



Phase One iX Cameras Installation Guide for DJI M600 & M600 PRO



Contents

Legal Notice..... 3

Contact Support..... 3

Required items for complete configuration 3

What’s In the Box?..... 4

Recommended Reading List 4

Introduction 5

Step 1: Installing the DJI UAV 5

Step 2: Configuring the UAV for Communication with the Phase One Camera..... 6

Step 3: Connecting the iX Camera – DJI Communication Cable..... 7

Step 4: Assembling the Ronin-MX Vibration Absorber..... 8

Step 5: Assembling the Phase One iX Camera into the Ronin-MX Gimbal 8

Step 6: Connecting the Cables 10

Step 7: Assembly Completion with ZipTie 11

Step 8: Configuring Phase One iX Camera to work with DJI UAV 11

Step 9: Activation process 12

Step 10: Calibrating the Ronin-MX 12

Legal Notice

The company disclaims all liability and warranties in relation to this manual, including warranty of merchantability, fitness for particular purpose and accuracy, and may amend it without further notice.

Contact Support

You can contact Phase One Technical Support directly by creating a support case at <http://industrial.phaseone.com/support.aspx>

Required items for complete configuration

The following items are required for installing Phase One iX Camera on DJI M600 & M600 Pro drone:

- DJI M600 / M600 Pro drone
- DJI Ronin-MX Gimbal (with Vibration Absorber)
- Additional remote control unit for iX Capture Mobile app.
- Battery Power distributor
- Additional battery for powering the Phase One iX Cameras (Intelligent battery)
- Phase One UAV accessory kit (73149 for iXU and 73191 for iXM, includes 2 cables, mount and screws + washers)

What's In the Box?

The following table lists the items required for installing the Phase One iX Cameras on the DJI M600 and M600 PRO:

Phase One UAV Solution Accessory kit:		
	1 x Phase One iXU Camera mount 4 x M4 screws with 4 spring washers and 4 flat washers	Connects the Phase One iX Camera to the DJI Drone (see Step 6).
	1 x Phase One iXM Camera mount 4 x M4 screws with 4 spring washers and 4 flat washers	Connects the Phase One iX Camera to the DJI Drone (see Step 6).
	1 x iX Camera - DJI Communication cable 1 x M3 screw with a single spring washer and a single flat washer.	Connects communication cable between the Phase One iX Camera and the DJI Drone (see step 3)
	1 x iX Camera - DJI Power cable	Provides power for Phase One iX Camera from DJI Gimbal (see Step 7).
	1 x HDMI (Male to Female) extender cable	Provides HDMI streaming from Phase One iX Camera to the DJI drone (see step 6).

Recommended Reading List

- DJI M600 / M600 Pro Installation Manuals
- DJI Ronin Manual
- DJI Assistant 2 Manual

Introduction

This document describes the required procedures needed for mounting the Phase One iX Cameras on the DJI M600 & M600 PRO.

Assembly Process

The following section describes the installation work flow that is required for assembling / mounting the Phase One iX Camera on the DJI M600 / M600 PRO UAV:

Note: Assembly of the DJI M600 / M600 Pro and Ronin-MX should be implemented according to their assembly manuals.

- Step 1: Installing the DJI UAV
- Step 2: Configuring the UAV for Communication with the Phase One iX Camera
- Step 3: Installing the iX Camera - DJI Communication Cable
- Step 4: Assembling the Ronin-MX Vibration Absorber
- Step 5: Assembling the Phase One iX Camera in the Ronin-MX
- Step 6: Connecting the Cables
- Step 7: Assembly Completion with Zip Tie
- Step 8: Configuring Phase One iX Camera to work with DJI UAV
- Step 9: Activation process
- Step 10: Calibrating the Ronin-MX

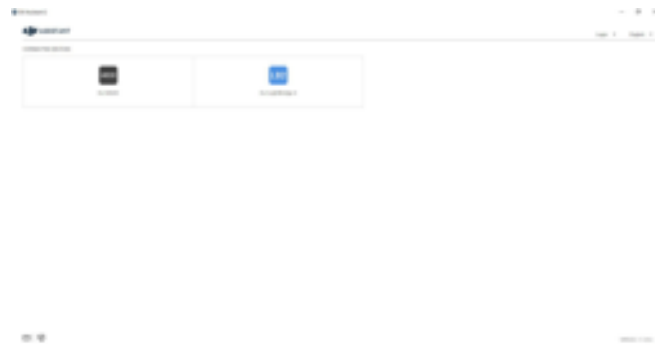
Step 1: Installing the DJI UAV

Unbox the **M600 / M600 PRO** UAV and assemble it according to the DJI Installation Manual.

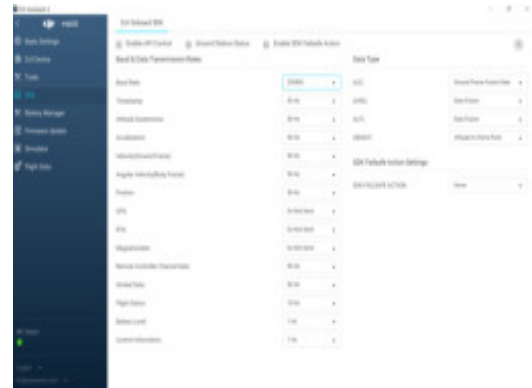
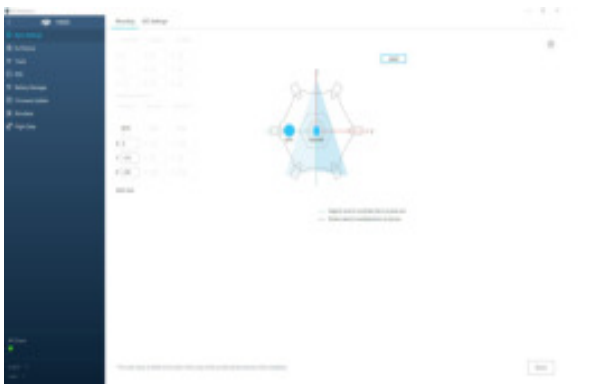


Step 2: Configuring the UAV for Communication with the Phase One Camera

1. Download DJI Assistant 2 from the DJI website and install it on a PC.
2. Connect a USB cable between the PC and the UAV micro USB port.
3. Turn ON the drone.
4. Start the Assistant 2 application. The following screen is displayed when the UAV is connected.
5. Click the **M600 / M600 Pro** icon. The following screen appears.
6. In the tree menu click 'SDK'. The following screen appears.



7. Configure the following fields:



- Select the 'Enable API Control' check box
 - Select the 'Ground Station Status' check box
 - Set the 'Baud Rate' to 115200
8. Exit the application.
 9. Re-start the UAV in order for the changes to take effect.
After re-start of the system, the Assistance 2 SDK page should look as the image below:



Note: This procedure should be repeated if DJI UAV Firmware was upgraded.

Step 3: Connecting the iX Camera – DJI Communication Cable



1. With the UAV standing the right way up, start the installation by removing the top cover from the UAV.
2. Turn the UAV on its side, and remove the bottom cover.
3. Insert the iX Camera - DJI Communication cable through the M600/M600 PRO body so that the DJI 4-pin connector is routed through the available thread holes of the body of the UAV (from the bottom up).
4. Once the cable is in place, connect the DJI 4-pin connector to the SDK Port in the A3 Flight Controller, and place the top cover back in its place.



5. Underneath the UAV, secure the small Communication box with an M3 screw, a spring washer and a flat washer next to the UAV USB port.
6. Place the UAV bottom cover back in its place.
7. Connect the power cable of the retractable module to the XT30 power cable at the bottom of the DJI UAV



Step 4: Assembling the Ronin-MX Vibration Absorber

Position the UAV on its back and connect the Ronin-MX Vibration Absorber to the UAV according to the Ronin-MX user manual.



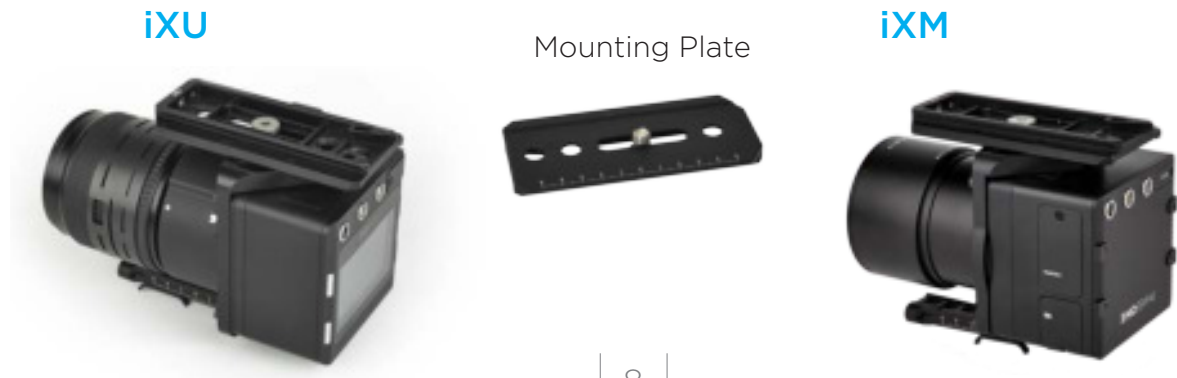
Step 5: Assembling the Phase One iX Camera into the Ronin-MX Gimbal

Mounting the Camera

- 1. Insert the four M4 screws with four spring washers and four flat washers into the Phase One Camera mount.



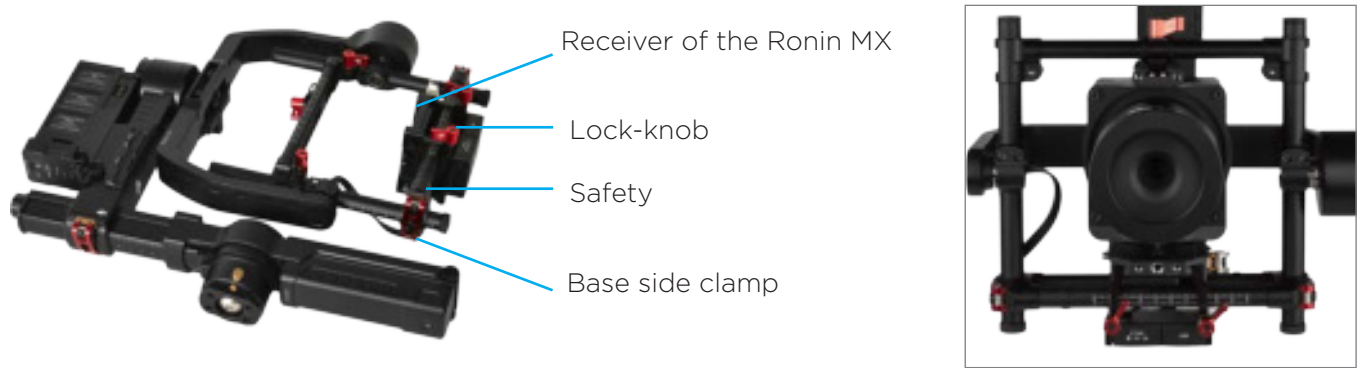
- 2. Assemble the camera mount on the camera and fasten the screws.
- 3. Attach the Camera Mounting Plate (part of the DJI Gimbal kit) with a 3.8" camera screw (part of the DJI Gimbal kit) to the Phase One Camera mount.



4. Attach the Camera Upper Mounting Plate (part of the DJI Gimbal kit) to the DJI mount top section using the 2 small screws under the flash hot shoe cover.



5. Facing outward on the tuning stand, slide the Phase One iX Camera into the receiver of the Ronin MX, until the safety-locks engage. Adjust the vertical position of the crossbar to meet the Camera Upper Mounting Plate. When the Phase One Camera System in place, tighten the camera base side clamp and lock-knobs.



Note: The camera should be placed upside-down so the pitch-axis can rotate to -135 degrees. The Ronin-MX Gimbal (including Phase One iX Camera) should be connected to the DJI UAV according to the UAV and Ronin-MX assembly instructions. Make sure the Ronin-MX safety lock is secured.



Step 6: Connecting the Cables

1. Connect the Lemo Right Angle connector of the iX Camera - DJI Communication cable to port B of the Phase One iX Camera (see iXM / iXU Installation Guides).
2. Connect the Lemo Right Angle connector of the iX Camera - DJI Power cable to the power port of the Phase One iX Camera.
3. Connect the HDMI male connector of the HDMI extender cable to the Camera



4. Connect the HDMI extender female connector to the UAV male HDMI connector.



5. Connect the 2-pin DJI connector of the iX Camera - DJI Power cable to the power socket on the Ronin-MX DJI Intelligent Battery Power port.



Step 7: Assembly Completion with ZipTie

Secure the appropriate cables with a zip tie to ensure free movement with Ronin-MX rotation angles.

Note: Make sure all cables are secured.



Step 8: Configuring Phase One iX Camera to work with DJI UAV

In order for Phase One iX Camera to work properly with DJI UAV perform the following procedures:

iXU Camera

1. Turn the camera on
2. Verify that the latest firmware version is installed on the camera. If not, install it with Phase One Firmware Updater (see [firmware versions](#)).
3. Insert a CF card into the card slot (any size, brand or model is applicable) and make sure it is identified by the camera
4. Press 'Menu' tab
5. Press 'Serial Link' tab
6. Press 'DJI Link (Data Terminal B)'
7. Re-start the camera

iXM Camera

1. Connect the iXM to iX Capture software
2. Verify that the latest firmware version is installed on the camera. If not, install it with Phase One Firmware Updater (see [firmware versions](#)).
3. Insert a XQD card into the card slot (any size, brand or model is applicable), format the card under service tab and make sure it is identified by the camera
4. Press 'Link' tab
5. Set right terminal to "DJI Link"
6. Re-start the camera
7. Connect the camera to the M600

After re-start, the camera is able to communicate with DJI UAV.

Note: if the camera is used for any other purpose, repeat the above procedure except step 4 where the 'Off' should be chosen.

Step 9: Activation process

Using a DJI drone and Phase One iX Camera combination for the first time requires an initial activation. The activation is done via an internet connection and a Remote Control unit connected to a mobile device running DJI GO.

To link Phase One iX Camera with DJI UAV perform the following procedures:

- 1. Using a USB cable, connect the Remote Control unit to a mobile device with an Internet access (iOS or Android)
- 2. Configure the Remote Control unit to Intelligent Flight mode by toggling the Flight Mode Switch to F-mode.
- 3. Activate the DJI Go App on the mobile device
- 4. Power On the DJI UAV
- 5. Turn on the Phase One iX Camera
- 6. Wait for 15 seconds and exit DJI Go App.
- 7. Run the iX Capture Mobile (while mobile device has an Internet connection) and verify connection

If linking has failed, Phase One iX Camera will issue an error message

Note: This procedure must be done once for any new DJI UAV or after each time the DJI UAV is Firmware upgraded

Step 10: Calibrating the Ronin-MX

- Use the Ronin-MX manual instructions to calibrate and balance the Gimbal. Use 'DJI Go' application (it can be downloaded from Apple store) in order to test the balancing and stabilizing of the system.

Setup Example of Phase One iX Camera:

This is a suggested setup configuration for the Initial setup of Phase One iX Camera:

Lower side slider at 2.4



Upper side slider at 2.5



Top slider at 0.5



Bottom slider at 3





Phase One Support:

industrial.phaseone.com/support.aspx

The content is subject to change.

Download the latest version from

industrial.phaseone.com/downloads.aspx

If you have any questions about this document,
please contact Phase One by sending a message to

support@phaseone.com

Visit the website for additional information

industrial.phaseone.com

