



Wi-Fi Adapter Kit Instructions

NOTICE

Read all installation and configuration instructions before proceeding. If you experience difficulty, contact Garmin® Product Support at www.garmin.com/support.

Items Needed

- Included:
 - A Ubiquiti™ PicoStation™ M2 HP configured by Garmin. Go to <http://buy.garmin.com> for more information.
 - A Power Over Ethernet (PoE) injector to supply power to the PicoStation.

NOTE: An AC-powered PoE injector and a DC-powered PoE injector are supplied for your convenience. Only one of them should be used when installing the PicoStation.
 - One cable and fuse to connect the DC PoE injector to power
 - One gray shielded Ethernet cable
 - One green special-shielded Ethernet cable
 - One Garmin Marine Network coupler
 - One Garmin Marine Network cable
- Not Included:
 - A compatible Garmin chartplotter with the newest firmware update (included on the SD card in your kit). See your chartplotter owner's manual for more information about updating your chartplotter's firmware using the SD card.
 - An Apple® iOS® or Android™ device with an applicable Garmin application installed

Installing the PicoStation on a Boat

NOTICE

The PicoStation and POE injector must be installed in locations where they remain dry.

- Mount the PicoStation on your boat.
- Mount the POE injector on your boat.
- Connect the POE injector to power as shown in the wiring diagram.
- Connect the POE injector to the PicoStation and to your chartplotter as shown in the wiring diagram.
- Apply a marine-approved silicone caulk where necessary to seal cable routing holes and panel gaps.

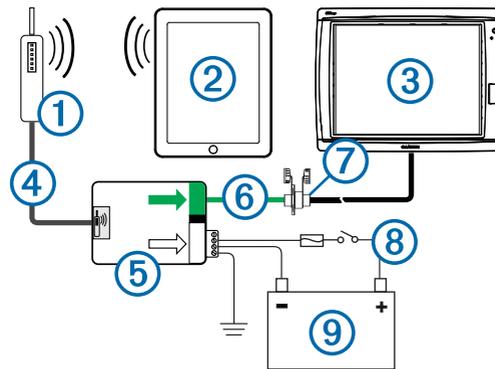
Compass-Safe Distance

4 in. (10 cm)

Wiring Diagram

NOTICE

Connecting the Power-over Ethernet injector incorrectly can cause damage to devices on the Garmin marine network. The gray shielded Ethernet cable must be connected from the PicoStation port to the Ubiquiti PicoStation and the green shielded Ethernet cable must be connected from the Garmin Network port to a device on the Garmin marine network.



Number	Device	Connection Type
①	Ubiquiti PicoStation	Connects to the PicoStation port on ⑤ using the gray shielded Ethernet cable.
②	Apple iOS or Android device	Connects wirelessly to ①.
③	Garmin Marine Network-compatible chartplotter	Connects to the Garmin Network port on ⑤ using a Garmin Marine Network cable, the green shielded Ethernet cable, and the coupler ⑦.
④	Gray shielded Ethernet cable	Connects to the PicoStation port on ⑤ and to the PicoStation.
⑤	Power-over-Ethernet injector	Provides power to the PicoStation through an Ethernet cable. NOTE: The gray shielded Ethernet cable connected to the PicoStation port must be connected only to the PicoStation. The green shielded Ethernet cable connected to the Garmin Network port must be connected only to the Garmin Marine Network.
⑥	Green shielded Ethernet cable	Attaches ⑤ to ③ through ⑦. NOTE: Do not use this cable to attach ⑤ directly to ③ unless the entire marine network is installed in a weather-protected location.
⑦	Marine network cable coupler	Connects the green shielded Ethernet cable to a Garmin Marine Network cable. NOTE: The coupler is required to ensure a waterproof connection to your chartplotter.
⑧	DC wiring connections	See the POE Injector DC Connection Considerations topic (POE Injector DC Connection Considerations) for detailed wiring instructions.
⑨	12-24 Vdc power source.	

POE Injector DC Connection Considerations

The POE Injector must be connected to the boat battery correctly to provide power to the connected device. When connecting the POE Injector to the battery, observe these considerations.

- If it is necessary to extend the power and ground wires, you must use 24 AWG (0.20 mm²) or larger wire.
- The positive voltage in (VIN+) must connect through a 1A fuse.
- There are two positive VIN+ ports on the POE Injector.
 - To power the device, one of the VIN+ ports must be connected to the positive terminal of the battery. Either port can be connected.
 - The unused VIN+ port can be used to connect an additional power source, such as a backup (optional).

- It is not necessary to connect the frame ground (FG) port, because the device should not need any additional chassis grounding in most installation situations. If interference is experienced, the FG port can be connected to the water ground of the boat to help avoid the interference.

Port Name	Function
VIN+	Positive voltage in. There are two of these ports available, although only one must be connected.
VIN-	Negative voltage in. Both VIN+ ports share this port for the negative voltage connection.
FG	Frame ground. This is not needed in most installation situations. Negative voltage in must not be connected to this port. The VIN- port must be used for negative voltage-in connections.

Apple iOS and Android Device Connection Considerations

- Every PicoStation is configured with a unique SSID and WPA Preshared Key (password). Refer to the label on the device package for your SSID and WPA Preshared Key.
- You must download and install a Garmin marine application on your Apple iOS or Android device before you can communicate with your Garmin Marine Network.

Connecting an Apple iOS Device to a 7000 Series or Earlier Chartplotter

Before you can connect an Apple iOS device to a 7000 series or earlier chartplotter, you must configure an IP address for the device to connect to the PicoStation.

NOTE: These procedures apply only when connecting an Apple iOS device to a 7000 series or earlier chartplotter.

- 1 On the iOS device, open **Settings**, and select **Wi-Fi**.
- 2 Select your PicoStation SSID, and enter the password.
- 3 Select **▶** next to your PicoStation SSID.
- 4 Select **Static**.
- 5 Enter **172.16.1.10** in the IP Address field.

NOTE: If you are connecting multiple iOS devices, you can enter multiple IP addresses, separated by commas. You must change the final number in each additional IP address to a number greater than 10, but less than 255. For example, 172.16.1.20, 172.16.1.30, and so on.

- 6 Enter **255.255.0.0** in the Subnet Mask field.
The subnet mask must be the same for all devices.
- 7 Select **Wi-Fi Networks** to save the settings and exit.
- 8 Repeat steps 1–7 to connect additional iOS devices.

Connecting an Apple iOS or Android Device to an 8000 Series or Newer Chartplotter

NOTE: These procedures apply only when connecting an Apple iOS or Android device to a 8000 series or newer chartplotter.

- 1 On the iOS or Android device, open **Settings**, and select **Wi-Fi**.
- 2 Select your PicoStation SSID, and enter the password.
- 3 Repeat steps 1–2 to connect additional iOS or Android devices.

Verifying iOS or Android Device and Access Point Configuration

- 1 On the iOS or Android device, open the Garmin marine application.
- 2 Select an option:
 - On a 7000 series or earlier chartplotter, select **Configure > Communications > Marine Network**.

- On an 8000 series or newer chartplotter, select **Settings > Communications > Marine Network**.

3 Select an option:

- If your mobile device appears in the list of attached marine network devices on the chartplotter, your PicoStation is installed correctly, the device is properly configured, and your Garmin marine application can communicate with your Garmin Marine Network.
- If your mobile device is not listed on the chartplotter, perform the troubleshooting steps in these instructions ([Troubleshooting](#)).

Troubleshooting

If your iOS or Android device is not connected the Garmin Marine Network, perform these troubleshooting procedures.

Apple iOS Device on a 7000 Series or Earlier Chartplotter Troubleshooting

- The iOS device may not be connecting to the PicoStation. When connected correctly, the SSID of the PicoStation appears in the list of Wi-Fi networks on the device.
 - The iOS device may not be properly configured. See [Connecting an Apple iOS Device to a 7000 Series or Earlier Chartplotter](#) for instructions on configuring the device.
 - The PicoStation may not be installed correctly. When correctly connected, the light on the PicoStation is lit. See [Wiring Diagram](#) for instructions on installing and connecting the PicoStation.
- If the device is connected to PicoStation, but does not appear on the chartplotter, the chartplotter may not be connected to the Garmin Marine Network.
- If you have confirmed that the PicoStation is installed correctly, the mobile device is properly configured, and your device is not listed on the chartplotter, you can contact Garmin Product Support for assistance.

Apple iOS Device on an 8000 Series or Later Chartplotter Troubleshooting

- The iOS device may not be connecting to the PicoStation. When connected correctly, the SSID of the PicoStation appears in the list of Wi-Fi networks on the device.
 - The PicoStation may not be installed correctly. When correctly connected, the light on the PicoStation is lit. See [Wiring Diagram](#) for instructions on installing and connecting the PicoStation.
- If the device is connected to PicoStation, but does not appear on the chartplotter, the chartplotter may not be connected to the Garmin Marine Network.
- If you have confirmed that the PicoStation is installed correctly, the mobile device is properly configured, and your device is not listed on the chartplotter, you can contact Garmin Product Support for assistance.

Android Device Troubleshooting

- The Android device may not be connecting to the PicoStation. When connected correctly, the SSID of the PicoStation appears in the list of Wi-Fi networks on the device.
 - **Settings > Wi-Fi > Advanced > Auto Network Switch** may be enabled. If it is enabled, you should disable **Auto Network Switch**.
 - The PicoStation may not be installed correctly. When correctly connected, the light on the PicoStation is lit. See [Wiring Diagram](#) for instructions on installing and connecting the PicoStation.
- If the device is connected to PicoStation, but does not appear on the chartplotter, the chartplotter may not be connected to the Garmin Marine Network.

- If you have confirmed that the PicoStation is installed correctly, the mobile device is properly configured, and your device is not listed on the chartplotter, you can contact Garmin Product Support for assistance.

Limited Warranty

The Garmin standard one-year consumer limited warranty applies to this accessory. For more information, go to www.garmin.com/support/warranty.html.

Export Information

The Garmin Wi-Fi Adapters 010-11981-XX are classified under ECCN 5A992 under the U.S. Export Administration Regulation's Commerce Control List. Please be advised that classifications are subject to change. Under the U.S. export regulations, the U.S. Government assigns your organization or client, as exporter/importer of record, the responsibility for determining the correct classification of any item at the time of export/import. Depending on the customer or the country of destination, an export license may be required by the Department of Commerce prior to shipment.

Contacting Garmin Product Support

- Go to www.garmin.com/support and click **Contact Support** for in-country support information.
- In the USA, call (913) 397.8200 or (800) 800.1020.
- In the UK, call 0808 2380000.
- In Europe, call +44 (0) 870.8501241.

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