



RedEdge-MX™ & Altum™  
DJI Matrice 100/600 Series  
Quick Mount Gen. 2  
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	5
Attaching the RedEdge-MX and the Mount	5
Attaching the RedEdge-MX and DLS 2 to the Matrice	6
Altum Instructions	6
Attaching the Altum and the Mount	6
Attaching the Altum and DLS 2 to the Matrice	7
Support	8

# Thank you for your purchase!

These instructions show how to integrate the MicaSense RedEdge-MX and/or Altum with a DJI Matrice 100/600 Series. 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 and 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)
3. 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 X 0.4, 6 mm Screws (Qty 2)
8. M 2.5 X 0.45, 4 mm Screws (Qty 2)
9. Zip Ties (Qty 6)
10. DLS2 Mounting Disc (Qty 1)
11. DLS2 Mast kit (Qty 1)



Images shown are not to scale

**Note:** DJI Z30 adapter is needed for this kit to be compatible with the Matrice 100 and 600 Series drones. (not provided by MicaSense)

# 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 Matrice manufacturer. Before assembling this kit, ensure the Matrice 100/600 Series 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 Matrice, RedEdge-MX, or Altum.

## Attaching DLS 2 mast assembly

1. Locate and remove the DJI mast kit from its packaging.
2. There are three carbon rod sizes. Choose the longest and insert it into the base mount.
3. Secure the base mount with the included M2 screw.
4. Place the top cap on the other side of the carbon rod.
5. Secure the top cap on the rod by screwing the M2 screw.
6. Screw in the base of the mast assembly into the aircraft frame using the provided M2.5 screws and mating cap.
7. Secure the DLS2 mounting disc to the mast using the provided M2.5 x 4mm screws.
8. Mount the DLS2 to the DLS2 mounting disc using the provided M2 x 6mm screws.
9. Ensure the DLS 2 connector is oriented toward the front of the drone.
10. Use zip ties to secure any loose wires.



DLS2 Mounted on Matrice 100

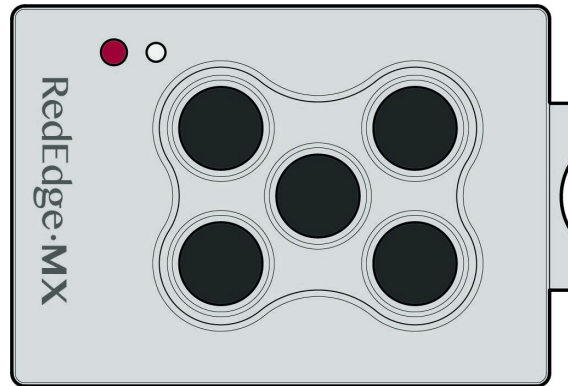


DLS2 Mounted on a Matrice 600Pro



Warning: Failure to properly secure loose wires may lead to interference with the aircraft propellers. This may damage the Matrice, 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.
2. 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 Matrice

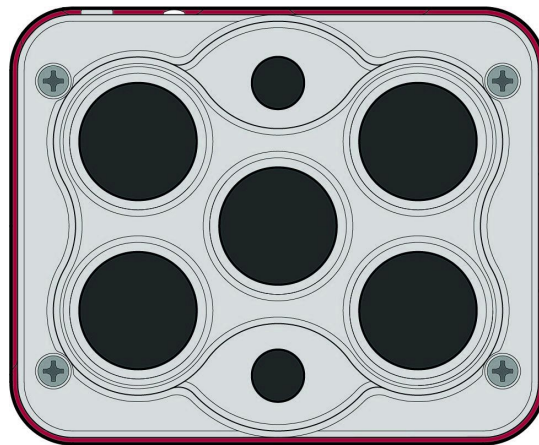
Once assembled, the Quick Mount Gen. 2 can quickly and easily be installed or removed from the Matrice. Power is provided by the Matrice via the Quick Mount Gen 2.

1. Attach the assembled Quick Mount Gen. 2 (with connected RedEdge-MX) to the Matrice using the DJI lock mechanism on the Matrice.
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.



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

## Altum Instructions



## Attaching the Altum and the Mount

1. Locate the two M3 x 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.



Fully connected Quick Mount Gen. 2

## Attaching the Altum and DLS 2 to the Matrice

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

1. Attach the assembled Quick Mount Gen. 2 (with connected Altum) to the Matrice using the DJI lock mechanism on the Matrice.
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 Matrice, 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 Gen. 2 for DJI Matrice 100/600 Series 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.



### SIGN UP

Visit [atlas.micasense.com](https://atlas.micasense.com) to create your free MicaSense Atlas account.



### DOWNLOAD

Download RedEdge-M 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.

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# Revision History

Revision	Description	Date
01	Initial Release	13 Aug 2019