uAvionix

FYXnav-B

uAvionix FYXNav-B GNSS with Baro

QUICK START GUIDE

Quick Start Guide

The uAvionix FYXNav provides a high integrity position source. FYXNav can be programmed with a static ICAO and call sign using the Ping App.

1. Install

2. Connect

3. Join

4. Configure ping2020/ping1090

5. Configure ping200S/20S

6. Commit

Install

1

Install the uAvionix Ping App from either the Apple App Store or Google Play. Search for **uAvionix Ping installer** or use the QR codes below.

Download on the App Store

GET IT ON Google Play

Connect

2

Connect the **pingUSB** to **FYXnav** using the provided **JST ZHR-5 cable**.

Connect **pingUSB** to a power source using a **Micro-USB cable**.

Join your mobile device to the wireless network named **Ping-XXXX,** where XXXX is a random string i.e. Ping-6AFB.

The WPA passphrase is **uavionix**.

ping2020/ping1090 proceed to **step 3**.

ping200S/20S proceed to **step 4.**

Configure 2020/1090

3

Ping2020/Ping1090 launch the **uAvionix Ping** application and complete the fields as required for your device/aircraft.

Selected Device Type: Choose the device FYXNav will be connected to.

Control: This setting controls device transmit functions. The selections available will depend on the device type selected.

Transceiver selections include:

- **TX enabled:** Transmit ADS-B message at one second intervals, receive is also enabled.
- **Receive:** Receive only, transmit disabled.
- **Standby:** ADS-B in/out disabled.

ICAO: Enter your ICAO Number in hexadecimal format. If your identifier is in octal (eight digits) format you must convert it prior to entry.

Call Sign: Enter the tail number of the aircraft. (A-Z 0-9)

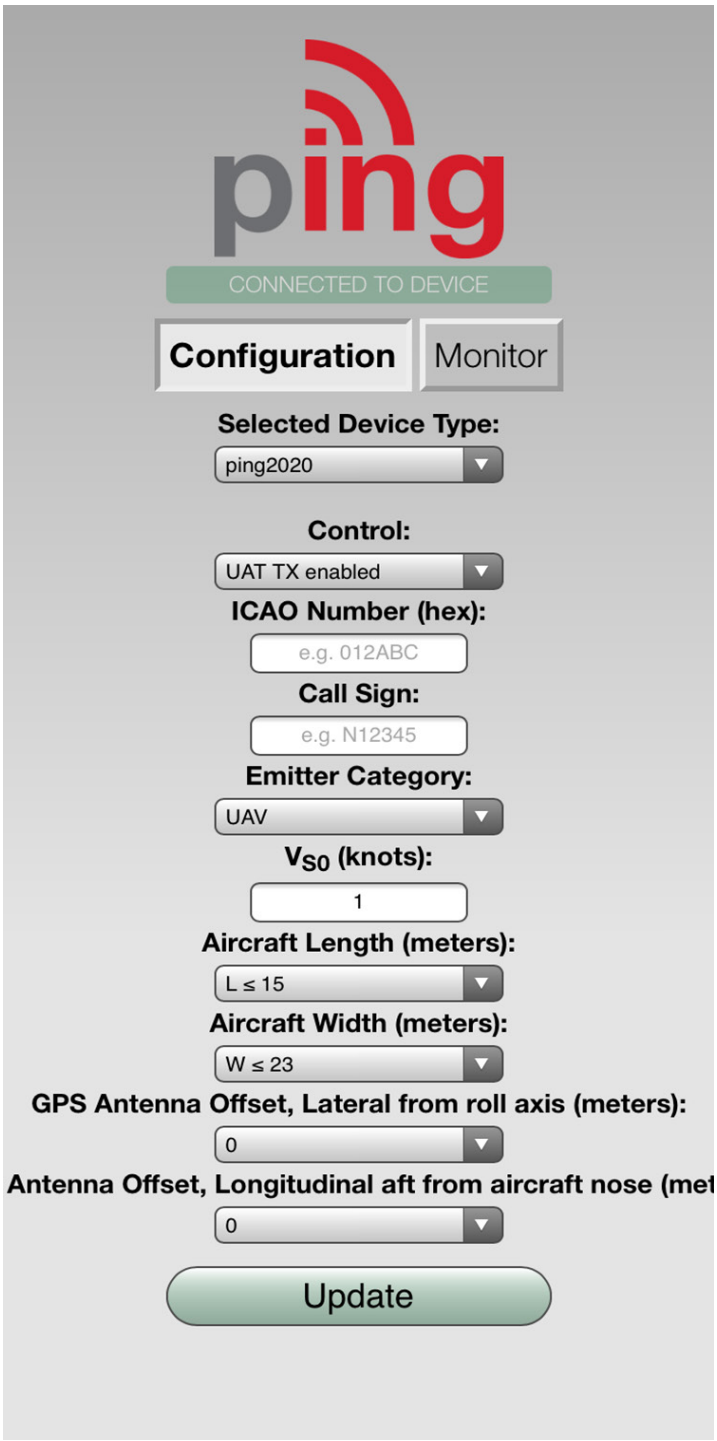
Emitter: This should be set to your aircraft type. UAV is the selection for unmanned vehicles.

V_{S0}: Enter airspeed in knots that the aircraft typically flies at after takeoff. Default value (1)

Aircraft Length: Select the length value in meters that matches your aircraft.

Aircraft Width: Select the width value in meters that matches your aircraft.

GPS Antenna Offsets: Choose the lateral and longitudinal offset in meters from GPS to the nose of your aircraft.



Configure 200S/20S

4

Ping200s/20S launch the **uAvionix Ping** application and complete the fields as required for your device/aircraft.

Selected Device Type: Choose **ping200s/20s.**

Control: Select transmit a transmit type.

- **Standby:** Transponder will not respond to interrogation.
- **ON:** Replies to interrogation with 4 digit squawk code.
- **ALT:** Replies to interrogation with altitude information.
- **1090ES:** ADS-B transmit is always enabled when a 6 digit ICAO code is entered.

ICAO: Enter your ICAO Number in Hexidecimal format. If your identifier is in octal (eight digits) format you must convert it prior to entry.

Call Sign: Enter the tail number of the aircraft. (A-Z 0-9)

Emitter: This should be set to your aircraft type. UAV is the selection for unmanned vehicles.

VFR Code: Enter the default VFR code for your country. The United States code is 1200.

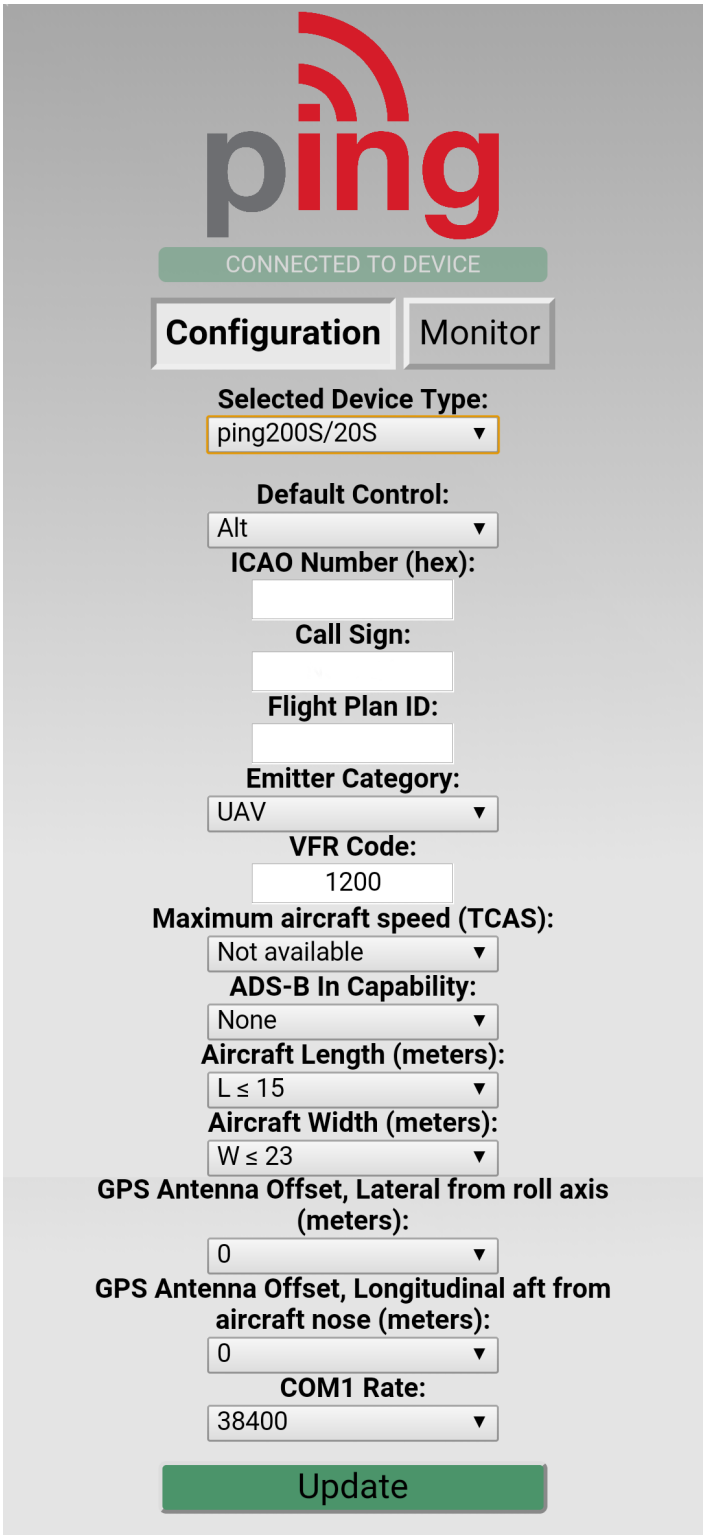
Maximum aircraft speed: Select your aircraft maximum speed.

ADS-B In Capability: Select aircraft ADS-B receive capability. If you do not have a separate ADS-B receiver this should be set to None.

Aircraft Length/Width: Select the length/width value in meters that matches your aircraft.

GPS Offsets: GPS location relative to the roll axis and nose of the aircraft.

COM1 Rate: Sets the serial port communication rate. This is only necessary for serial control of the transponder.

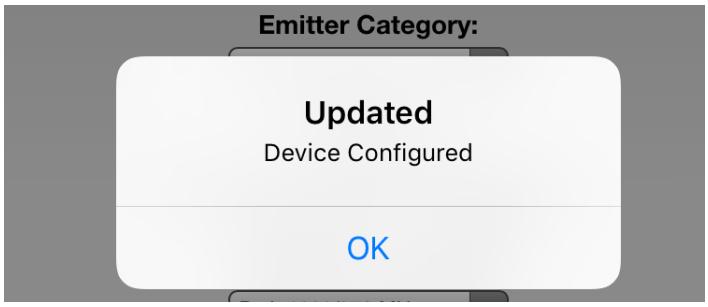


Update

5

After completing all data fields tap the **Update** button.

You should receive the **Device Configured** message, tap **OK.**

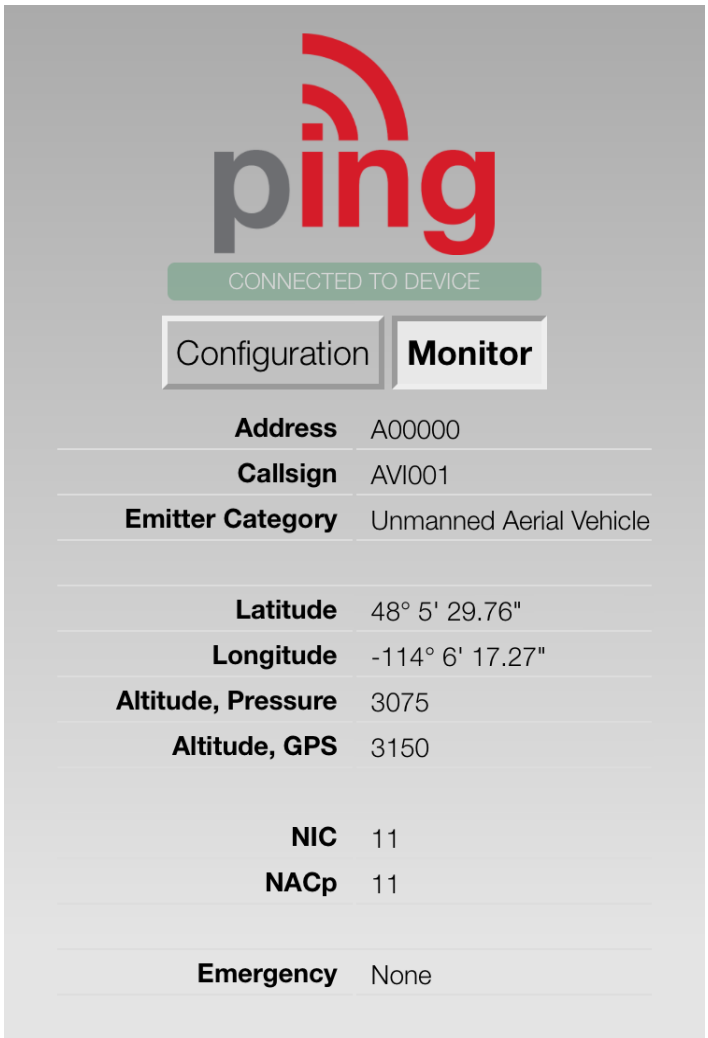


Tap **Monitor.**

Verify all fields are correct for your aircraft.

The monitor fields will only populate when FYXNav has a GPS fix. A GPS fix is indicated by a flashing red LED.

A fix is not necessary for programming but is required to monitor the current configuration.

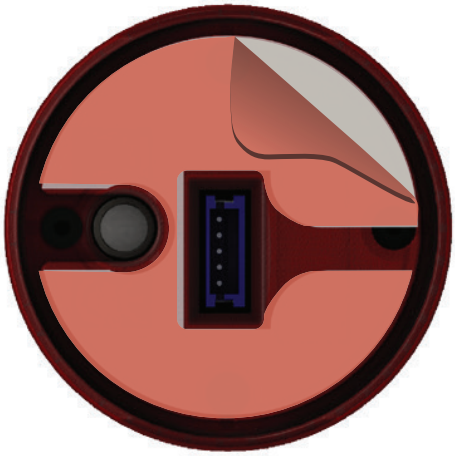


Disconnect power from **pingUSB**.

Disconnect FYXnav from **pingUSB**.

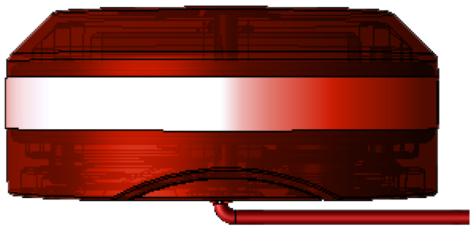
Mount

6



Mount FYXNav using the provided **double-sided adhesive.**

Remove both top and bottom backing from provided double sided tape. Adhere double sided tape to the underside of FYXnav in the correct orientation so the barometer and 5-pin connector are not blocked by the adhesive.



Connect one end of provided **JST ZHR-5 cable** to **FYXnav**. Route cable through channel in adhesive. **Mount FYXnav** to a clean, smooth surface. The Ping logo on the top of the FYXnav should have an unobstructed view of the sky.