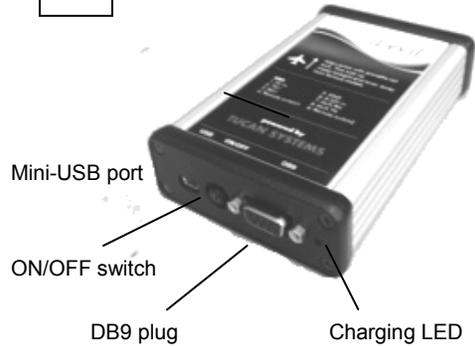


INSTALLATION INSTRUCTIONS

1. Charging



- When using as a "portable" device, you must first charge the internal batteries:

- Connect the USB cable supplied with your device to a 5V USB power supply and the other side to the iLevil. Charging may take up to 4 hours.
- The LED next to the ON/OFF switch indicates if the device is charging. When the LED goes off, the battery is fully charged.
- The ON/OFF switch can be used to power the device using the internal batteries. This switch must be OFF if using external power supply (12-24V)
- When connected to (12-24V) through the DB9 plug, the batteries will be charged automatically.

2. Alignment

- Align the airplane drawing on the iLevil's top label with the roll axis of your aircraft.
- The label should face up (towards the sky)
- Install the iLevil on a surface that is LEVEL with the horizon DURING un-accelerated, straight and level flight. It is ok if it isn't level when on the ground (i.e tail draggers) as long as it is level when the airplane levels off.
- Install as far away from ferrous metals. The internal compass will slowly learn your aircraft configuration during flight to compensate for magnetic deviations. If unable to obtain a good heading, try repositioning the iLevil and perform a complete reset.
- Attach the remote GPS antenna (square sized)
- Attach the ADS-B antenna. Try installing the antenna with direct "line-of-sight" to ground ADS-B stations. A remote antenna on the belly of the aircraft is also an option for better ADS-B reception. See website for more information.
- To connect to the pitot-static system, you need two 1/8NPT hose fittings, for your specific hose size. Connect the static line to the "static P" port, and the dynamic line to the "Dynamic P" port. Teflon is recommended when installing the hose fittings to create a tight fit and reduce pressure drop.



3. Communication



WiFi (Apple and Android devices)

- Turn on the iLevil by pushing the on/off switch or applying 12-24V external power supply.
- Go to WiFi Settings and connect your tablet to the iLevil-xxxx network. (NOT Bluetooth)
- Wait 10 seconds for connection to be established
- Run your App.

Note: Some Applications may not support all the features of the iLevil. Go to www.aviation.levil.com to determine your apps' capabilities.

TIPS

- Let the AHRS stabilize in place for 2 minutes before flight. If the iLevil is restarted during flight, it is recommended to keep a stable flight condition for the first 2 minutes to let the gyros stabilize.
- DO NOT switch the iLevil ON/OFF button swiftly. When resetting your device, let the capacitors inside drain for 2 seconds, then turn on your device again. Failure to do so will cause the AHRS to fail and display inaccurate readings.
- Check the website for future firmware updates. We are always integrating new hardware and software.
- Magnetic heading compensation starts after the 2 minutes of stabilization. The airplane must be turning for the compass to calibrate itself. Use GPS heading if unable to achieve reliable magnetic heading.
- In most locations, it is not possible to receive ADS-B information unless you are airborne (typically above 2000 feet)
- Pressure Altitude is sent at 29.92 inHg. You must enter the correct altimeter setting on the software side to compensate for barometric pressure changes.

SPECIFICATIONS

AHRS

- 360 deg pitch and bank operation
 - GPS independent attitude
 - 300 deg/sec max turn rate
 - 4Gs max rating
 - Output:
Roll, pitch, magnetic heading, slip indicator, rate of turn, G meter.
- Pressure Altitude (at 29.92inHg), Indicated airspeed and Vertical Speed Indicator.

ADS-B in (978 MHz)

- Receives regional and continental NEXRAD reports broadcasted by ADS-B towers within range. (regional every 2.5 minutes, continental every 15 minutes)
- Receives traffic reports broadcasted by near-by ADS-B towers and airplanes operating 978 MHz ADS-B out transponders

GPS

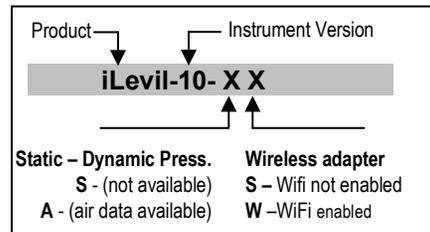
- Supports WAAS
- Cold start: < 60 sec typ. (open sky)
- Warm start: < 30 sec. typ (open sky)

Internal Battery

- Operating time: < 3 hours typ. (no sunlight)
- Charging time (USB): ~ 4 hours.
- Charging time (Solar): ~ 43 hours.

Environmental Requirements

- Temp range: -10° to 60° C (14°-140° F)
- Clear view to the sky for best GPS and ADS-B reception.
- Windshields with integrated heating elements will severely attenuate GPS signals.



WARRANTY

- Levil Technology Corp. warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase. The following are not covered: software, damage resulting from accident, neglect, misuse, improper voltage supply or failure to follow operational guidelines supplied with this product.

CAUTION

- Ferrous materials inside the aircraft affect the compass reading.
- Lithium-ion batteries are volatile. Failure to read and follow the **Safety Instructions** may result in fire, personal injury and damage to property.
- The iLevil will get really hot after it has been running in the direct sun, use caution when handling this device.
- Not all traffic is displayed using ADS-B in.
- This is not an FAA certified instrument. Do not use it as primary or back-up instrument



978MHz ADS-B receiver +
GPS + AD-AHRS

Installation Guide

iLevil-AW