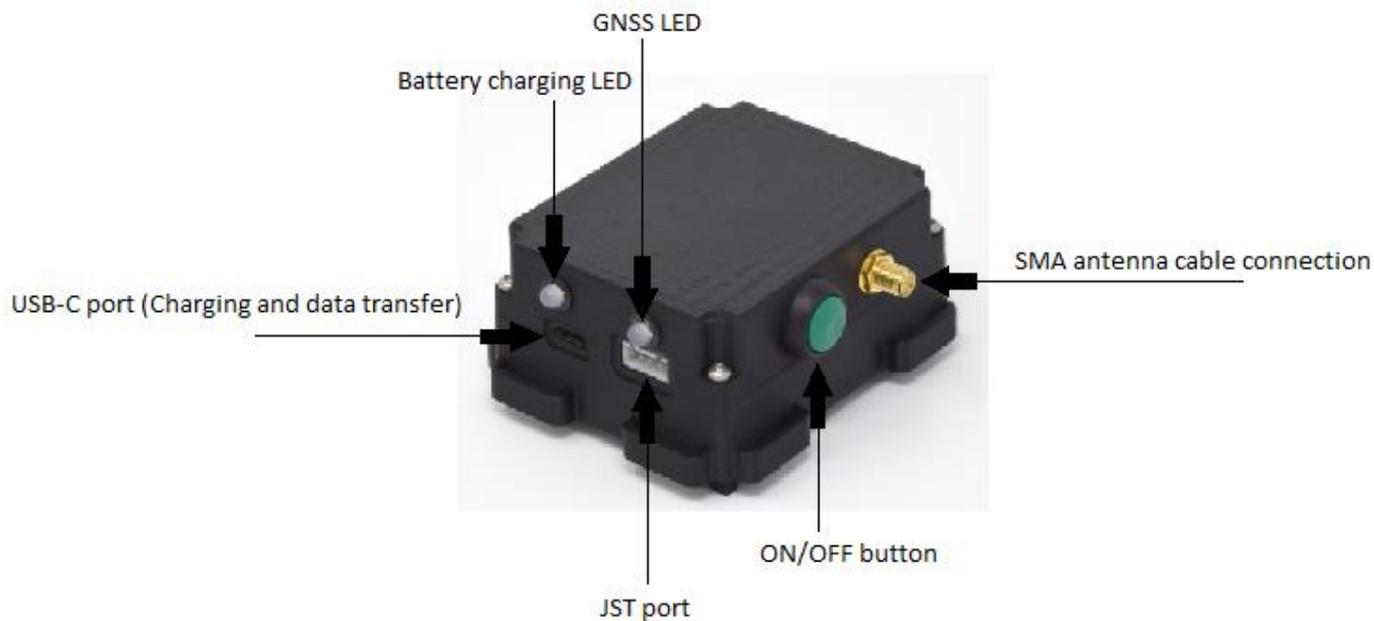


LOKI USERS GUIDE (DJI)

LOKI HARDWARE COMPONENTS

Loki Controller

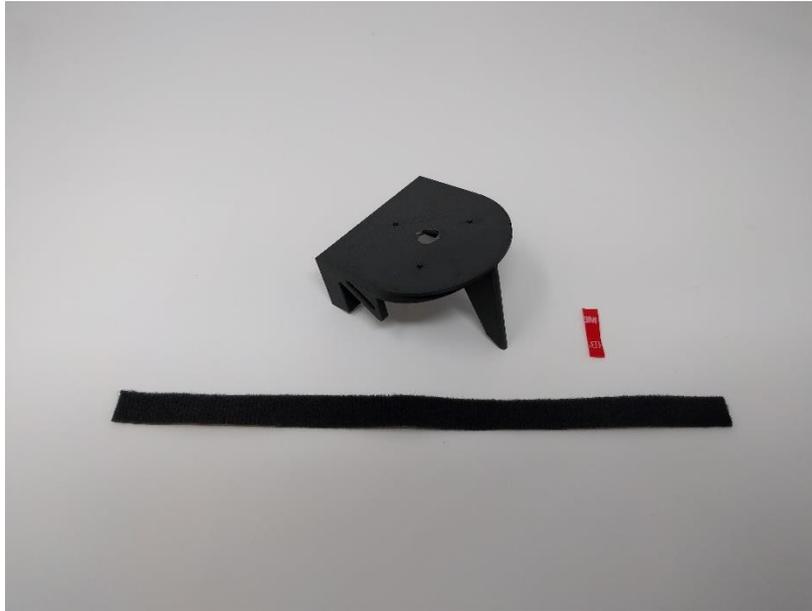


DJI Personality Cable

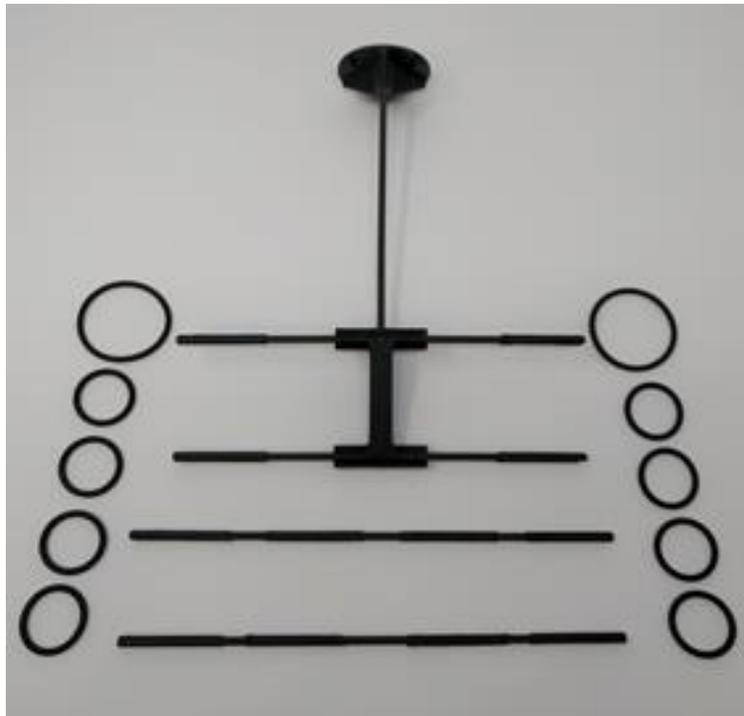


Caution – Be extremely careful when installing and removing the Loki DJI personality cable. The SD connector on your drone is very fragile. The connector type is “push-push” meaning that you push the connector to engage and then push a second time to disengage. The connector should pop out just a bit when in the disengaged mode. If you do not discern this movement, push the connector again until you see the card move slightly out of the slot. If you pull the connector while it is engaged, you will cause permanent damage to your drone’s SD card holder. You will have to send your drone to DJI for repair. AirGon is not responsible for damage to your drone caused by improperly removing the Personality Cable.

Inspire 2 Antenna mounting kit



Phantom 4 Pro antenna and controller mounting kit



Antenna, spacer, ground plane, screws, SMA antenna cable, and retention band



USB Cable



LOKI SOFTWARE COMPONENTS

AirGon Sensor Package Software Suite (ASP) Suite

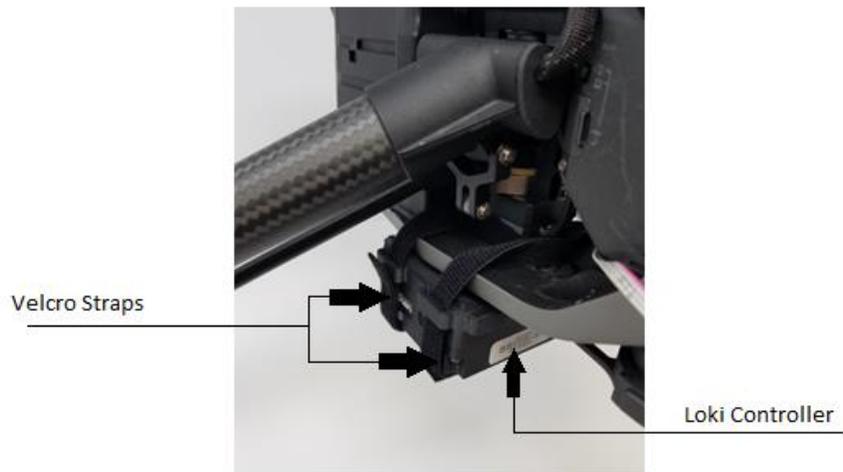
Download AirGon ASP Suite from <http://airgon.com/airgon/airgonmmsuite/ASPSuite/publish.htm>

Instructions for licensing ASP Suite will arrive in an email delivery.

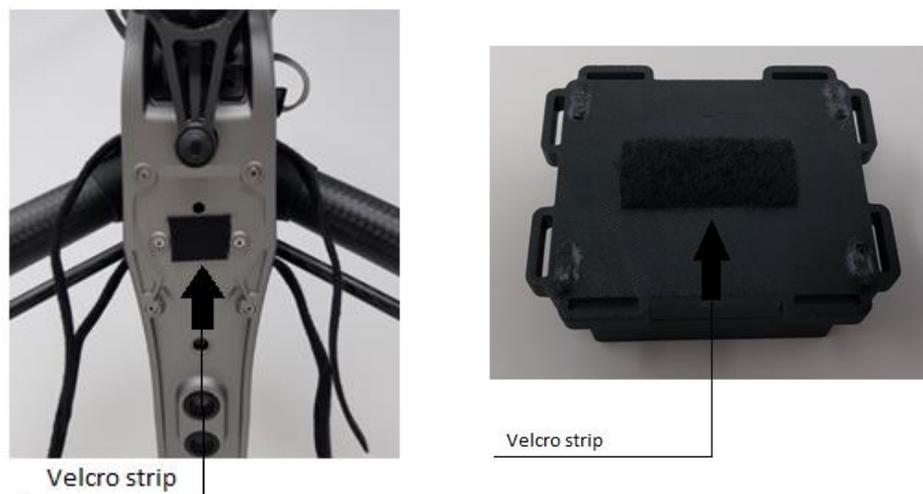
INSPIRE 2 LOKI CONTROLLER AND ANTENNA INSTALLATION

Mount the Loki controller to the bottom of the Inspire 2 using the velcro straps. The Inspire 2 will require that you place the provided 1 inch Velcro piece on the controller and the body of the drone.

Inspire 2 – Controller mounting position

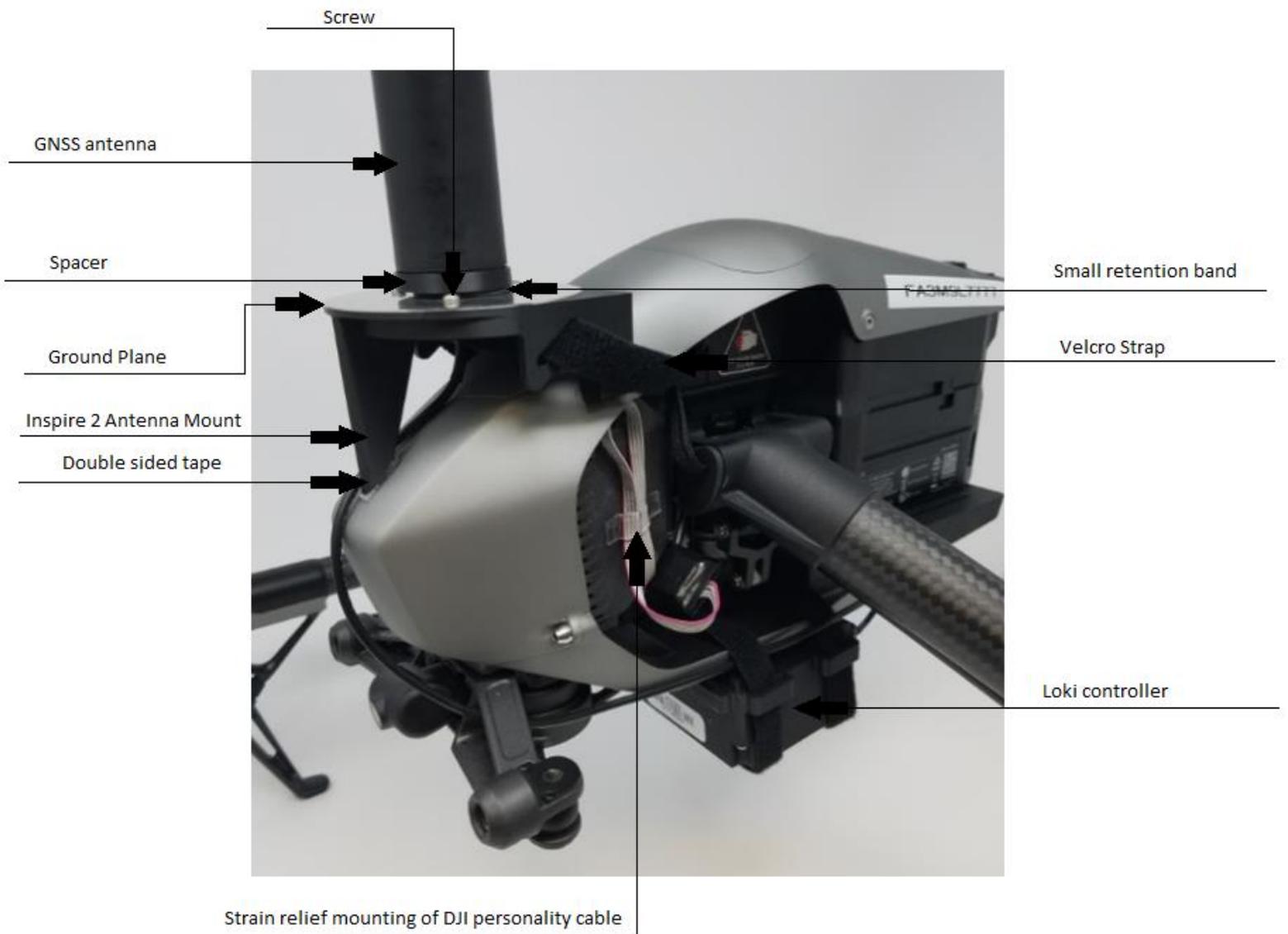


Inspire 2 and Loki controller – Velcro positioning



Assemble the antenna mounting assembly prior to attaching to the Inspire 2. Use a T7 size torx bit to install the 3 provided screws to secure the ground plane to the antenna mount. The screws are “Thread-Forming Screws for Plastic”, you are creating the threads when using the screws for the first time. When reusing the created threads, be careful to use the same threads. Use a small retention band between the spacer and the ground plane that is on top of the antenna mount. This is needed to ensure that there is not a gap between the antenna and the spacer. The snugness between the antenna and the spacer is to ensure that the antenna does not detach during the flight (due to motor vibration which could cause the antenna to unscrew during the flight). Route the female end of the SMA antenna cable up through the antenna mount. Use a 5/16” nut driver to install the star-washer and nut that is attached to the SMA cable. Screw the GNSS antenna on the female end of the SMA antenna cable until snug against the spacer (**Do not overtighten**).

Inspire 2 - Antenna and personality cable routing and installation

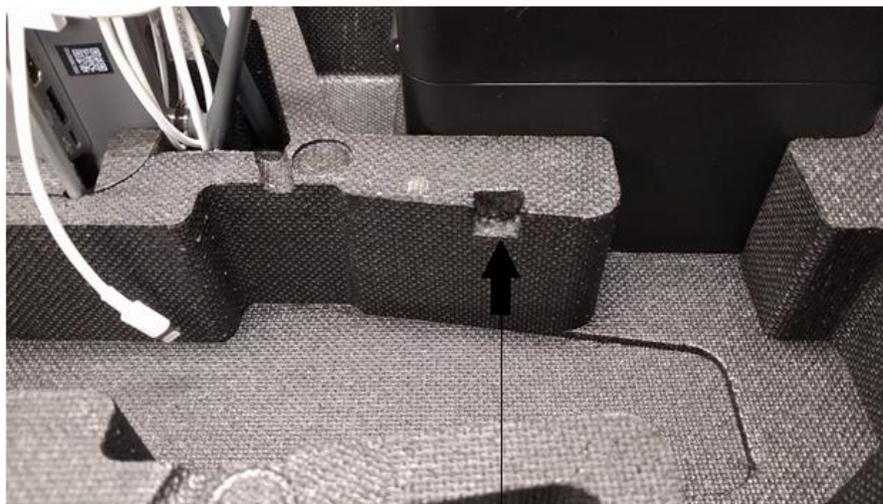


For antenna mount installation, use the provided piece of double-sided tape and attach the angled part of the antenna mount to the nose of the drone. The back legs of the antenna mount should rest on the large screws on the top of the Inspire 2 nose. When mounted to the drone, the antenna must be oriented so that it is in the vertical position and the SMA cable reaches the Loki controller. When routing the SMA cable, make sure no sensor is blocked. Once the Loki controller and antenna assembly is securely mounted to the drone, connect the male end of the SMA cable to the Loki controller.

It is very important that the Personality Cable not put any strain on the connector that plugs into the drone's SD slot. Ensure there is a small loop of cable at the connector and secure the cable to the body of the drone, close to the connector. It is best to secure the cable to the drone such that the cable loop is directly in-line with the card. We very strongly recommend that you do not remove the cable from the SD slot once it is installed. In fact, it is a good idea to secure the card end of the Personality Cable to the drone with a bit of tape. It is safe to fly the drone with the Personality Cable installed but without the Loki Controller on the drone. Just ensure the cable end that normally plugs into the Loki Controller is secured such that it does not swing around during flight. As noted in other places in this guide, cut out the foam in your drone case such that the card end of the Personality Cable does not come into contact with the case.

To continue using the DJI case with the Inspire 2 DJI personality cable installed, you will need to cut a small portion out of the case.

Inspire 2 Case – Cut out location



Case cut out location

Inspire 2 – body installation with DJI personality cable attached

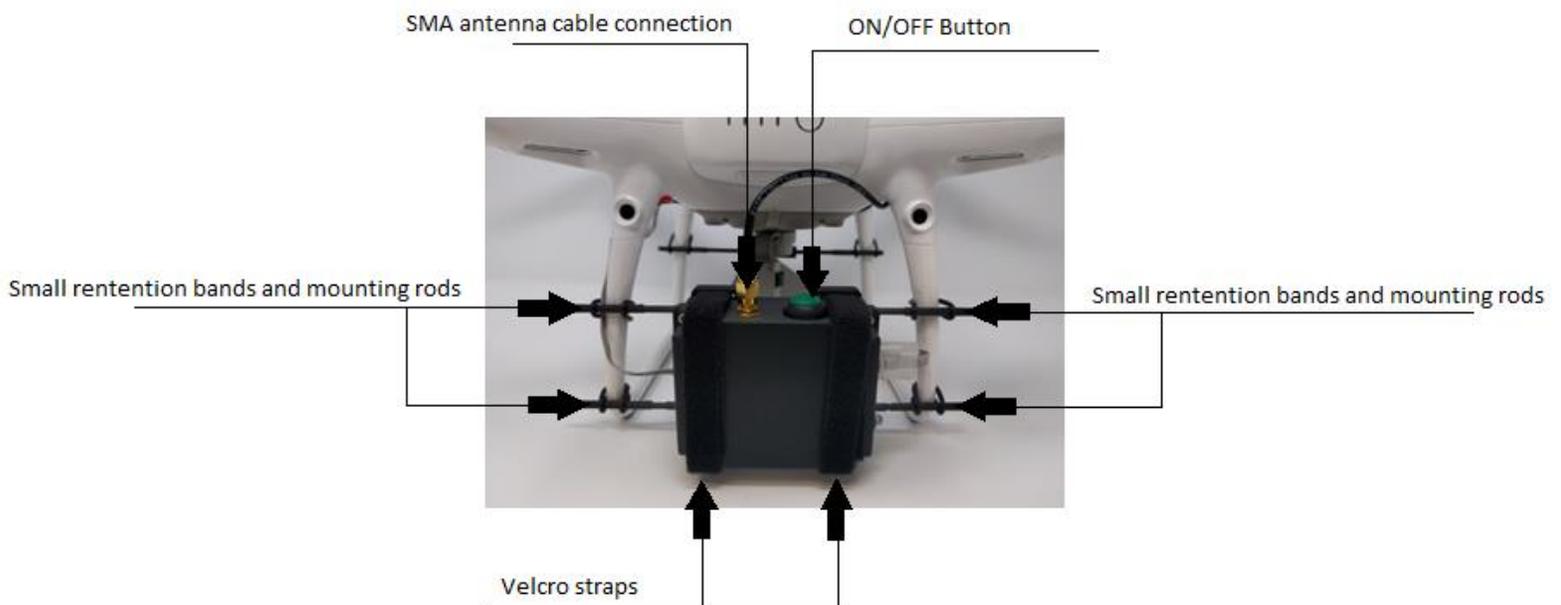


Case cut out location

PHANTOM 4 PRO LOKI CONTROLLER INSTALLATION

Mount the Loki controller to the P4P drone using the velcro straps, retention bands, and mounting rods. Position the mounting rods on the outside of the landing gear. Make sure that the Loki controller is positioned as low as possible on the drone legs to prevent sensor interference.

Phantom 4 Pro – Loki controller mounting configuration



Use a T7 size torx bit to install the 3 provided screws to secure the ground plane to the antenna mount. The screws are "Thread-Forming Screws for Plastic", you are creating the threads when using the screws for the first time. When reusing the created threads, be careful to use the same threads. Use a small retention band between the spacer and the ground plane that is on top of the antenna mount. This is needed to ensure that there is not a gap between the antenna and the spacer. The snugness between the antenna and the spacer is to ensure that the antenna does not detach during the flight (due to motor vibration which could cause the antenna to unscrew during the flight). Route the female end of the SMA antenna cable up through the antenna mount. Use a 5/16" nut driver to install the star-washer and nut that is attached to the SMA cable. Screw the GNSS antenna on the female end of the SMA antenna cable until snug against the spacer. (**Do not overtighten**).

Use the provided zip tie at the base of the antenna rod to secure the SMA cable, so that there is no inadvertent contact with prop rotation. Position the top antenna mounting rods on the outside and the lower mounting rods on the inside of the landing gear. When mounted to the drone, the antenna must be oriented so that it is in the vertical position and the SMA cable reaches the Loki controller. Use the small and large retention bands to secure the antenna mount to the drone. When routing the SMA cable, use provided tape strips and make sure that no sensor is blocked. Once the Loki controller and antenna assembly are securely mounted to the drone, connect the male end of the SMA cable to the Loki controller.

It is very important that the Personality Cable not put any strain on the connector that plugs into the drone's SD slot. Ensure there is a small loop of cable at the connector and secure the cable to the body of the drone, close to the connector. It is best to secure the cable to the drone such that the cable loop is directly in-line with the card. We very strongly recommend that you do not remove the cable from the SD slot once it is installed. In fact, it is a good idea to secure the card end of the Personality Cable to the drone with a bit of tape. It is safe to fly the drone with the Personality Cable installed but without the Loki Controller on the drone. Just ensure the cable end that normally plugs into the Loki Controller is secured such that it does not swing around during flight. For P4P there is not case alteration required for installed DJI Personality cable.

Phantom 4 Pro – Antenna mount installation



Phantom 4 Pro – SMA cable routing



SMA antenna cable double-sided tape mounting locations

Inspire 2 – Personality cable strain relief and cable routing

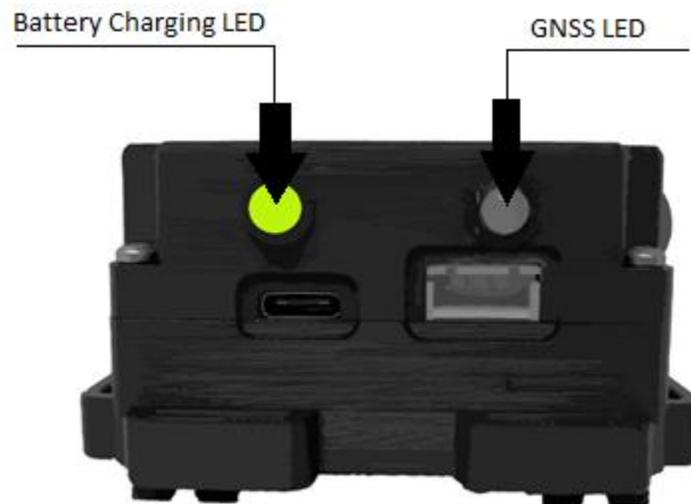


Strain relief double-sided tape location

Tape provided is cut into 3/8" strips for the first installation. An additional 3-inch strip is provided, that can be cut into spares. If additional tape is required, the type of tape used is: 3M Scotch 4910 VHB Tape. This can be purchased online from Amazon.

LOKI OPERATING INSTRUCTIONS

When a USB cable is plugged into the Loki controller, prior to the Loki controller being turned on, the battery charges but you will not be able to retrieve data. The battery automatically charges any time the Loki controller is connected to a computer or USB charger. The LED will be green-yellow while charging.



When the battery is fully charged, the LED will turn green. **Best practice is to charge the Loki completely before the beginning of planned flights.**



The charging LED will turn red when the battery level is 5 % or lower. This will occur whether Loki is on or off. Once the red light indicator is observed, it is recommended that the battery be charged to preserve longevity of the battery.



Prior to flying the mission, turn on the DJI drone. The GNSS LED will flash blue-green and then go off.



The GNSS LED will reilluminate green-yellow and remain that color until sufficient satellites are found.



Once sufficient satellites have been acquired, the GNSS LED will turn solid green. The Loki ready to perform the mission.



Once the mission is completed, turn the DJI drone off. The Loki will turn off automatically. To download the data, hold the ON/OFF button for 2 seconds to turn the Loki controller on and plug the USB cable into the Loki controller and computer. **Note: The Loki controller must be turned on prior to plugging the USB cable into the Loki controller in order to retrieve data for download.**



SUPPORT

Normal support business hours are **Monday - Friday, 8 AM — 5 PM** USA Central Time.

If a support request is sent during business hours a representative will typically get back to you within 4 hours. If received after hours, a response will be sent the following day. To speed response time please include the following information in your request:

- Contact information - please include e-mail address and phone number
- Company name
- Product name and version number

If your request includes problems pertaining to a specific error message, please include a screen shot of the error message.

For hardware and software support contact:

support@airgon.com