

# RedEdge-MX<sup>TM</sup> & Altum<sup>TM</sup> DJI Inspire 2 Quick Mount <u>Gen. 2</u> INTEGRATION GUIDE



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# Thank you for your purchase!

These instructions show how to integrate the MicaSense RedEdge-MX and/or Altum with a DJI Inspire 2. It covers attaching mounting brackets included in the kit, powering the camera from the host system, and placement of the Downwelling Light Sensor (DLS 2) unit.



Warning: This kit is not intended for any other RedEdge models other than the RedEdge-M/MX or Altum. Damage will occur if any other RedEdge model is connected.

#### What's inside?

- 1. Quick Mount Gen 2 Adapter (Qty 1)
- 2. 6-pin 60cm cable (Qty 2)
- Altum to Quick Mount cable (Qty 1) [Use with Altum sensor]
- 4. RedEdge-MX to Quick Mount cable (Qty 1) [Use with MX sensor]
- 5. M3 x 0.5, 6 mm SHC Screws (Qty 2)

- 6. M3 Lock Washer (Qty 2)
- 7. M 2.5 X 0.45, 16 mm Screws (Qty 2)
- 8. M2 X 0.4, 8 mm Screws (Qty 2)
- 9. Zip Ties (Qty 5)
- 10. DLS 2 Mounting plate (Qty 1)



Images shown are not to scale

# What's Required?

- #1 Phillips Screwdriver
- Cutting tool such as scissors or diagonal cutter
- 1.5 mm hex wrench
- 2 mm hex wrench

# Let's get started!



Warning: Installation of this kit into a drone should be done by an experienced person, in adherence with all recommendations and guidelines of the Inspire manufacturer. Before assembling this kit, ensure the Inspire is not powered, has the battery removed, and the rotor blades removed. Failure to follow these instructions can result in injury and/or damage to the Inspire, RedEdge-M/MX, or Altum.

# Attaching DLS 2 mast assembly

- 1. Mount the DLS 2 unit on top of the mast using the provided M2 X 8 (Qty 2) screws.
- 2. Using the appropriate Allen key, remove the two M2.5 screws from the drone to install DLS2 mounting plate (see image below)
- 3. Secure the mast to the top of the Inspire 2 using the provided M2.5 X 16 (Qty 2) screws making sure the DLS 2 connector is oriented toward the front of the drone.
- 4. Use zip ties to secure any loose wires.



DLS 2 mounted on Inspire 2

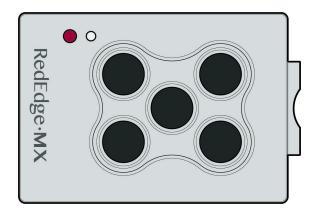


Showing DLS2 mast mounted on Inspire 2 with DLS 2 connector facing forward



Warning: Failure to properly secure loose wires may lead to interference with the aircraft propellers. This may damage the Inspire, RedEdge-MX/Altum, or both.

# RedEdge-MX Instructions



# Attaching the RedEdge-MX and the Mount

- 1. Locate the two M3 x 6 mm socket head cap screws, M3 lock washers, and Quick Mount Gen. 2 Adapter.
- Using the counterbore screw holes, attach the mount to the back of the RedEdge-MX.
   Make sure the mount 8-pin camera port is located on the same side as the camera
   "PWR/TRG" port.

3. Connect the provided Quick Mount Gen.2 RedEdge-MX cable to the RedEdge-MX "PWR/TRG" and "DLS" ports.



Quick Mount Gen 2 Adapter attached to RedEdge-MX

#### Attaching the RedEdge-MX and DLS 2 to the Inspire

Once assembled, the Quick Mount Gen. 2 can quickly and easily be installed or removed from the Inspire. Power is provided by the Inspire via the Quick Mount Gen 2.

- 1. Attach the assembled Quick Mount Gen. 2 (with connected RedEdge-MX) to the Inspire using the DJI lock mechanism on the Inspire.
- 2. Use the provided 6-pin 60cm cable to connect the DLS2 and the RedEdge-MX. Plug the DLS 2 cable from the DLS 2 port to the Quick Mount Gen. 2 "6-pin DLS" port.
- 3. When attached, the camera will be tilted forward slightly to compensate for the tilt of the aircraft while flying.



Fully connected RedEdge-MX and Quick Mount Gen 2



Warning: Failure to properly secure loose wires may lead to interference with the aircraft propellers. This may damage the Inspire, RedEdge-MX/Altum, or both.

#### **Altum Instructions**



#### Attaching the Altum and the Mount

- 1. Locate the two M3  $\times$  8 mm socket head cap screws, M3 lock washers, and Quick Mount Gen 2 Adapter.
- 2. Using the counterbore screw holes, attach the mount to the back of the Altum. Make sure the 8-pin camera port found on the Quick Mount is located on the same side as the camera "HOST" port.
- 3. Connect the provided Altum Gen. 2 Quick Mount cable to the "HOST" port found on the Altum camera and the Power/Trigger and Communication ports found on the Quick Mount.



MicaSense Altum connected to Quick Mount Gen. 2

#### Attaching the Altum and DLS 2 to the Inspire

Once assembled, the Quick Mount Gen. 2 can quickly and easily be installed or removed from the Inspire. Power is provided by the Inspire via the Quick Mount Gen 2.

- 1. Attach the assembled Quick Mount Gen. 2 (with connected Altum) to the Inspire using the DJI lock mechanism on the Inspire.
- 2. Plug the DLS 2 cable from the DLS 2 port to the Quick Mount Gen. 2 "6-pin DLS" port.
- 3. When attached, the camera will be tilted forward slightly to compensate for the tilt of the aircraft while flying.



Warning: Failure to properly secure loose wires may lead to interference with the aircraft propellers. This may damage the Inspire, RedEdge-MX/Altum, or both.

# Support

For other RedEdge-MX or Altum associated integration guides, please visit our Knowledge Base at support.micasense.com

For additional questions, please contact <a href="mailto:support@micasense.com">support@micasense.com</a>

MicaSense RedEdge-MX & Altum Quick Mount Gen. 2 for DJI Inspire 2 Instructions.

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#### It's simple to plan a successful mission



#### **FLY**

The MicaSense sensors low weight, low power requirements, and ability to capture RGB and narrowband spectral bands simultaneously means you can gather the data you need in fewer flights. Have multiple UAVs? MicaSense sensors quickly integrate with many different drone platforms.



#### **PROCESS**

With MicaSense sensors, you own your data. You're not limited to a particular processing platform. You can choose whichever platform is best for you, your customer, or your project.



#### **ANYWHERE**

We know you need tools you can rely on. That's why we built the sensors we wanted in the field—predictable, tough, and reliable—so you can gather the data you need when you need it.



#### **ANALYZE**

RedEdge-MX and Altum have five bands—blue, green, red, red edge, and near-infrared—that our research showed were optimal for sensing crop health. It simply shows you more. And with MicaSense Atlas, you can see many different analytical layers in one easy to use interface, and compare these outputs across time.





Visit atlas.micasense.com to create your free MicaSense Atlas account.

#### DOWNLOAD



Download MicaSense Sensor user manuals, integration guides and support resources via your Atlas account.

#### CONTACT



Support@micasense.com US based MicaSense support is here to help.

# MicaSense<sup>®</sup>

Located in Seattle, Washington, MicaSense delivers integrated solutions for data gathering, processing, and analytics across the global agriculture market. With decades of expertise in widely varied UAV applications, the MicaSense team is redefining remote sensing technology and pioneering new ways to collect and analyze information.

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# Revision History

Revision	Description	Date
01	Initial Release	13 Aug 2019