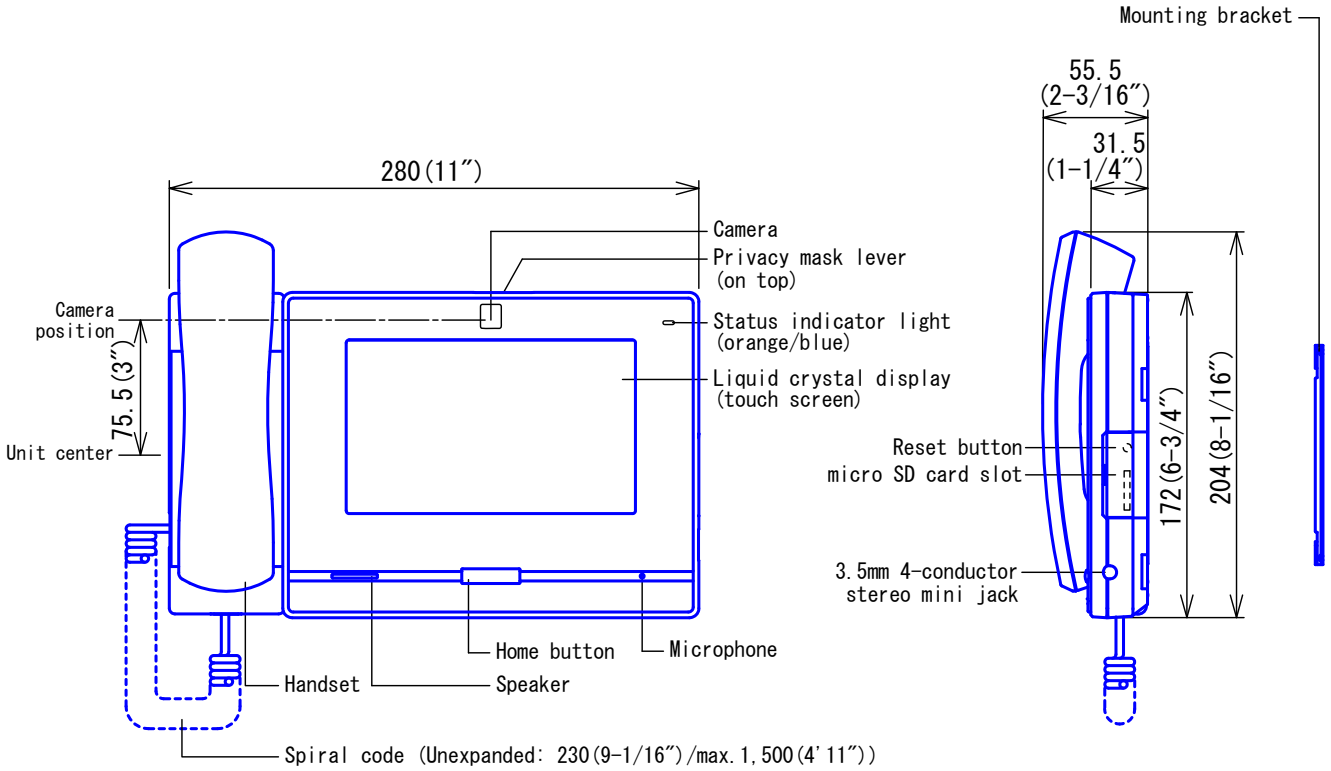
CAUTION:This is a preliminary specification sheet. All information subject to change without notice.

■PRODUCT DRAWING

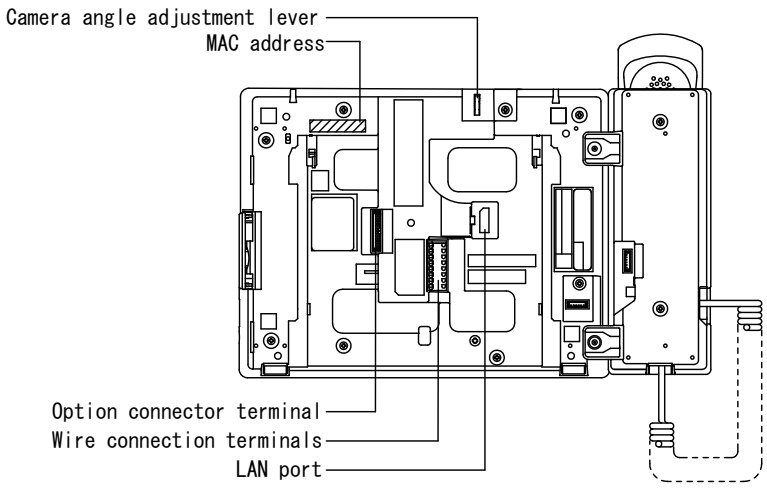


■SPECIFICATIONS

Power source	Power-over-Ethernet(IEEE 802.3af Class 0)
Current consumption	Standby 66mA, maximum 155mA
Type of communication	Hands-free: Automatic voice switching/PTT Handset: Full-duplex
Monitor	7 inch TFT color LCD, WVGA 800 x 480 (approx. 1,150,000 pixels)
Camera	1/4 inch color CMOS, VGA 640 x 480 (approx. 300,000 pixels)
LAN	Ethernet(10BASE-T, 100BASE-TX)
Audio codec	G.711(μ-law, A-law)、G.722
Video codec	H.264/AVC, Motion JPEG
Protocol	IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP, RTCP, IGMP, MLD, SMTP, FTP, DHCP, NTP, DNS
Encryption method	TLS1.0, TLS1.1, TLS1.2
Packet delivery	Unicast, Multicast
Number of stations in address book	500 stations
Ambient temperature	0～40℃ (32～104° F)
Mounting	Desktop use (with desktop stand) or wall-mount
Electrical box	3-gang box
Material	Fire-retardant PS + ABS resin
Unit color	Flat black (N2 Munsell Approximation)
Weight	1.0kg (approx.)(2.2 lbs) (when used with desk stand: 1.2kg (approx.)(2.7 lbs))
Remarks	ONVIF Profile S support

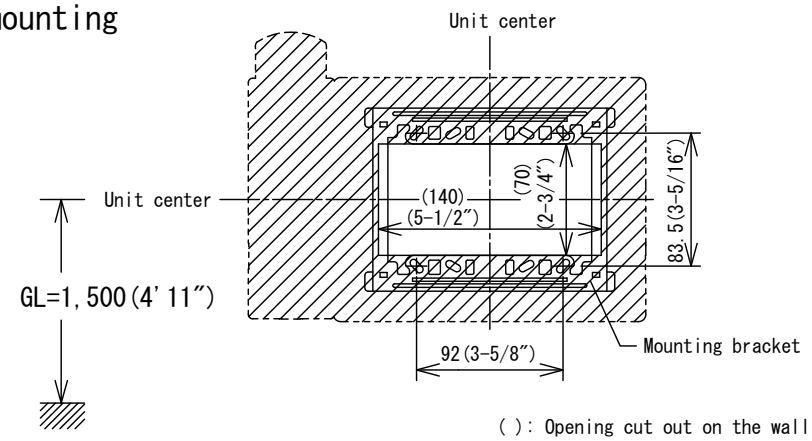
DESCRIPTION	FIG. NAME		UNIT	DATE
MASTER STATION	PRODUCT/SPECIFICATIONS		mm	31 October, 2017
MODEL NO.	FIG.NO.	PAGE	REVISION	AIPHONE
IX-MV7-HB	IX-MV7-HB-1-7	1/7	1	

<Back view>



●MOUNTING

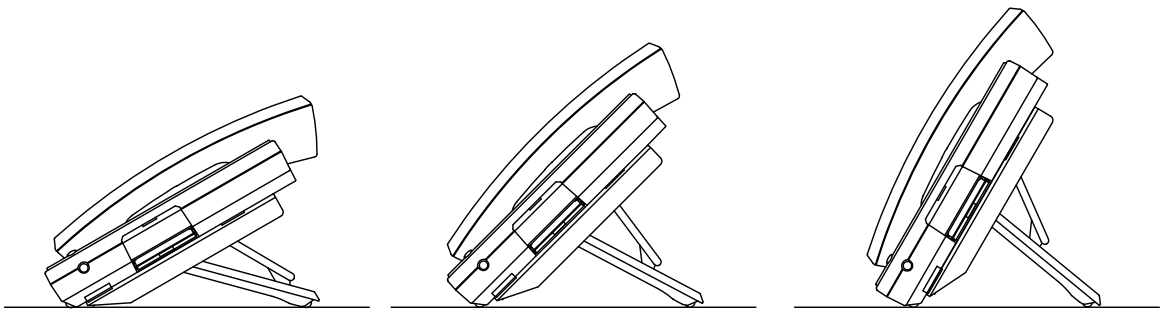
・Wall-mounting



( ): Opening cut out on the wall

・Desktop mounting(with desktop stand)

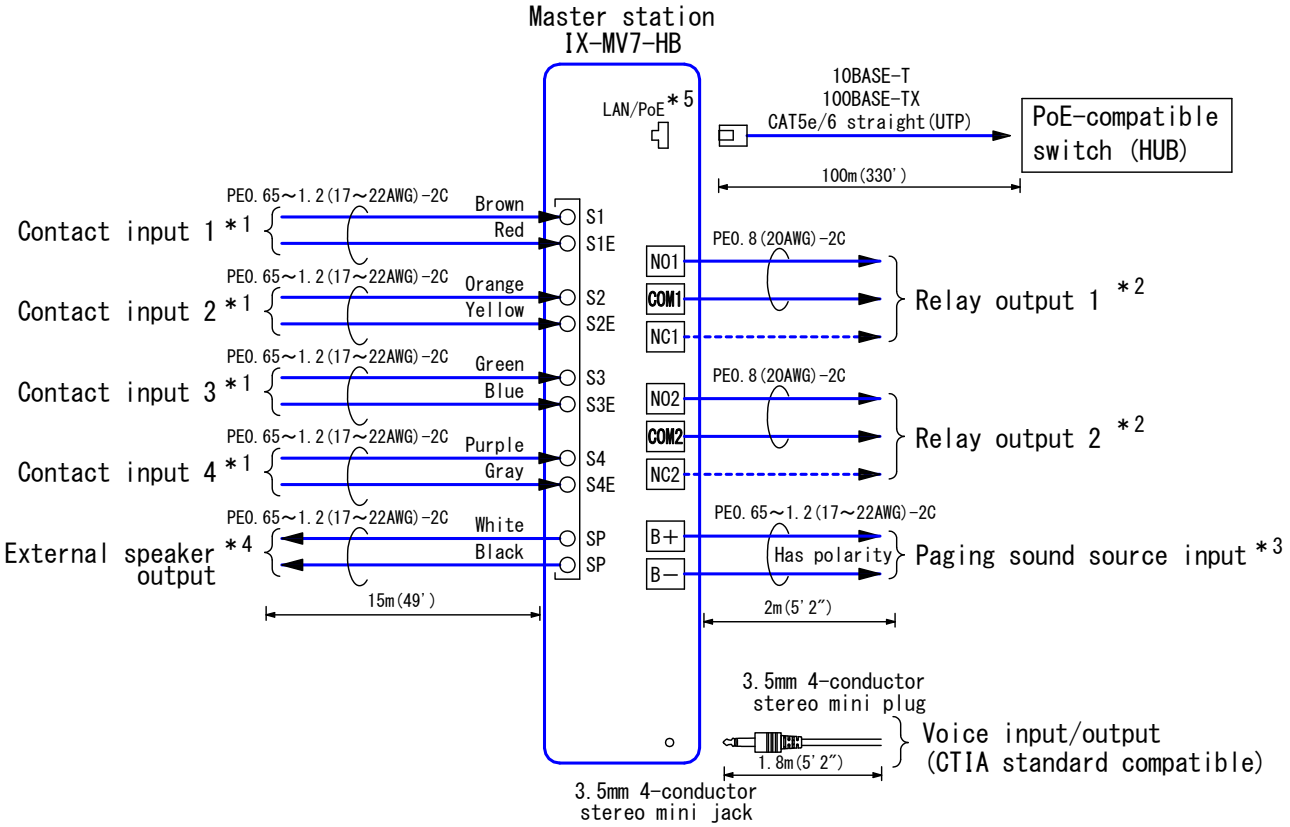
＊Desktop stand is included with Master Station



30°　45°　60°

DESCRIPTION	FIG. NAME		UNIT	DATE
MASTER STATION	PRODUCT DRAWING		mm	31 October, 2017
MODEL NO.	FIG. NO.	PAGE	REVISION	AIPHONE
IX-MV7-HB	IX-MV7-HB-2-7	2/7	1	

■WIRING DIAGRAM



*1. Contact Input Specifications

Input method	Form C dry contact(N/O or N/C)
	System detecting activation signal only
Detection time	100msec or more
Contact resistance	Make: 700Ω or less Break: 3kΩ or more
Terminal short-circuit current	10mA or less
Voltage between terminals	5V DC or less(between open terminals)

*2. Relay Output Specifications

Output method	Form C dry contact(N/O or N/C)
Voltage between terminals	24V AC, 1A(resistive load) 24V DC, 1A(resistive load) Minimum overload(AC/DC): 100mV, 0.1mA

*3. Paging audio input

Input impedance	600Ω
Input audio level	50mVrms

*4. External speaker output

Output impedance	8Ω
Max. output	0.5W

*5. IEEE802.3af

DESCRIPTION MASTER STATION	FIG. NAME WIRING DIAGRAM		UNIT mm	DATE 31 October, 2017
MODEL NO. IX-MV7-HB	FIG. NO. IX-MV7-HB-3-7	PAGE 3/7	REVISION 1	AIPHONE

■RESTRICTIONS

- A PoE-compatible switch must be used as the switch (hub) for station connection.
- A computer is required to make system settings.
  IX system can be configured in one of the two methods, "IX Support Tool" application or Web browser. Once the system has been configured through a browser, the settings cannot be transferred to IX Support Tool. The IX Support Tool is recommended for system settings management.
- Due to handsfree auto voice actuation system, smooth voice switching may be hindered by voice strength of the opponent or ambient noise, etc.
- When set only Push-to-talk mode, all communication, including the use of the handset, will be Push-to-talk.
- A door station cannot be monitored during a call or communication.
- In the following cases, outgoing and incoming call records cannot be saved.
  ・Incoming calls during communication (Up to 20 calls can be saved).
  ・Incoming calls when transfer setting is available.
- Depending on the system configuration, there are cases when the response by the master station might make a short wait before communication starts.
- 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.

■RESTRICTIONS ABOUT THE NETWORK

- Connection cannot be made over the Internet (global IP network).
- We do not recommend using a wireless LAN as it may not operate correctly due to security issues or communication speed delays.
- The procedures used for making network settings differ depending on the availability of automatic IP address assignment through DHCP or stateless automatic setup.
- For IPv4 Address with DHCP, due to the architecture of the IX 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 IX 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.
- Download the Settings data and store it at a safe location. Otherwise, it may become impossible to restore the settings after fixing a failure.
  Make sure not to use duplicate file names when saving data.
- Depending on the network environment, operation delays might occur.
- Some time might be required for picture transmission or paging over a network.
- 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.
  IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP, RTCP, IGMP, MLD, SMTP, FTP, DHCP, NTP, DNS
- The network bandwidth required by each device when communicating are as follows.
  G.711・G.722 : 64kbps x 2(in communication), 64kbps x stations(on page)
- 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

  Individual Call : Call a specific station.
  Group Call: Make an outgoing call to all stations that belong to the selected group.
  Contact input call: Make an outgoing call to all stations that belong to the selected Contact input call group.

- Answer and communication

  Push-to-talk: This communication mode switches between sending speech or receiving speech manually.
  Microphone mute: During communication, the microphone can be turned off by pressing the privacy button.
  Auto answer: When auto answer is enabled, individual calls from other Master Stations will be answered automatically.
  Privacy: The microphone of the unit will not be turned on when auto answer feature is enabled.

- Monitoring

  Monitor a door station: Door station video and audio can be monitored. Master Stations cannot be monitored.
  Monitor a network camera: Monitor video from a network camera.

- Audio or video recording function

  Audio or video recording: Record audio of call and video from camera 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 computer.

- Transfer

  Transfer calls (during communication): Transfer an answered call to another master 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 group: Send a page to all stations that belong to a selected group.
  Paging all stations: Send a page to all stations that are registered on this device.
  Note) Unicast can reach up to 50 stations.
  Messaging paging: Distribute message data and play notification sound on receiving device.
  External input paging: Send a page using contact input and external sound input.

- Others

  Unlock a door: Unlock an electric lock during communication, or during monitoring.
  Up to each 20 incoming/outgoing call records are stored. Station monitoring is not logged in call history.
  ONVIF event notifications can be received from network cameras.
  Adjust video to enhance visibility: The image will be adjusted to back light compensation and night time correction.
  Send e-mails: E-mails can be sent to pre-registered e-mail addresses when triggering events occur.
  Schedule-linked message: Play message data following a preset schedule.
  Picture-in-picture function: Display images from two cameras simultaneously during calling, monitoring, or other function.
  The following combinations are available.
  - ・a master station's camera and a master station's camera
  - ・a master station's camera and a network camera
  - ・a door station's camera and a network camera

  Monitoring function: Perform line monitoring or failure monitoring.

- Indicators

Name	Status *	Description
Status indicator	Orange flashing	Booting
		Device error
		Communication failure
		Firmware version upgrading
		Initializing
	Blue flashing	Calling destination busy
		Outgoing calling, monitoring, or paging calling
		Incoming calling
		Missed call
	Blue light	During communication
		Standby (Depends on setting)

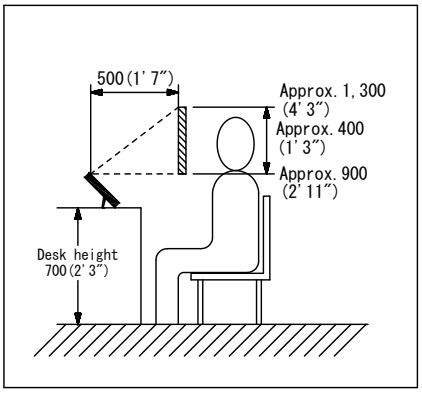
*. The flashing pattern varies depending on the state of master station.

■IMAGE VIEW AREA & MOUNTING HEIGHT

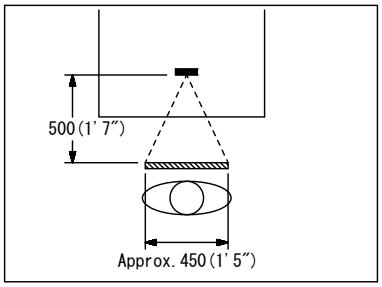
●Note about desktop use

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



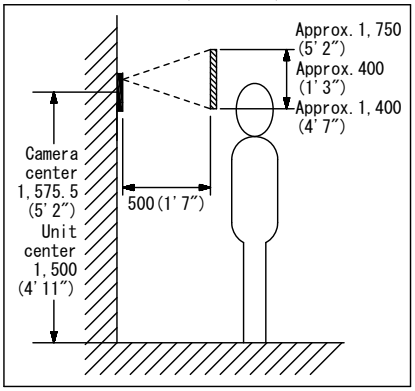
Horizontal



●Wall mounting

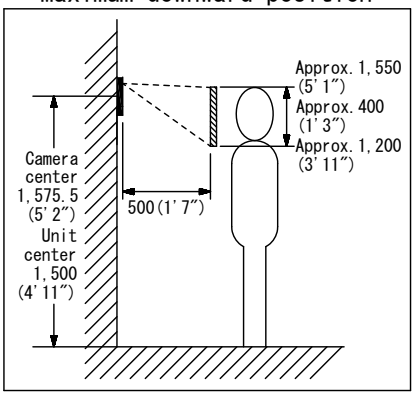
Vertical

Zoom 〈center〉

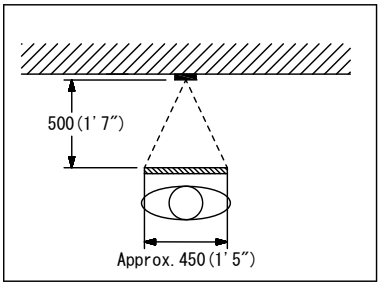


Vertical

Maximum downward position



Horizontal



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MASTER STATION	IMAGE VIEW AREA & MOUNTING HEIGHT		mm	31 October, 2017
MODEL NO.	FIG. NO.	PAGE	REVISION	AIPHONE
IX-MV7-HB	IX-MV7-HB-7-7	7/7	1	