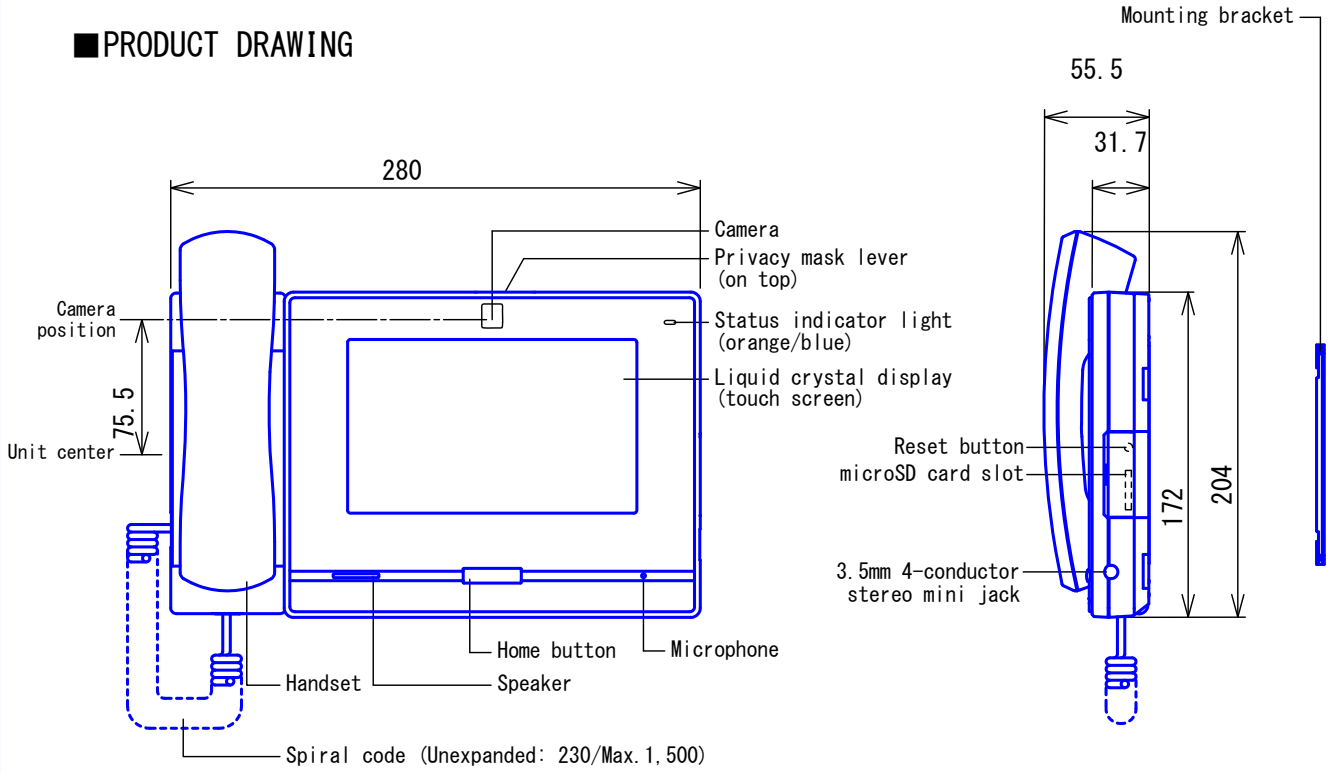
## ■PRODUCT DRAWING




## ■SPECIFICATIONS

| | |
|---|---|
| Power source | Power-over-Ethernet(IEEE 802.3af Class 0) |
| Power consumption | Standby 3.2W, Max. 7.4W |
| Type of communication | Full duplex audio (depending on the destination station)/touch-to-talk |
| Monitor | 7″ TFT LCD display, WVGA 800 x 480 (Approx. 1.15 million pixels) |
| Camera | 1/4-type CMOS, VGA 640 x 480 (Approx. 300,000 pixels) |
| Minimum illumination | 15 lux |
| LAN | Ethernet(10BASE-T, 100BASE-TX) Auto MDI/MDI-X-compatible |
| Audio codec | G.711(μ-law, A-law) |
| Video codec | Encode: H.264/AVC<br>Decode: H.264/AVC, Motion JPEG |
| Protocol | IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP, RTCP, IGMP, MLD, SMTP, SFTP, DHCP, NTP, DNS |
| Encryption method | TLS1.0, TLS1.1, TLS1.2 |
| Packet delivery | Unicast, Multicast |
| Number of units in address book | Max. 9,999 units<br>(IX/IXG stations: Max.9,998 stations + Intercom App: Max.9,999) |
| Ambient temperature | -10～40℃ |
| Mounting | Desktop use(with desktop stand)or wall-mount |
| Electrical box | 3-gang box |
| Material | Self-extinguishing ABS resin |
| Unit color | Flat black (N2 Munsell Approximation) |
| Weight | Approx. 1.1kg<br>(when used with desk stand: Approx.1.3kg) |
| Remarks | ONVIF Profile S support |

| DESCRIPTION | FIG. NAME | | UNIT | DATE |
|---|---|---|---|---|
| GUARD STATION | PRODUCT DRAWING/SPEC. | | mm | 6 July, 2020 |
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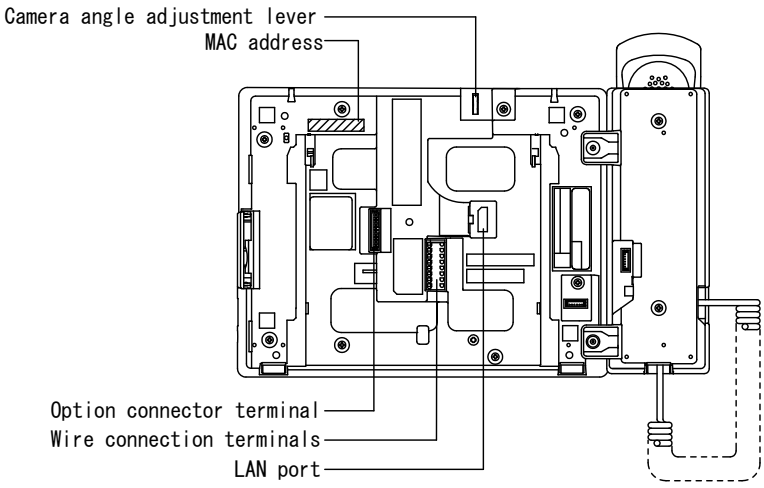
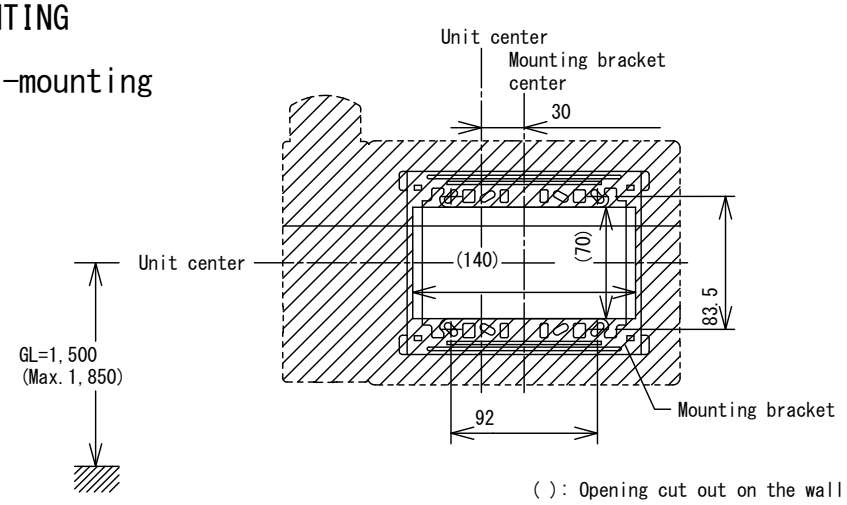
<Back view>




## ●MOUNTING

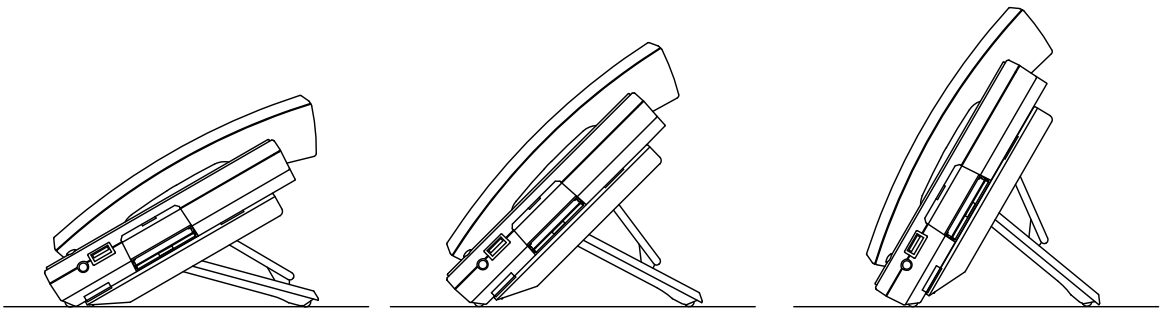
・Wall-mounting




( ): Opening cut out on the wall

・Desktop mounting(with desktop stand)

＊Desktop stand is included with Master Station



30°　45°　60°

| DESCRIPTION | FIG. NAME | | UNIT | DATE |
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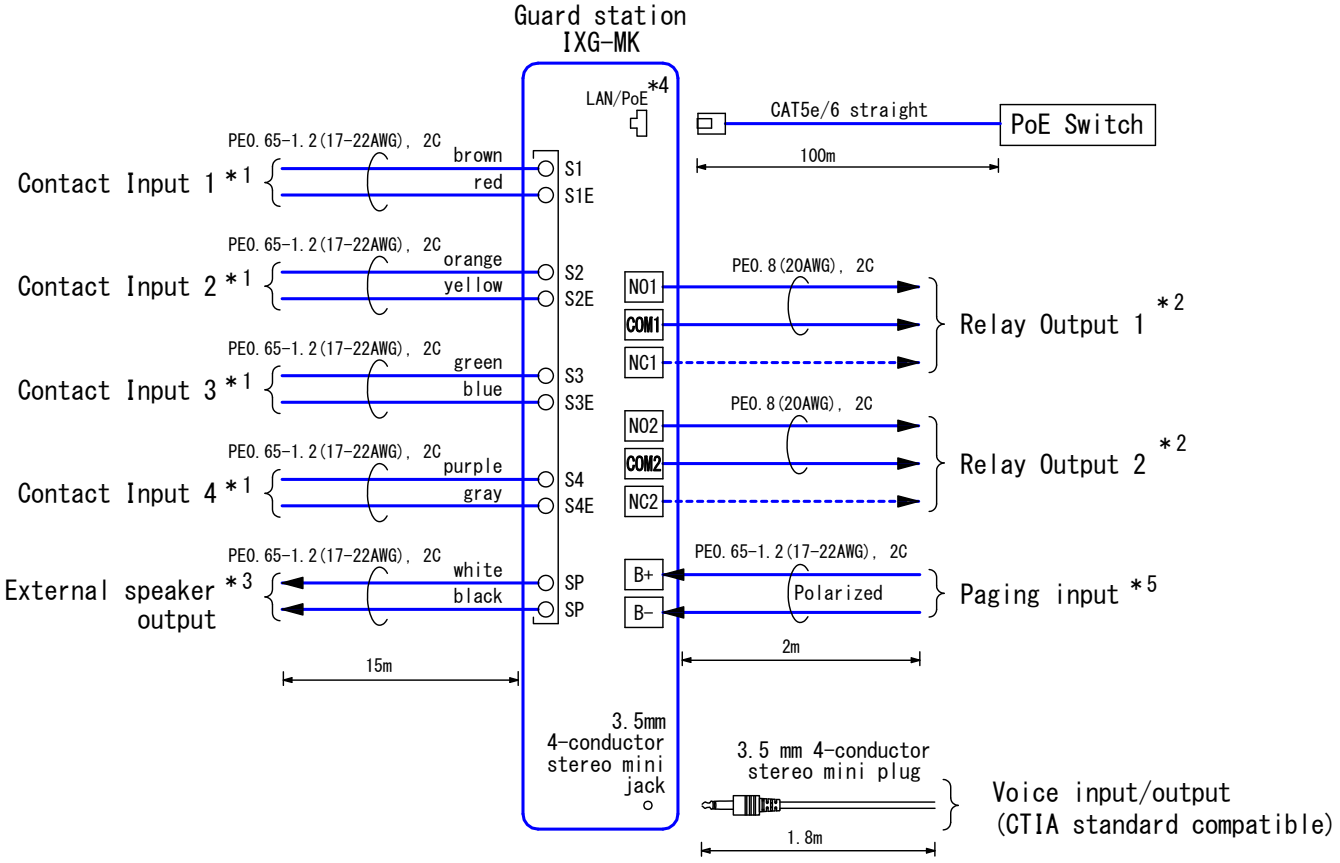
## ■WIRING DIAGRAM




*1. Contact Input Specifications

| | |
|---|---|
| Input method | Programmable dry contact (N/O or N/C)<br>Level detection method |
| Detection time | 200 msec or more |
| Contact resistance | Make: 700 Ω or less<br>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)<br>24 VDC, 1A(resistive load)<br>Minimum overload(AC/DC): 100mV, 0.1mA |

*3. External Speaker Output Specifications

| | |
|---|---|
| Output impedance | 8 Ω |
| Maximum output power | 0.5W |

*4. IEEE802.3 af

*5. Paging Audio Input Specifications

| | |
|---|---|
| Input impedance | 600Ω |
| Input audio level | 50mVrms |

| DESCRIPTION | FIG. NAME | | UNIT | DATE |
|---|---|---|---|---|
| GUARD STATION | WIRING DIAGRAM | | mm | 6 July, 2020 |
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## ■RESTRICTIONS

- A PoE-compatible switch must be used as the switch (hub) for station connection.
- A computer is required to make system settings.
  IXG system can be configured in "IXG Support Tool" application.
- While updating the System settings, stations unavailable.
- Do not register unused units in the address list. If unused units are present in the address list, system performance will degrade.
- In order to audio or video record, the following microSD memory card (market goods) compliant with SD standard is necessary.

| Standard | Capacity | File System | Speed Classes |
|---|---|---|---|
| SDHC | 4GB up to 32GB | FAT32 | C10 |
| SDXC | 64GB up to 128GB | exFAT | C10, U1 |

- Due to handsfree auto voice actuation system, smooth voice switching may be hindered by voice strength of the opponent or ambient noise, etc.
- Due to network environment, system configuration, or settings, it may take time to start communication when an incoming call is answered.

## ■RESTRICTIONS ABOUT THE NETWORK

- When connecting via the Internet (global IP networks), VPN Service is necessary.
- We do not recommend using a wireless communication such as wireless LAN as it may not operate correctly due to security issues or communication speed delays.
- For IPv4 Address with DHCP, due to the architecture of the IXG system, DHCP configuration is only recommended for network environments utilizing managed (static) IP address leasing.
- For stateless IPv6 Address, do not change the prefix of the device so that it cannot transmit Router Advertisement (RA).
- For IPv6 Address with DHCP, due to the architecture of the IXG system, DHCP configuration is only recommended for network environments utilizing managed (static) IP address leasing.
  The DUID of the device: 00030001 + MAC address
- Depending on the network environment and computer, prior arrangements and setup operations involving the network administrator might be necessary.
- Depending on the network environment, operation delays might occur.
- Depending on the network environment or other factors, audio or video dropout, delays, lower frame rates, or other loss of correct operation might occur.
- The protocols used by this system must be supported.
- The network bandwidth required by each device when communicating are as follows.
  G.711: 64kbps x 2(in communication), 64kbps x stations(on page)
  H.264: 32kbps up to 2048kbps
- IPv4 and IPv6 cannot be mixed in the same system.
- When using multicasting for web-setup network-camera searches, video, or audio, use in an environment that does not reject IGMPv3 or MLDv2.

## ■FUNCTIONS

- Calling

Calling a Residential unit: Call Tenant stations, Handset sub stations, and Intercom App in a Residential unit.
Calling a Commercial unit: Call Master stations, Handset sub stations, and Intercom App in a Commercial unit.
Calling a Guard unit: Call Guard stations, Handset sub stations, and Intercom App in a Guard unit.
Calling a Common Inside Area: Call Master stations, Guard stations, and Handset sub stations in a Common Inside Area.
Calling another station in the Guard unit or Common Inside Area: Call another Guard station in the Guard unit or Common Inside Area.
Calling Intercom App in the Guard unit: Call Intercom App in the Guard unit.
Contact input call: Make an outgoing call to all stations that belong to the selected Contact input call unit.

- Answer and communication

Touch-to-talk: This communication mode switches between sending speech or receiving speech.
Mute mode: During communication, the camera and microphone can be turned off by pressing the mute button.
Auto answer: When auto answer is enabled, individual calls from other Guard Stations or Master Stations will be answered automatically.
Privacy: When auto answer feature is enabled, the camera and microphone of the station will not be turned on.

- Monitoring

Monitoring a Door station: Monitor video and audio from a Door station in the same unit or Common Outside Area.
Monitoring an Entrance station: Monitor video and audio from an Entrance station
Monitoring an IP camera: View the video and audio of an IP camera.
Scan monitor: Monitor video and audio from multiple terminals or IP cameras while switching over at regular time intervals.

- Audio or video recording function

Audio or video recording: Record audio and video to a microSD card at the start of or during a call.
Audio or video playback: Play an audio or video recording saved to a microSD card on a station or a computer.

- Transfer

Absent transfer/Schedule transfer/Delay transfer can be transferred to preset one unit or up to ten stations.
However, when transferring the transferred call again, it is transferred to one station.
Transfer calls (during communication): Transfer an answered call to another station.
Absent transfer: Activate absent transfer, the incoming calls are sent to another station automatically.
Schedule transfer: A call can be transferred automatically, according to a schedule.
Delay transfer: Incoming calls can be transferred to another station automatically when not answered within a set period of time.

- Paging

Paging a building: Send a page to all stations that belong to a selected building.
Paging all stations: Send a page to all stations that are registered on this device.
Note) Unicast can reach up to 50 stations.
Message paging: Distribute message data and play notification sound on receiving device.

- Speed Dials/Favorites
  The following functions can be assigned to each of the eight speed dials.
  Calling: Individual Call, Unit Call
  Paging: Building page, All page, Message page
  Monitor: Monitor a station or IP camera, Scan monitor
  Option Relay Control: Control another station's relay output.
- Option Input
  The following functions can be assigned to each of the four option inputs.
  Calling: Unit Call
  Answer operation: Answer a call and page by option input.
  Paging: Building page, All page, Message page, External input page
- Relay Output
  The following functions can be assigned to each of the two relay outputs.
  Status output: Make a relay output in status of Outgoing a call/Incoming a call/ Communication/Outgoing a page/Incoming a page.
  Door Release: Trigger a relay output when receiving an unlocking instruction.
  Option Relay Control: Trigger a relay output when receiving making an relay output instruction from another station.
- Others
  Unlock a door: Unlock an electric lock during an incoming call, communication, or monitoring.
  Up to each 500 incoming/outgoing call records are stored. Station monitoring is not logged in call history.
  Adjust video to enhance visibility: The image will be adjusted to back light compensation and night time correction.
  Send emails: Emails can be sent to pre-registered email addresses when triggering events occur.
  Chime: Play message data following a preset schedule.
  Picture-in-picture function: Display images from two cameras simultaneously during calling, monitoring, or other function.
- Indicators

| Name | Status *1 | Description |
|---|---|---|
| Status indicator | Orange flashing | Booting |
| | | Device error |
| | | Communication failure |
| | | Firmware version upgrading |
| | | Initializing |
| | Orange light | Turning power on, setting transfer on |
| | Blue flashing | Calling destination busy |
| | | Outgoing calling, monitoring, or outgoing paging |
| | | Incoming calling |
| | | Door releasing *2 |
| | | Missed call |
| | | Incoming paging |
| | | Receiving an event notification from a network camera |
| | Blue light | During communication |
| | | Standby (Depends on setting) |

*1. The flashing pattern varies depending on the state of master station.
*2. This flashes when the electrical lock connected to this station is released.
If the door release timeout is set to 3 seconds or less, it will flash at a 3 second interval.

| DESCRIPTION | FIG. NAME | | UNIT | DATE |
|---|---|---|---|---|
| GUARD STATION | FUNCTIONS | | mm | 6 July, 2020 |
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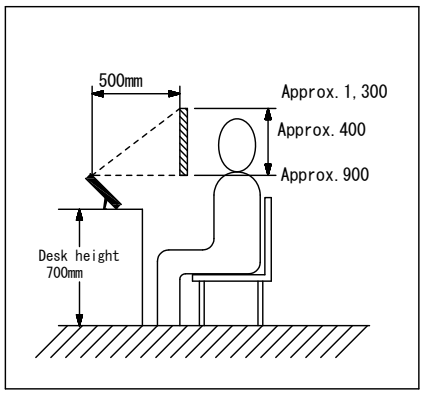
## ■IMAGE VIEW AREA & MOUNTING HEIGHT

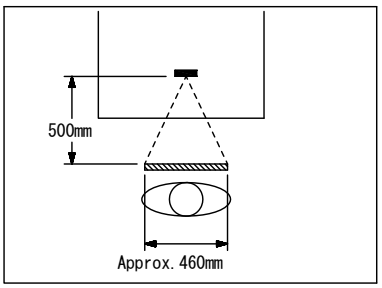
●Note about desktop use

In the case of installed on a desk.
Condition: Desktop stand (45° )
Camera position(the most downward(-20° )
Adjust the camera position according to the desktop stand angle.

Vertical



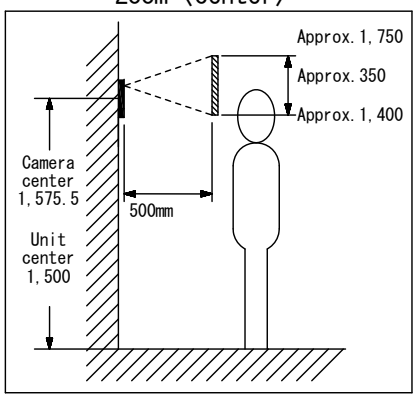

Horizontal




●Wall mounting

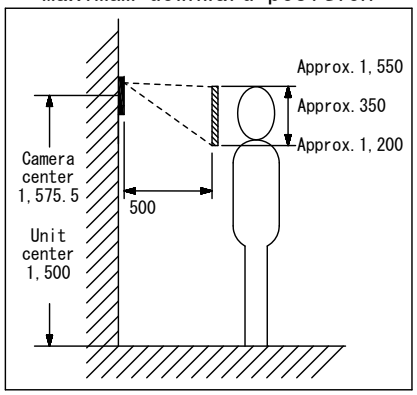
Vertical

Zoom 〈center〉

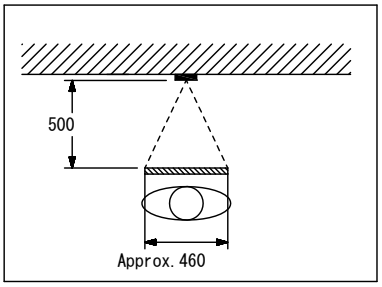



Vertical

Maximum downward position




Horizontal




| DESCRIPTION | FIG. NAME | | UNIT | DATE |
|---|---|---|---|---|
| GUARD STATION | IMAGE VIEW AREA & MOUNTING HEIGHT | | mm | 6 July, 2020 |
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## ■SETTING

- Using the "IXG Support Tool" application
  Install the application on a PC and use to create the setting file for all stations.
- Refer to "■IXG SUPPORT TOOL"

## ■IXG SUPPORT TOOL

- System requirements

| | |
|---|---|
| OS | Windows 7 Professional(SP1), Windows 7 Enterprise(SP1), Windows 7 Ultimate(SP1)<br>Windows 8, Windows 8 pro, Windows 8 Enterprise<br>Windows 8.1, Windows 8.1 pro, Windows 8.1 Enterprise<br>Windows 10 Home, Windows 10 pro, Windows 10 Enterprise |
| CPU | 32 bit (x86) processor or 64 bit (x64) processor of 1 GHz or higher |
| Memory | 4 GB RAM or higher |
| Screen resolution | 1280x768 or greater |

- Functions
  - Settings…All stations in the system can be configured from the Settings window.
  - Setting File Download…Store the Settings File
  - Setting File Upload…Upload the Settings File
  - Station Search…Search the stations in IX/IXG System connected in the network to show the list.
  - Station Replacement…this feature to replace a station.
  - Restore System Settings…If the setting file is lost, the setting file can be restored.
  - Update Firmware…Update the firmware for the station.

## ■IXG SUPERVISION TOOL

Install the application on a PC and use to Line supervision for stations.

- System requirements

| | |
|---|---|
| OS | Windows 7 Professional(SP1), Windows 7 Enterprise(SP1), Windows 7 Ultimate(SP1)<br>Windows 8, Windows 8 pro, Windows 8 Enterprise<br>Windows 8.1, Windows 8.1 pro, Windows 8.1 Enterprise<br>Windows 10 Home, Windows 10 pro, Windows 10 Enterprise |
| CPU | 32 bit (x86) processor or 64 bit (x64) processor of 1 GHz or higher |
| Memory | 4 GB RAM or higher |
| Screen resolution | 1280x768 or greater |

- Functions
  - Line Supervision…By checking the response to a ping, this feature confirms that the station is properly connected to the network.