



pingNAV

uAvionix PingNAV GNSS with Baro

QUICK START GUIDE

Quick Start Guide

The uAvionix PingNAV provides a high integrity position source for use with Ping ADS-B transceivers. PingNAV can be programmed with a static ICAO and call sign using the Ping App.

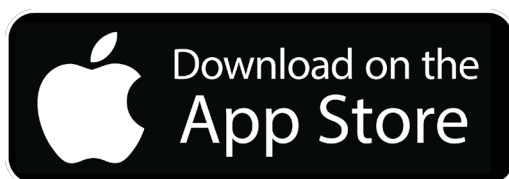
- 1. Install**
- 2. Connect**
- 3. Configure**
- 4. Commit**
- 5. Mount**
- 6. Connect**



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.



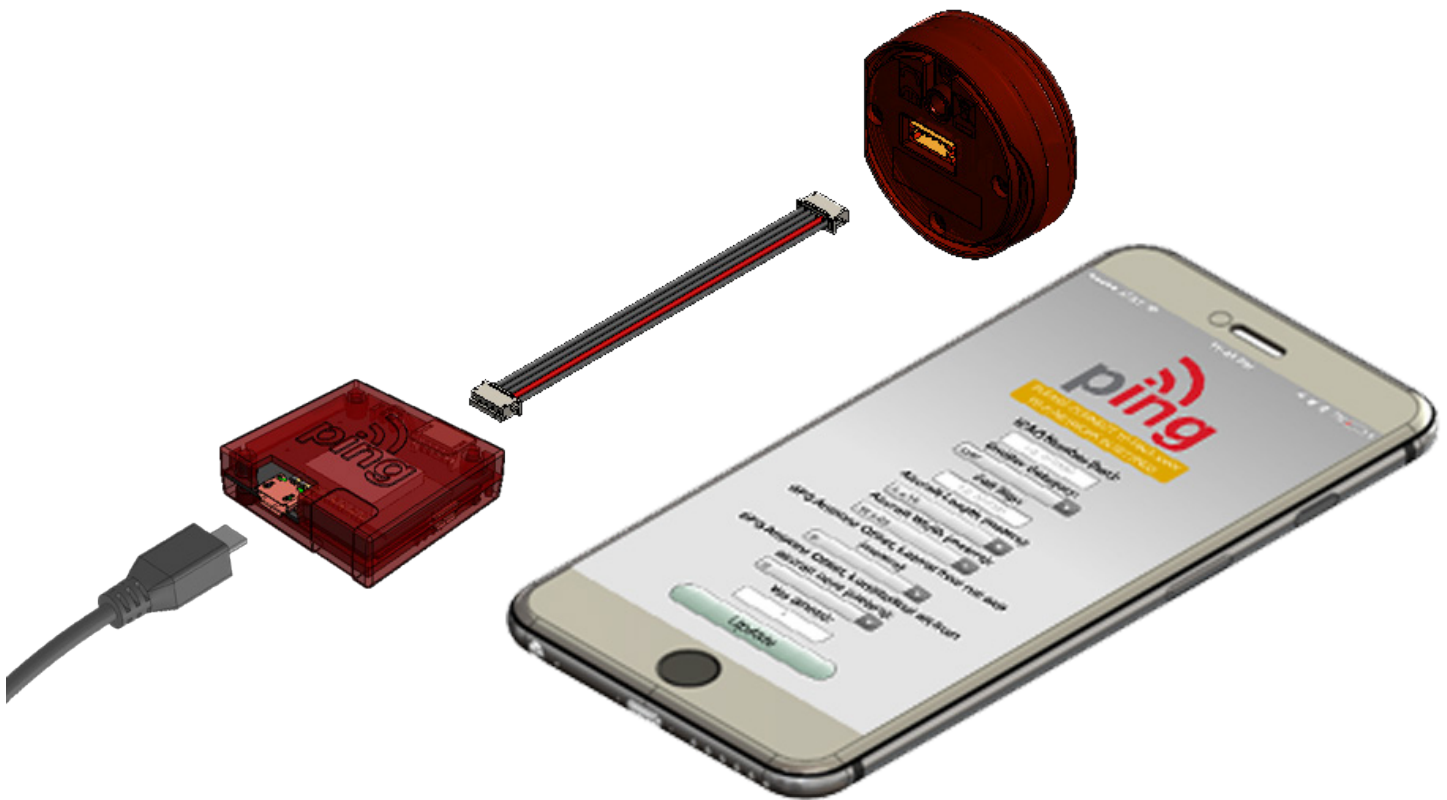


Connect

2

Connect the **ping programmer** to **pingNAV** using the provided 5 pin 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**.



Configure

3

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

Selected Device Type: Choose the device pingNav 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 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.

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 configuration interface for the 'ping' application. At the top, there is a logo with the word 'ping' in red and grey, and a yellow banner that reads 'PLEASE CONNECT TO PING-XXXX WI-FI NETWORK IN SETTINGS'. Below this, the settings are organized into sections:

- Selected Device Type:** A dropdown menu with 'ping2020' selected.
- Control:** A dropdown menu with 'UAT TX enabled' selected.
- ICAO Number (hex):** A text input field containing 'ABC234'.
- Call Sign:** A text input field containing 'DRONE'.
- Emitter Category:** A dropdown menu with 'UAV' selected.
- V_{so} (knots):** A text input field containing '1'.
- Aircraft Length (meters):** A dropdown menu with 'L ≤ 15' selected.
- Aircraft Width (meters):** A dropdown menu with 'W ≤ 23' selected.
- GPS Antenna Offset, Lateral from roll axis (meters):** A dropdown menu with '0' selected.
- GPS Antenna Offset, Longitudinal aft from aircraft nose (meters):** A dropdown menu with '0' selected.

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



Commit

4

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

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

Disconnect power from **ping programmer**.

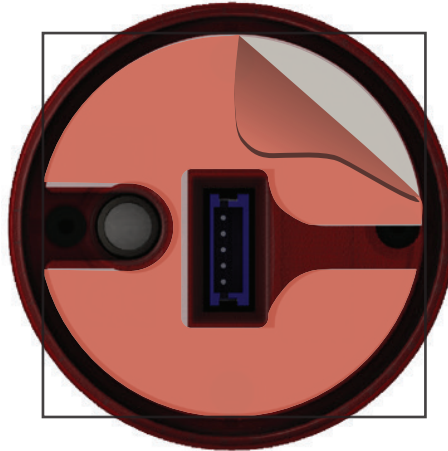
Disconnect pingNAV from **ping programmer**.

The screenshot shows the 'ping' application interface. At the top, the 'ping' logo is displayed in red and grey. Below it, a yellow banner reads 'PLEASE CONNECT TO PING-XXXX WI-FI NETWORK IN SETTINGS'. The main configuration area includes several dropdown menus: 'Selected Device Type' (set to 'ping2020'), 'Control' (set to 'UAT TX enabled'), 'ICAO Number (hex):', 'V_{SO} (knots):' (set to '1'), 'Aircraft Length (meters):' (set to 'L ≤ 15'), 'Aircraft Width (meters):' (set to 'W ≤ 23'), 'GPS Antenna Offset, Lateral from roll axis (meters):' (set to '0'), and 'GPS Antenna Offset, Longitudinal aft from aircraft nose (meters):' (set to '0'). A green 'Update' button is at the bottom. A white dialog box is overlaid in the center, displaying 'Updated Device Configured' and an 'OK' button.



Mount

5



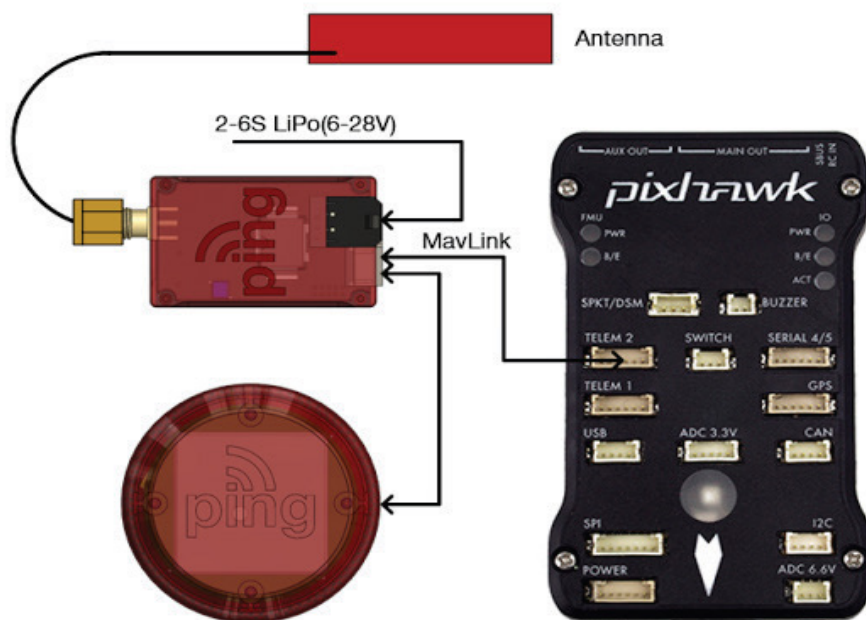
Mount pingNav using the provided **double-sided adhesive**.

Remove both top and bottom backing from provided double sided tape. Adhere double sided tape to the underside of pingNav 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 **pingNav**. Route cable through channel in adhesive. **Mount pingNav** to a clean, smooth surface. The Ping logo on the top of the pingNav should have an unobstructed view of the sky.

Connect the 5-pin cable from pingNAV to ping2020.
See ping2020 Quick Start Guide for ping2020 installation.



PingNAV should be installed in a location that meets the following recommendations:

- Mounting location should provide pingNAV a clear view of the sky and is mounted as far as possible from motors and ESCs.
- Provide a minimum of 10cm between pingNAV and DC power or batteries.
- Do not place pingNAV beneath carbon fiber vehicle canopies.