

JO Series

Network Security Summary

This document goes over the requirements and protocols used for the JO-1MDW answering station's network connection. This connection is only required for mobile app function.

General Information

Mobile App:	Intercom App Type B
Answering Station:	JO-1MDW
Expansion Answering Station:	JO-1FD
Video Door Station:	JO-DA, JO-DV, JO-DVF

Installation and Network Discovery

The JO-1MDW connects to a local area network through WiFi. The JO mobile app can receive calls or monitor the door station while connected to a cellular or wireless network with internet access. During initial setup, the network must be configured so that the default gateway can respond to ping requests from the JO-1MDW.

IPv4 Address	10.0.0.0-10.255.255.255, 172.16.0.0-172.31.255.255, 192.0.0.0-192.168.255.255
IPv4 Subnet Mask	128.0.0.0-255.255.255.255
Gateway	A default gateway is required for app connectivity.
DNS Server	DNS information is required for domain name resolution.
Supported Wireless Frequency	2.4 GHz (5.0 GHz and dual band not supported, WAP connections not recommended)
Supported Wireless Protocols	802.11b/g/n
Supported Encryption Protocols	None, WEP, WPA-PSK (TKIP/AES), WPA2-PSK(AES)

Ports and Protocols

Protocol	Port	Function	Destination
HTTPS	443	App	api-r1.jo.aiphone-app.net api-r3.jo.aiphone-app.net
MQTT	8883	Cloud server access	*.iot.us-east-1.amazonaws.com
SRTP/STUN	10000-20000	Audio and video	*.compute-1.amazonaws.com
NTP	123	Time sync	ntp.jo.aiphone-app.net
IGMP**	Broadcast	App registration	N/A

* Represents a wildcard character.

** IGMP is only used during the app registration process during installation.

App Registration on Managed Networks

IGMP and multicast are temporarily utilized when registering mobile devices to the JO-1MDW. During initial setup, the JO-1MDW and mobile device must be in the same broadcast domain until the process is complete.

If the network does not allow this broadcast, temporarily connect the JO-1MDW and the mobile device to the same router on a separate network, such as a mobile hot spot. This will remove any network security that could prevent initial pairing during app registration. Complete the registration process, then deploy the JO-1MDW to its final location. The app and JO-1MDW will remain paired.