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 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 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**.
**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.
**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.

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**Image:**

- **Configuration:**
  - Selected Device Type: ping200s/20s
  - Default Control:
    - Alt
    - ICAO Number (hex)
    - Call Sign
    - Flight Plan ID
    - Emitter Category: UAV
  - VFR Code: 1200
  - Maximum aircraft speed (TCAS):
    - Not available
  - ADS-B In Capability:
    - None
    - Aircraft Length (meters):
      - L ≤ 15
    - Aircraft Width (meters):
      - W ≤ 23
  - GPS Antenna Offset, Lateral from roll axis (meters):
    - 0
  - GPS Antenna Offset, Longitudinal aft from aircraft nose (meters):
    - 0
  - COM1 Rate:
    - 38400

- **Monitor**

**Update**
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 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.

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