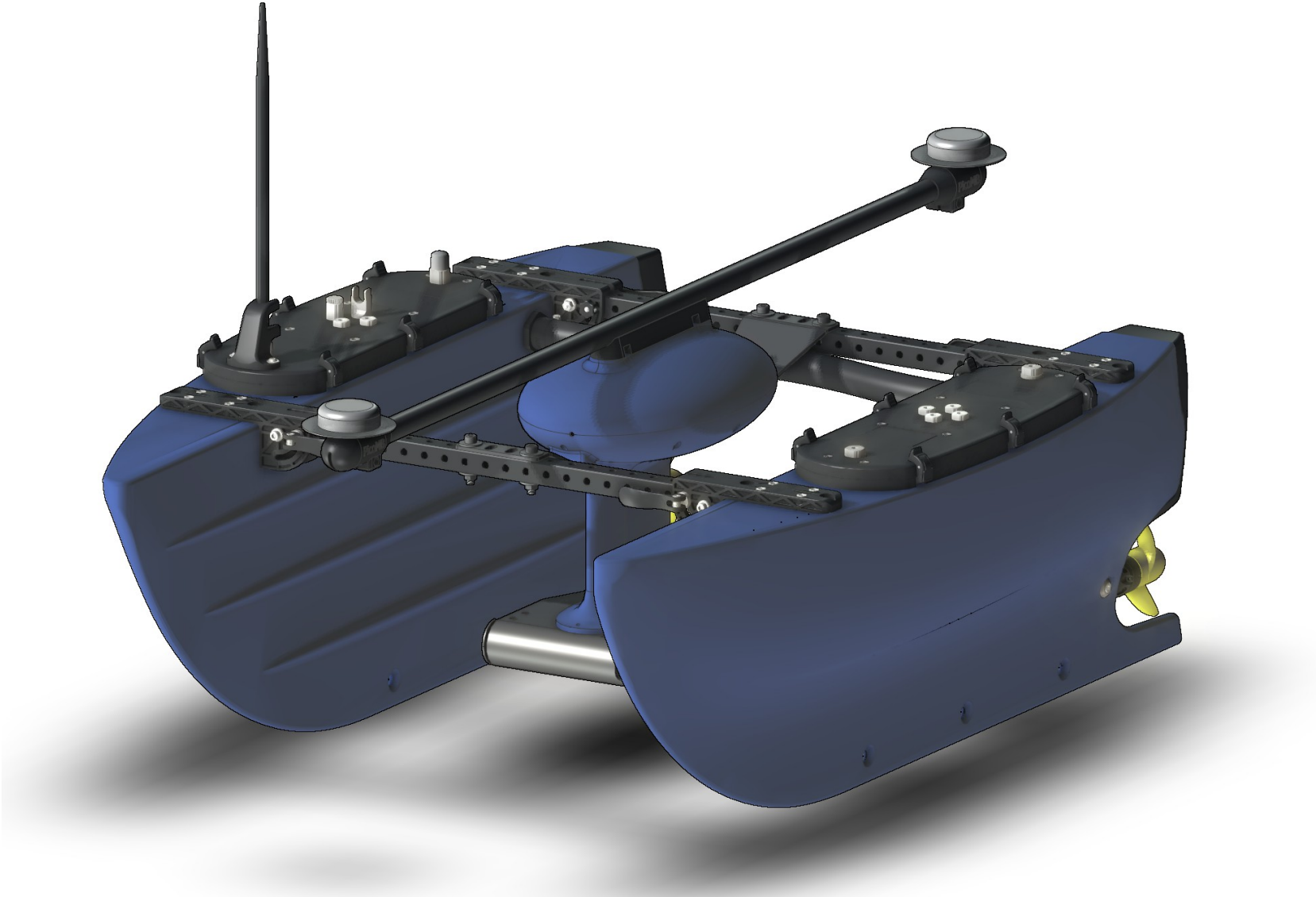
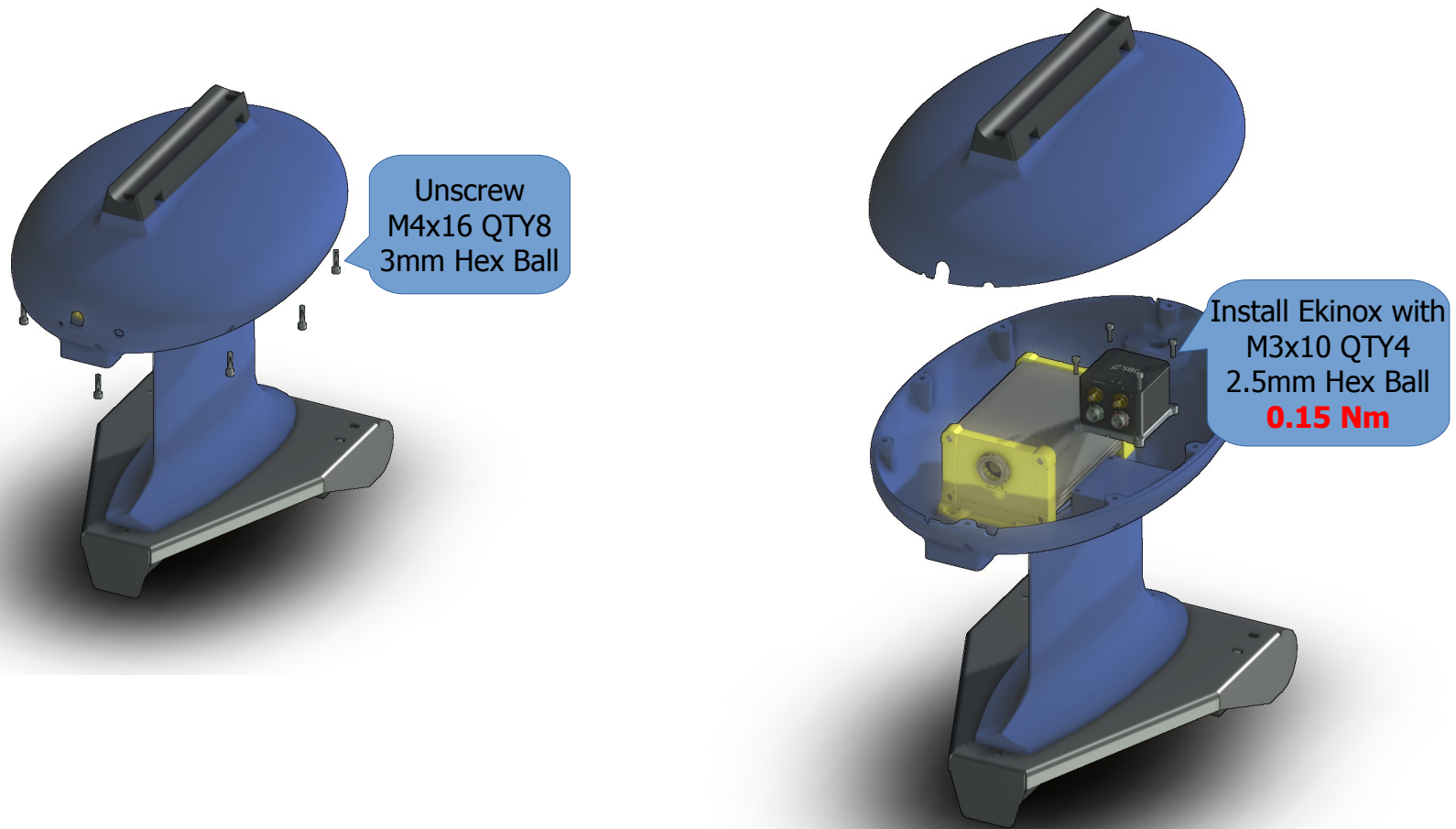


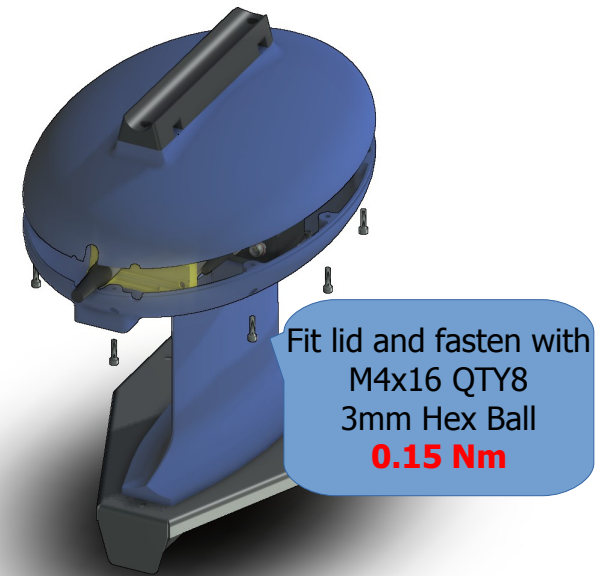
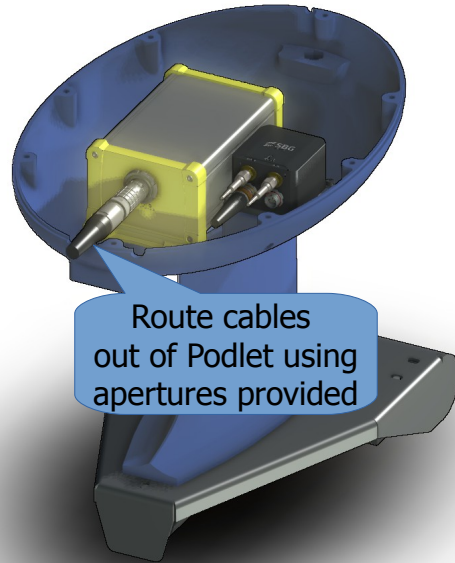
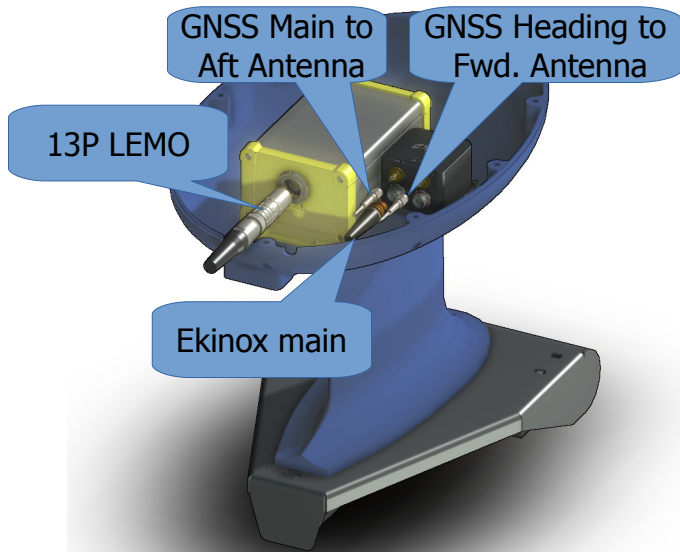
# Podlet Quick Start Guide



## Install Ekinox-micro



## Install Cables and Close Podlet



# Assemble GNSS Antennas



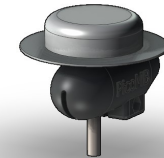
Install M18 nut in mount from underside



Pass TNC through mount from below



Fasten TNC to antenna



Fasten antenna to mount by rotating the *mount*

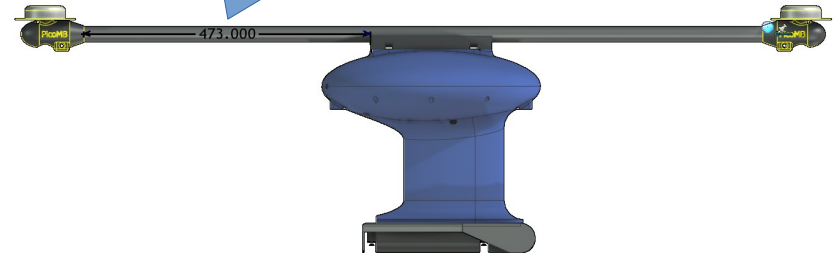
Slide mounts onto cross-trees and tighten M6x30 capheads using 5mm Hex Ball  
**Do not overtighten**



Fit cross-trees to Podlet and tighten nylon band clamps



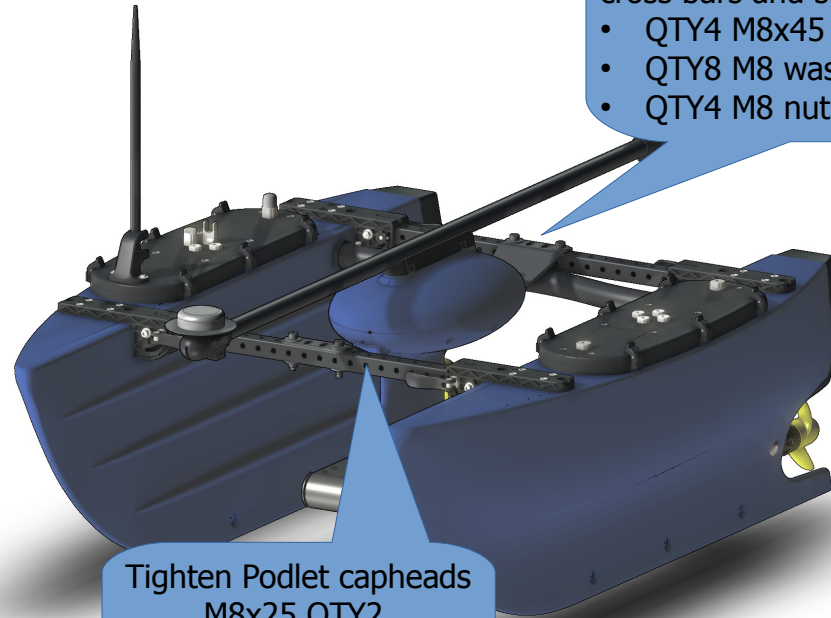
473mm between Podlet mount rear face and front face of antenna mount



# Install Podlet on BlueBoat



Fit brackets to Podlet  
Using QTY2 M8x25 capheads  
& washers, finger tight

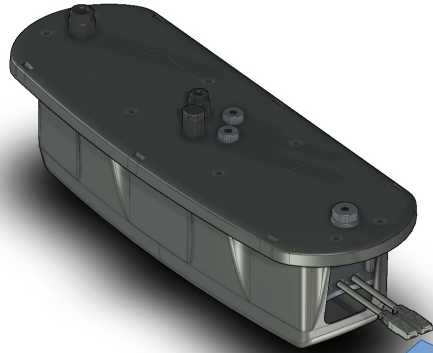


Tighten Podlet capheads  
M8x25 QTY2  
6mm Hex Ball  
**0.6 Nm**

Place port hatch assy. on  
port hull and Podlet on blueboat  
cross bars and secure with

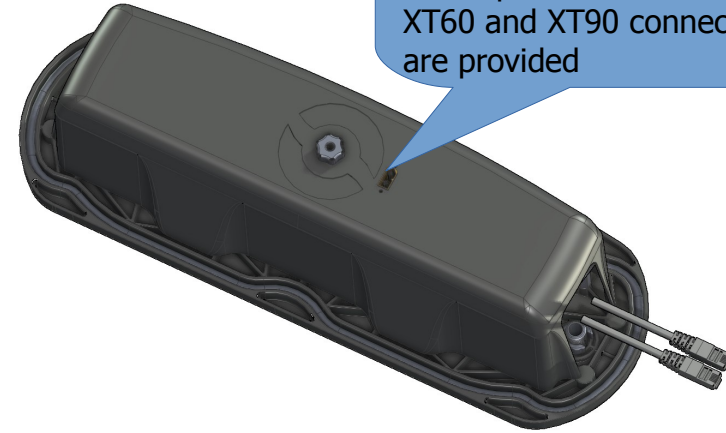
- QTY4 M8x45 capheads
- QTY8 M8 washers and
- QTY4 M8 nuts

# BlueBoat Port Hatch Assembly

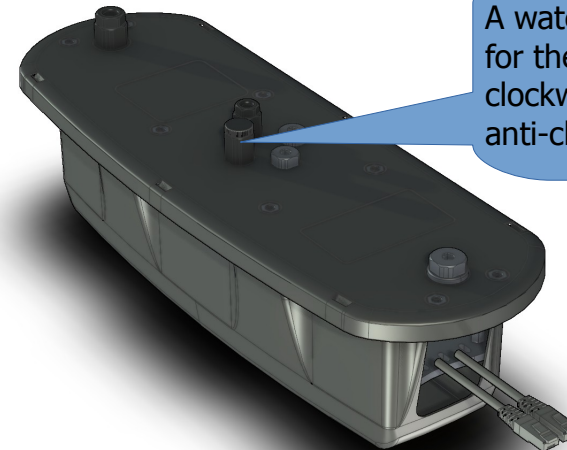


Route the two 2m Ethernet cables from the port hatch assembly to the stbd hatch assembly through the BlueBoat crosstube. Inside the stbd hatch assembly connect one Ethernet cable to the Rpi and the other to the BlueBoat router using the Ethernet coupler provided. Refer to the BlueBoat integration guide for more details.

<https://bluerobotics.com/learn/BlueBoat-general-integration-guide/>

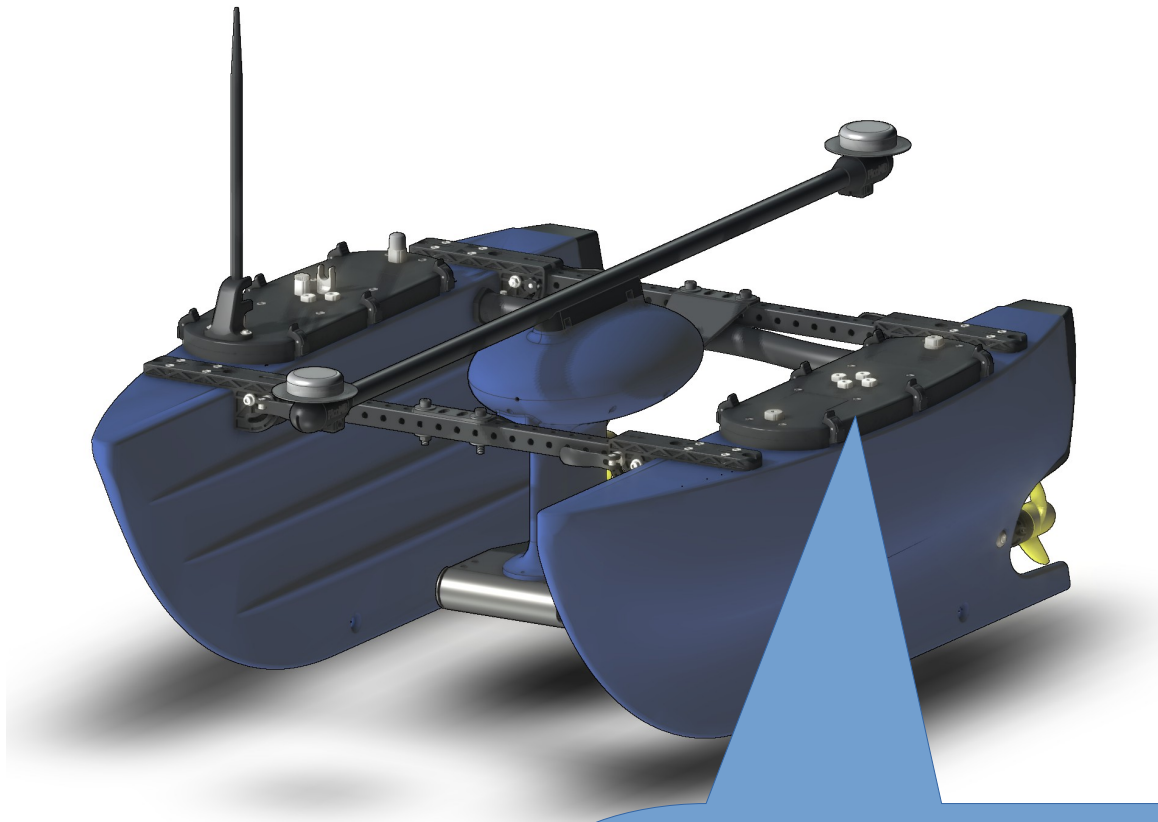


To power the MBES and INS connect a 4S LiPo of at least 14,000 mAh to the underside of the port hatch assembly XT60 and XT90 connectors are provided



A waterproof switch is provided for the MBES and INS, rotate clockwise to power on anti-clockwise to power off.

## Install the Port Hatch Assembly



The BlueBoat Port Hatch Assembly is installed in the normal way: connect the ESC to the motor, the ESC UNI connector and the stbd XT60. Fit the hatch and fasten the 6 clips.

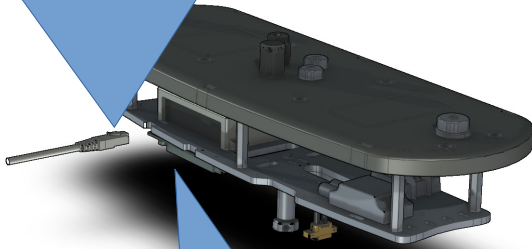
Refer to the BlueBoat Operators Guide for more details:

<https://bluerobotics.com/learn/blueboat-operators-guide/>



# Configuring the Ekinox-micro IP Address

BlueBoat and Podlet use 192.168.2.x network addresses. As supplied, your Ekinox-micro may use a different network address. Power on the MBES and INS and connect your notebook directly with an Ethernet cable to the Ethernet Switch within the port hatch assembly. Ensure your notebook is on the same network address as the Ekinox-micro.



Whilst the hatch is open, install the BeamworX dongle in the single board computer. The computer is mounted on the underside of the Electronics tray.

Device Settings

COM Ports Ethernet GAN Logic I/O

**Global Configuration**

Connection mode: Static

IP Address: 192.168.2.124

Subnet mask: 255.255.255.0

Gateway: 192.168.2.4

Primary DNS: 8.8.8.8

Secondary DNS: 8.8.4.4

**Ports**

Eth 0

Protocol: UDP

Output IP: 255.255.255.255

Output Port: 1234

Input Port: 5678

Broadcast

Eth 1

Protocol: OFF

Eth 2

Protocol: OFF

Eth 3

Save Cancel

Point a browser to the Ekinox-micro's current IP address and set up the Ekinox-micro with the IP address, Subnet mask and Gateway as above. Save the configuration, power off the port hatch assembly and disconnect your notebook



# The BlueBoat Network

## BlueBoat Network Addresses

### Standard BlueBoat Components:

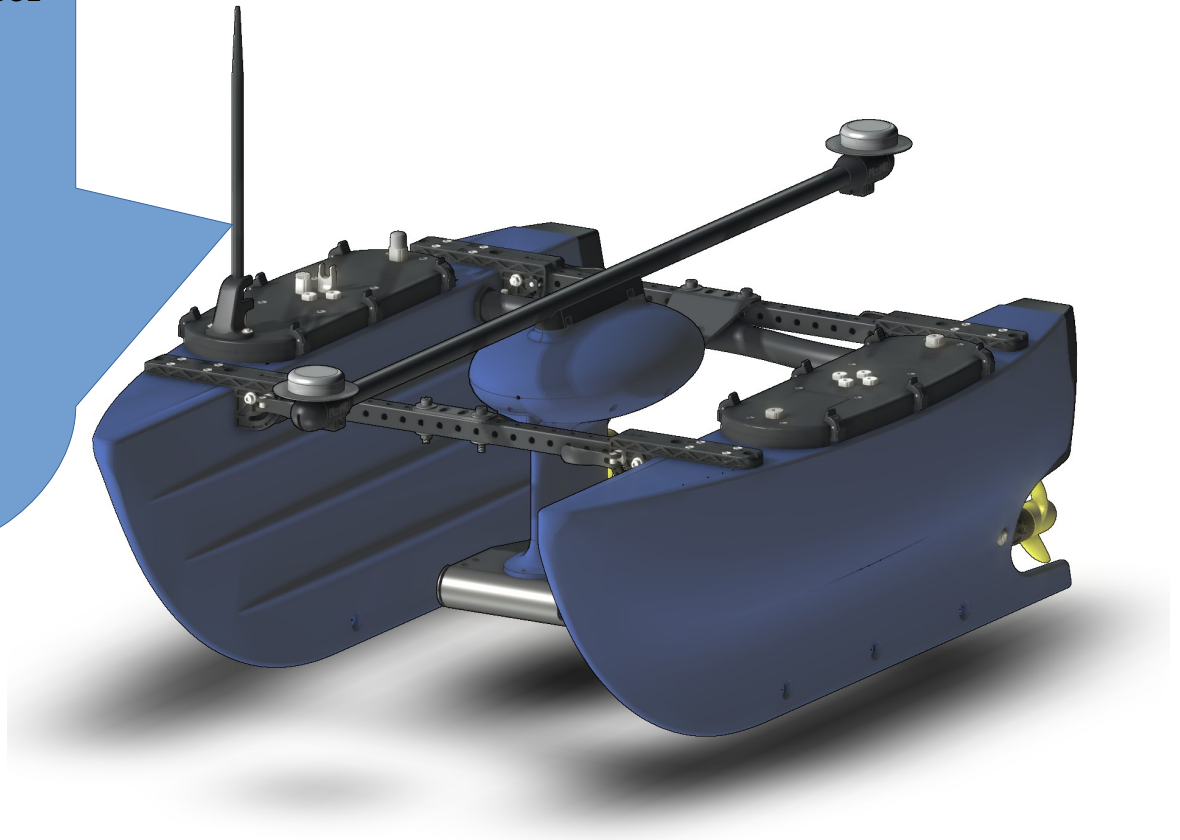
192.168.2.1 - your computer's IP address  
192.168.2.2 - BlueBoat Raspberry Pi 4  
192.168.2.3 - BaseStation wireless router  
192.168.2.4 - BlueBoat wireless router

### Podlet Components:

192.168.2.70 - Single board computer  
192.168.2.120 - PicoMB13P  
192.168.2.124 - Ekinox-micro

### Optional Components

192.168.2.130 - RS2 BaseStation



# Operating BlueBoat and Podlet

Refer to the BlueBoat Operators Guide:

<https://bluerobotics.com/learn/blueboat-operators-guide/>

- Power on the BlueBoat BaseStation
- Power on the BlueBoat stbd hatch
- Power on the BlueBoat port hatch



Set notebook WiFi IP address to 192.168.2.1 and connect to the BlueBoat BaseStation SSID. Connect a gamepad to notebook.

=> Use QGroundControl for BlueBoat navigation and guidance

=> Use Remote Desktop Connection (Windows) or Remmina (Linux) to connect with the onboard computer @ 192.168.2.70 (username=user, password=password)

The onboard computer runs BeamworX for MBES and INS acquisition.

BeamworX .XML and Ekinox-micro .JSON configuration files are available from Picotech preconfigured for BlueBoat + Podlet

