-*, IX-RS-*, IX-SOFT, or VoIP Phone (max.8 per unit), Intercom App (max.8 per unit), door station (max.2 per unit), phone (max.1 per unit)
Common Inside Area	IXG-MK, IX-MV7-*, IX-RS-*, IX-SOFT, or VoIP Phone (max.8 per unit), door station (max.2 per unit)
Common Outside Area	Door station (max.10 per unit)
Guard Unit	IXG-MK, IX-RS-*, or VoIP Phone (max.8 per unit), Intercom App (max.8 per unit), door station (max.2 per unit), phone (max.1 per unit)
Entrance	IXG-DM7(-*) (max.10 per unit)
Other	IXGW-LC (max.16 per building), IXGW-GW or IXGW-TGW.En (max.99 per system), IXW-MA (max.500 per system)

■ Example of Standard System

Systems including IXGW-GW

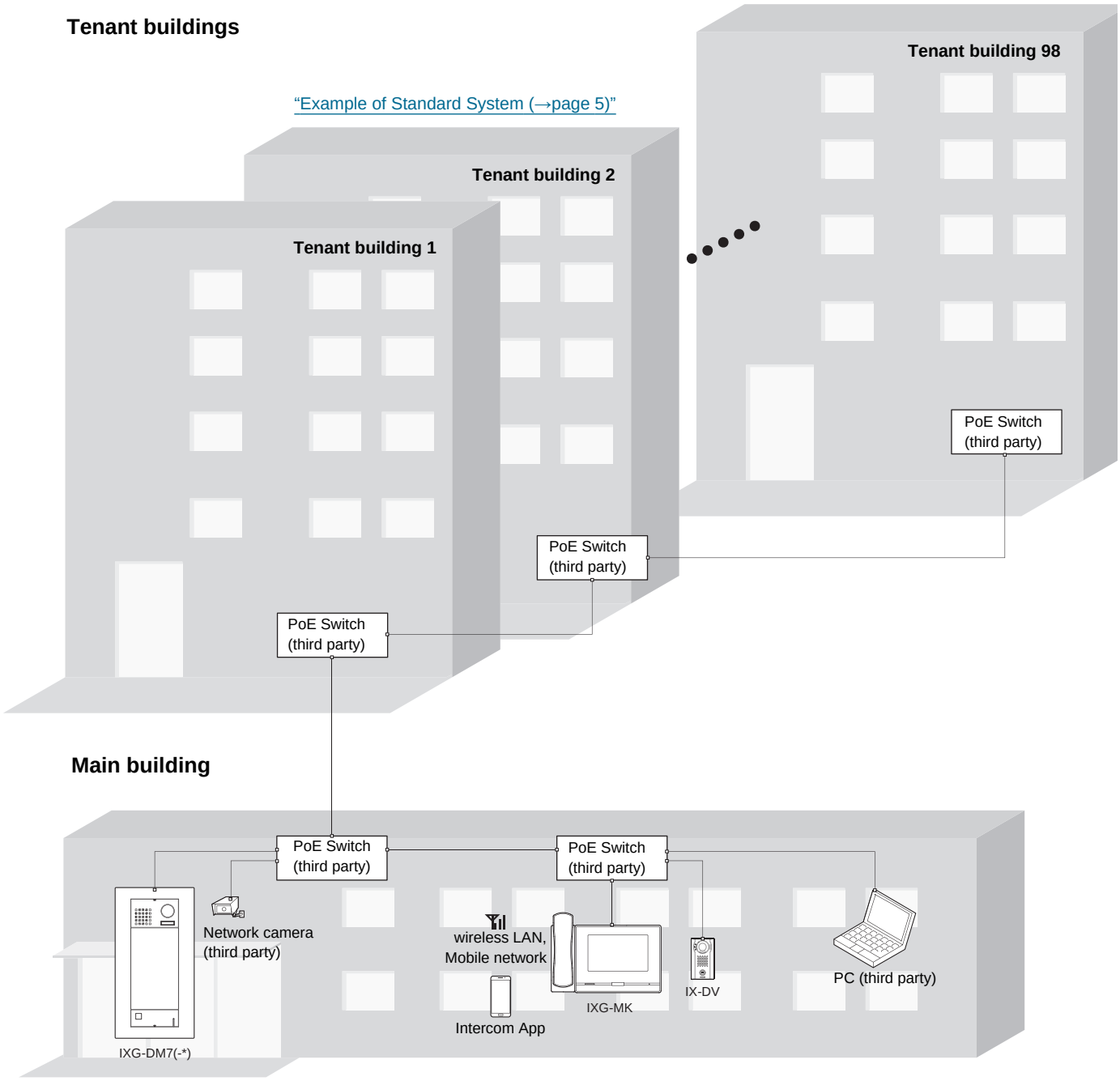


Systems including IXGW-TGW.En



■ Example of Multi-building System

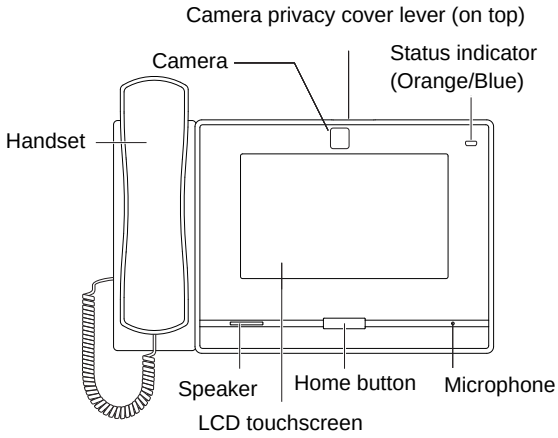
Maximum number of buildings: 99 buildings



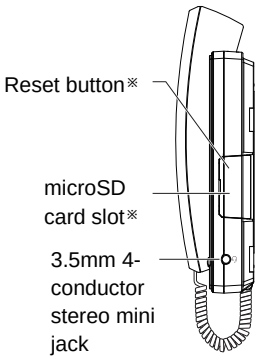
Part Names and Accessories

■ IXG-MK

Front view

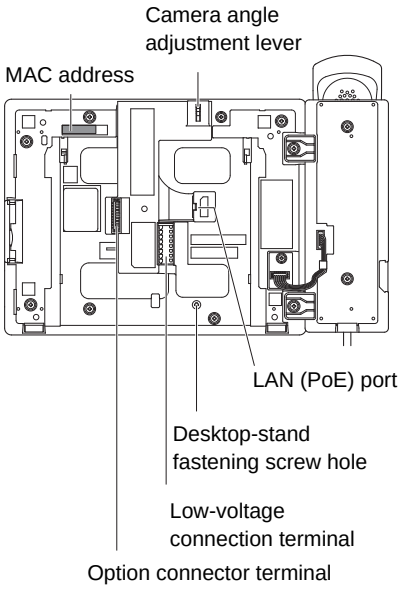


Side view

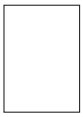
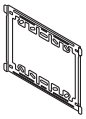


※Accessible when terminal cover is opened

Back view

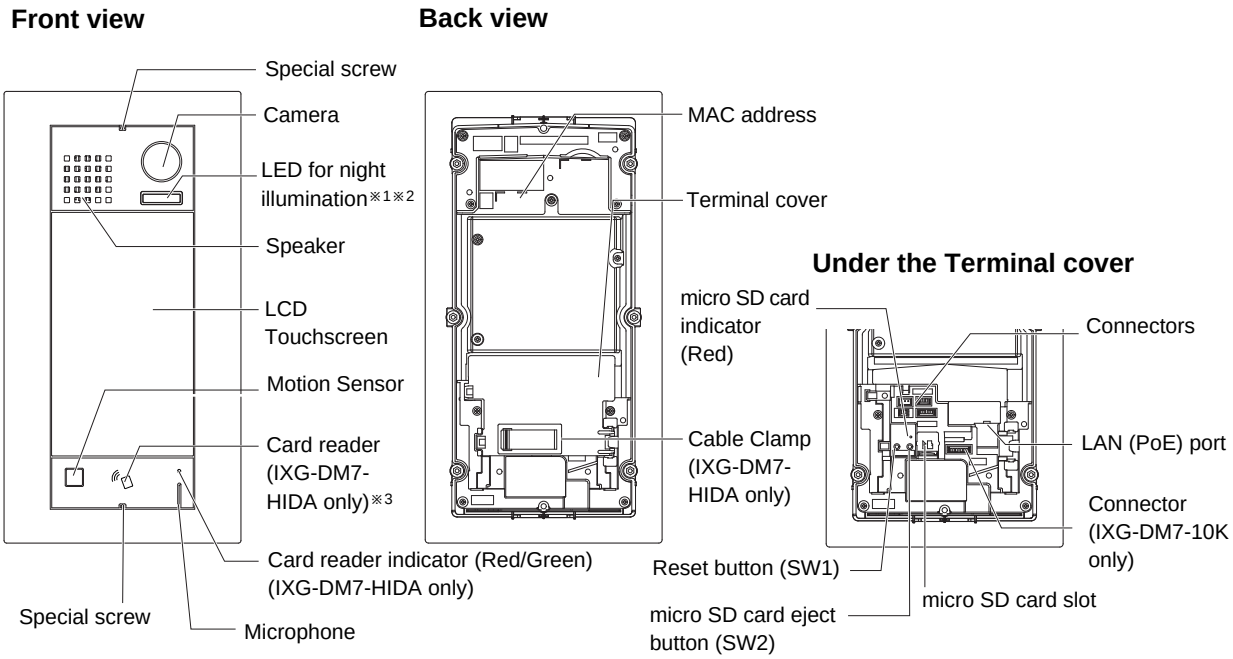


Included accessories

Installation Manual 	Notice	Chinese RoHS declaration	Desktop-stand x 1
Mounting-bracket screws x 4	Mounting bracket x 1 (attached to the station) 	Cable tie x 1	Wall-mounting wood screws x 4
Desktop-stand screws x 4	Option connector x 1	Desktop-stand fastening screw x 1	Contact us

■ IXG-DM7(-*)

Illustrations show the IXG-DM7-HIDA. Installation procedures and connections will vary depending on the model.



※1 Lights when accepting reboot.
※2 Flashes when the terminal starts up or when accepting ID/password initialization.
※3 Compatibility card

Card type	High Frequency (13.56MHz)	HID iCLASS, SEOS, HID iCLASS SR, HID iCLASS SE, HID MIFARE Classic, HID Mifare DES Fire EV1
	Low Frequency (125kHz)	HID Proximity, Indala Proximity
Card format	H10301 (26-bit Wiegand Format) H10302/H10304(37-bit Wiegand Format) 35bit/48bit Corporate 1000	

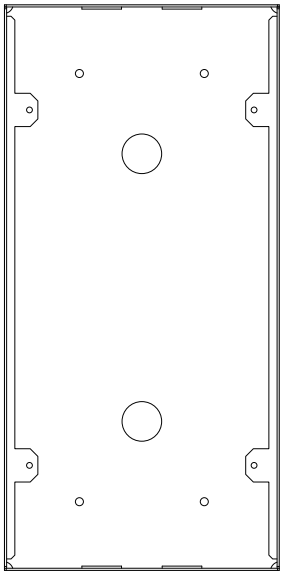
Included accessories

Instlation Manual	Product warranty※1 (for Japanese market)	Notice	Chinese RoHS declaration※1	Option connectors (2pin x 1, 3pin x 2, 5pin x 1, 7/9pin※2 x 1)
Special screwdriver x 1	Mounting-bracket screws x 4	Mounting bracket x 1 ※3	Contact us	

※1 IXG-DM7 only
※2 IXG-DM7-10K only
※3 Magnet bracket & magnet (IXG-DM7-HIDA only)

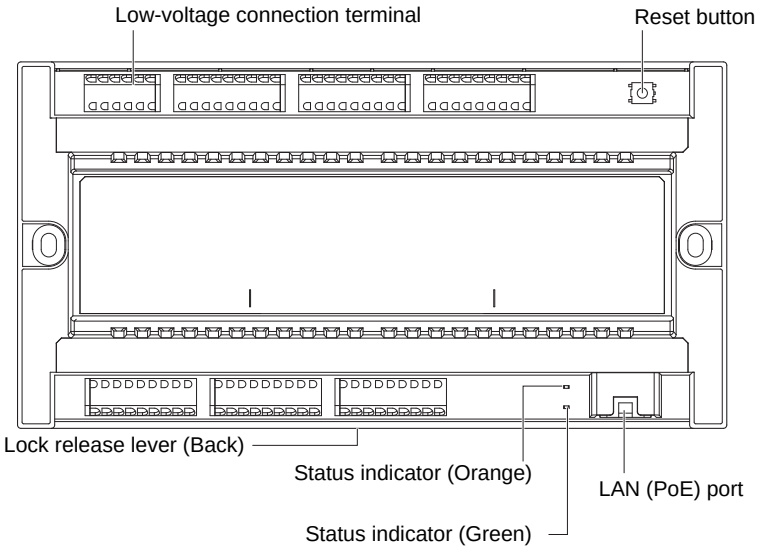
■ IXG-DM7-BOX

Front view



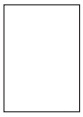
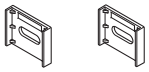
■ IXGW-LC

Front view



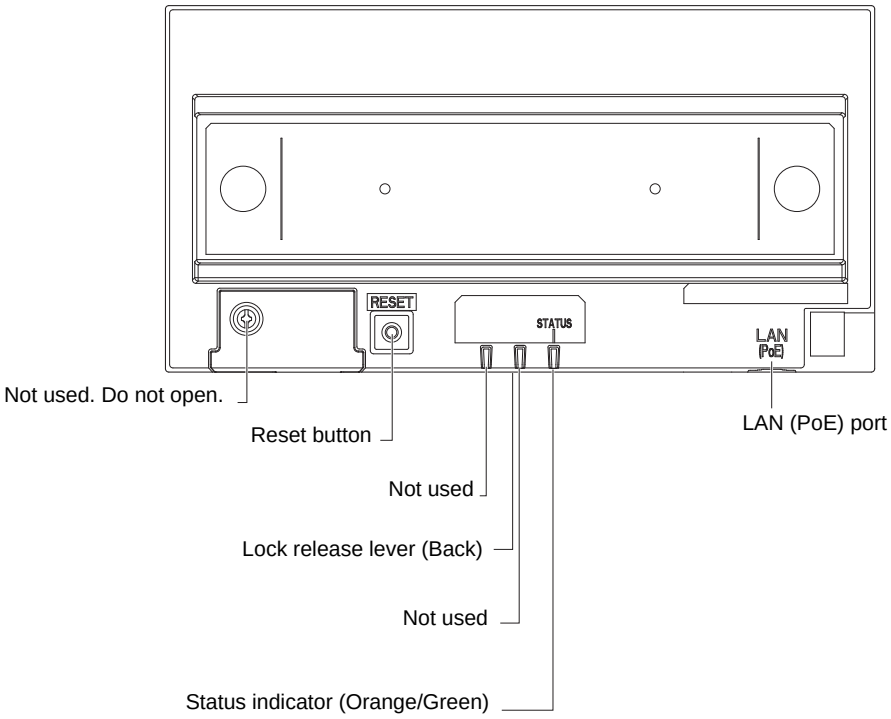
The MAC address is on the back of the device.

Included accessories

Notice	Chinese RoHS declaration	Stoppers x 2	Contact us
			

■ IXGW-GW

Front view



The MAC address is on the back of the device.

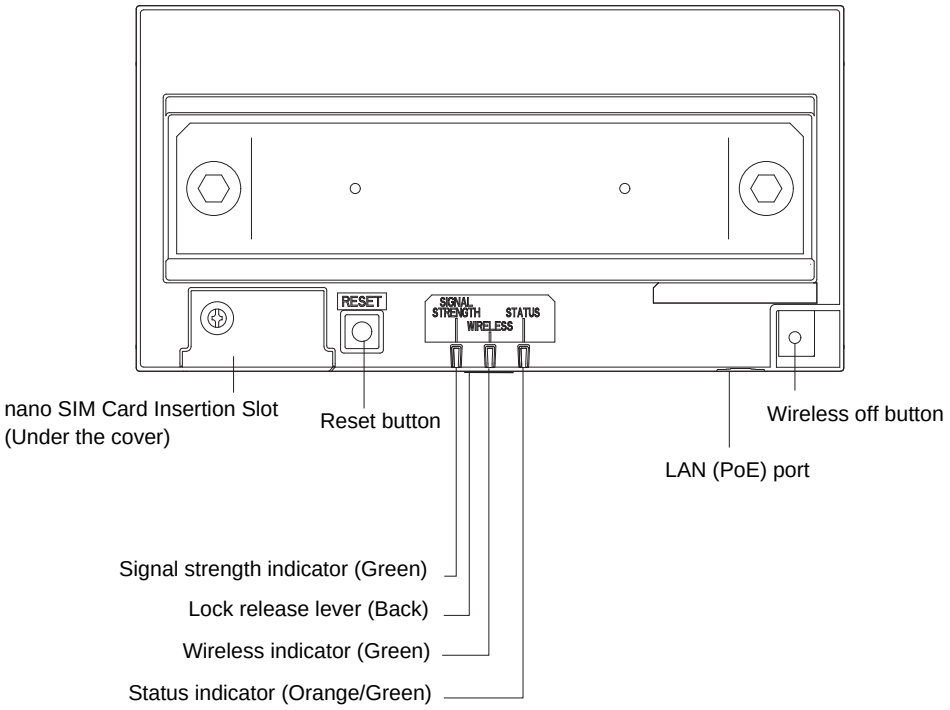
Included accessories

Product warranty※1 (for Japanese market)	Notice	Chinese RoHS declaration※1	DIN rail x 1 (attached to the unit)
Stoppers x 2	Quick Start Programing Guide	Contact us	

※1 Not included depending on the model.

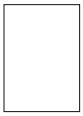
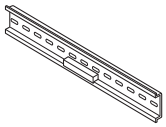
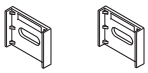
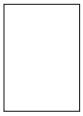
■ IXGW-TGW.En

Front view



The MAC address is on the back of the device.

Included accessories

Notice 	RE sheet (for IXGW-TGW.E2)	DIN rail x 1 (attached to the unit) 	Stoppers x 2 
Quick Start Programing Guide 	Terminal antenna x 2	Contact us	

Indicator

Refer to "Operation Manual" for additional indicators not listed.

■ IXG-MK

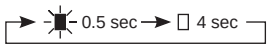
:Lit □ : Off

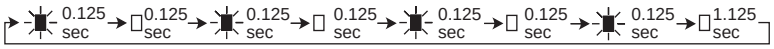
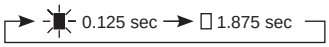
Name	Status (pattern)		Description
Status indicator	Orange flashing		Booting
			Device error, Startup error
			Communication failure
			Firmware version updating
			Initializing
	Blue light		Standby (Depends on setting)

■ IXGW-LC

Name	Status (pattern)		Description
Status indicator	Orange flashing		Booting
			Firmware version updating
			Initializing
	Green light		Standby

■ IXGW-GW, IXGW-TGW.En

Name	Status (pattern)		Description
Status indicator	Orange light		Not set to connect with the IXG Cloud Server, or "Gateway Settings" > "Gateway Registration" > "Internet Connection" has been set to "None" in the IXG Support Tool
	Orange flashing		Booting
			IXG Cloud Server communication failure (Connection error with the AWS server)

Name	Status (pattern)		Description
			Firmware version updating
			Initializing
	Green light		Communicating normally with the IXG Cloud Server
	Green flashing (IXGW-TGW.En only)		Either a wired or wireless communication failure occurred with the IXG Cloud Server (connection error with the AWS server) during startup ※When "Gateway Settings" > "Gateway Registration" > "Internet Connection" has been set to "Wired LAN / Cellular (Back up)" in the IXG Support Tool※1
Wireless indicator (IXGW-TGW.En only)	Green flashing		Not connected to the base station (including out of range and not under contract)
			Connected to the base station
	Green light		Communications module is shutting down
	Green off		Communication module shut down
Signal strength indicator (IXGW-TGW.En only)	Green light		SIM card PIN lock※2
	Green flashing		Reception level 5 (strong)
			Reception level 4
			Reception level 3
			Reception level 2
	Green off		Reception level 1 (Out of range)※3

※1 The light continues to flash even if the status of the communication with the IXG Cloud Server changes. The station must be restarted to confirm that it is communicating normally with the server (light is turned on).
※2 The SIM card goes into PIN lock when the wrong PIN code has been entered 3 times. The PUK code can be entered to recover from the PIN lock state.
※3 The wireless level indicator also shows Reception level 1 when the SIM card is not recognized, when the settings allow only wired Internet connections and no phone is registered, or when no Internet connection is set and no phone is registered.

About microSD card

Choose a microSD card (sold separately) using the recommended specifications below (these are referred to collectively as "microSD cards").

Station Type	Standard	Supported storage capacity	Format	Speed class
IXG-DM7(-*) IXG-MK	microSDHC memory cards	4 GB to 32 GB	FAT32	SD speed class 10 UHS speed class 1
IXG-MK	microSDXC memory cards	64 GB to 128 GB	exFAT	

- When using the 24/7 recording function with the IXG-DM7(-*), press the Reset button (SW1) to restart the station after inserting the microSD card.
- A microSD card is not included with this station. Select a microSD card based on the factors of its use environment such as temperature.
- Some microSD cards may not operate properly.
- If the card contains data other than video/audio files, it may not have enough space to record video/audio recordings.
- The network camera may not be able to record video, depending on the size of the video.

- A maximum of 999 video/audio files can be saved. However, this may vary depending on the size of the video/audio files and the capacity of the microSD card.
- Use a microSD card that has been formatted on a PC or the like.
- MicroSD cards have a limited life. The microSD card should be replaced regularly. Contact the microSD card manufacturer for the replacement period of the microSD card.
- Aiphone is not to be held responsible in any way for microSD cards.

How to Install

Always properly secure wall mounted stations to prevent the station from falling.

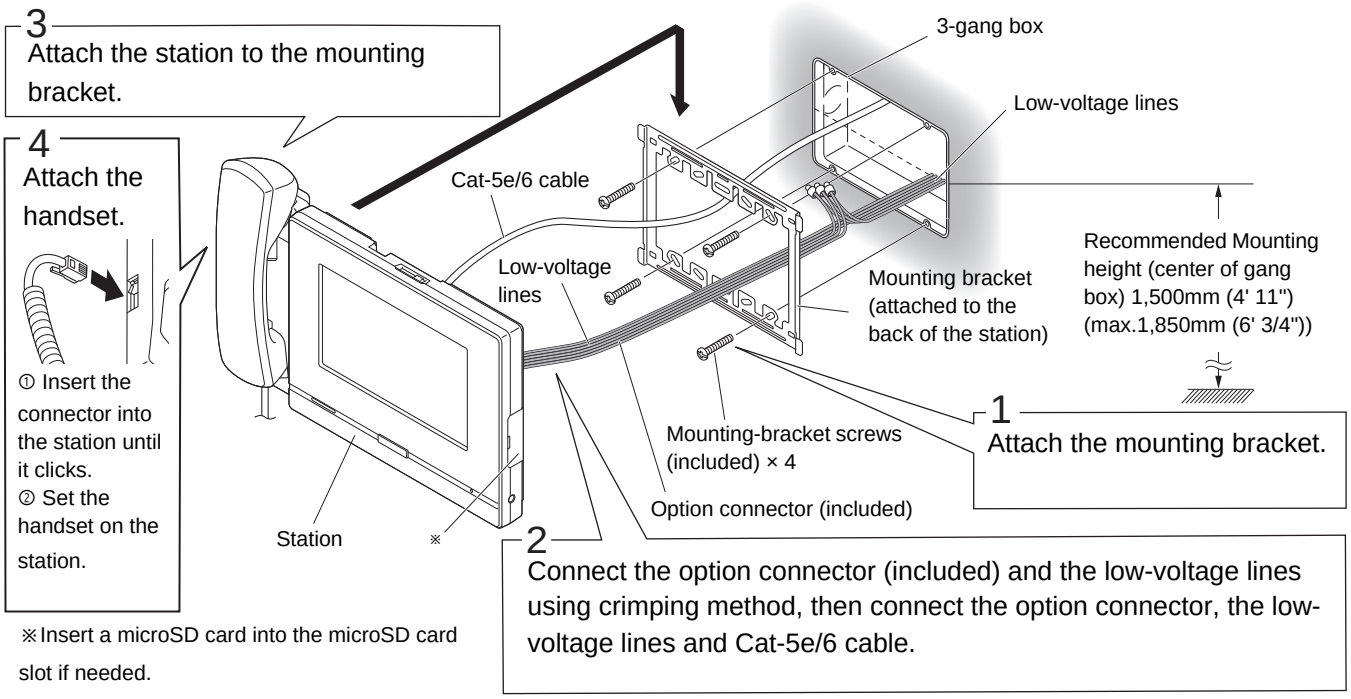
- If the accessory screws are unusable for plaster board or a concrete wall, etc., please use a product such as an anchor or concrete plug (not included).

■ IXG-MK

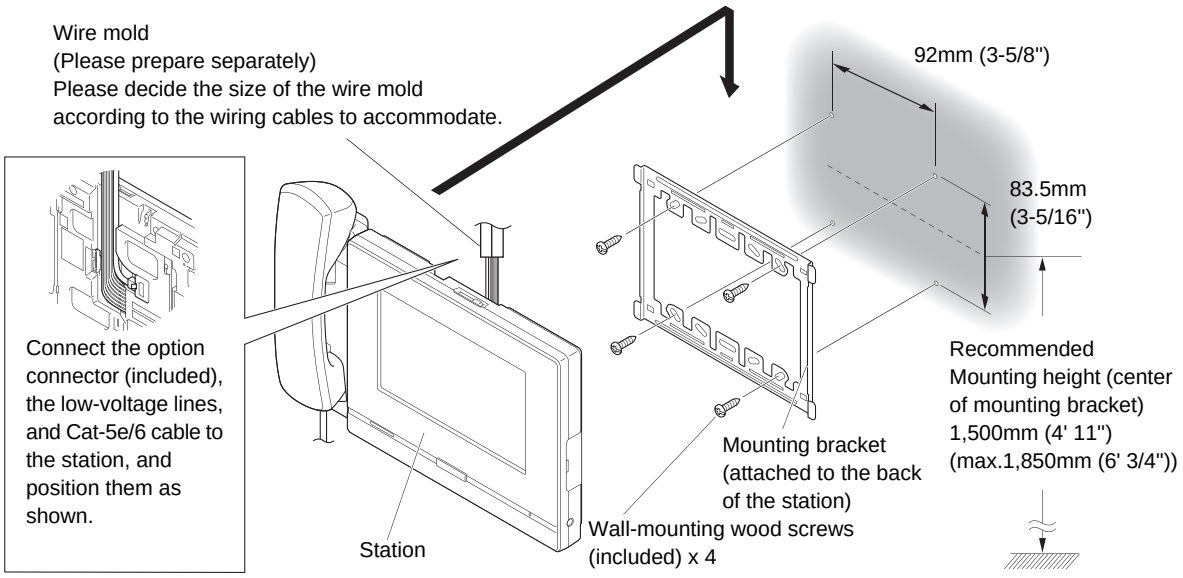
- The installation height of the station should not exceed 2m (6.6') (upper edge) from ground level.
- The microSD card slot is located on the right side of the station. It should be installed in a location where it can be operated.

● Mounting the station on a wall

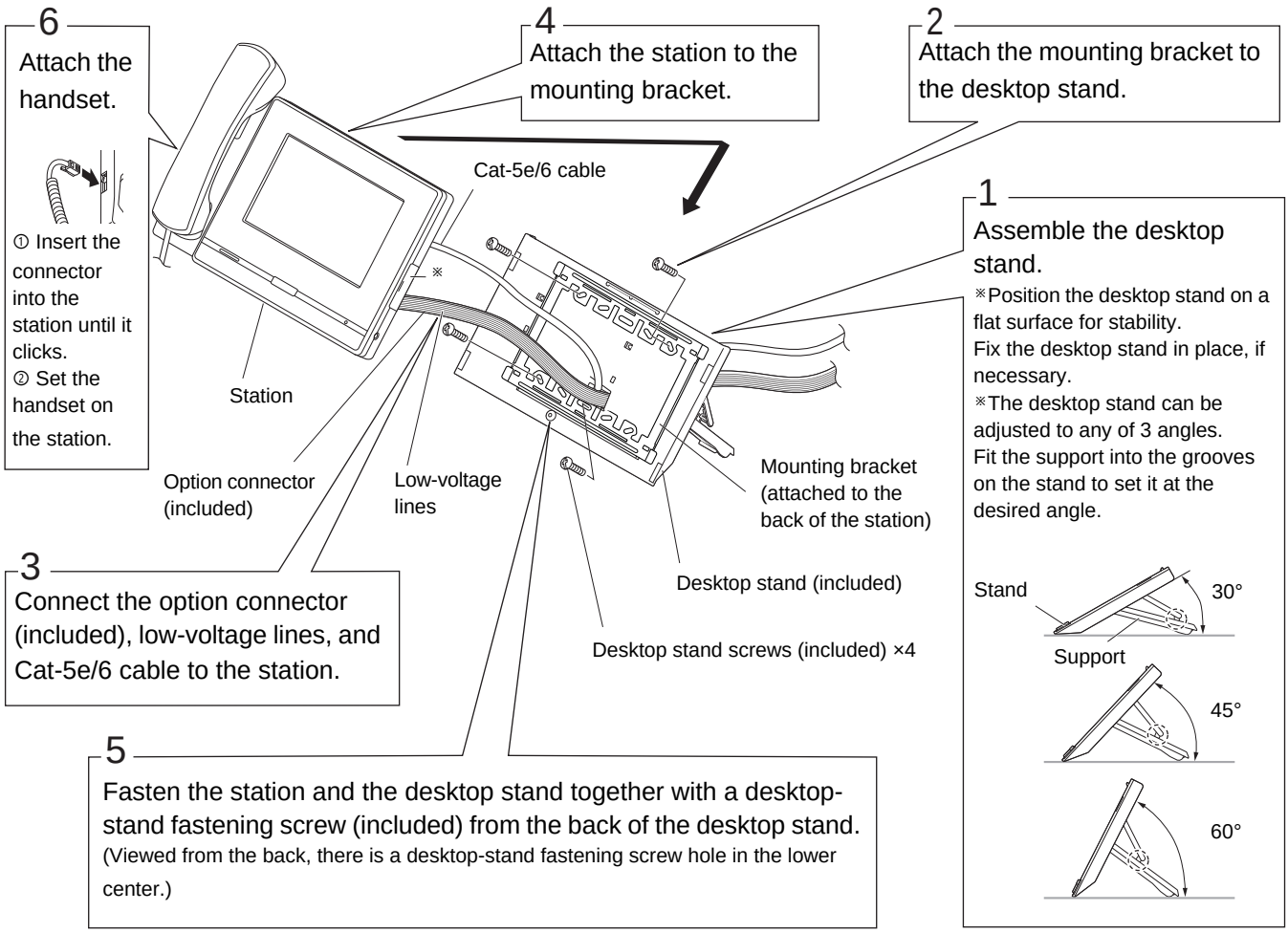
Back wiring



Surface wiring



● Mounting the station on the desktop stand



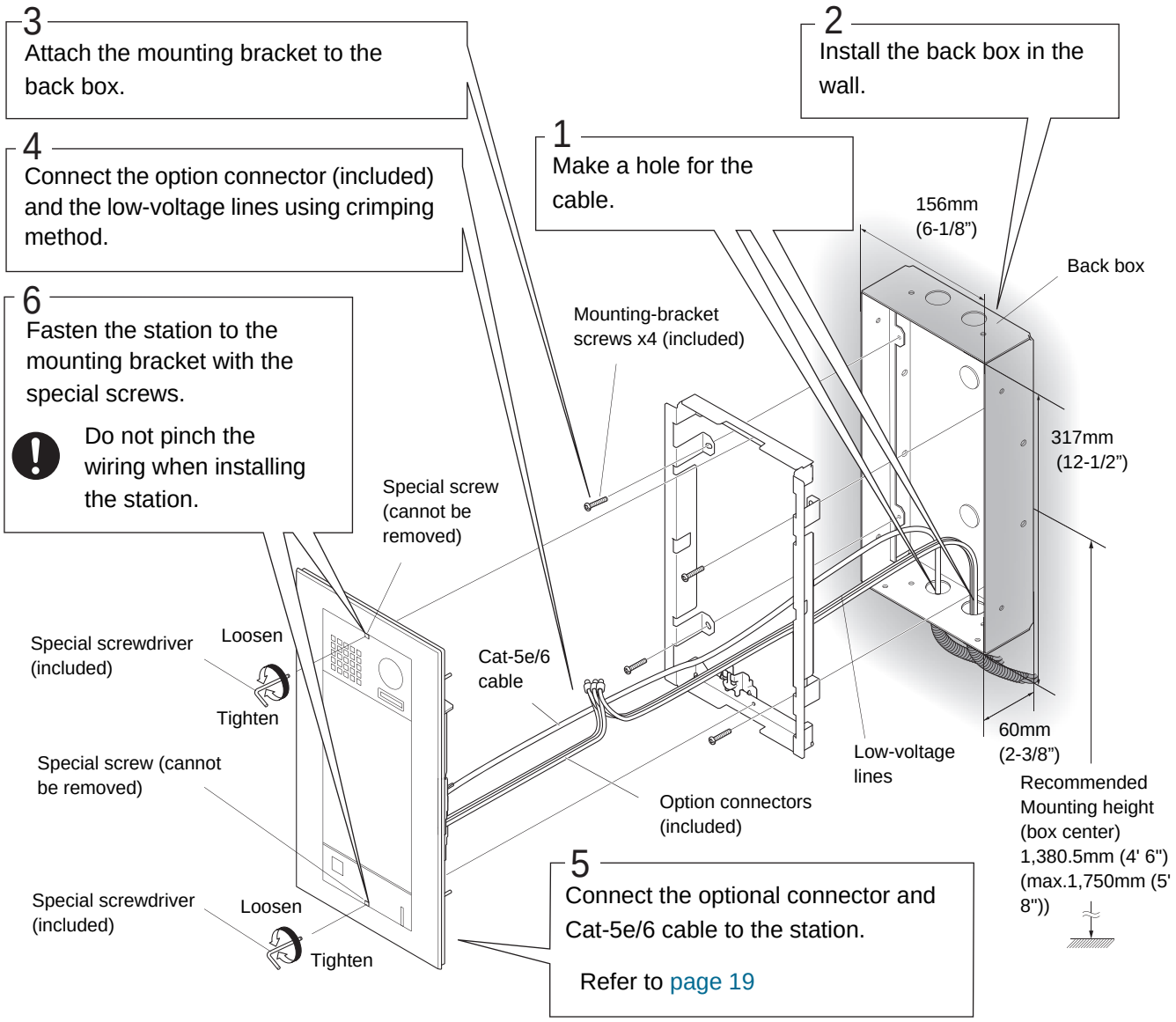
※Insert a microSD card into the microSD card slot if needed.

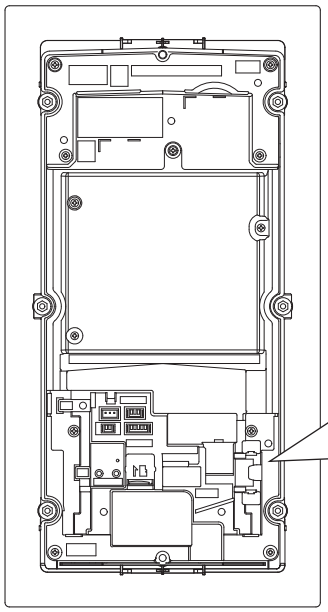
- Fasten the mounting bracket to the desktop stand with the supplied screws.
- If necessary, secure the Cat-5e/6 cable or low-voltage line using the included cable tie.
- When using the Desktop mounting, use the included Desktop stand.

■ IXG-DM7(-*)

Back Box for Entrance Station (IXG-DM7-BOX) is sold separately.
The illustrations explain installation using the IXG-DM7-HIDA model.

- When installing the station on a rough surface, please seal the station edges to prevent water entering the station. If the station edges are left unsealed on a rough surface, IP65 ingress protection rating is not guaranteed.
- If the back box is exposed, water and dust will enter through the opening of the back box, and IP65 is not fulfilled.
- The installation height of the station should not exceed 2m (6.6') (upper edge) from ground level.
- IXG-DM7-HIDA stations have an alarm that sounds when it detects an impact. Fix the back box and station securely to a solid wall so that they do not budge. If the station is installed in a location where it is subject to shaking, such as from the opening and closing of doors, the shock sensor may not operate properly, and false alarms can occur.
- IXG-DM7-HIDA sounds an alarm if it is removed from its installation location after it has been installed. When removing an installed station, such as when performing maintenance, turn off the power to the PoE switch before removing.

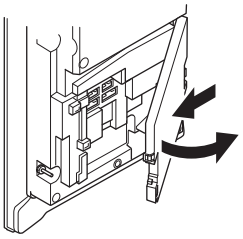




5

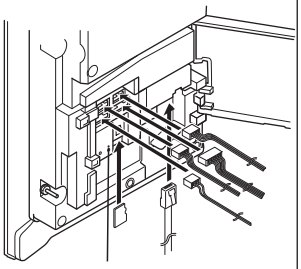
Connect the option connector and Cat-5e/6 cable to the station.

① Slide the terminal cover left, and open up it.

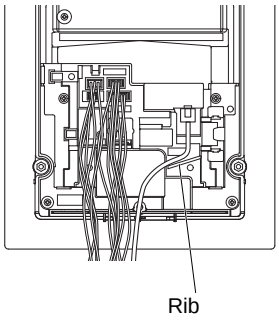


② Insert the option connectors and Cat-5e/6 cable to the station. Run the Cat-5e/6 cable along the rib. Insert a microSD card into the microSD card slot if recording function is used.

- Push the microSD card in until you hear it click into place.
- The microSD card indicator will light red while mounting the microSD card.
- To take the microSD card out, push the [microSD card eject] button (SW2) on the back of the station one time. The microSD card indicator will turn off. Do not remove the card while the indicator is lit. When the indicator turns off, push the microSD card until it clicks, then remove.



microSD card indicator

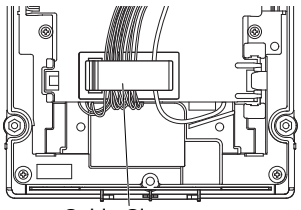


Rib

③ Replace the terminal cover.

Be sure to close the terminal cover when done. If left open, condensation or water may enter causing damage.

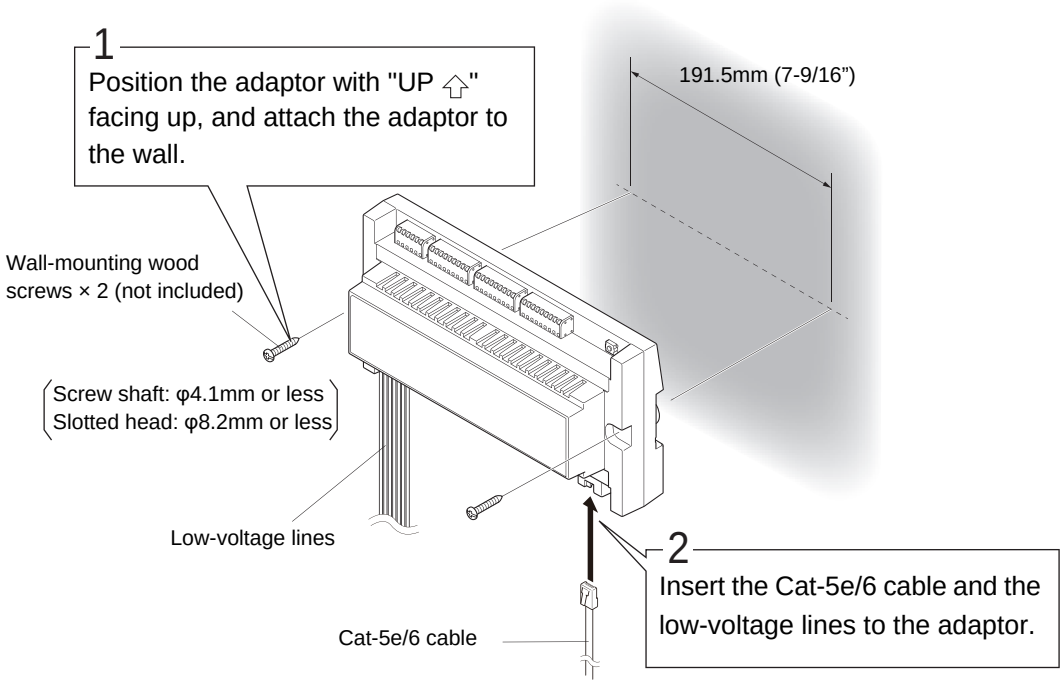
④ With the IXG-DM7-HIDA only, attach the connectors and Cat-5e/6 cable with a cable clamp to prevent the wiring from being pinched between the magnet bracket and the magnet.



Cable Clamp

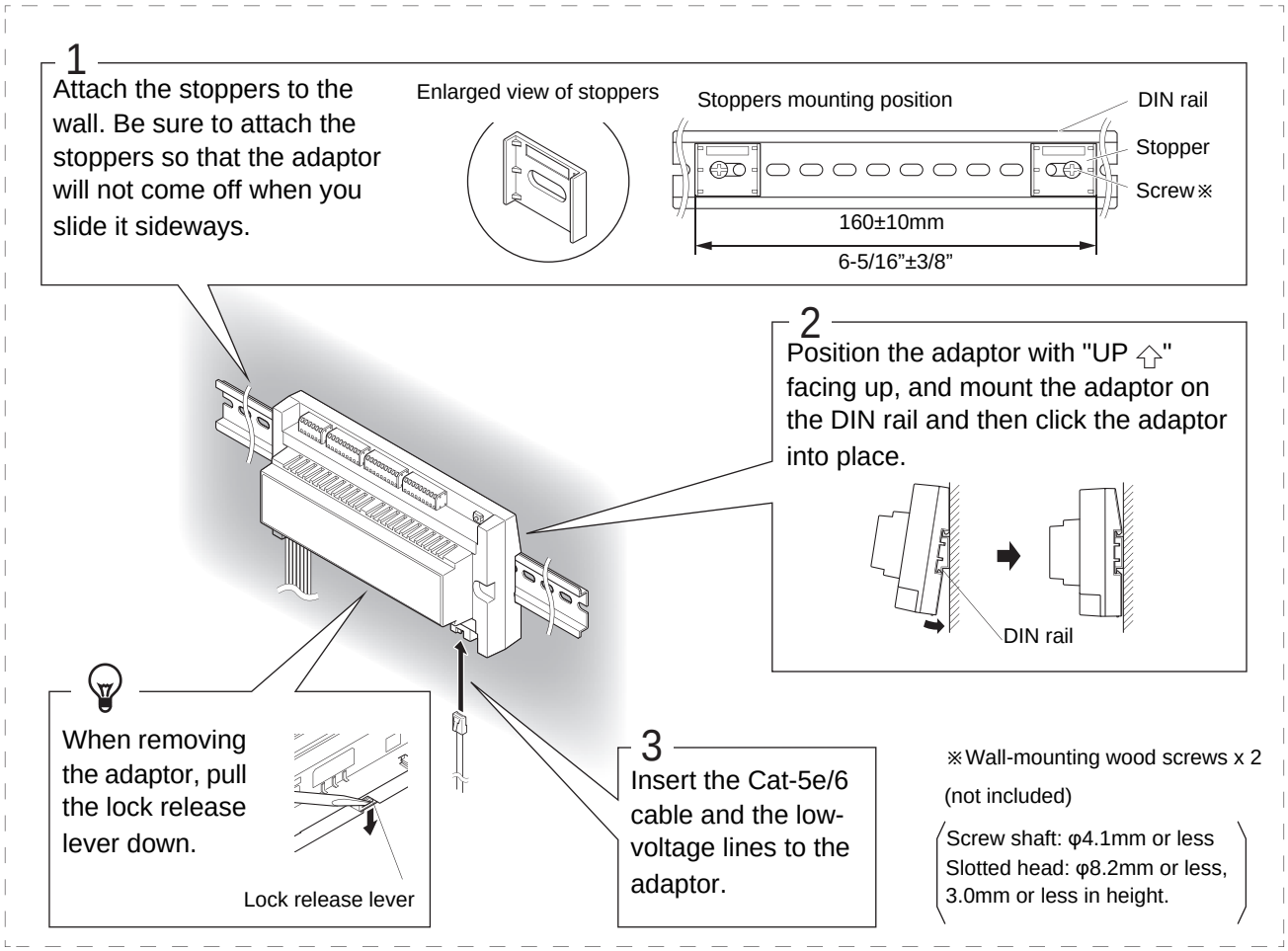
■ IXGW-LC

● Mounting the adaptor directly to a wall



Mounting the adaptor on the DIN rail

DIN rail is not included.



■ IXGW-GW, IXGW-TGW.En

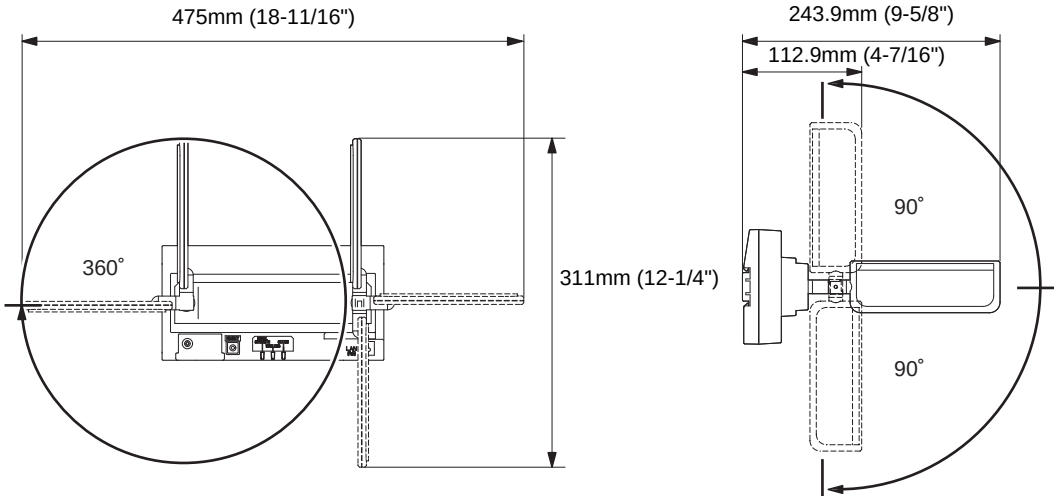
Before attaching IXGW-TGW.En

Check the signal strength with a smartphone before attaching IXGW-TGW.En.
Use a smartphone with a SIM card from the same company as the SIM card inserted in IXGW-TGW.En to install an app that can measure signal strength and check the signal strength at the installation location.

Recommended signal strength:
RSRP≧-90dBm
RSRQ≧-15dB

- If the signal strength is extremely low, install a femtocell or repeater to increase the signal strength.
- For femtocell and repeater installation, contact a Mobile Network Operator.

For IXGW-TGW.En, secure an operation space for antennas.



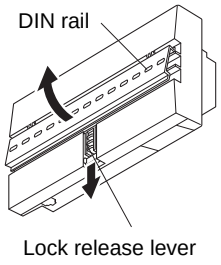
Installation precautions

- Wireless connection is only available for 3G/4G connections. (2G/3G/4G only in Europe)
- Wireless connection is required for linkage to phones. The device requires a contract that provides a phone number to the SIM card.
- Check the reception where the station will be installed in advanced. Some areas may not be suitable, such as:
  - Locations with bad reception such as underground locations or inside buildings
  - Outside 3G/4G service areas provided by communication carriers (2G/3G/4G only in Europe)
  - Top floors of high-rise buildings and mansions
  - Near metallic doors, etc.
- Communication failure may occur even in a location with good reception.
- Do not install the station outdoors.
- Devices that use the same frequency band as this device may interfere with its functions. Keep them far away from the device.
- The station may cause interference with implantable medical devices, such as pacemakers. Install the station so it is more than 15cm (5") from users of these medical devices.
- Install the station in a location more than 1m (3' 3") away from electronic medical equipment.

These illustrations explain installation using the IXGW-TGW.En model.

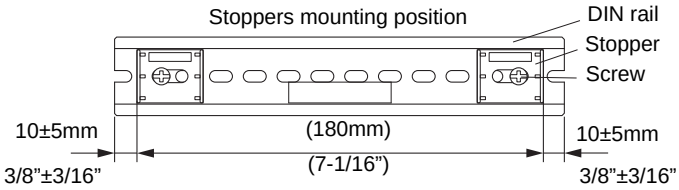
1

Pull the lock release lever down to remove the DIN rail from the adaptor.



2

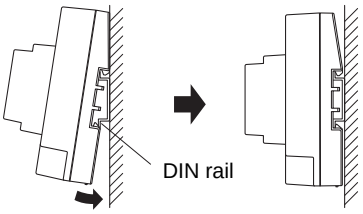
Attach the DIN rail and the stoppers to the wall. Be sure to attach the stoppers so that the adaptor will not come off when it is slid sideways.

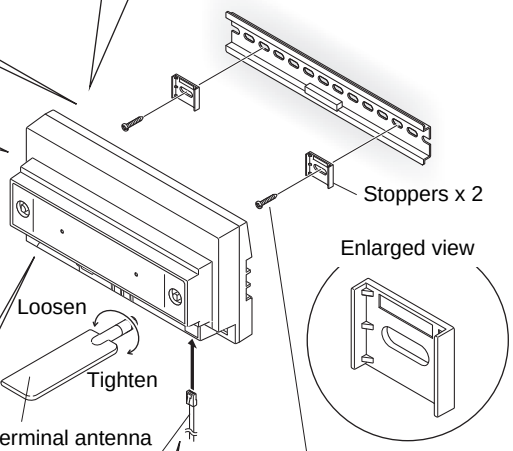


3

Position the adaptor with "UP ⇧" facing up, and mount the adaptor on the DIN rail and then click the adaptor into place.

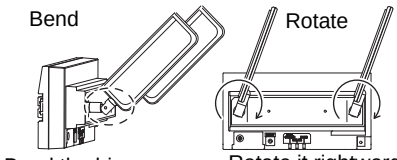
*For IXGW-GW installation, go to step 6.





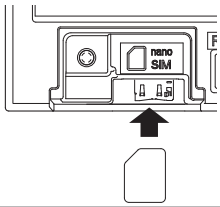
4

Attach the terminal antennas to the adapter and adjust the antennas by bending or rotating it.



5

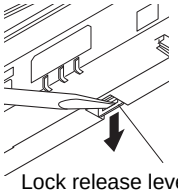
When inserting SIM cards, open the SIM card insertion slot cover with a screwdriver, insert the SIM card, and place the cover back in its original position.



6

Insert the Cat-5e/6 cable into the adaptor.

When removing the adaptor, pull the lock release lever down.



- Do not insert the SIM card while the station is turned on. Otherwise, the station may not operate correctly.
- Only use the supplied terminal antenna with this station.
- Always shut down the station before disconnecting power to prevent malfunctions. Before disconnecting power, press the Wireless Off button for at least one second. The wireless indicator light will remain on while the station is shutting down. Do not disconnect the power before the light turns off. Doing these steps out of order can cause damage to the station.

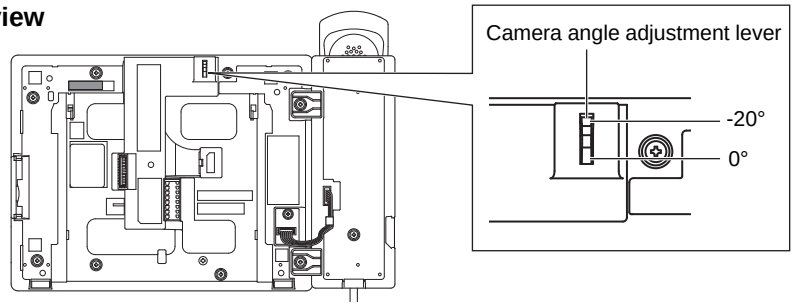
Camera View Range and Mounting Position

■ IXG-MK

● 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.

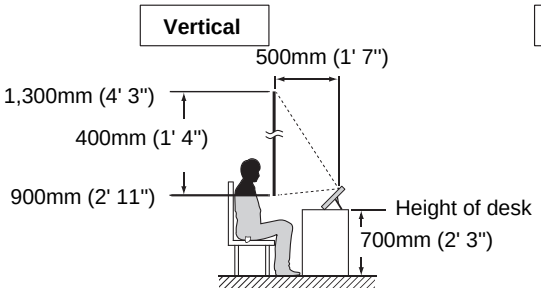
Back view

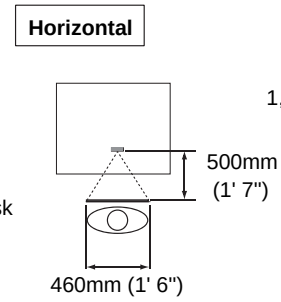


● Camera View range

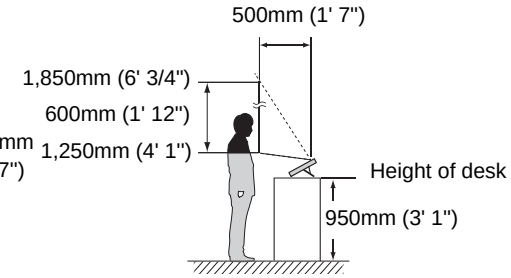
The camera range as illustrated is only an approximate indication and may vary according to the environment.

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

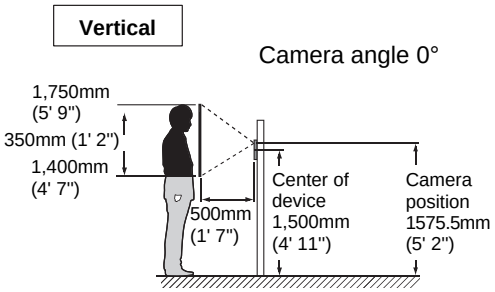


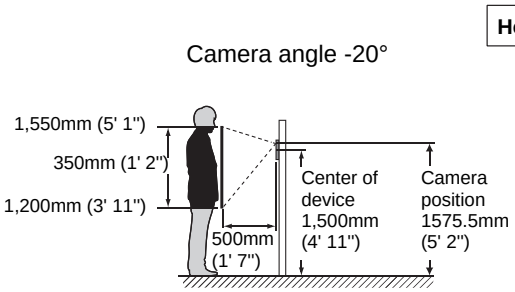


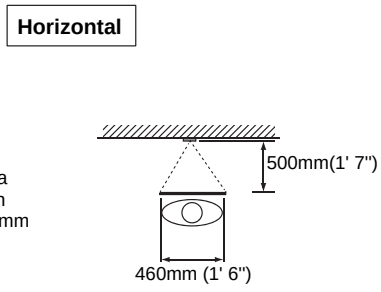
When installed on a flat desktop (with desktop stand at 30° and camera angle at the lowest position [-20°])



Wall mounting







The dimensions are approximate in this page.

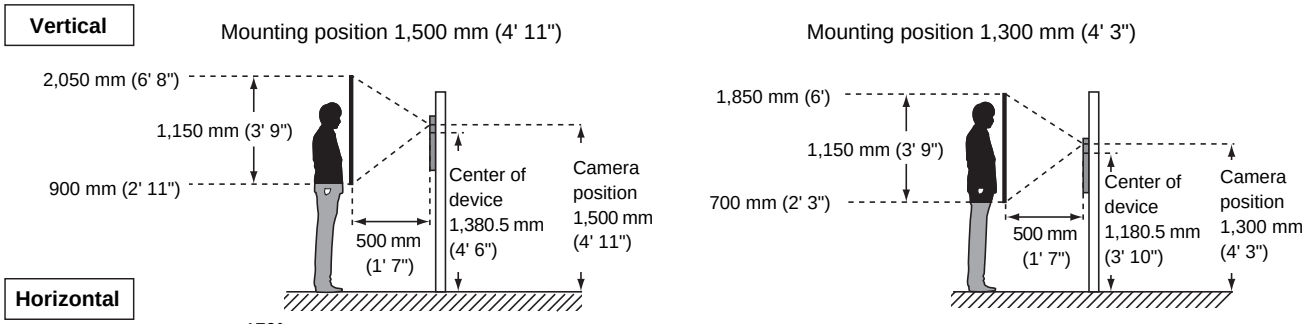
When light enters the camera, the monitor screen may flicker brightly or the subject may become dark. Try to prevent strong lighting from entering the camera directly.

■ IXG-DM7(-*)

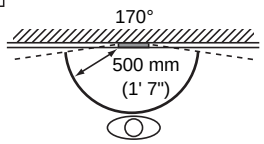
● Mounting positions and image view area

Wide view

Vertical



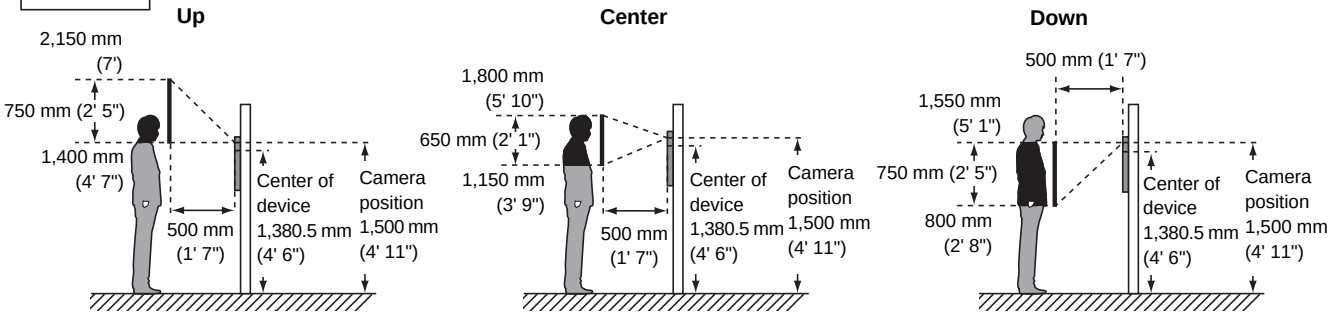
Horizontal



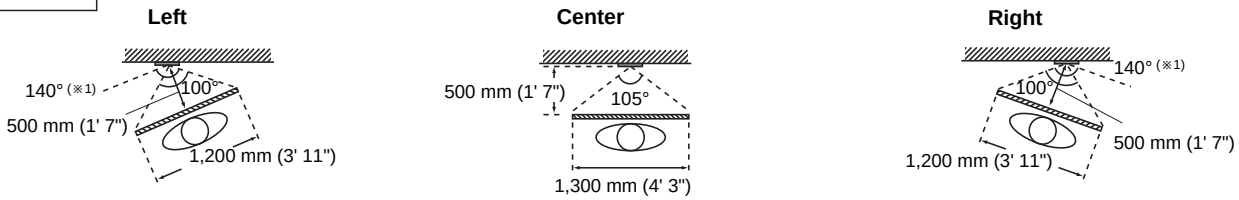
An area over a range of approx. 170° in a 500 mm (1' 7") radius from the camera displays. (The display range is a rough estimation and may change due to the installation environment and the specification of the monitor.)

Zoom view

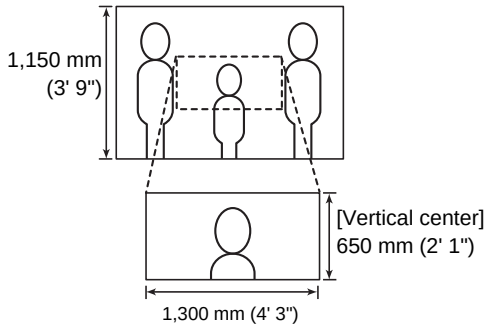
Vertical (with mounting position of 1,500 mm (4' 11"))



Horizontal



(※1): Zoom view range is approx. 140° at 500 mm (1' 7") distance from the camera.



Wide View
The default is "Wide View".

Zoom View
The zoom position can be changed.

The dimensions are approximate in this page.

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.

■ 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 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

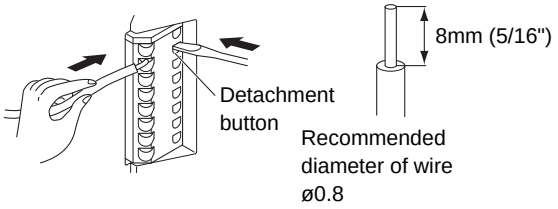
- Use PE (polyethylene)-insulated PVC jacketed cable. Parallel or jacketed conductors, mid-capacitance, non-shielded cable is recommended.
- Never use twisted-pair cable or coaxial cable
- 2Pr quad V twisted pair cables cannot be used.

Parallel cable

Coaxial cable

● 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.

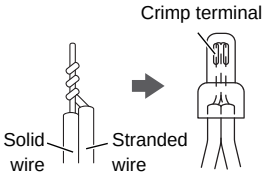


※The shape varies depending on a model.

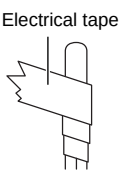
- When connecting low-voltage lines, perform the connection using either the crimp sleeve method or soldering, then insulate the connection with electrical tape.

●Crimp sleeve method

1. Twist the stranded wire around the solid wire at least 3 times.

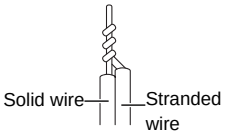


2. Overlap the tape by at least a half width and wrap the connection at least twice.

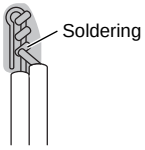


●Soldering method

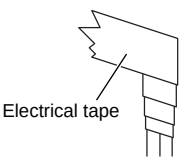
1. Twist the stranded wire around the solid wire at least 3 times.



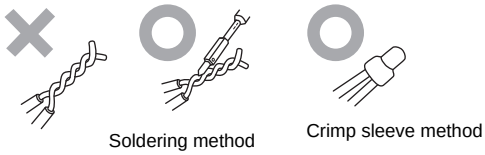
2. After bending down the point, perform soldering, with care that no wires protrude from the soldering.



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.

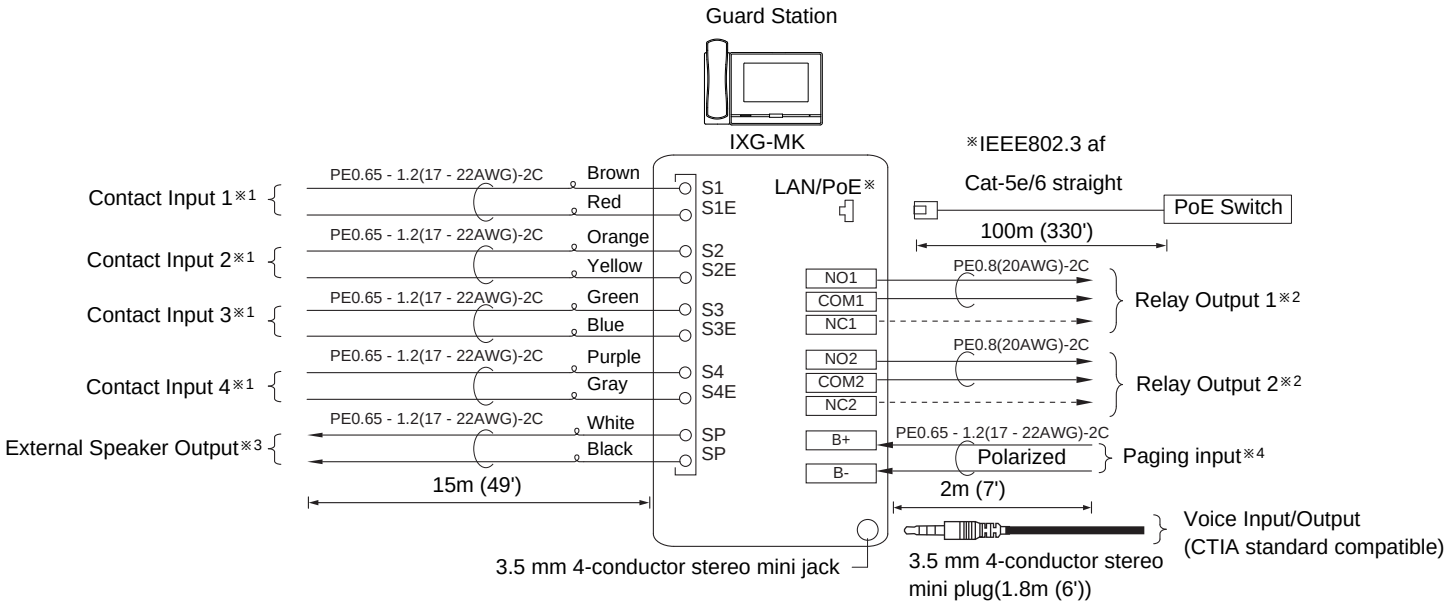


Soldering method　　Crimp sleeve method

Wiring Connection

■ IXG-MK

• 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) (The operation will not be performed again even if the input continues at the time of recovery.)
Detection Time Range	0 (Momentary), 200-2000 msec, 3-600 sec can be set.
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)

※3 External Speaker Output Specifications

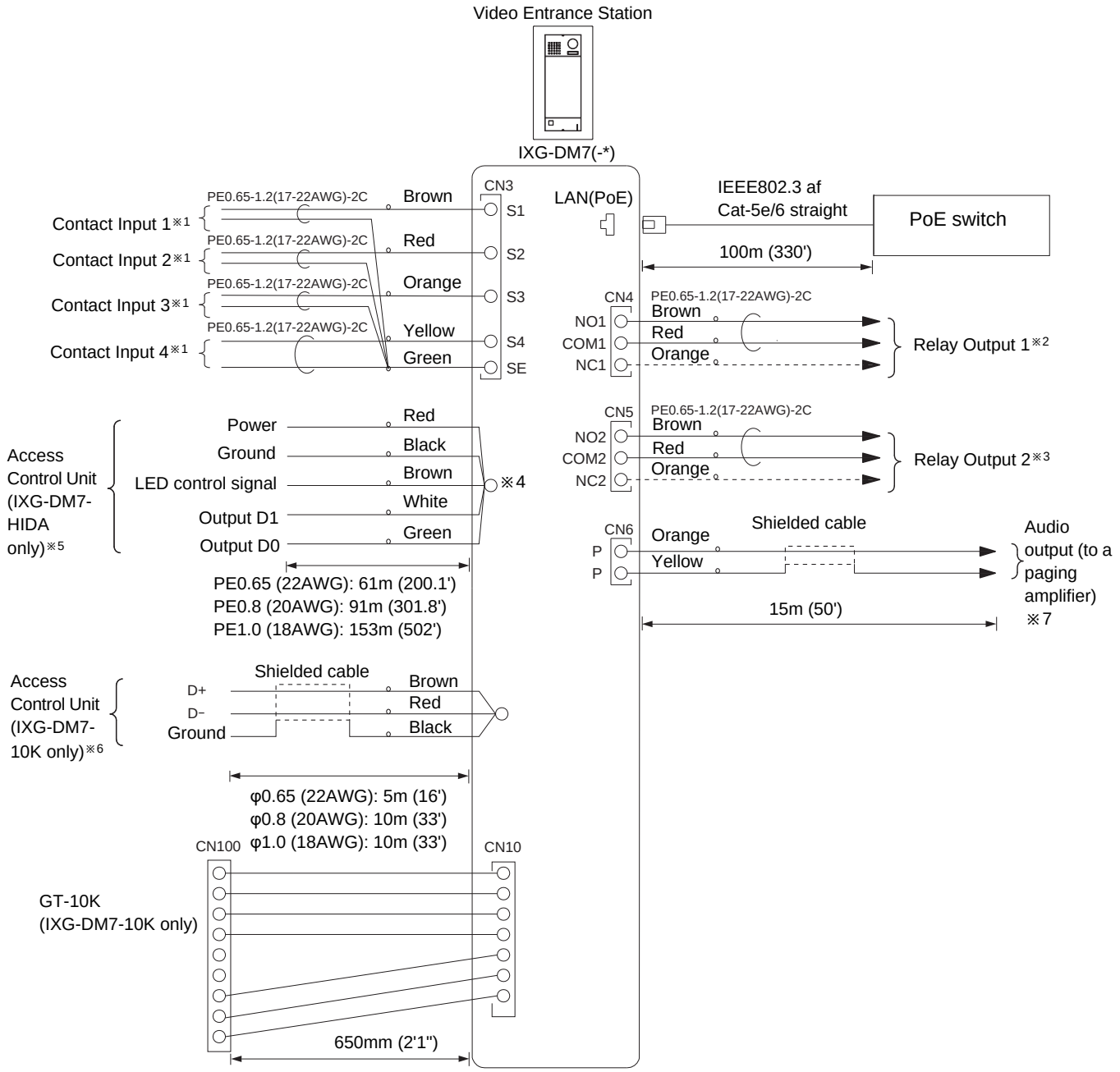
Output impedance	8 Ω
Maximum output power	0.5 W

※4 Paging Audio Input Specifications

Input impedance	600 Ω
Input audio level	50 mVrms

■ IXG-DM7(-*)

• 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) (The operation will not be performed again even if the input continues at the time of recovery.)
Detection Time Range	0 (Momentary), 200-2000 msec, 3-600 sec can be set.
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 1 Specifications

Output method	Form C dry contact (N/O or N/C)
Contact rating	24 VAC, 3A (resistive load) 24 VDC, 3A (resistive load)

※3 Relay Output 2 Specifications

Output method	Form C dry contact (N/O or N/C)
Contact rating	24 VAC, 0.5A (resistive load) 24 VDC, 0.5A (resistive load)

※4 Card Reader Specifications

Power requirement	10.8 - 14.5 VDC at 250mA
Interface	Wiegand

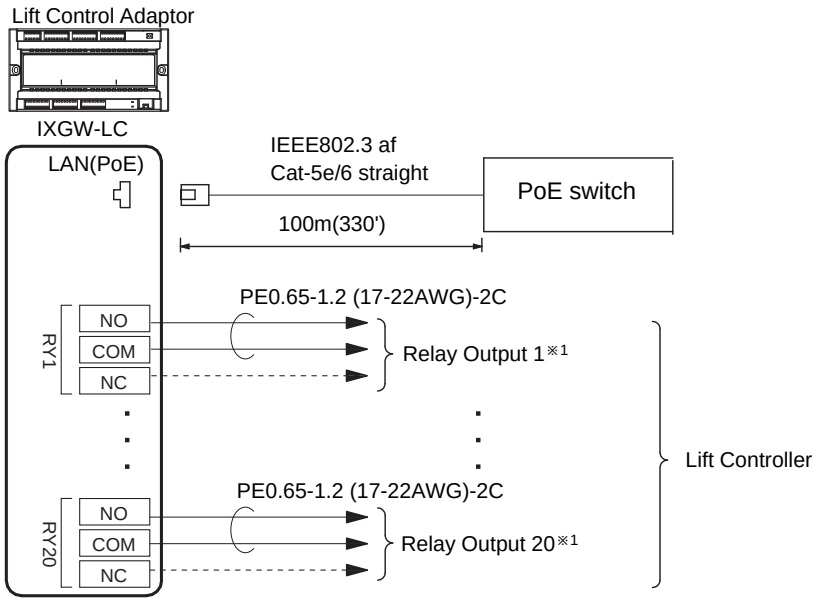
※5 For a list of compatible card formats, see “IXG-DM7(-*) (→page 9)”.

※6 Compatible access controllers:
- HEPLUS, HECOMGSM (HEXACT®)
- UGVBT (AIPHONE)

※7 Audio output specifications

Output impedance	600 Ω
Audio output volume	300 mVrms (at 600 Ω termination)

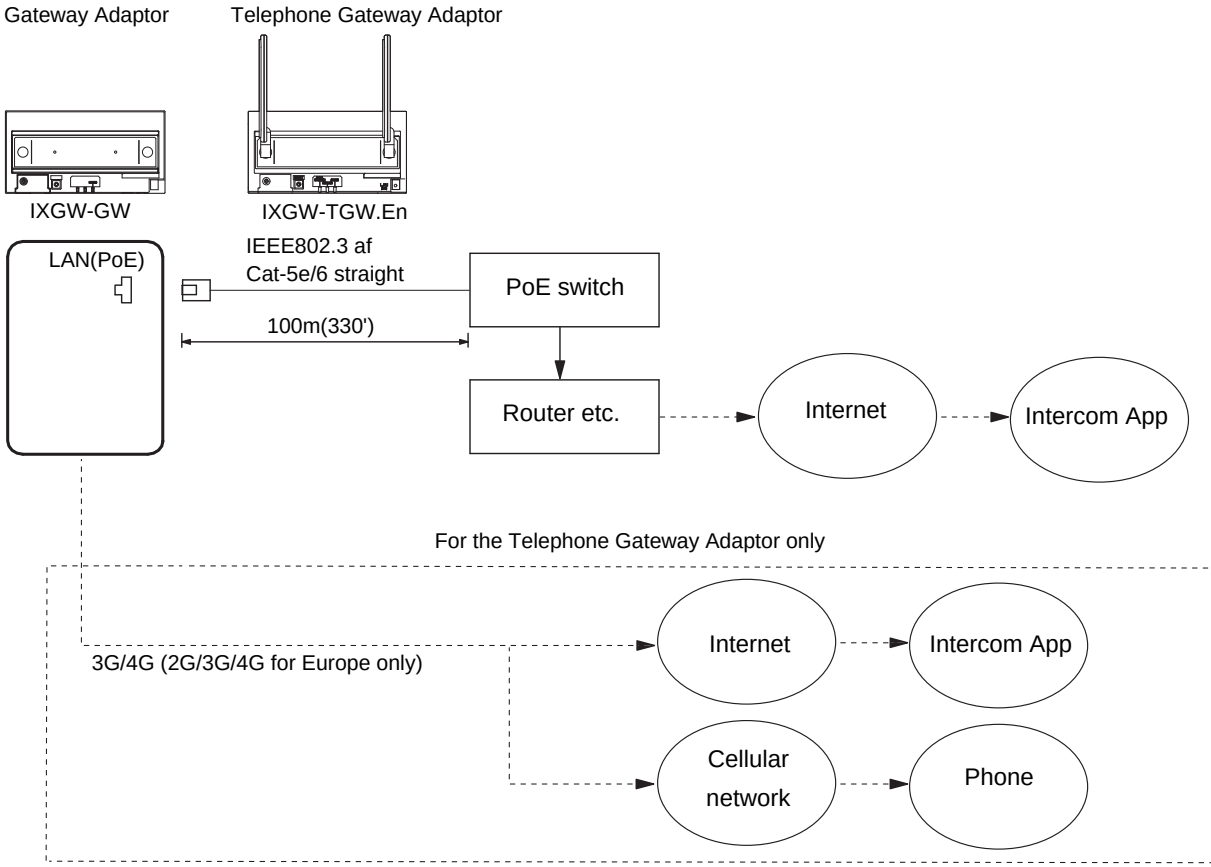
■ IXGW-LC



※1 Relay Output 1-20 Specifications

Output method	Form C dry contact (N/O or N/C)
Contact rating	24 VAC, 0.5A (resistive load) 24 VDC, 0.5A (resistive load)

■ IXGW-GW, IXGW-TGW.En



- If the Internet connection's uplink speed is slow, video may not be displayed properly. (An uplink speed of 18.4 Mbps or more is recommended.)

Specifications

Refer to "Operation Manual" for IXG-MK, IXG-DM7(-*).

■ IXG-DM7-BOX

Mounting	Flush wall-mounted
Materials	SPCC t1.6
Dimensions	156 mm (6-1/8") [W] × 317 mm (12-1/2") [H] × 60 mm (2-3/8") [D]
Mass	Approx. 1.5kg (3.3 lbs)

■ IXGW-LC

Power	PoE (IEEE802.3af Class 0 standard)
Power consumption	Standby 2.1 W, Max. 4.4 W (48 VDC)
LAN	Ethernet (10BASE-T, 100BASE-TX), Auto MDI/MDI-X-compatible
Relay	20 relay outputs
Protocol	IPv4, IPv6, TCP, UDP, HTTP, HTTPS, IGMP, MLD, SFTP, DHCP, NTP, DNS, TLS
Encryption system	TLS1.2, IEEE802.1X
Packet transmission	Unicast and Multicast
Operating temperature	-10 °C to +50 °C (+14 °F to +122 °F)
Mounting	Wall-mounted
Materials	Flame retardant resin
Color	Gray
Dimensions	210 mm (8-1/4") [W] × 108.5 mm (4-1/4") [H] × 61 mm (2-3/8") [D]
Mass	Approx. 310g (0.69 lbs)

■ IXGW-GW, IXGW-TGW.En

Power	PoE (IEEE802.3af Class 0 standard)
Power consumption	IXGW-GW: Standby 2.4 W, Max. 2.9 W (48 VDC), IXGW-TGW.E1: Standby 2.8 W, Max. 5.8 W (48 VDC), IXGW-TGW.E2: Standby 2.8 W, Max. 6.7 W (48 VDC), IXGW-TGW.E3: Standby 2.8 W, Max. 5.1 W (48 VDC)
LAN	Ethernet (10BASE-T, 100BASE-TX), Auto MDI/MDI-X-compatible
Public network connection specification	IXGW-TGW.E1: LTE(B2/B4/B5/B12/B13/B14/B66/B71), WCDMA(B2/B4/B5) IXGW-TGW.E2: LTE(B1/B3/B7/B8/B20/B28A), WCDMA(B1/B3/B8), GSM(900/1800) IXGW-TGW.E3: LTE(B1/B3/B5/B8/B9/B18/B19/B26/B28), WCDMA(B1/B5/B6/B8/B19)
Protocol	IPv4, IPv6, TCP, UDP, SIP, HTTPS, RTP, RTCP, SRTP, SRTCP, IGMP, MLD, SFTP, DHCP, NTP, DNS, MQTT, ICE, DTLS, SDP
Encryption system	TLS1.2, IEEE802.1X
Packet transmission	Unicast and Multicast
Channel	IXGW-GW: 8(Intercom App), IXGW-TGW.En: 8(Intercom App)+1(Phone)
Operating temperature	-10 °C to +50 °C (+14 °F to +122 °F)
Mounting	Wall-mounted (DIN rail)
Materials	Flame retardant resin
Color	Black
Dimensions	210 mm (8-1/4") [W] × 108.5 mm (4-1/4") [H] × 61 mm (2-3/8") [D] (62.2mm (2-7/16") [D] with DIN rail) (Does not include the terminal antennas)
Mass	IXGW-GW: Approx. 320g (0.71 lbs) (approx. 350g (0.78 lbs) with DIN rail) IXGW-TGW.En: Approx. 430g (0.95 lbs) (approx. 540g (1.2 lbs) with DIN rail and terminal antennas)

About the Error Screen

If the error screen appeared on the entrance screen, follow the steps below:

- Confirm unit has been set up correctly using the IXG Support Tool.
- Check network connection using IXG Supervision Tool.
- Check wiring to units.

Regulations

IXGW-TGW.E1
FCC
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement:

(1) This Transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
(2) This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and person's body.

ISED
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

To comply with RSS 102 RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.
This radio transmitter (5131A-LE910CXNF) has been approved by Innovation, Science and Economic Development Canada.
You must always use the antenna supplied with the product.

IXGW-TGW.E2
RE Directive, RE Regulation
This equipment complies with the Radio Equipment Directive.

Important safety information
This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and person's body.

WEEE

This symbol indicates that this product should be disposed of separately from other household waste.
By taking it to a designated collection point for recycling of waste equipment in accordance with local waste disposal legislations on your responsibility will help to prevent any negative impacts on the environment and on human health.

RF Output Table
IXGW-TGW.E1

Items	Maximum radio-frequency power		
LTE	LTE 1900-B2	1850 - 1910MHz(Tx); 1930 - 1990MHz(Rx)	22.5dBm
	LTE 1700-B4	1710 - 1755MHz(Tx); 2110 - 2155MHz(Rx)	22.5dBm
	LTE 850-B5	824 - 849MHz(Tx); 869 - 894MHz(Rx)	22.5dBm
	LTE 700-B12	699 - 716MHz(Tx); 729 - 746MHz(Rx)	22.5dBm

Items	Maximum radio-frequency power		
	LTE 700-B13	777 - 787MHz(Tx); 746 - 756MHz(Rx)	22.5dBm
	LTE 700-B14	788 - 798MHz(Tx); 758 - 768MHz(Rx)	22.5dBm
	LTE 1700-B66	1710 - 1780MHz(Tx); 2110 - 2200MHz(Rx)	22.5dBm
	LTE 600-B71	663 - 698MHz(Tx); 617 - 652MHz(Rx)	22.5dBm
WCDMA	WCDMA 1900-B2	1850 - 1910MHz(Tx); 1930 - 1990MHz(Rx)	23.5dBm
	WCDMA 1700-B4	1710 - 1755MHz(Tx); 2110 - 2155MHz(Rx)	23.5dBm
	WCDMA 850-B5	824 - 849MHz(Tx); 869 - 894MHz(Rx)	23.5dBm

IXGW-TGW.E2

Items	Maximum radio-frequency power		
LTE	LTE 2100-B1	1920 - 1980MHz(Tx); 2110 - 2170MHz(Rx)	22.5dBm
	LTE 1800-B3	1710 - 1785MHz(Tx); 1805 - 1880MHz(Rx)	22.5dBm
	LTE 2600-B7	2500 - 2570MHz(Tx); 2620 - 2690MHz(Rx)	22.5dBm
	LTE 900-B8	880 - 915MHz(Tx); 925 - 960MHz(Rx)	22.5dBm
	LTE 800-B20	832 - 862MHz(Tx); 791 - 821MHz(Rx)	22.5dBm
	LTE 700-B28A	703 - 733MHz(Tx); 758 - 788MHz(Rx)	22.5dBm
WCDMA	WCDMA 2100-B1	1920 - 1980MHz(Tx); 2110 - 2170MHz(Rx)	23.5dBm
	WCDMA 1800-B3	1710 - 1785MHz(Tx); 1805 - 1880MHz(Rx)	23.5dBm
	WCDMA 900-B8	880 - 915MHz(Tx); 925 - 960MHz(Rx)	23.5dBm
GSM	GSM 900	880 - 915MHz(Tx); 925 - 960MHz(Rx)	32.5dBm
	GSM 1800	1710 - 1785MHz(Tx); 1805 - 1880MHz(Rx)	29.5dBm

IXGW-TGW.E3

Items	Maximum radio-frequency power		
LTE	LTE 2100-B1	1920 - 1980MHz(Tx); 2110 - 2170MHz(Rx)	22.5dBm
	LTE 1800-B3	1710 - 1785MHz(Tx); 1805 - 1880MHz(Rx)	22.5dBm
	LTE 850-B5	824 - 849MHz(Tx); 869 - 894MHz(Rx)	22.5dBm
	LTE 900-B8	880 - 915MHz(Tx); 925 - 960MHz(Rx)	22.5dBm
	LTE 1800-B9	1749.9 - 1784.9MHz(Tx); 1844.9 - 1879.9MHz(Rx)	22.5dBm
	LTE 850-B18	815 - 830MHz(Tx); 860 - 875MHz(Rx)	22.5dBm
	LTE 850-B19	830 - 845MHz(Tx); 875 - 890MHz(Rx)	22.5dBm
	LTE 850-B26	814 - 849MHz(Tx); 859 - 894MHz(Rx)	22.5dBm
	LTE 700-B28	703 - 748MHz(Tx); 758 - 803MHz(Rx)	22.5dBm
WCDMA	WCDMA 2100-B1	1920 - 1980MHz(Tx); 2110 - 2170MHz(Rx)	23.5dBm
	WCDMA 850-B5	824 - 849MHz(Tx); 869 - 894MHz(Rx)	23.5dBm
	WCDMA 850-B6	830 - 840MHz(Tx); 875 - 885MHz(Rx)	23.5dBm
	WCDMA 900-B8	880 - 915MHz(Tx); 925 - 960MHz(Rx)	23.5dBm
	WCDMA 850-B19	830 - 845MHz(Tx); 875 - 890MHz(Rx)	23.5dBm

Privacy statement

https://www.aip-info.net/legal/privacy/

AIPHONE

Providing Peace of Mind

https://www.aiphone.net/

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