dji Mini 3 Pro Smart Controller Drone

dji Mini 3 Pro Smart Controller Drone User Guide

Contents

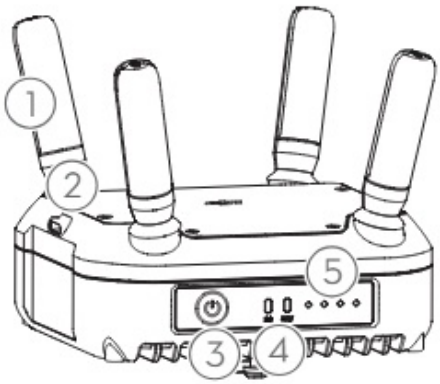
dji Mini 3 Pro Smart Controller Drone

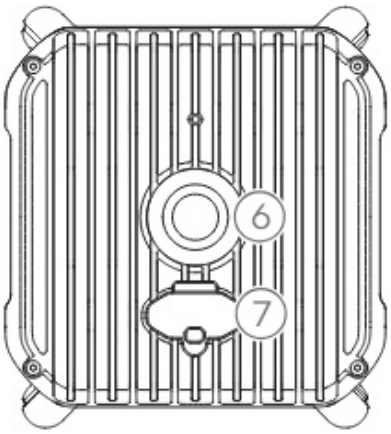
Disclaimer
Carefully read this entire document and all safe and lawful practices provided before use.

Introduction

DJITM Relay works at 2.4 GHz and 5.8 GHz, which can transmit signals with a supported DJI remote controller and aircraft, respectively.[1] Stable signal transmission can prevent signals being blocked in complex environments. The total working time of the relay is up to 4 hours and can be extended using a mobile power supply. With the mount, the relay can be set up using extension rods of different heights.

Overview



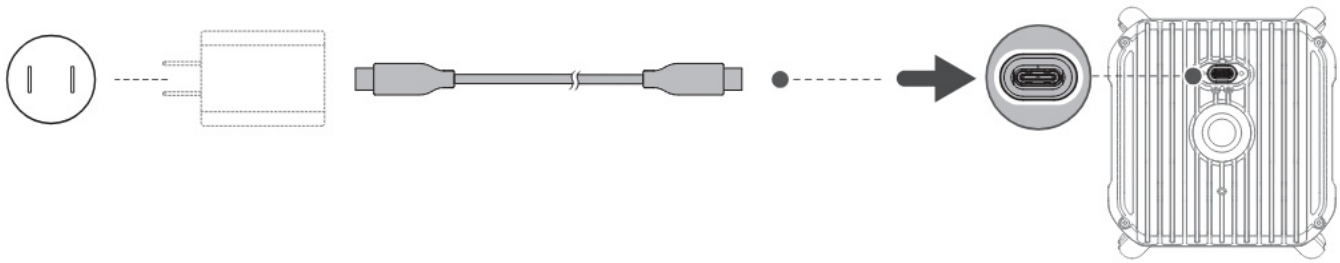


1. Detachable Antennas Transmit wireless signals.
2. Water Vent
3. Power Button Press once to check the battery level. Press, then press and hold to power on/off.
4. Status LEDs Indicate the linking status between the remote controller (RC) or aircraft (UAV) with the relay.
5. Battery Level LEDs Indicate the battery level. 6. 5/8″ Screw Hole For installing the mount.
6. USB-C Port For charging, connecting a mobile power supply [2] or firmware updates.
    1. Refer to Specifications to check supported products.
    2. When using the provided USB-C cable to connect the mobile power supply, insert two screws from the packaging into the screw holes beside the USB-C port to secure the cable.

Getting Started

Charging the Relay

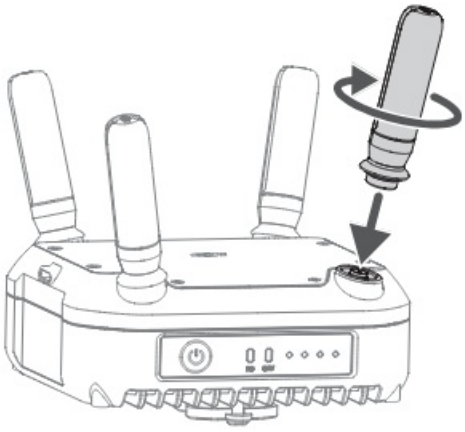
Charge the relay through the USB-C port using the charging cable (included) and a USB charger (not included). The battery is fully charged when all the battery-level LEDs are on, which takes approximately 2 hours and 20 minutes. It is recommended to fully charge the battery before using it for the first time.



- It is recommended to use USB Power Delivery chargers.

Installation

Mount the detachable antennas onto the relay.



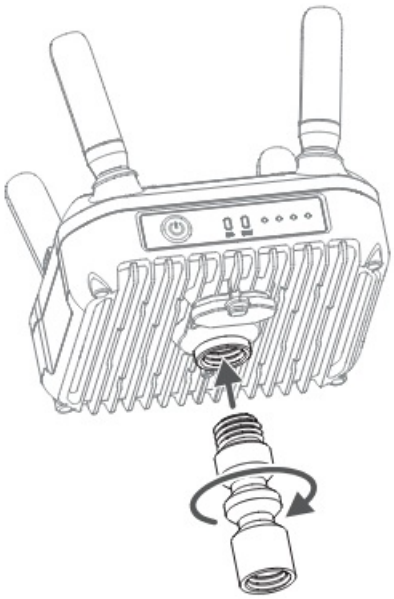
Linking
Follow the steps below to link before using it for the first time.

1. Power on the remote controller and aircraft, and make sure the two devices are linked.
2. Power on the relay. After the status LEDs turn solid red, press and hold relay power button to prepare for linking.
3. Open the DJI AGRASTM app and tap Device Management, then tap Relay > Link to start linking. After linking successfully, the status LED (RC) of the relay will glow solid green.
4. After connecting with the remote controller, the relay will link with the aircraft automatically. The linking is successful when the status LED (UAV) becomes solid green.
    - Make sure the remote controller and aircraft are within 0.5 m of the relay during linking.
    - If linking fails, try again after checking the operation and the firmware version. Contact DJI Support if the issue persists.

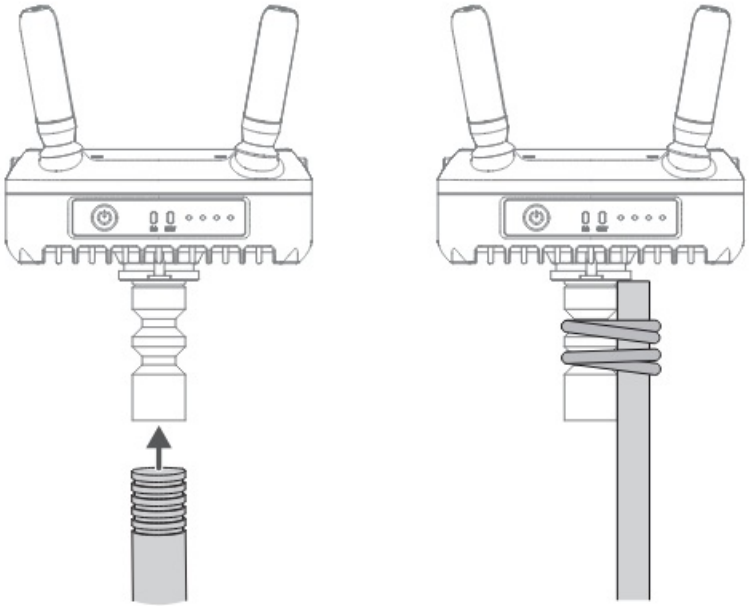
Activation
Activation is required before using it for the first time. Follow the instructions on DJI Agras to activate the relay after linking.

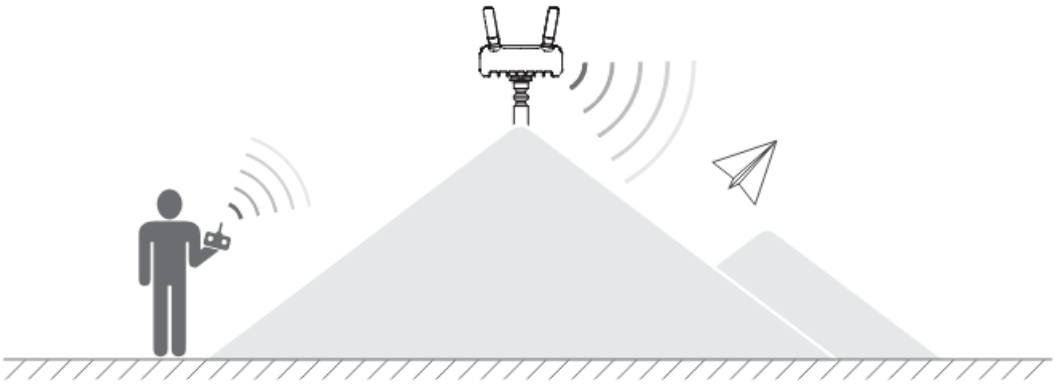
Using the Relay
During usage, it is recommended to set up the relay in high places (such as roofs and high hills) to solve the problem of signal blockage in orchards or fields with tall crops. Follow the instructions below to set up.

1. Install the mount to the relay via the 5/8″ screw hole.



2. Insert the extension rod into the mount via the screw hole, or attach the extension rod by rope. Users can select extension rods of different heights (not included) according to their requirements.





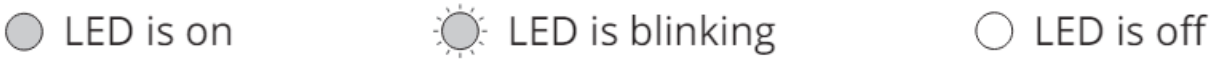
- To ensure the signal transmission, it is recommended to set up the relay at least 2 m higher than the crops.
- DO NOT obstruct the antennas during use.
- DO NOT set up the relay outdoors during thunderstorms to avoid lightning strikes.
- The relay should be used in the temperature range of 0° to 40° C (32° to 104° F). High temperatures can

lead to fire or an explosion. Low temperatures can negatively affect the performance of the battery.

- The battery temperature will be high after use. Charge the relay until it cools down to room temperature. Otherwise, charging may be disabled. Charge at a temperature range of 5° to 40° C (41° to 104° F). The ideal charging temperature range is 22° to 28° C (72° to 82° F). Charging within the ideal temperature range can prolong battery life.
- Extinguish any battery fire using water, sand, or a dry powder fire extinguisher.
- The electrolytes in the battery are highly corrosive. If any electrolytes make contact with your skin or eyes, wash the affected area with water and see a doctor immediately.

LED Patterns

- The Battery Level LEDs will show the current battery level during charging and discharging. The indicators are defined below:



Checking Battery Level
Press the power button once to check the current battery level.

Battery Level LEDs				
LED1	LED2	LED3	LED4	Battery Level
●	●	●	●	88%-100%
○	●	●	☼	76%-87%
●	●	●	○	63%-75%
○	●	☼	○	51%-62%
●	●	○	○	38%-50%
○	☼	○	○	26%-37%
●	○	○	○	13%-25%
☼	○	○	○	0%-12%

LED Patterns During Charging

Battery Level LEDs				
LED1	LED2	LED3	LED4	Battery Level
☼	☼	○	○	0%-50%
☼	☼	☼	○	51%-75%
☼	☼	☼	☼	76%-99%
○	○	○	○	100%

Linking Status

Status LEDs	Description
Blinks green and red alternately	Linking
Solid green	Linking successfully
Solid red	Not linked

Storage and Maintenance

1. It is recommended to store the relay in an environment at a temperature range from -10° to 30° C (14° to 86° F) when storing for more than three months.
2. It is recommended to store the relay with a power level between 30% to 50% when storing for an extended time. DO NOT store the relay for an extended period after fully discharging. Otherwise, the battery may be over-discharged and cause irreparable damage to the battery cell.
3. The battery enters hibernation mode if depleted and stored for an extended period. Recharge the battery to bring it out of hibernation.
4. DO NOT leave the relay near heat sources such as a furnace or heater, under direct sunlight, or inside a vehicle in hot weather.
5. Make sure to store the relay in a dry environment. DO NOT detach the antennas from the relay to prevent corrosion during storage.
6. Fully charge the battery at least every six months to maintain battery health.
7. DO NOT disassemble the product in any way, or the battery may leak, catch fire, or explode.

Updating Firmware

Follow the steps below to update the firmware using the DJI Agras app.

1. Power on the relay and remote controller. Make sure the remote controller is connected to the relay and the internet.
2. A prompt appears at the bottom of the home screen in DJI Agras when a new firmware update is available. Tap the prompt to enter the firmware screen.
3. Tap Relay, and select the desired firmware. Tap Update and DJI Agras will download the firmware and update the relay. Users can also update with the DJI ASSISTANTTM 2 for MG software. Connect the relay to a computer via a USB-C cable. Launch the software and click Firmware Update, then select the desired firmware version and click Update.

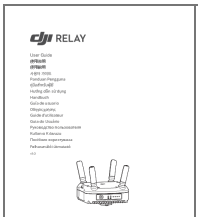
- To update firmware using the DJI Agras app, power off the aircraft first.
- Make sure the battery levels of the remote controller and relay are higher than 25% before updating.

Specifications

Weight	≤575 g
Dimensions	120×110×100 mm
IP Rating [1]	IP55
Operating Temperature	0° to 40° C (32° to 104° F)
Operating Frequency [2]	2.4000-2.4835 GHz, 5.725-5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FFC), <20 dBm (SRRC/CE/MIC) 5.8 GHz: <33 dBm (SRRC/FCC),<14 dBm (CE)
Max Transmission Distance	5 km (SRRC), 4 km (MIC/KCC/CE), 7 km (FCC) (unobstructed, free of interference, and at a flight altitude of 2.5 m)
Power Consumption	9 W (SRRC), 12 W (FCC)
Input Voltage [3]	9 V⎓3 A / 12 V⎓2.5 A / 15 V⎓2 A
Battery Type	Li-ion
Capacity	6500 mAh
Operating Time	4 hours
Charging Temperature	5° to 40° C (41° to 104° F)
Supported Product [4]	Agras T50 Agras T25 Agras T40 Agras T20P DJI RC Plus Remote Controller
Warranty Period	12 months

1. The protection rating may be reduced due to improper use and damage caused by external forces or environmental factors.
2. 5.8 GHz frequency is unavailable in some contries. Check local regulations for more information.
3. Use chargers or external power supplies that meet the specifications. Otherwise, the device may not work normally.
4. Visit the official DJI website for updated information about supported products.

Documents / Resources

	dji Mini 3 Pro Smart Controller Drone [pdf] User Guide Mini 3 Pro, Mini 3 Pro Smart Controller Drone, Smart Controller Drone, Controller Drone, Drone

References

- User Manual