Connecting iLevil to external Devices

Required steps:

1. Download the AHRS Utility App (from the App Store) to your iPad
2. Turn ON the iLevil and connect the WiFi to your iLevil-xxxx network
3. Open the AHRS Utility and make sure it is connected to the iLevil.
4. Go to Device Config → Enable Configuration
5. Under "Serial Ports configuration" select the Auxiliary port you'd like to configure (if using iLevil SW or Sport, select AUX0).
6. From the drop-down menu, select the device you will be connecting, click Apply.
7. Acknowledge the pop-up message by clicking OK.
8. At this point perform a full reset of the iLevil (OFF-ON)
9. Connect the iLevil to the external device with the appropriate serial harness. You can purchase harness on our website, or make your own. Wiring Diagrams available in the support tab at www.levilaviation.com

For GRT EIS2000/4000/6000:

You must create a connection between PIN11 (Transmit on GRT EIS) and any of the AUX RX (Receive PIN) on iLevil. There must be also a connection between Ground PIN on GRT and Ground PIN on iLevil. Your iLevil must have Firmware version 1.9 and up in order to support GRT EIS.

For GPS output:

To receive GPS NMEA data from the iLevil into another device: You must create a connection between Receive (RS-232) pin on external hardware and any of the AUX TX (transmit PIN) on iLevil. By setting the corresponding AUX port to "GPS Out NMEA", the iLevil will send GPS NMEA output at 9600 bauds. Make sure your external device is configured to receive data at 9600 bauds.

For Trutrak AutoPilot:

You must create a connection between Receive (RS-232) pin on autopilot and any of the AUX TX (transmit PIN) on iLevil. By setting the corresponding AUX port to "AutoPilot", the iLevil will send GPS NMEA output at 9600 bauds. Make sure your AP

is configured to receive data at 9600 bauds. Also, when using an App with Autopilot interface (such as Xavion), the iLevil will forward information from the App to the Autopilot. Your iLevil must have firmware V2.9 and up for AutoPilot support.

For NavWorx or other ADS-B platforms:

When using the iLevil Sport to relay information from external ADS-B receivers, you must configure the AUX0 port to "ADS-B". The iLevil will relay all ADS-B and GPS related data from the external hardware and will NOT send GPS information from its internal GPS. Connect the serial TX Pin from your external ADS-B hardware to the Receive Pin on the iLevil Sport. Ground Pins should also be connected.

For FLARM:

You must create a connection between Transmit PIN on FLARM and any of the AUX RX (Receive PIN) on iLevil. There must be also a connection between Ground PIN on FLARM and Ground PIN on iLevil. Your iLevil must have Firmware version 3.2 and up in order to support FLARM.

For Mode ES Trig transponder:

You must create a connection between Receive (RS-232) pin on the transponder and any of the AUX TX (transmit PIN) on iLevil. There must also be a connection between Ground PIN on the transponder and Ground PIN on iLevil by setting the corresponding AUX port to "NMEA GPS OUT", the iLevil will send GPS NMEA output at 9600 bauds.

The iLevil can output GPS data over the serial port when the Auxiliary port (AUX0 for Sport and SW) is configured for "NMEA out" using the AHRS Utility App. However, the internal GPS on the iLevil must have the certified GPS, offered as an option when purchasing an iLevil 3 or as an upgrade if you own the iLevil 2. This will meet the requirements for the 2020 mandate **ONLY** for **non-certified** aircraft.

For iFly GPS:

When connecting your iLevil SW or Sport to the iFly GPS, You must purchase the iFly GPS Harness directly from our online store. From the Serial Ports configuration options select iFly GPS to configure the iLevil to transmit the information to the iFly GPS.

Contact us if you have any questions!
407-542-3971