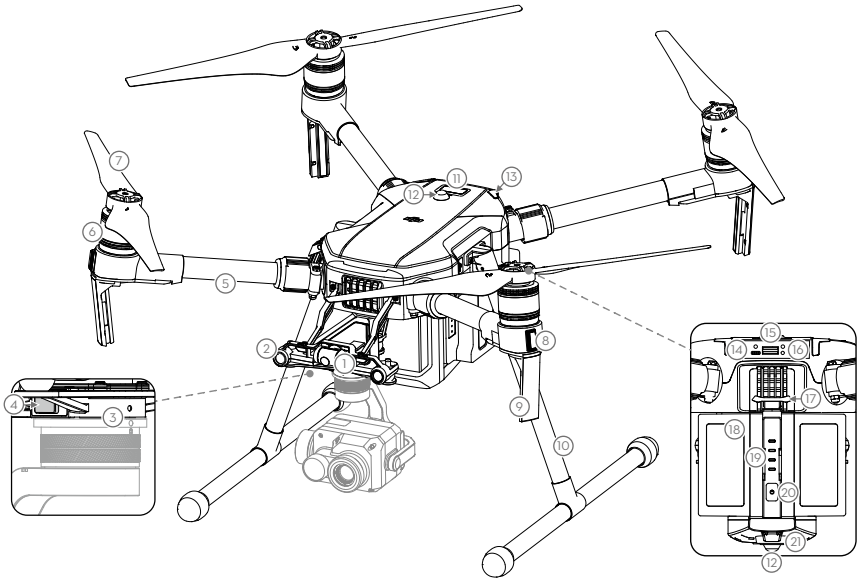
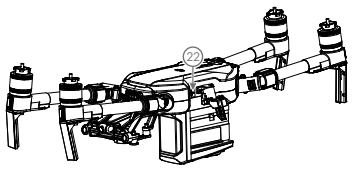
Matrice 200 V2

EN

The DJI™ MATRICE™ 200 V2 (M200 V2) is a powerful industrial drone platform with world-class agility and speed, redundant barometers and IMUs for maximum reliability, and smart flight features that make capturing complex shots easy. The aircraft's visual sensors* enable enhanced hovering precision even when flying indoors or in environments where GNSS is unavailable. The built-in AirSense makes you aware of nearby aircraft in the surrounding airspace to ensure safety. Its airframe design gives it an IP43 Ingress Protection, in accordance with the global IEC 60529 standard. The mechanical design, along with quick-release landing gears and mounted folding arms, makes it easy to transport, store, and prepare for flight. The safety beacons on both the top and the bottom of the aircraft allow the aircraft to be identified at night or in low light conditions. An advanced power management system along with dual batteries ensures power supply and enhances flight safety. Without a payload, the M200 V2 has a flight time of up to 38 minutes with standard batteries (TB55).*

The M200 V2 is compatible with many of DJI's DGC2.0 connector gimbals.* This manual uses the DJI ZENMUSE™ XT 2 as an example to demonstrate the M200 V2's remarkable functions.





Folded

1. FPV Camera
2. Forward Vision System
3. DJI Gimbal Connector V2.0 (DGC2.0)
4. Gimbal Detachment Button
5. Frame Arms
6. Motors
7. Propellers
8. ESC LEDs
9. Transmission Antennas
10. Landing Gear
11. Upward Infrared Sensor
12. Beacons
13. Aircraft Status Indicators
14. USB Mode Switch
15. USB Port
16. Linking Button and Indicator
17. Battery Removal Button
18. Intelligent Flight Batteries
19. Battery Level Indicators
20. Power Button
21. Downward Vision System
22. microSD Card Slot

* The Vision and Infrared Sensing Systems are affected by surrounding conditions. Read the Disclaimer and Safety Guidelines to learn more.
Maximum run-time is tested in a lab environment. Performance may vary depending on local conditions.
Gimbals can be purchased separately from the official DJI website.
DO NOT disassemble the aircraft shell, otherwise it will not be covered under warranty.

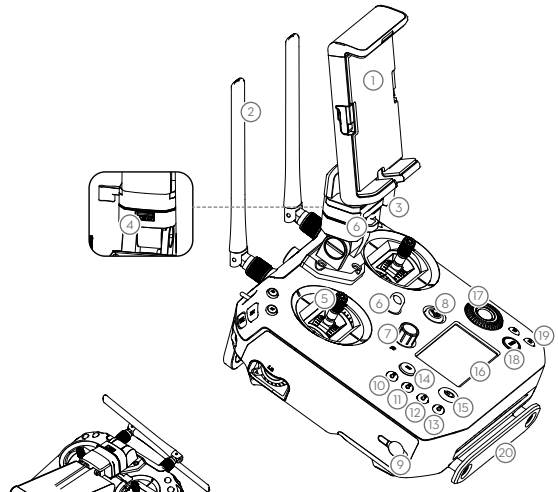
Find Quality Products Online at: www.GlobalTestSupply.com sales@GlobalTestSupply.com

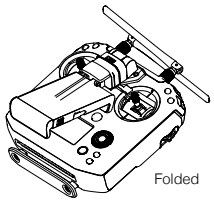
Cendence S Remote Controller

EN

The CENDENCE™ S remote controller features DJI's OCUSYNC™ 2.0 technology for a maximum transmission distance of up to 5 mi (8 km).* While flying the aircraft, you have a HD live view directly within the DJI Pilot app on your paired device for a precise and responsive flying experience. Dual frequency* support makes the HD video downlink more stable. In Dual Remote Controller Mode, two remote controllers control the aircraft and camera separately, even when they are up to 656 feet (200 m) apart.*

The remote controller works with a WB37 Intelligent Battery, which can be fully charged via the charging port in about 2 hours with the standard charger, or with the Intelligent Battery Charging Hub* in about 1 hour and 11 minutes. The maximum run time of the remote controller is approximately 4 hours.*

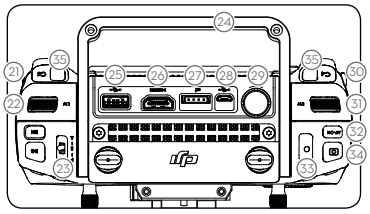




Folded

1. Mobile Device Holder
2. Antennas
3. Monitor Mounting Bracket
4. USB Port (Reserved Port)
5. Control Sticks
6. Strap Hook
7. Focal Adjustment Knob
8. Return-to-Home (RTH) Button
9. Power Port
10-13. Reserved Buttons
14. Pause Button
15. Power Button
16. Remote Control Display
17. Camera Settings Dial
18. Customizable Button Setting Menu
19. Customizable Buttons (BA-BH)
20. Support Rig
21. Left Lever
22. Left Dial (Gimbal Pitch)
23. Flight Mode Switch
24. Handle Bar
25. USB Port
    (for Mobile Device Connection)
26. HDMI A Port (for Video Output)

27. CAN Bus Port (Extension Port)
28. Micro USB Port
29. SDI Port (for Video Output)
30. Right Lever
31. Right Dial (Gimbal Pan)
32. AF Button (Autofocus)
33. Record Button
34. Shutter Button
35. Customizable Buttons (C1-C4)



* The remote controller can reach its maximum transmission distance (FCC) in an unobstructed area with no electro-magnetic interference at an altitude of about 400 feet (120 meters). The actual maximum transmission distance may be less than the distance mentioned above due to interference in the operating environment, and the actual value will fluctuate according to the strength of interference.
To comply with local regulations, the 5.8 GHz frequency is not available in some countries and regions.
For more information about Dual Remote Controller mode, please refer to the user manual.
The Charging Hub can be purchased separately from the official DJI website.
Maximum run time is estimated in a lab environment without supplying power to a smart device or monitor, for reference only.

Find Quality Products Online at: www.GlobalTestSupply.com sales@GlobalTestSupply.com

EN

Using Matrice 200 V2

1. Downloading the DJI Pilot App

Search for DJI Pilot in Google Play Store or scan the QR code to download the app onto your mobile device.

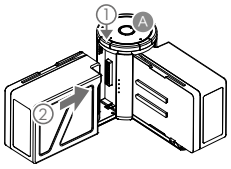
DJI Pilot App

Internet First-time activation requires your DJI account and an internet connection.

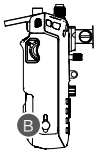
- DJI Pilot supports Android 5.0 or later.
- If using a DJI CRYSTALSKY™ Monitor, it is recommended to use the built-in DJI Pilot app.

2. Charging the Batteries

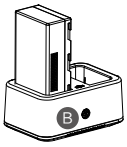
- Press the release button and open the corresponding charging port cover.
- Insert the Intelligent Flight Battery into the charging port to begin charging.
- Be sure to press the release button when removing fully charged batteries.



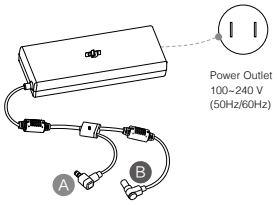
Using the IN2CH Charging Hub, charging time is approximately
TB55: 2 hours and 24 min (two batteries)*



Charging Time:
2 hours*



Using the WCH2 Charging Hub, charging time is approximately 1 hour and 11 min (one battery)*



Power Outlet
100~240 V
(50Hz/60Hz)

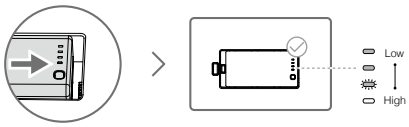
* Provided charger.
The battery must be fully charged before using it for the first time.

- When charging is complete, the LED lights on the Intelligent Flight Battery will turn off, and the LED on the Charging Hub will turn solid green.
- When charging is complete, the display on the remote controller will show 100%.
- The Charging Hub will sound an alert when the battery has been fully charged. The alert can be turned on or off by toggling the switch under the hub.
- Install the battery into the aircraft and power on. If a low battery temperature is detected, the battery will automatically heat up to maintain a temperature between 16° and 20° C.
- Ensure two Intelligent Flight Batteries are charged and discharged simultaneously to prolong their service life and for a better flight experience.

3. Preparing the Remote Controller

Mounting the Remote Controller Battery

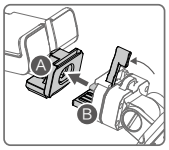
Put the battery into the Battery Slot, then slide it to the end until you hear a click.



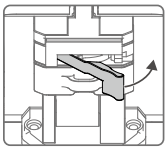
- Press the Battery Release Button before removing the battery.
- Press the Battery Level Button once to check the battery level.

Find Quality Products Online at: www.GlobalTestSupply.com sales@GlobalTestSupply.com

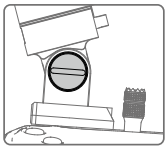
Mounting the Monitor to the Remote Controller



Ensure that Part B is unlocked. Connect Part B to Part A.

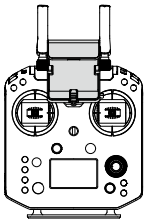


Lock the Mounting Bracket.

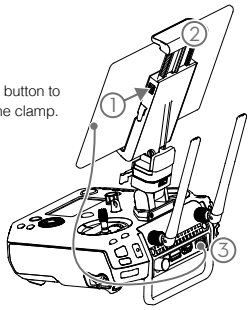


Use a coin or the screwdriver included to adjust the tightness of the tilt axis.

Connecting the Mobile Device



Press the button to release the clamp.

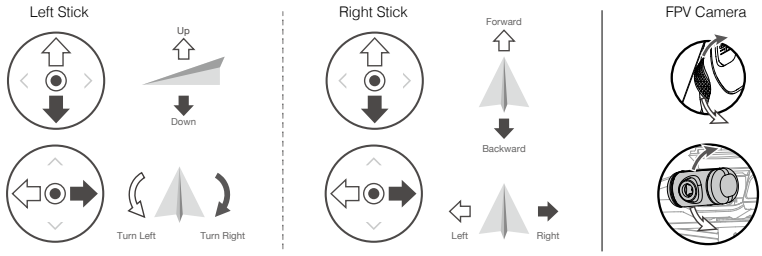


Place your mobile device and adjust the clamp to secure.

Connect your mobile device with a USB cable.

Using the Remote Controller

The Stick Mode is set to Mode 2 by default. In Mode 2, the left stick controls the aircraft's elevation and heading, and the right stick controls the aircraft's forward, backward, and lateral movements. To adjust the FPV camera, press and hold the C2 Button and rotate the left dial.



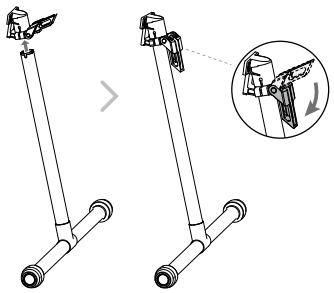
- For more information about how to connect and use the remote controller, please refer to the user manual.
- You can change the stick mode and customize the C1-C4 and BA-BH buttons' functions in the DJI Pilot app.

Find Quality Products Online at: www.GlobalTestSupply.com sales@GlobalTestSupply.com

EN

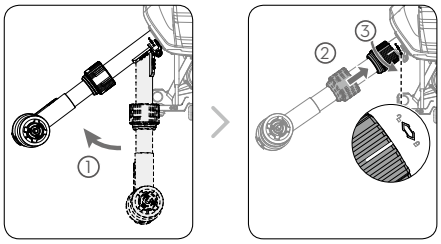
4. Preparing the Aircraft

Mounting the Landing Gear

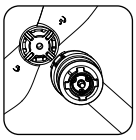


Unfolding the Aircraft

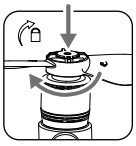
Unfold the frame arm, slide the arm lock to the end of the frame arm, and rotate it about 90° until the silver line lies within the range of the ⇔ icon.



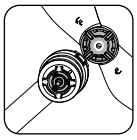
Mounting the Propellers



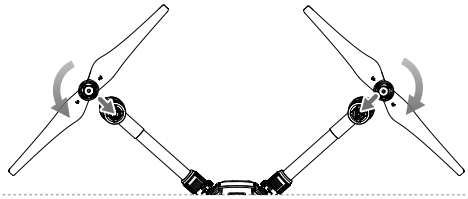
Propellers without silver rings should be installed on motors without marks.



Press the propeller down onto the mounting plate and rotate in the lock direction 🔓 until secure.

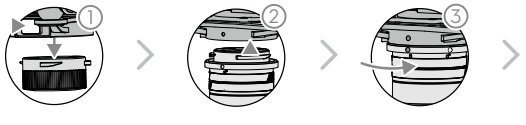


Propellers with silver rings should be installed on motors with the same color marks.



⚠ Check that the propellers are secure before each flight.

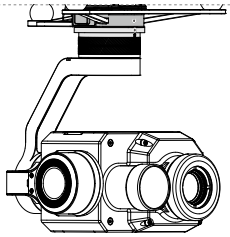
Mounting the Gimbal and Camera



Press the Gimbal Detachment Button to remove the cover.

Align the white and red dots and insert the gimbal.

Rotate the gimbal lock to the locked position.

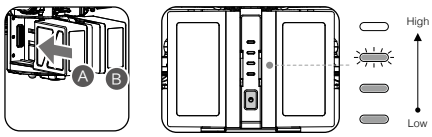


⚠ Make sure to press down the gimbal detachment button when rotating the gimbal lock to remove the gimbal and camera. The gimbal lock should be fully rotated when removing the gimbal for the next installation.

Find Quality Products Online at: www.GlobalTestSupply.com sales@GlobalTestSupply.com

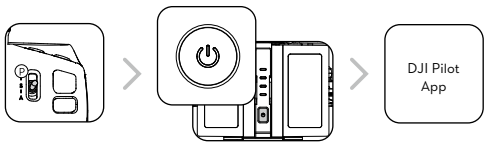
Mounting the Intelligent Flight Batteries

Insert a pair of batteries.
Press once to check the battery level.
Press again and hold until the batteries turn on or off.



- Only use battery slot B when using one battery to supply power. In this case, the aircraft can only be powered on, but cannot take off.
- If for any reason only one battery is available during flight, land the aircraft immediately and replace the batteries as soon as possible.
- Make sure to press the Battery Removal button when removing the battery.
- Make sure to use the included TB55 batteries. DO NOT use any other type of batteries.

5. Flight



Toggle the Flight Mode switch to P-mode, the safest flight mode.

Power on the remote controller, and aircraft.

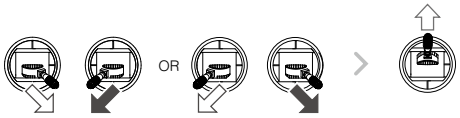
Launch the DJI Pilot app.

Ready to Go (GPS)

Before taking off, ensure that the Aircraft Status Bar in the DJI Pilot app reads 'Ready to Go (GPS)' or 'Ready to Go (Vision)' if flying indoors.

- If using a CrystalSky Monitor, after the monitor is powered on, wait for a pop-up window that asks for a selection of USB device use, and then select "DJI Pilot". Otherwise, the app cannot be connected to the remote controller.
- Always set an appropriate RTH altitude before takeoff. Refer to the Disclaimer and Safety Guidelines for more details.

Manual Takeoff



Combination Stick Command to start/stop the motors

Left stick up (slowly) to take off

Return-to-Home (RC)



Press and hold to initiate the RTH procedure. Press again to cancel.

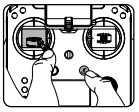
- Rotating propellers can be dangerous. DO NOT start the motors in narrow spaces or when there are people nearby.
- Always keep your hands on the remote controller so long as the motor is still spinning.
- After landing, power off the aircraft before turning off the remote controller.

Manual Landing

Pull left stick down (slowly) until you touch the ground. Hold for a few seconds to stop the motors.



To stop the motors mid-flight, press the RTH button while simultaneously pulling the left stick to the bottom inner corner. Stop motors mid-flight will cause the aircraft to crash. The motor can only be stopped mid-flight when the flight controller detects critical error.



It is important to understand basic flight guidelines for the safety of both you and those around you.
Refer to the Disclaimer and Safety Guidelines for more information.

GEO Zones

Find Quality Products Online at: www.GlobalTestSupply.com sales@GlobalTestSupply.com

EN

Specifications

- **Aircraft (M200 V2)**

Dimensions	Unfolded, propellers and landing gears included, 883×886×398 mm Folded, propellers and landing gears excluded, 722×247×242 mm
Diagonal Wheelbase	643 mm
Weight	Approx. 4.69 kg (with two TB55 batteries)
Max Takeoff Weight	6.14 kg
Max Payload	1.45 kg
Operating Frequency	2.4000-2.4835 GHz; 5.725-5.850 GHz
EIRP	2.4 GHz: ≤ 26 dBm (NCC/FCC); ≤ 20 dBm (CE/MIC); ≤ 20 dBm (SRRC) 5.8 GHz: ≤ 26 dBm (NCC/FCC); ≤ 14 dBm (CE); ≤ 26 dBm (SRRC)
Hovering Accuracy (P-mode with GPS)	Vertical: ±1.64 feet (±0.5 m) or ±0.33 feet (±0.1 m, Downward Vision System enabled) Horizontal: ±4.92 feet (±1.5 m) or ±0.98 feet (±0.3 m, Downward Vision System enabled)
Max Angular Velocity	Pitch: 300°/s, Yaw: 120°/s
Max Pitch Angle	S-mode: 35°; P-mode: 30° (Forward Vision System enabled: 25°); A-mode: 30°
Max Ascent Speed	16.4 ft/s (5 m/s)
Max Descent Speed (vertical)	9.8 ft/s (3 m/s)
Max Speed	S-mode/A-mode: 81 kph (50.3 mph); P-mode: 61.2 kph (38 mph)
Max Service Ceiling Above Sea Level	9842 feet (3000 m, with 1760S propellers)
Max Wind Resistance	39.4 ft/s (12 m/s)
Max Flight Time (with two TB55 batteries)	38 min (no payload), 24 min (takeoff weight: 6.14 kg)
Supported DJI Gimbals	Zenmuse X4S/X5S/X7/XT/XT2/Z30
Supported Gimbal Mounting	Single Gimbal, Downward
Ingress Protection Rating	IP43
GNSS	GPS+GLONASS
Operating Temperature	-4° to 122° F (-20° to 50° C)

- **Remote Controller (GL900A)**

Operating Frequency	2.4000-2.4835 GHz; 5.725-5.850 GHz
Max Transmitting Distance (unobstructed, free of interference)	NCC/FCC: 5 mi (8 km); CE/MIC: 3.1 mi (5 km); SRRC: 3.1 mi (5 km)
EIRP	2.4 GHz: ≤ 26 dBm (NCC/FCC); ≤ 20 dBm (CE/MIC); ≤ 20 dBm (SRRC) 5.8 GHz: ≤ 26 dBm (NCC/FCC); ≤ 14 dBm (CE); ≤ 26 dBm (SRRC)
Power Supply	Extended Intelligent Battery (Model: WB37-4920mAh-7.6V)
Output Power (max)	13 W (Without supplying power to monitor)
USB Power Supply	1 A = 5.2 V (max)
Operating Temperature	-4° to 122° F (-20° to 50° C)

- **Downward Vision System**

Velocity Range	<32.8 ft/s (10 m/s) at the height of 6.56 feet (2 m)
Altitude Range	<32.8 feet (10 m)
Operating Range	<32.8 feet (10 m)
Operating Environment	Surfaces with clear patterns and adequate lighting (> 15 lux)
Ultrasonic Sensor Operating Range	0.33-16.4 feet (0.1-5 m)
Ultrasonic Sensor Operating Environment	Non-absorbing material, rigid surface (thick indoor carpeting will reduce performance)

- **Forward Vision System**

Obstacle Sensing Range	2.3-98.4 feet (0.7-30 m)
FOV	Horizontal: 60°; Vertical: 54°
Operating Environment	Surfaces with clear patterns and adequate lighting (> 15 lux)

- **Upward Infrared Sensing System**

Obstacle Sensing Range	0-16.4 feet (0-5 m)
FOV	±5°
Operating Environment	Large, diffuse and reflective obstacles (reflectivity >10%)

- **Intelligent Flight Battery (TB55-7660mAh-22.8V)**

Capacity	7660 mAh
Voltage	22.8 V
Battery Type	LiPo 6S
Energy	174.6 Wh
Net Weight (Single One)	Approx. 885 g
Operating Temperature	-4° to 122° F (-20° to 50° C)
Charging Temperature	41° to 104° F (5° to 40° C)
Max Charging Power	180 W

- **Charger (IN2C180)**

Voltage	26.1 V
Rated Power	180 W

- **Charging Hub (IN2CH)**

Input Voltage	26.1 V
Input Current	6.9 A

DJI incorporates HDMI™ technology.
The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

MATRICE and DJI are trademarks of DJI.
Copyright © 2019 DJI All Rights Reserved.

※ This content is subject to change without prior notice.

Printed in China.

Find Quality Products Online at: www.GlobalTestSupply.com sales@GlobalTestSupply.com