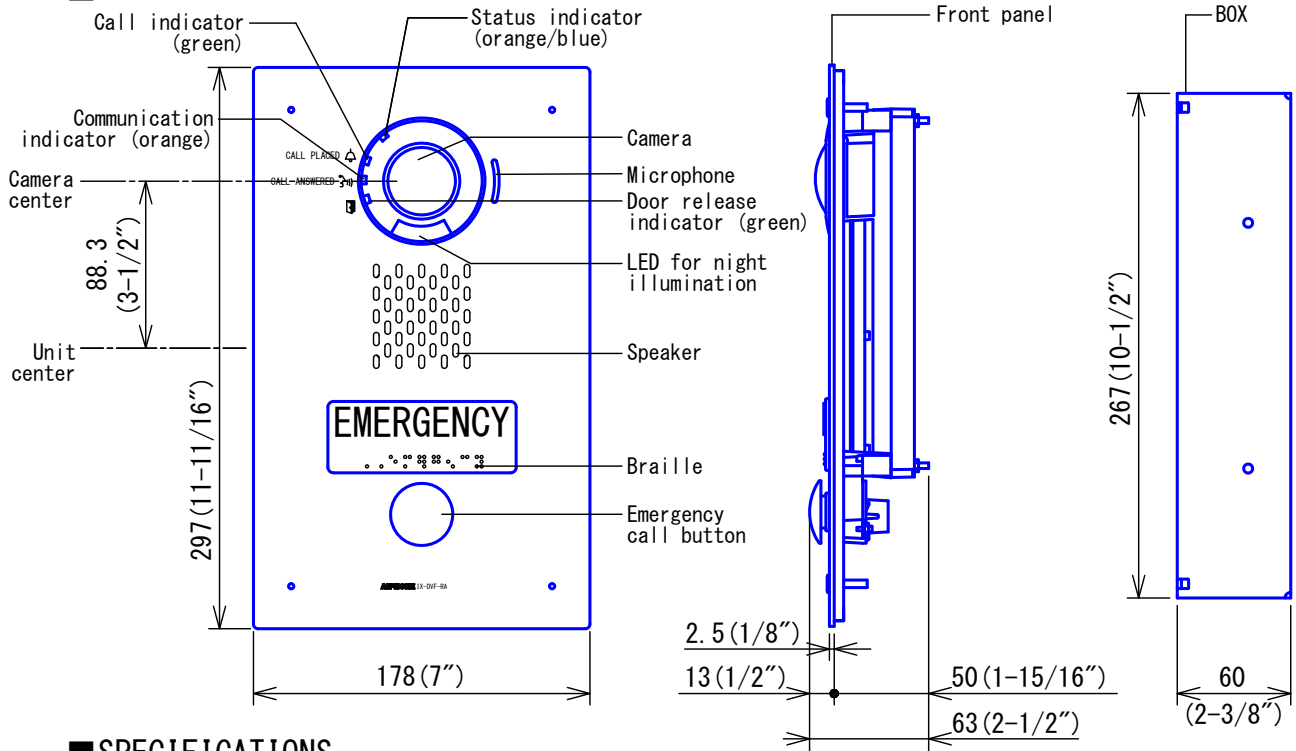


## PRODUCT DRAWING



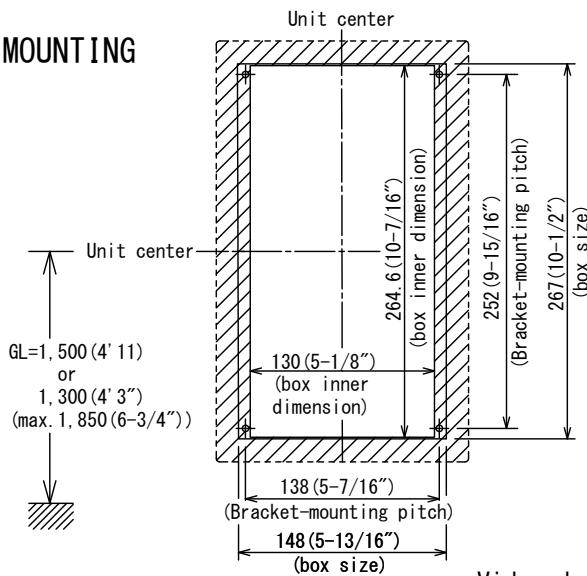
## SPECIFICATIONS

Power source	Power-over-Ethernet (IEEE 802.3af/at Class 0) / 24V DC External power supply
Current consumption	Power-over-Ethernet Standby: 55mA/Standby with continuous recording: 77mA Maximum: 155mA 24V DC External power supply Standby: 94mA/Standby with continuous recording: 140mA Maximum: 300mA
Type of communication	Hands-free: automatic voice switching
Camera	1/3-type color CMOS SXVGA 1280 x 960 (approx. 1.2 million pixels)
Minimum illumination	5 lux
LAN	Ethernet (10BASE-T, 100BASE-TX), Auto MDI/MDI-X-compatible
Audio codec	G. 711 ( $\mu$ -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, SFTP, DHCP, NTP, DNS
Encryption method	TLS1.0, TLS1.1, TLS1.2
Packet delivery	Unicast, Multicast
Number of called stations	20 stations
Ambient temperature	-40~+60°C (-40~+140° F)
Mounting	Flush wall-mount
Material	Front panel: stainless steel, vertical alignment finished/ Main unit: self-extinguishing ABS resin/ Box: SPCC 1.2
Unit color	Front panel: silver/ Main unit: black/ Box: black (Electrodeposition Coating)
Weight	Unit: approx. 1.5kg (3.3 lbs) / Box: approx. 860g (1.9 lbs)
IP rating	IP65
IK rating	IK08
Remarks	ONVIF Profile S support

DESCRIPTION	FIG. NAME	UNIT	DATE
VIDEO DOOR STATION	PRODUCT DRAWING/SPECIFICATIONS	mm	19 December, 2018
MODEL NO.	FIG. NO.	PAGE	REVISION
IX-DVF-RA	154058-1-5	1/5	1

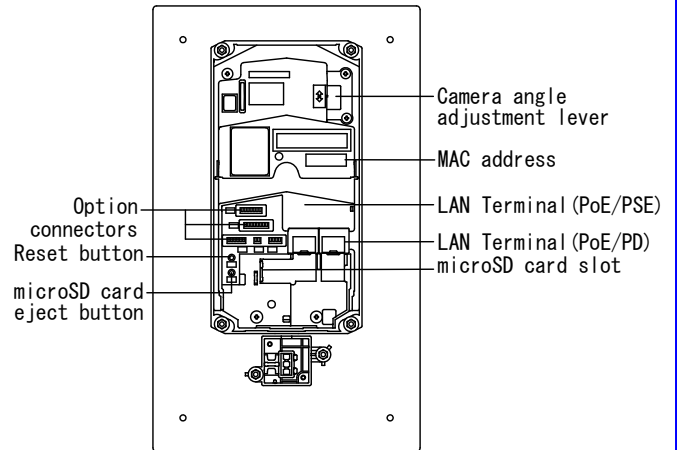
**AIPHONE**

## ● MOUNTING



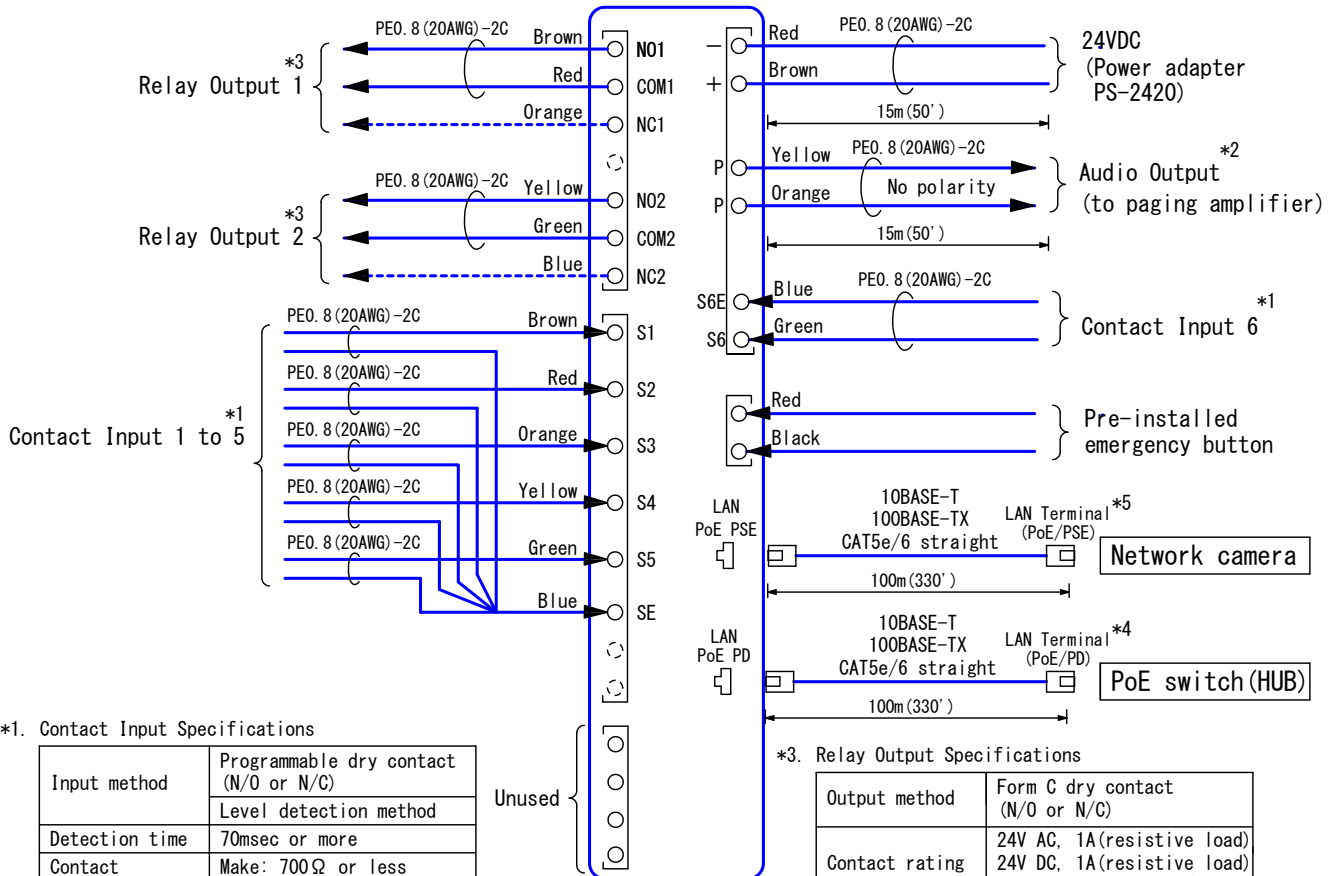
## <Back view>

Behind the Terminal cover



## ■ WIRING DIAGRAM

Video door station  
IX-DVF-RA



### \*1. Contact Input Specifications

Input method	Programmable dry contact (N/O or N/C)
	Level detection method
Detection time	70msec or more
Contact resistance	Make: 700Ω or less Break: 3kΩ or more
Terminal short-circuit current	20mA or less
Voltage between terminals	5V DC or less (between open terminals)

### \*2. Audio Output Specifications

Output impedance	600Ω
Output audio level	300 mVrms (with 600Ω terminal)

### \*3. Relay Output Specifications

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

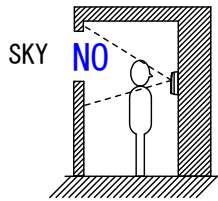
\*4. The intercom unit can be powered by using a PoE switch or Aiphone PS-2420 power supply. In the case "PoE PSE" output of the intercom unit is used to power other devices, IEEE802.3at compatible PoE switch must be used to power the intercom unit. In the case both a PoE switch and Aiphone PS-2420 power supply are used in combination to power the intercom unit, PS-2420 can provide back-up power if the PoE power supply fails. this allows continuous recording function etc. to continue operating.

\*5. Works only with LAN PoE PSE (IEEE802.3at) switch.

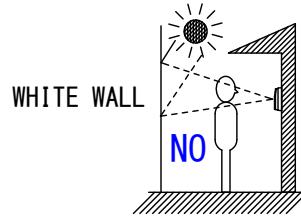
DESCRIPTION <b>VIDEO DOOR STATION</b>	FIG. NAME PRODUCT DRAWING/WIRING DIAGRAM	UNIT mm	DATE 19 December, 2018
MODEL NO. <b>IX-DVF-RA</b>	FIG. NO. 154058-2-5	PAGE 2/5	REVISION 1
			<b>AIPHONE</b>

## ■ RESTRICTIONS

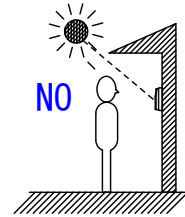
- A PoE-compatible switch must be used as the switch (hub) for station connection.
- Video door station's ONVIF video system can only be accessed by one 3rd party product at a time. Multiple simultaneous connections not possible.
- A computer is required to make system settings.  
IX system can be configured 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.
- Do not cover the moisture escape holes with caulking seals.
- While updating the System settings, stations unavailable.
- Avoid installing This station in the following locations;



At the entrance where background is sky in upper floors of Condominiums, etc.



The background of the standing caller's is white wall.



Where the standing location is strongly sunlit.

- 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

## ■ 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 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.
- Depending on the network environment, operation delay 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 · G. 722 : 64kbps x 2 (in communication), 64kbps x stations (on page)  
H. 264 : 64kbps – up to 2048kbps (When communicating with 3rd party product supporting ONVIF, 32kbps to 8192kbps)
- IPv4 and IPv6 cannot be mixed in the same system.
- When using multicasting for video, or audio, use in an environment that does not reject IGMPv3 or MLDv2.

DESCRIPTION	FIG. NAME		UNIT	DATE
VIDEO DOOR STATION	RESTRICTIONS		mm	19 December, 2018
MODEL NO.	FIG. NO.	PAGE	REVISION	<b>AIPHONE</b>
IX-DVF-RA	154058-3-5	3/5	1	

## FUNCTIONS

- Calling
  - 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.
- 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 computer.
- Paging
  - Incoming a page.
- Option Input
  - The following functions can be assigned to each of the six option inputs.
  - Calling: Group Call
  - Answer operation: Answer a call and page by option input.
  - Relay Latch Reset: Reset the "Latch Output" in operation.
  - API: Send API command by option input.
- 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/Communication.
  - External Audio Output: Trigger a relay output for operating PA amplifier when audio output from Audio Output terminal.
  - 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.
- Audio output
  - Output receiving audio of communication or paging to paging amplifier.
- Others
  - IP-PBX integration: IX System can integrate with IP-PBX \*.
    - Make, receive, transfer calls, answer visitors, and release doors.
    - \*. Integration with SIP (Unified Communication Manager) of Cisco Systems.
  - Send emails: Emails can be sent to pre-registered email addresses when triggering events occur.
  - Transmitting video through ONVIF: View Video from Door Station camera with a 3rd party product supporting the ONVIF specification.
  - Chime: Play message data following a preset schedule.
- Indicators

Name	Status *1	Description
Status indicator	Orange flashing	Booting
		Device error, startup error
		Communication failure
		Updating Firmware
		Mounting/unmounting microSD card
	Initializing	
	Blue light	Standby
	Blue flashing	Call destination busy
		Incoming call
		Incoming paging
When being monitored (Depends on setting)		
Call indicator	Green flashing	Outgoing calling
Communication indicator	Orange light	In communication
Door release indicator	Green flashing	Door releasing *2

\*1. The flashing pattern varies depending on the state of video door station.

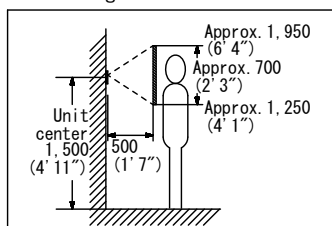
\*2. This flashes when the electrical lock connected to this station is released.

If the door release timeout is set to 3 seconds or less, it will flash at a 3 second interval.

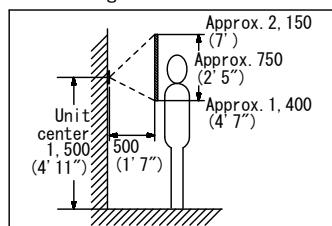
## IMAGING RANGE AND MOUNTING LOCATION

### Vertical

Camera angle 0°

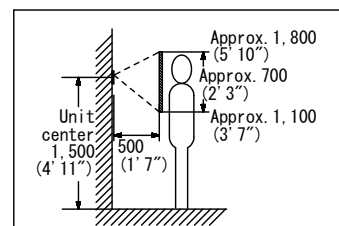


Camera angle +13°

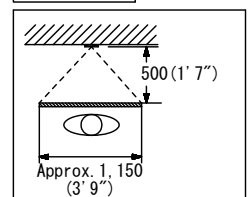


Camera angle -8°

If lower due to a level difference



### Horizontal



DESCRIPTION	FIG. NAME	UNIT	DATE
VIDEO DOOR STATION	FUNCTIONS/IMAGING	mm	19 December, 2018
MODEL NO.	FIG. NO.	PAGE	REVISION
IX-DVF-RA	154058-4-5	4/5	1

**AIPHONE**

## ■ SETTING

- Station settings  
Configure on the station
- WEB settings  
Configure using a PC  
System requirements

Network	Ethernet(10BASE-T, 100BASE-TX)
Web browser	Microsoft Edge / Internet Explorer 10.0, 11.0 / Mozilla Firefox 59, 60(TLS1.0, 1.1 or 1.2 enabled)

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

## ■ IX SUPPORT TOOL

- System requirements

OS	Windows 7 Professional, Windows 7 Enterprise, Windows 7 Ultimate Windows 8, Windows 8 pro, Windows 8 Enterprise Windows 8.1, Windows 8.1 pro, Windows 8.1 Enterprise Windows 10 Home, Windows 10 pro, Windows 10 Enterprise Windows 10 Education
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(Table View)---All stations in the system can be configured from the Settings window.
  - Settings(Station View)---Configure each station in the system individually.
  - Setting File Download---Store the Settings File
  - Setting File Upload---Upload the Settings File
  - Station Search---Search the stations in IX 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.
- Restrictions
  - If the station was configured or modified using the web interface, the setting file cannot be downloaded using the IX Support Tool.

## ■ IX SUPERVISION TOOL

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

- System requirements

OS	Windows 7 Professional, Windows 7 Enterprise, Windows 7 Ultimate Windows 8, Windows 8 pro, Windows 8 Enterprise Windows 8.1, Windows 8.1 pro, Windows 8.1 Enterprise Windows 10 Home, Windows 10 pro, Windows 10 Enterprise Windows 10 Education
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.
  - Device Check---This function to determine whether stations are operating normally or malfunctioning.
  - Download Video and Audio---To download recordings of the Door Stations.

DESCRIPTION <b>VIDEO DOOR STATION</b>	FIG. NAME SETTING/IX SUPPORT TOOL/IX SUPERVISION TOOL	UNIT mm	DATE 19 December, 2018
MODEL NO. <b>IX-DVF-RA</b>	FIG. NO. 154058-5-5	PAGE 5/5	REVISION 1 <b>AIPHONE</b>