JO system, Wifi/App Troubleshooting Guide

1. Network requirements for the JO-1MDW

Please check the items below to confirm that the wifi network is set correctly

1. What is your average internet speed, both download and upload?

(Ideally, you are looking for an update speed of 1.3Mbps upload and 1.3Mbps download. If the upload speed is around 0.8Mbps, please lower the 'video quality' in other settings. This will improve the data transmission between the JO master and the Aiphone server by reducing the overall upload data.)

2. Is your Wifi band on either IEEE802.11b/g/n?

(Please make sure that the above frequency is enabled in your modem router's wifi setting. bands such as 802.11 ac aren't available for the JO-1MDW.)

3. Is the wifi frequency set on 2.4Ghz?

(The JO system has 2 antennas that can transmit data in the 2.4GHz frequency. 5.0GHz frequency isn't available.

Also, only one of the antennas can be used at a time.)

4. Do you use any access point devices or have the 802.11r (fast roaming) turned on within your house?

(Access point devices vary according to the network device's manufacturer. Some may use technologies that can't be used with the JO-1MDW. Depending on the situation, it's required to turn them off.)

5. Is the JO-1MDW updated to firmware version 2.13?

(As of 20 December 2019, the most current JO firmware is the version 2.13 More details about the JO system can be found from the URL below. https://www.aiphone.net/product/single/jo_series/)

6. Give a static IP

If the IP address keeps changing due to any reason such as network configuration, please allocate a static IP to the JO-1MDW.

7. Select a different internal antennae inside the JO-1MDW

Please check the screenshot below.

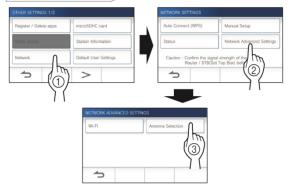
Selecting the antenna

Antenna of the station can be selected according to the reception status or the location of the station or Wi-Fi router.

1 From the MENU screen, tap ○ → > Other Settings.

A message will appear asking whether or not to proceed.

- 2 To continue configuring the settings, tap .
- 3 Tap Network → Network Advanced settings → Antenna selection



4 Tap either Antenna A or Antenna B, and tap



* The Wi-Fi signal strength of the selected antenna will be shown.

2. What to do when the App doesn't work.

If you have setup the JO-1MDW according to the wifi requirement but it's not working as expected, please try the items below.

1. Restoring all settings to the factory default

In rare cases, firmware glitches may be the root cause of the faulty symptoms. The most effective way to resolve firmware issues are to default the JO-1MDW to factory settings. Please note that defaulting the JO-1MDW will delete any data or configuration that has been set in the JO-1MDW. Also, it will require the mobile App to be deleted and reinstalled into your phone. To default the JO-1MDW, please follow the step by step instruction on the right.

Restoring all settings to the factory default

- * This operation also deletes all the recordings including protected ones.

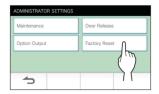
A message will appear asking whether or not to proceed.

- 2 To continue, tap .
- **3** Tap > → Administrator Settings.



A message will appear asking whether or not to proceed.

- **4** To continue, tap ✓.
- 5 Tap Factory Reset



6 Tap 🗸 to continue initializing the settings.

* To cancel, tap ______.

When "The station has been initialized." is shown, the initializing has been completed, and will return to the screen of step 5.

NOTE:

It is recommended that user settings, recordings and logs are deleted if ownership of this station changes.

2. Let's check if the symptom is caused by the JO-1MDW or the network.

The easiest way to check it, would be by using a second smartphone with tethering, or hotspot functionality. Please enable the hotspot and connect the JO-1MDW and a smartphone with the Intercom type B App to it. Once connected, please check that all three features are working within spec.

("please note that you'll require good 4\$\overline{G}\$ connection to proceed with this test. If the 4\$\overline{G}\$ connection isn't strong enough please run a speed test to confirm that you have at least 1.3Mbps upload and download speed to proceed with this test)

Feature 1, answer a call from a door station

Feature 2, monitor the door station

Feature 3, review a recorded video

If all the features are working within specification, the higher probability is that the issue is within the internet and wifi network. The opposite will indicate that the issue is caused by a potential fault within the JO-1MDW. If this is a network issue, please check the network settings in the modem router.



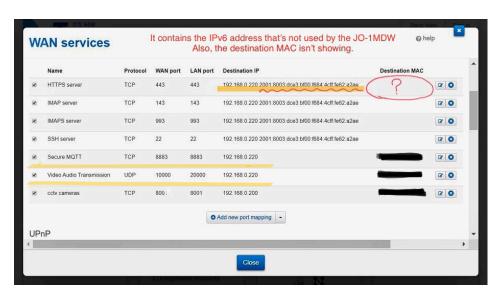
3. Port Forwarding

In some cases, such as when using NBN modem routers, port forwarding is necessary. The ports that need to be open are...

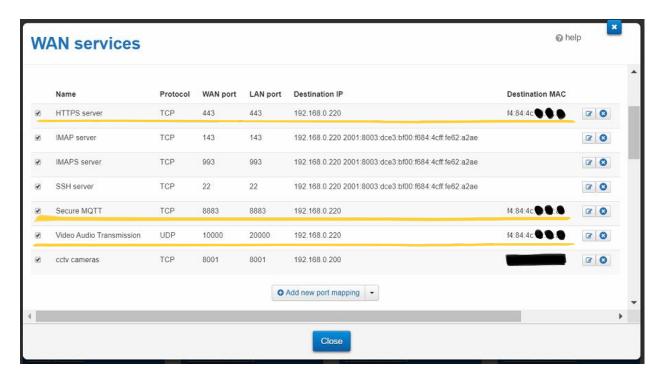
HTTPS 443, TCP, for certification server control Secure MQTT 8883, TCP, for call control server connection RTP 10000-20000, UDP, for video and audio transmission

The Port Forwarding method is different according to the modem router in use.

I've prepared an example below using a Telstra modem router, but if you are using a different internet service provider or a modem router that isn't provided by your provider, please contact the equipment manufacturer or the internet service provider for assistance.



For most Telstra modem routers, the port forwarding setting is done in the 'WAN Services' settings in the advanced setting tab. The port forwarding can be done by clicking the 'Add new port mapping' button and typing the correct values accordingly.



In the example above, all three port information has been entered, but as you can see, the HTTPS has got an IPv6 address and doesn't have the Mac address showing up in the screen. In this case that indicates that the port forwarding setting is done incorrectly.

To correct it, the IPv6 is deleted by editing the entered information. Now, the MAC address will show up correctly. Please check the screenshot below.

4. What to do if the cause seems to be due to hardware, JO-1MDW, fault.

Hardware related issues can be divided into issues caused by firmware anomaly or hardware anomaly. The later is easier to identify as other features controlled by the hardware will most likely fail too. If all the network settings as well as the results from the steps above indicates that the cause is hardware related, please bring the JO-1MDW to the point of purchase for screening and a potential service.

3. What to do if the cause is unknown or if you require further assistance.

Please call Aiphone for assistance. Ideally, please have a computer with TeamViewer connected to the end-user's wifi.

TeamViewer URL

https://www.teamviewer.com/en/

The Aiphone technical support will check the modem router's settings and request few onsite tests over the phone.

For further assistance, please call 02 8036 4507 and press 3 to speak with one of out technical support members.