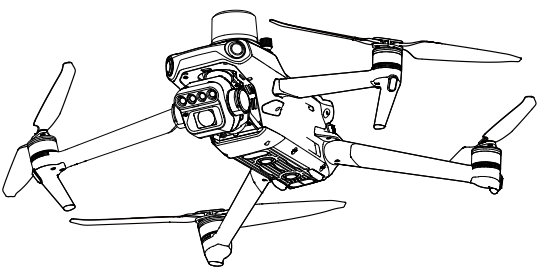
MAVIC 3M

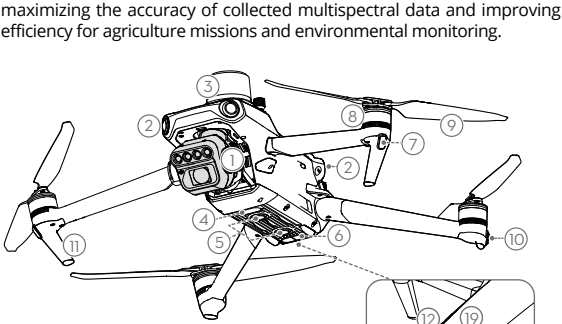
Quick Start Guide
快速入门指南
快速入門指南
クイックスタートガイド
퀵 스타트 가이드
Kurzanleitung
Guía de inicio rápido
Guide de démarrage rapide
Guida di avvio rapido
Snelstartgids
Guia de início rápido
Guia de Início Rápido
Краткое руководство пользователя

v1.0



Aircraft

DJI™ MAVIC™ 3M features both an Infrared Sensing System and Upward, Downward, and Horizontal Omnidirectional Vision Systems, allowing for hovering and flying indoors as well as outdoors and for automatic Return to Home while avoiding obstacles in all directions. * The built-in DJI AirSense system senses nearby aircraft in the surrounding airspace to ensure safety. With a precise three-axis gimbal to stabilize the high-performance multi-camera payload, the DJI PILOT™ 2 app can be used to view in real-time from the RGB and multispectral cameras. The RTK module provides data for centimeter-level precision positioning accuracy. ** At the same time, the spectral sunlight sensor on top of the aircraft detects solar irradiance in real-time for imaging compensation, maximizing the accuracy of collected multispectral data and improving efficiency for agriculture missions and environmental monitoring.



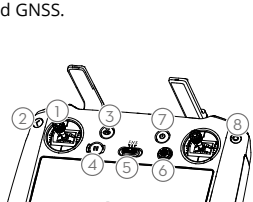
1. Gimbal and Camera
2. Horizontal Omnidirectional Vision System
3. RTK Module
4. Auxiliary Bottom Light
5. Downward Vision System
6. Infrared Sensing System
7. Front LEDs
8. Motors
9. Propellers
10. Aircraft Status Indicators
11. Landing Gears (built-in antennas)
12. Upward Vision System
13. USB-C Port
14. microSD Card Slot
15. Battery Level LEDs
16. Intelligent Flight Battery
17. Power Button
18. Battery Buckles
19. Spectral Sunlight Sensor

* The vision and infrared sensing systems are affected by the surrounding conditions. Read the User Manual for more information.

** To be used with a Network RTK service, DJI D-RTK 2 High Precision GNSS Mobile Station (sold seperately), or post-processed kinematic (PPK) data (recommended when RTK signal is weak during operations).

Remote Controller

The DJI RC Pro Enterprise remote controller features O3 Enterprise, the latest version of DJI's signature OCUSYNC™ image transmission technology, and can transmit a live HD view from the camera of the aircraft at a distance of up to 15 km*. The remote controller has a wide range of aircraft and gimbal controls as well as customizable buttons. The built-in microphone allows recording voice and the 5.5-in high brightness 1000 cd/m^2 screen boasts a resolution of 1920×1080 pixels. Users can connect to the internet via Wi-Fi and the Android operating system comes with a variety of functions such as Bluetooth and GNSS.



1. Control Sticks
2. Back/Function Button
3. RTH Button
4. Flight Pause Button
5. Flight Mode Switch
6. 5D Button
7. Power Button
8. Confirm Button
9. Touchscreen
10. M4 Screw Hole
11. microSD Card Slot
12. USB-C Port
13. Mini HDMI Port
14. Microphone

15. Gimbal Dial
16. Record Button
17. Antennas
18. Status LED
19. Battery Level LEDs
20. Focus/Shutter Button
21. Camera Settings Dial

22. Air Vent
23. Control Sticks Storage Slot
24. Customizable C1 Button
25. Speaker
26. Customizable C2 Button
27. Air Intake

* The remote controller can reach its maximum transmission distance (FCC) in a wide-open area with no electromagnetic interference at an altitude of about 120 m (400 ft).

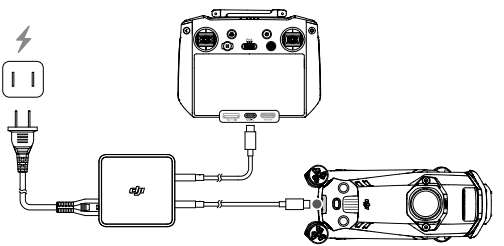
1. Watching the Tutorials

Scan the QR code or visit DJI official website to watch the tutorial videos.

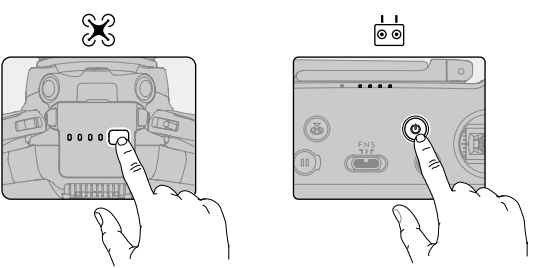
https://ag.dji.com/mavic-3-m/video

2. Charging the Battery

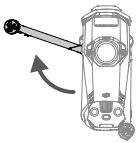
Charge to activate the Intelligent Flight Battery and the internal battery of the Remote Controller before using it for the first time.



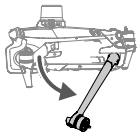
Check battery level: press once.
Power on/off: press, then press and hold.



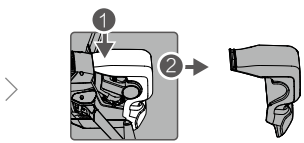
3. Preparing the Aircraft



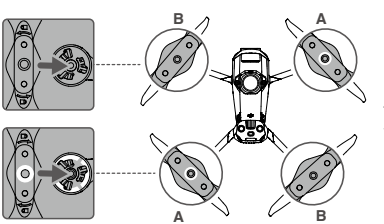
Unfold the front arms



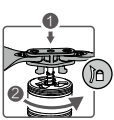
Unfold the rear arms



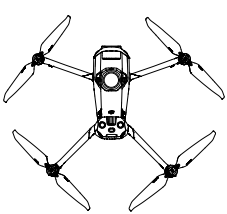
Remove the gimbal protector from the camera



Match the propellers to motors



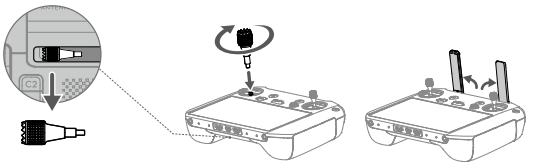
Press the propellers down and rotate until they click in place



Unfolded

⚠ • Unfold the front arms before the rear arms. All arms and propellers must be unfolded before takeoff.

4. Preparing the Remote Controller

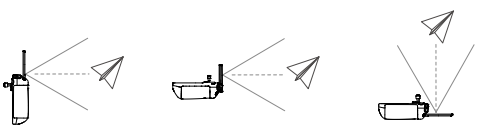


Remove the control sticks from the storage slots

Attach the control sticks and twist to secure

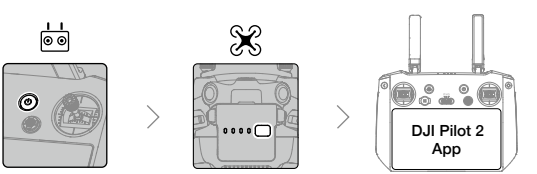
Unfold the antennas

The optimal transmission range is where the antennas face the aircraft, with the angle between the antennas and the back of the remote controller being 180° or 270°.



- DO NOT operate other wireless devices at the same frequency as the remote controller, to avoid signal interference.
- A warning prompt appears in DJI Pilot 2 if the transmission signal is weak. Adjust the antennas to make sure that the aircraft is within the optimal transmission range.

5. Getting Ready for Takeoff



Power on the remote controller

Power on the aircraft

Launch DJI Pilot 2

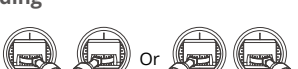
Internet

A DJI account and internet connection are required to activate the aircraft and the remote controller. Before activating the aircraft in DJI Pilot 2, power on the remote controller and follow the prompts to activate.

6. Flight

• Manual Takeoff/Landing

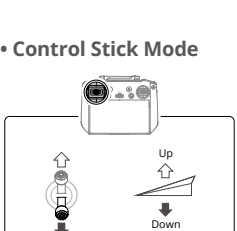
Start/Stop Motors: perform Combination Stick Command and hold for two seconds.

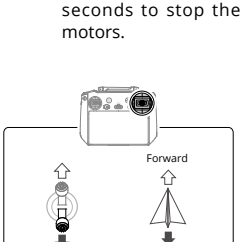


Takeoff: slowly push the left control stick (mode 2) up to take off.

Landing: slowly push the left control stick (mode 2) down until the aircraft lands. Hold for three seconds to stop the motors.

• Control Stick Mode





The default control stick mode is mode 2. The left control stick controls the altitude and heading of the aircraft, while the right control stick controls the forward, backward, and sideward movements.

- Always set an appropriate RTH mode and RTH altitude before takeoff.
- Press the Flight Pause button for emergency braking during flight.

Specifications

Aircraft (Model: M3M)

Weight (with propellers and RTK module)	951 g
Max Takeoff Weight	1050 g
Max Ascent Speed	8 m/s (Sport mode) 6 m/s (Normal mode)

Max Descent Speed	6 m/s (Sport mode) 6 m/s (Normal mode)
Max Horizontal Speed (near sea level, no wind)	21 m/s (Sport mode), 19 m/s (Sport mode, EU) 15 m/s (Normal mode)
Max Take-off Altitude Above Sea Level (without payload)	6,000 m
Max Flight Time (without wind)	43 mins
Max Hover Time (without wind)	37 mins
Max Wind Speed Resistance	12 m/s
Operating Temperature	-10° to 40° C (14° to 104° F)
GNSS	GPS + Galileo + BeiDou + GLONASS (GLONASS is supported only when RTK module is enabled)
Operating Frequency	2.400-2.4835 GHz, 5.725-5.850 GHz*
Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.8 GHz: <33 dBm (FCC), <14 dBm (CE), <30 dBm (SRRC)
Interface	USB-C, microSD card slot, PSDK port
Gimbal	
Angular vibration range	±0.007°
Controllable Rotating Range	Tilt: -90° to +35°
RGB Camera	
Sensor	4/3 CMOS; Effective pixels: 20 MP
Lens	FOV: 84° Format Equivalent: 24 mm Aperture: f/2.8-f/11 Focus: 1 m to ∞ (with autofocus)
Multispectral Camera	
Sensor	1/2.8" CMOS; Effective Pixels: 5 MP
Lens	FOV: 73.91° Format Equivalent: 25 mm Aperture: f/2.0 Focus: N/A
Narrow Band Filter	Green (G): 560±16 nm, Red (R): 650±16 nm, Red Edge (RE): 730±16 nm, Near-Infrared (NIR): 860±26 nm
Intelligent Flight Battery	
Capacity	5000 mAh
Standard Voltage	15.4 V
Max Charging Voltage	17.6 V
Battery Type	LiPo 4S
Energy	77 Wh
Weight	335.5 g
Charging Temperature	5° to 40° C (41° to 104° F)
Battery Charger	
Input	100-240 V AC, 50-60 Hz, 2.5 A

Output	Max. 100 W (Total) When both ports are in use, the maximum output of one of the ports is 82 W. The charger will dynamically allocate the output of the two ports accordingly to the power load.

Remote Controller (Model: RM510B)

Weight	Approx. 680 g
Battery	Li-ion (5000 mAh @ 7.2 V)
Storage Capacity	ROM 64GB + expandable storage via microSD card
Operating Time	3 hrs
Operating Temperature	-10° to 40° C (14° to 104° F)
Charging Temperature	5° to 40° C (41° to 104° F)
GNSS	GPS + Galileo + GLONASS
O3 Enterprise	
Operating Frequency	2.400-2.4835 GHz, 5.725-5.850 GHz*
Max Transmission Distance (Unobstructed, free of interference)	15 km (FCC), 8 km (CE/SRRC/MIC)
Max Transmission Distance** (with interference)	Strong Interference (urban landscape, limited line of sight, many competing signals): 1.5-3 km (FCC/CE/SRRC/MIC) Medium Interference (suburban landscape, open line of sight, some competing signals): 3-9 km (FCC), 3-6 km (CE/SRRC/MIC) Weak Interference (open landscape, abundant line of sight, few competing signals): 9-15 km (FCC), 6-8 km (CE/SRRC/MIC)
Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.8 GHz: <33 dBm (FCC), <14 dBm (CE), <23 dBm (SRRC)
Wi-Fi	
Protocol	802.11 a/b/g/n/ac/ax Support 2×2 MIMO Wi-Fi
Operating Frequency	2.400-2.4835 GHz, 5.150-5.250 GHz, 5.725-5.850 GHz*
Transmitter Power (EIRP)	2.4 GHz: <26 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.1 GHz: <26 dBm (FCC), <23 dBm (CE/SRRC/MIC) 5.8 GHz: <26 dBm (FCC/SRRC), <14 dBm (CE)
Bluetooth	
Protocol	Bluetooth 5.1
Operating Frequency	2.400-2.4835 GHz
Transmitter Power (EIRP)	<10 dBm

* 5.8GHz and 5.1GHz frequencies are prohibited in some countries. In some countries, the 5.1GHz frequency is only allowed for indoor use.

** The data is tested in an environment with no obstructions for a variety of typical interference intensity scenarios, without a guarantee of the actual flight distance, for reference only.