

# **Getting Started**

### Overview

The AutoNav Plus was designed to navigate Seafloor Unmanned Survey Vessels along preprogrammed track lines. It was designed specifically to allow the hydrographic surveyor to reliably and effectively tackle hydrographic surveys in shallow waters or hard to reach areas when conventional survey boats are not an option. The AutoNav PLUS expands on the USV's usability by allowing direct access to the onboard computer on the survey vessel for easier data collection from the shore.





#### Figure & Table 1: AutoNav PLUS Components

Part Number	Description	Quantity
1	AutoNav Plus	1
2	FrSky Remote	1
3	Receiver Antennas	2
4	Wifi Bridge Antenna	1
5	Wifi Directional Antenna	1
6	GPS Serial Cable	1
7	Sonarmite Serial Cable	1
8	Port pontoon AutoNav Cable	1
9	Starboard pontoon AutoNav Cable	1
10	External power cable	1
Seafloor Systems, Inc.   info@seafloorsystems.com   +1(530) 677-1019 Page 1		

### Setup

### Operation **Shoreside Setup**

To setup the shoreside Wi-Fi Bridge, plug in an ethernet to metal housing, and plug the other end of the ethernet into the power over ethernet adapter. Attach the bullet connector to the POE and plug it into a power source. Lastly, plug the POE ethernet adapter into the computer being used to remote into the AutoNav PLUS.

Then, setup the base computers network settings following the steps below.



Open control Panel (Figure 2). 1.

#### Figure 2



2. Open "Network and Internet" (Figure 3).



3. Right Click on the ethernet port with the description "Unidentified network" and select



### Setup Cont.

4. Highlight "Internet Protocol Version 4 (TCP/IPv4)" and click "Properties" (Figure 5).

Figure 5	Internet Protocol Version 4 (TCP/IPv4)	Properties	×		
	General				
	You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.	natically if your network supports ask your network administrator			
	Obtain an IP address automatical	ly			
	• Use the following IP address:				
	IP address:	192.168.1.4			
	S <u>u</u> bnet mask:	255.255.255.0			
	Default gateway:				
	Obtain DNS server address automatically				
	• Use the following DNS server add	resses:			
	Preferred DNS server:				
	<u>A</u> lternate DNS server:				
	⊠Validate settings upon exiti	Ad <u>v</u> anced			
		OK Cancel			

- 5. Set the IP address and Subnet mask as shown in (Figure
- 6. Select "OK" and close all windows.
- 7. Using the Windows search bar type "Remote Desktop" and hit enter.
- 8. Type in the IP address: 192.168.1.8 as shown in Figure 6

Figure 6	💀 Remote Desktop Connection — 🗆 🗙
	Remote Desktop Connection
	<u>C</u> omputer: <u>192.168.1.8</u> ✓ User name: ANP You will be asked for credentials when you connect.
	Show Options Connect Help

- 9. Make sure the Username to log in is "ANP"
- 10. The password is Seafloor (capital "S")

# **HyDrone Pairing**

First, plug in both the Port and Starboard pontoon batteries and make sure the switches are set to "off." Then attach the box to the frame using the four screws included. Once fastened to the frame attach the port pontoon using the Mil-Spec cable and the "Port" bulkhead on the AutoNav Plus. Then attach the starboard pontoon to the AutoNav Plus "Starboard" Bulkhead. This allows both the Wi-Fi bridge and onboard computer to receive power. Flip the switch on the front of the box to "on" and wait 30 seconds for the pc to boot before trying to connect. The Wifi Bridge will have full green bars when it has linked to the AutoNav.

The PC login info is as follows

Username: ANP

Password: Seafloor (Capital "S")