



# RedEdge-MX™ & Altum™ DJI Inspire 1 Quick Mount INTEGRATION GUIDE



# Table of Contents

Thank you for your purchase!	2
What's inside?	2
What's Required?	3
Let's get started!	3
Attaching DLS 2 mast assembly	3
RedEdge-MX Instructions	4
Attaching the RedEdge-MX and the Mount	4
Attaching the RedEdge-MX and DLS 2 to the Inspire	5
Altum Instructions	7
Attaching the Altum and the Mount	7
Attaching the Altum and DLS 2 to the Inspire	8
Support	9

# Thank you for your purchase!

These instructions show how to integrate the MicaSense RedEdge-MX and/or Altum with a DJI Inspire 1. 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 Adapter (Qty 1)
2. 6 pin cable (Qty 1)
3. Sensor Mounting Plate (Qty 1)
4. Go-Pro Mount Adapter (Qty 1)
5. M 2.5 X 0.45, 16 mm Screws (Qty 2)
6. M 3 X 8 mm Screws (Qty 4)
7. M 2 X 8 mm Screws (Qty 4)
8. Alcohol wipe (Qty 1)
9. Zip Ties (Qty 6)
10. Double sided tape (Qty 2)
11. DLS 2 Mounting plate (Qty 1)
12. Connector Board (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

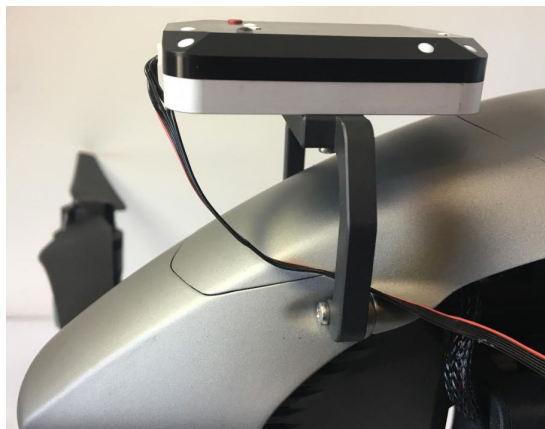
## Let's get started!



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 1 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.



Example: DLS 2 mounted on Inspire 2

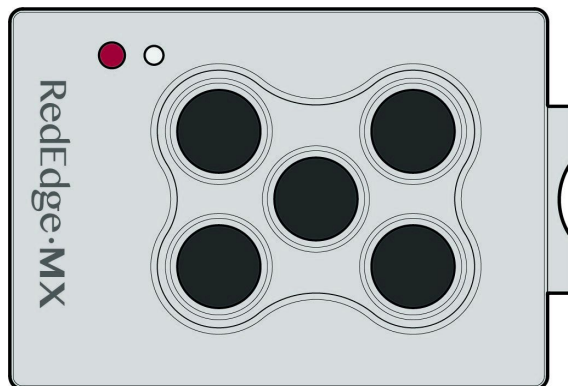


Example: Showing DLS2 mast mounted on Inspire 2 with DLS 2 connector facing forward



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.

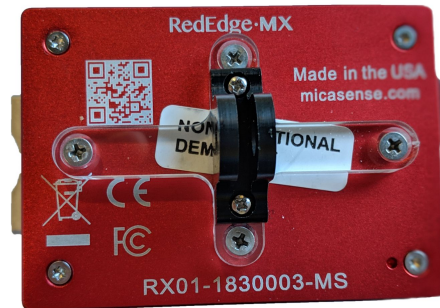
## RedEdge-MX Instructions



### Attaching the RedEdge-MX and the Mount

1. Locate the four M3 x 8 mm flat-head screws and sensor mounting plate.
2. Peel off the brown protective paper from the sensor mounting plate.
3. Using the countersink screw holes, attach the mount to the back of the RedEdge-MX.

4. Locate the two M2 x 8 mm screws and the Go-Pro mount adapter.
5. Attach the Go-Pro mount adapter to the sensor mounting plate.
6. Locate the Quick Mount adapter and remove the thumbscrew.
7. Attach the Go-Pro mount adapter of the assembled sensor mounting plate to the Quick mount adapter and secure it with the thumbscrew.
8. Connect the Quick Mount cable to the RedEdge-MX "PWR/TRG" port



Mounting Bracket attached to RedEdge-MX



Fully connected Quick Mount

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

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

1. Attach the assembled Quick Mount (with connected RedEdge-MX) to the Inspire using the DJI lock mechanism on the Inspire.

2. Plug the DLS 2 cable from the DLS 2 port to the connector board.
3. Using the provided shorter 6-pin cable, connect the RedEdge-MX "DLS" port to the connector board.

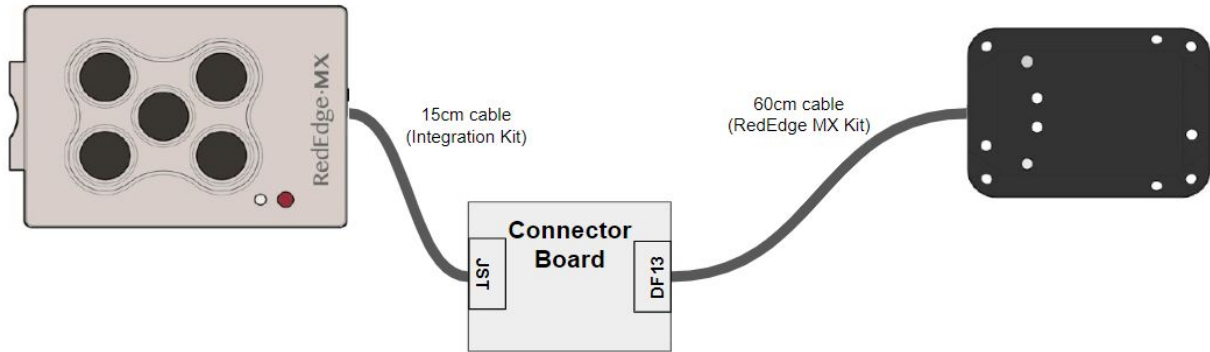


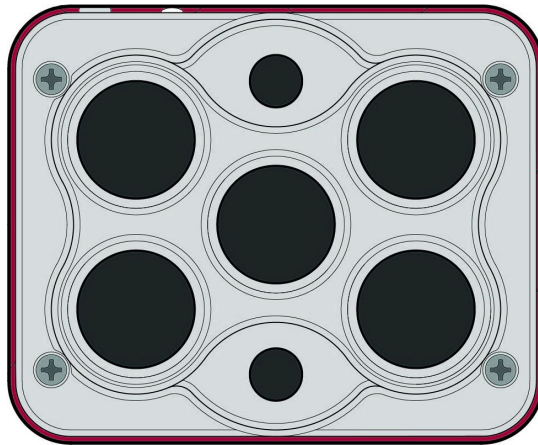
Diagram: RedEdge-MX to Connector Board to DLS 2

4. Secure the connector board using the double sided tape in a safe location.
5. Angle the camera so that, while flying forward, it will point nadir (straight down). The forward-tilt angle can vary by aircraft, but it is typically 8° to 12°.
6. Use zip ties to secure any loose wires.



**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 four M3 x 8 mm flat-head screws and sensor mounting plate.
2. Peel off the brown protective paper from the sensor mounting plate.
3. Using the countersink screw holes, attach the mount to the back of the Altum.
4. Locate the two M2 x 8 mm screws and the Go-Pro mount adapter.
5. Attach the Go-Pro mount adapter to the sensor mounting plate.
6. Locate the Quick Connect mount and remove the thumbscrew.
7. Attach the Go-Pro mount adapter of the assembled sensor mounting plate to the Quick mount adapter and secure it with the thumbscrew.
8. Connect the Quick Mount cable to the Altum wire harness.



MicaSense Altum connected to Quick Mount



## Attaching the Altum and DLS 2 to the Inspire

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

1. Attach the assembled Quick Mount (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 connector board.
3. Using the provided shorter 6-pin cable, connect the Altum "DLS" wire harness to the connector board.

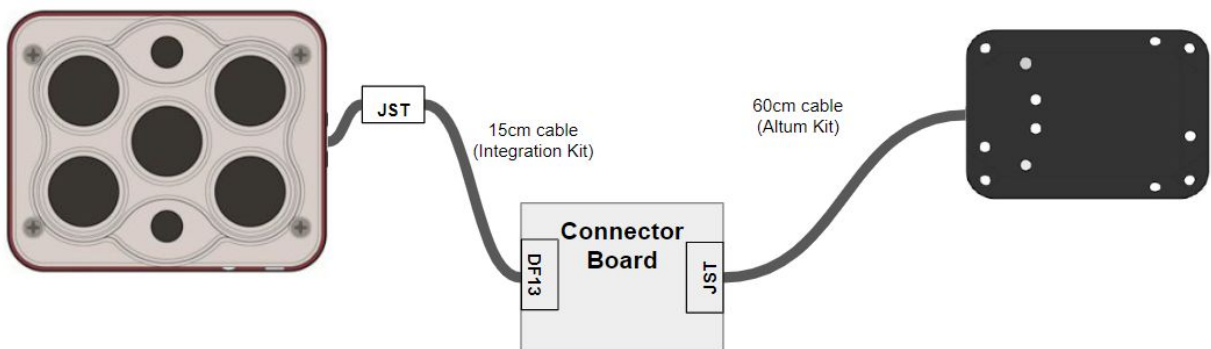


Diagram: Altum to Connector Board to DLS 2

4. Secure the connector board using the double sided tape in a safe location.
5. Angle the camera so that, while flying forward, it will point nadir (straight down). The forward-tilt angle can vary by aircraft, but it is typically 8° to 12°.
6. Use zip ties to secure loose wires to prevent entanglement.



**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](http://support.micasense.com)

For additional questions, please contact [support@micasense.com](mailto:support@micasense.com)

MicaSense RedEdge-MX & Altum Quick Mount for DJI Inspire 1 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.

To learn more about Atlas or to start a free trial, please visit [micasense.com/atlas](https://micasense.com/atlas)



### SIGN UP

Visit [atlas.micasense.com](https://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](mailto:Support@micasense.com) US based MicaSense support is here to help.



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.

MicaSense RedEdge-MX/Altum QuickConnect DJI Inspire 1 Integration Guide  
Rev 02 – July 2019  
P/N: 805-00043

## Revision History

Revision	Description	Date
01	Initial Release	18 Dec 2018
02	DLS 2 mounting plate and kit content updated	29 Jul 2019