EC SERIES
QUICK START GUIDE

Wave WiFi®
CONNECTIVITY SOLUTIONS

EC Power Cable
12 volts only

Power

Data

EC-HP DB AC

CAT 5e cable plugs into base

All HP units are MiMo capable. MiMo means multiple-input multiple-ouput, which is the ability to use two or more antennas at the same time. This increases data speed and connection quality.

When configuring setup using multiple antennas it is always good to stagger mount the antennas at about 3 feet or more away from each other.

Accessories

ER: 1x DB Antenna   **HP:** 2x DB Antenna   Ferrule

HP: x2 Wifi Antenna   Spare N Connector   Low Loss 400 Cable

Ethernet Protector   EC Power Cable   Cat5e Ethernet Cable

Power Supply

Power Cable

ER and HP systems are wired into the ship's low voltage supply: *12 volts only*. Include a line fuse and breaker, and take care with polarity of the DC wires.
RED = POSITIVE / **BLACK** = NEGATIVE

EC Top View

Female (N) Connectors

EC Bottom View

Ethernet Port   4-Pin Power Port

EC Units

EC-ER DB   **EC-HP DB AC**

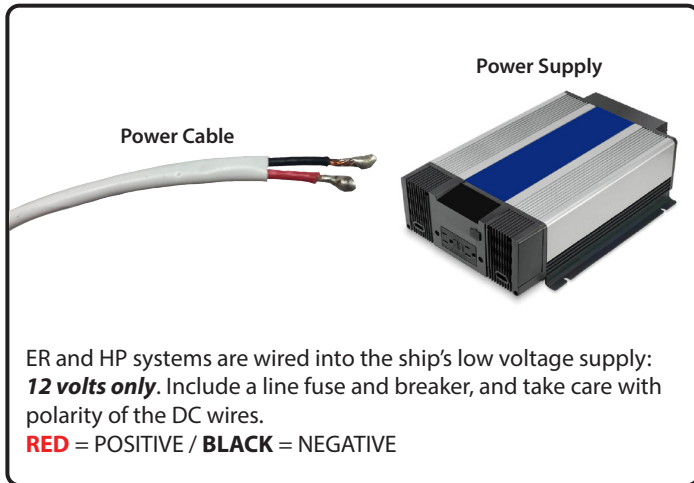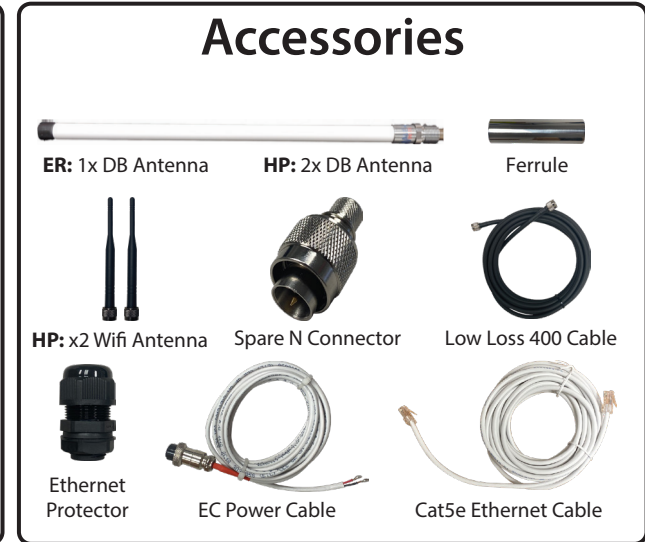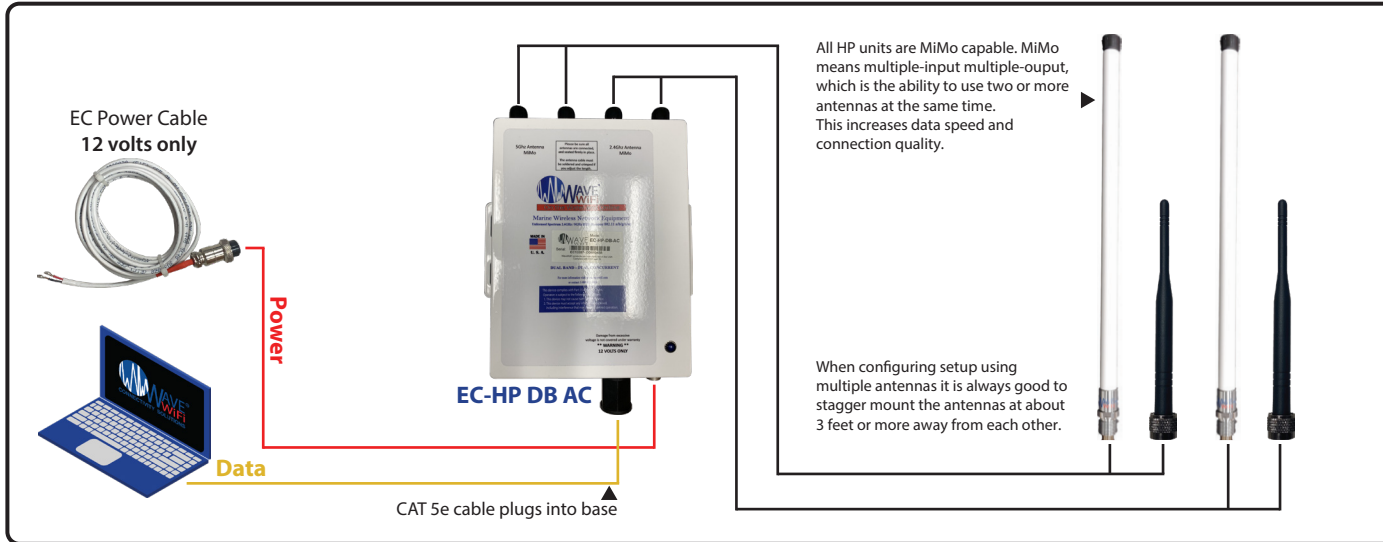## Connecting to Internet via physical connection

1. Connect the Cat5e cable into the ethernet port of a laptop or PC
2. Open a web browser and type in 192.168.89.1 in the URL bar at the top.
3. From the network scan page, connect to a network that you are familiar with.
4. The connection should read, "(Three dots)..., Checking IP, Got Internet".

Connecting to Internet via wireless connection

1. Connect the Cat5e cable from the EC unit to the
2. Connect wirelessly to the router that your EC unit is **PHYSICALLY** connected to via laptop, tablet or smartphone.
3. Open a browser and at the top URL bar type: 192.168.89.1
4. Once on the interface page, click on a network and type in a password if needed.
5. The connection should read "(Three dots)..., Checking IP, Got Internet".

Troubleshooting your EC Unit

- The Serial# and firmware version of your unit is located to the bottom-right of the "Settings Page".
- The EC unit power consumption is regulated 12v -- 1A.
- Try power cycling the unit initially. Meaning to power it off and then on again. This should last 30 secs and should be the EC Unit as well as the router it is connected to.
- If you are seeing poor performance in the gain of your EC Unit then check the low loss antenna cable connections. Make sure that the connectors are on securely and screwed on tightly so that the gold pin is in place. (If you reterminated the low loss antenna cable be sure that it is soldered and crimped. This is usually done by professional installer).
- Be sure that you are not overpowering or underpowering your EC Unit and causing it to fail.

Figure 2a.

Scanning for HotSpot Networks

If necessary you can refresh the network list by clicking the "Scan" tab to the left. The list of wireless networks (HotSpots) is ordered by signal strength: the strongest signals are indicated by the color GREEN. You will also see ORANGE or RED for weaker signals. These bars will also fluctuate as the signal changes around you. To connect to a Hotspot, click on the HotSpot name (SSID). There will be a drop down once you click on the network which you are trying to connect. In the blank space type in a password. The Unit will then attempt to negotiate a connection with the remote Hotspot. During this process the screen will show "Three dots (...), Checking IP, Got Internet". Do not click on anything until this process is completed. Afterwards click the network that you are connected, to see your current network status, which will show Connected to network: YES, IP obtained: YES, Internet Detected: YES. **(See Figure 2a.)**

Figure 2b.

Favoriting Hotspots

1. Connect to the network that you want to favorite.
2. Once connected, click the yellow star to the left of the network bar **(See Figure 2a.)** to favorite the Wi-Fi internet source.

TIP: You can see a full listing of all favorited networks in the "favorites" tab to the left of the screen.
You can also delete a network from your favorites list in this same location.

EC Settings

Clicking on the "Settings" tab displays the following page. Disabling "Firewall" removes your protection from access by other network users. However, it may be necessary to disable this feature to access some HotSpots. Clicking Reboot will reload the operating system. You may have to reconnect after a reboot if the hotspot is not a favorited network. You can also assign a static IP to the EC unit. (Please be sure that you understand IP addressing when changing this function.) **(See Figure 2b.)**
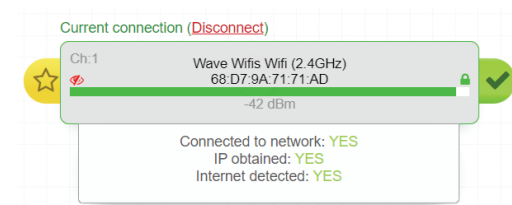
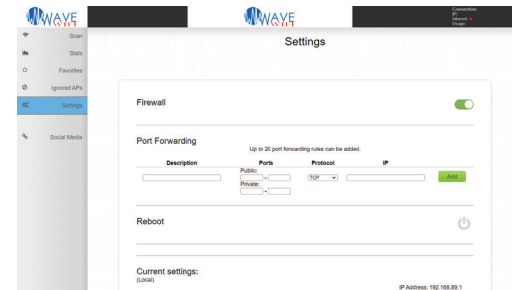**FCC Warning**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.
• Please contact a professional person to install and operate.