



FY Nav

uAvionix FYXNav-B GNSS with Baro

QUICK START GUIDE

Quick Start Guide

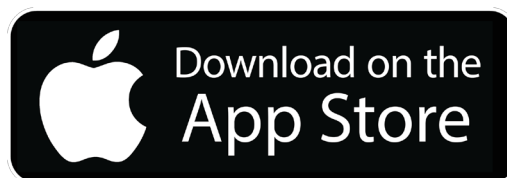
The uAvionix FYXNav provides a high integrity position source. FYXNav can be programmed with a static ICAO and call sign using the Ping App.

- 1. Install**
- 2. Connect**
- 3. Join**
- 4. Configure ping2020/ping1090**
- 5. Configure ping200S**
- 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.





Connect

2

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

Connect **ping programmer** 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 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_{so}: 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.

The screenshot shows the 'ping' application interface. At the top is the 'ping' logo with a red signal icon. Below it is a green bar indicating 'CONNECTED TO DEVICE'. There are two tabs: 'Configuration' and 'Monitor'. The 'Configuration' tab is active and contains the following settings:

- Selected Device Type:** ping2020
- Control:** UAT TX enabled
- ICAO Number (hex):** e.g. 012ABC
- Call Sign:** e.g. N12345
- Emitter Category:** UAV
- V_{so} (knots):** 1
- Aircraft Length (meters):** L ≤ 15
- Aircraft Width (meters):** W ≤ 23
- GPS Antenna Offset, Lateral from roll axis (meters):** 0
- Antenna Offset, Longitudinal aft from aircraft nose (meters):** 0

At the bottom of the configuration screen is a green 'Update' button.



Configure 200s

4

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

Selected Device Type: Choose **ping200s**.

Control: Select transmit a transmit type.

Standby: Transponder will not respond to interrogation.

Mode A: Replies to interrogation with 4 digit squawk code.

Mode C: Replies to interrogation with altitude information.

Mode S: Provides multiple information formats to a selective interrogation.

1090ES: ADS-B transmit enabled.

Combinations of the reply types are also available.

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.

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.

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

The screenshot shows the uAvionix Ping application interface. At the top, there is a logo with the word "ping" in a stylized font and a red signal icon. Below the logo is a green bar that says "CONNECTED TO DEVICE". There are two tabs: "Configuration" (which is active) and "Monitor". The configuration section contains several dropdown menus and text input fields:

- Selected Device Type:** ping200S
- Control:** Mode C/S + 1090ES
- ICAO Number (hex):** A0000
- Call Sign:** AV1001
- Emitter Category:** UAV
- VFR Code:** 1200
- Maximum aircraft speed (TCAS):** S ≤ 75 knots
- ADS-B In Capability:** None
- Aircraft Length (meters):** L ≤ 15

At the bottom of the configuration section is a large green button labeled "Update".



Update

5

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

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

Tap **Monitor**.

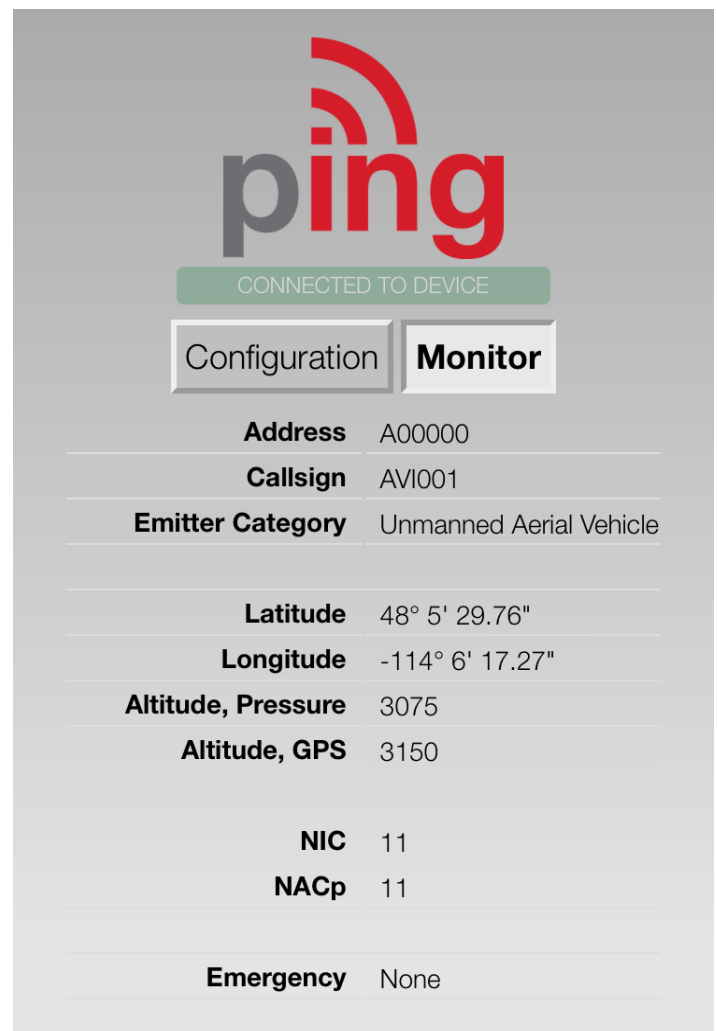
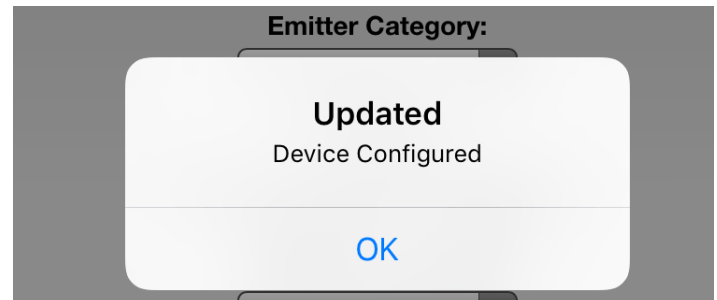
Verify all fields are correct for your aircraft.

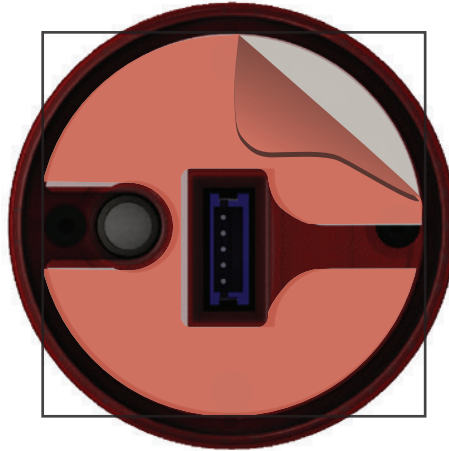
The monitor fields will only populate when FYXNav has a GPS fix. A GPS fix is indicated by a flashing red LED.

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

Disconnect power from **ping programmer**.

Disconnect FYXnav from **ping programmer**.





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.