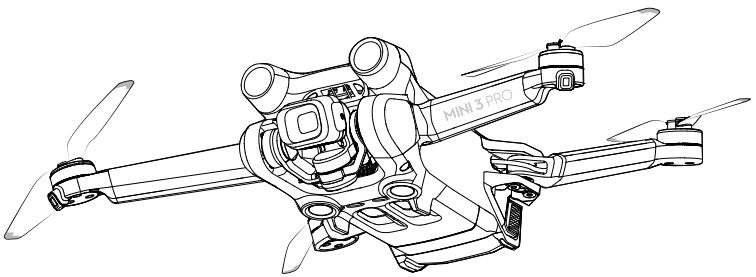
DJI MINI 3 PRO

User Manual v1.6 2023.03



Searching for Keywords

Search for keywords such as “battery” and “install” to find a topic. If you are using Adobe Acrobat Reader to read this document, press Ctrl+F on Windows or Command+F on Mac to begin a search.

Navigating to a Topic

View a complete list of topics in the table of contents. Click on a topic to navigate to that section.

Printing this Document

This document supports high resolution printing.

Revision Log

Version	Date	Revisions
v1.2	2022.6	Added support for FocusTrack, QuickShots (Dronie, Rocket, Circle, Helix, and Boomerang), and Hyperlapse in portrait mode, and added USB mode.
v1.4	2022.10	Added support for MasterShots in portrait mode, added shutter priority and ISO priority for the camera in Pro mode, added support for FAA's Remote ID requirements in the United States and more.
v1.6	2022.12	Added support for the propeller guard.

© 2023 DJI All Rights Reserved.

Using this manual

Legend

Warning Important Hints and Tips Reference

Read Before the First Flight

Read the following documents before using the DJI™ Mini 3 Pro:

1. Safety Guidelines
2. Quick Start Guide
3. User Manual

It is recommended to watch all tutorial videos on the official DJI website and read safety guidelines before using for the first time. Prepare for your first flight by reviewing the quick start guide and refer to this user manual for more information.

Video Tutorials

Go to the address below or scan the QR code to watch the DJI Mini 3 Pro tutorial videos, which demonstrate how to use the Mini 3 Pro safely:

https://s.dji.com/guide11

Download the DJI Fly App

Make sure to use DJI Fly during flight. Scan the QR code above to download the latest version.

- The DJI RC remote controller has the DJI Fly app already installed. Users are required to download DJI Fly to their mobile device when using DJI RC-N1 remote controller.
- The Android version of DJI Fly is compatible with Android v6.0 and later. The iOS version of DJI Fly is compatible with iOS v11.0 and later.

* For increased safety, flight is restricted to a height of 98.4 ft (30 m) and range of 164 ft (50 m) when not connected or logged into the app during flight. This applies to DJI Fly and all apps compatible with DJI aircraft.

Download DJI Assistant 2 (Consumer Drones Series)

Download DJI Assistant 2 (Consumer Drones Series) at https://www.dji.com/mini-3-pro/downloads.

The operating temperature of this product is -10° to 40° C. It does not meet the standard operating temperature for military grade application (-55° to 125° C), which is required to endure greater environmental variability. Operate the product appropriately and only for applications that it meets the operating temperature range requirements of that grade.

 © 2023 DJI All Rights Reserved.

Contents

Using this manual 2
- Legend 2
- Read Before the First Flight 2
- Video Tutorials 2
- Download the DJI Fly App 2
- Download DJI Assistant 2 (Consumer Drones Series) 2

Product Profile 6
- Introduction 6
- Using for the First Time 7
- Diagram 9

Aircraft 13
- Introduction 13
- Flight Modes 13
- Aircraft Status Indicator 14
- QuickTransfer 14
- Return to Home 15
- Vision Systems and Infrared Sensing Systems 18
- Intelligent Flight Mode 20
- Advanced Pilot Assistance Systems (APAS 4.0) 27
- Flight Recorder 28
- Propellers 28
- Intelligent Flight Battery 30
- Gimbal and Camera 36

Remote Controller 39
- DJI RC 39
- DJI RC-N1 47

DJI Fly App 53
- Home 53
- Camera View 54

Flight 60
- Flight Environment Requirements 60
- Flight Limits 60

© 2023 DJI All Rights Reserved.

Pre-Flight Checklist 62
Auto Takeoff/Landing 62
Starting/Stopping the Motors 63
Flight Test 63

Appendix 66

Specifications 66
Firmware Update 72
Aftersales Information 73
FAR Remote ID Compliance Information 73

 © 2023 DJI All Rights Reserved.

Product Profile

This section introduces DJI Mini 3 Pro and lists the components of the aircraft and remote controller.

© 2023 DJI All Rights Reserved.

Product Profile

Introduction

DJI Mini 3 Pro features both an Infrared Sensing System and Forward, Backward, and Downward Vision Systems. This allows for hovering and flying indoors as well as outdoors and for automatic Return to Home while avoiding obstacles from the front, back, and below. DJI Mini 3 Pro also boasts a foldable and compact design, weighing less than 249 g. The aircraft has a maximum flight speed of 36 mph (57.6 kph), a maximum flight time of 34 minutes when using an Intelligent Flight Battery, and a maximum flight time of 47 minutes when using an Intelligent Flight Battery Plus.

The DJI RC remote controller has a built-in 5.5-inch screen with a resolution of 1920x1080 pixels. Users can connect to the internet via Wi-Fi while the Android operating system includes both Bluetooth and GNSS. The DJI RC remote controller comes with a wide range of aircraft and gimbal controls as well as customizable buttons. It has a maximum operating time of approximately 4 hours. The RC-N1 remote controller displays the video transmission from the aircraft to DJI Fly on a mobile device. The aircraft and camera are easy to control using the onboard buttons and the remote controller has a runtime of approximately 6 hours.

Feature Highlights

Gimbal and Camera: With a fully stabilized 3-axis gimbal and a 1/1.3-in sensor camera, DJI Mini 3 Pro is able to shoot 4K video and 48MP photos. It also supports switching between Landscape mode and Portrait mode with one tap in DJI Fly.

Video Transmission: With four built-in antennas and DJI's long-range transmission O3 (OCUSYNC™ 3.0) technology, DJI Mini 3 Pro offers a maximum transmission range of 12 km and video quality at up to 1080p 30fps from the aircraft to DJI Fly. The remote controller works at both 2.4 and 5.8 GHz, and is capable of selecting the best transmission channel automatically.

Advanced Shooting Modes: Capture complicated shots effortlessly with features such as MasterShots, Hyperlapse, and QuickShots. With just a few taps, the aircraft will take off to record according to the preset path and generate a professional standard video automatically. QuickTransfer makes downloading and editing photos and videos more convenient and efficient.

Intelligent Flight Modes: With ActiveTrack 4.0 and Point of Interest 3.0, the aircraft follows or flies around a subject automatically while sensing obstacles in its path. The user can focus on operating the aircraft while the Advanced Pilot Assistance System 4.0 enables the aircraft to avoid obstacles.

⚠
- The maximum flight time and speed were tested in a windless environment at near sea level while flying at a consistent speed of 13 mph (21.6 kph).
- The remote controller reaches its maximum transmission distance (in FCC compliant mode) in a wide open area with no electromagnetic interference, at an altitude of about 120 m (400 ft). The maximum runtime was tested in a laboratory environment. This value is for reference only.
- The 5.8 GHz frequency is not supported in some regions, where it will automatically be disabled. Always observe local laws and regulations.
- The Intelligent Flight Battery Plus needs to be purchased separately and it is sold in just some countries and regions. Visit the official DJI online store for more information.
- The maximum takeoff weight will be more than 249 g if the aircraft is used with the Intelligent Flight Battery Plus. Make sure to observe local laws and regulations about the takeoff weight.

 © 2023 DJI All Rights Reserved.

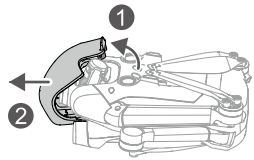
Using for the First Time

DJI Mini 3 Pro is folded before being packaged. Follow the steps below to unfold the aircraft and remote controller.

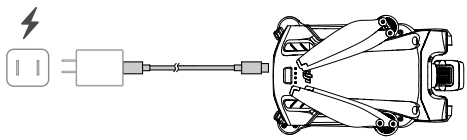
Preparing the Aircraft

All aircraft arms are folded before the aircraft is packaged. Follow the steps below to unfold the aircraft.

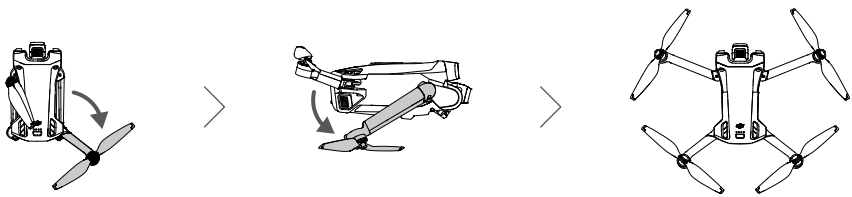
1. Remove the gimbal protector from the camera.



2. All Intelligent Flight Batteries are in hibernation mode before shipment to ensure safety. Connect the USB charger to the USB-C port on the aircraft to charge and activate the Intelligent Flight Batteries for the first time.



3. Unfold the rear arms, followed by the front arms, and then all of the propeller blades.



- It is recommended to use the DJI 30W USB-C Charger or other USB Power Delivery chargers.
- The maximum charge voltage for the aircraft charging port is 12 V.
- Make sure the gimbal protector is removed and all arms are unfolded before powering on the aircraft. Otherwise, it may affect the aircraft self-diagnostics.
- Attach the gimbal protector when the aircraft is not in use. Ensure all arms are folded before re-attaching the gimbal protector. First rotate the camera to make it horizontal and forward-facing ① . While attaching the gimbal protector, ensure the camera fits into the protector first, then insert the latch on the upper part of the protector onto the opening on the aircraft ② , and insert the two locating pins into the holes at the bottom of the aircraft ③ .

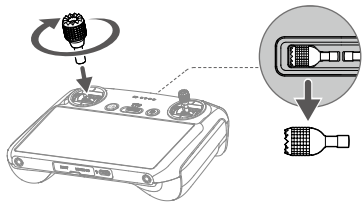


© 2023 DJI All Rights Reserved.

Preparing the Remote Controller

Follow the steps below to prepare the DJI RC remote controller.

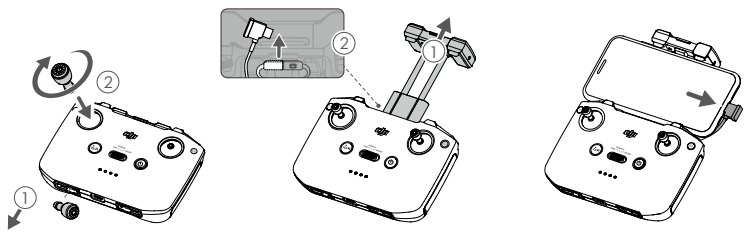
1. Remove the control sticks from the storage slots and mount them on the remote controller.



2. The remote controller needs to be activated before first use and an internet connection is required for activation. Press, and then press again and hold the power button to power on the remote controller. Follow the on-screen prompts to activate the remote controller.

Follow the steps below to prepare the DJI RC-N1 remote controller.

1. Remove the control sticks from the storage slots and mount them on the remote controller.
2. Pull out the mobile device holder. Choose the appropriate remote controller cable based on the port type of your mobile device (a Lightning connector cable, Micro USB cable, and USB-C cable are included in the packaging). Place your mobile device in the holder, then connect the end of the cable without the remote controller logo to your mobile device. Make sure your mobile device is securely in place.



⚠ • If a USB connection prompt appears when an Android mobile device is used, select the option to charge only. Other options may cause the connection to fail.

Activating the DJI Mini 3 Pro Aircraft

DJI Mini 3 Pro requires activation before first use. After powering on the aircraft and remote controller, follow the on-screen prompts to activate DJI Mini 3 Pro using DJI Fly. An internet connection is required for activation.

 © 2023 DJI All Rights Reserved.

Binding the Aircraft and Remote Controller

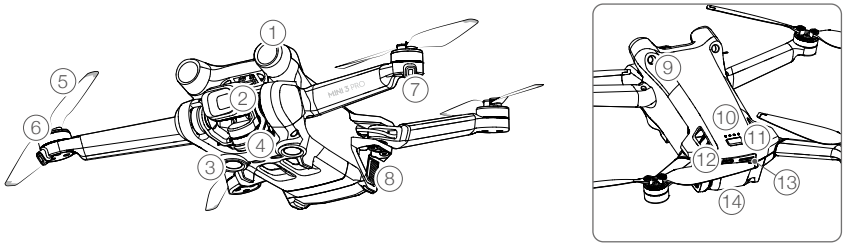
After activation, the aircraft is bound to the remote controller automatically. If automatic binding fails, follow the on-screen prompts on DJI Fly to bind the aircraft and remote controller for optimal warranty services.

Updating Firmware

A prompt will appear in DJI Fly when new firmware is available. Update the firmware whenever prompted to ensure optimal user experience.

Diagram

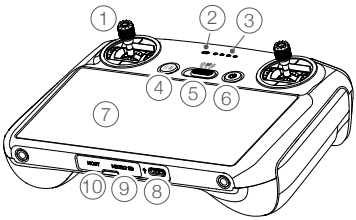
Aircraft



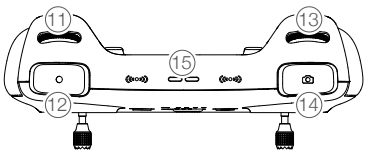
1. Forward Vision System
2. Gimbal and Camera
3. Downward Vision System
4. Infrared Sensing System
5. Propellers
6. Motors
7. Aircraft Status LEDs
8. Battery Buckles
9. Backward Vision System
10. Battery Level LEDs
11. Power Button
12. USB-C Port
13. microSD Card Slot
14. Intelligent Flight Battery

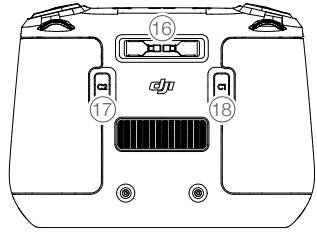
© 2023 DJI All Rights Reserved.

DJI RC Remote Controller



1. Control Sticks
   Use the control sticks to control the movement of the aircraft. The control sticks are removable and easy to store. Set the flight control mode in DJI Fly.
2. Status LED
   Indicates the status of the remote controller.
3. Battery Level LEDs
   Displays the current battery level of the remote controller.
4. Flight Pause/Return to Home (RTH) Button
   Press once to make the aircraft brake and hover in place (only when GNSS or Vision Systems are available). Press and hold to initiate RTH. Press again to cancel RTH.
5. Flight Mode Switch
   Switch between Cine, Normal, and Sport mode.
6. Power Button
   Press once to check the current battery level. Press, and then press and hold to power the remote controller on or off. When the remote controller is powered on, press once to turn the touchscreen on or off.
7. Touchscreen
   Touch the screen to operate the remote controller. Note that the touchscreen is not waterproof. Operate with caution.
8. USB-C Port
   For charging and connecting the remote controller to your computer.
9. microSD Card Slot
   For inserting a microSD card.
10. Host Port (USB-C) *
    For connecting the DJI Cellular Dongle which needs to be purchased separately.
    * To be supported later through firmware updates.





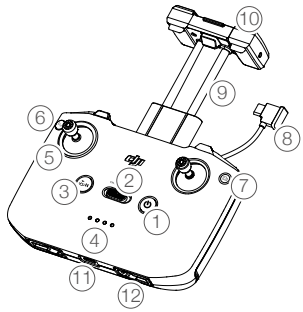
11. Gimbal Dial
    Controls the tilt of the camera.
12. Record Button
    Press once to start or stop recording.
13. Camera Control Dial
    For zoom control.
14. Focus/Shutter Button
    Press halfway down on the button to auto focus and press all the way down to take a photo.
15. Speaker
    Outputs sound.
16. Control Sticks Storage Slot
    For storing the control sticks.
17. Customizable C2 Button
    Switch between recentering the gimbal and

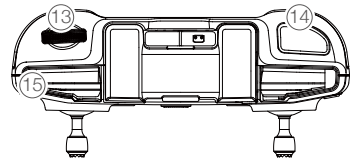
 © 2023 DJI All Rights Reserved.

pointing the gimbal downward. The function can be set in DJI Fly.

18. Customizable C1 Button
    Switch between recentering the gimbal and pointing the gimbal downward. The function can be set in DJI Fly.

DJI RC-N1 Remote Controller





1. Power Button
   Press once to check the current battery level. Press, and then press and hold to power the remote controller on or off.
2. Flight Mode Switch
   Switch between Sport, Normal, and Cine mode.
3. Flight Pause/Return to Home (RTH) Button
   Press once to make the aircraft brake and hover in place (only when GNSS or Vision Systems are available). Press and hold to initiate RTH. Press again to cancel RTH.
4. Battery Level LEDs
   Displays the current battery level of the remote controller.
5. Control Sticks
   The control sticks are removable and easy to store. Set the flight control mode in DJI Fly.
6. Customizable Button
   The functions of the button can be set in DJI Fly. Press once to recenter the gimbal or point the gimbal downward (default settings).
7. Photo/Video Toggle
   Press once to switch between photo and video mode.
8. Remote Controller Cable
   Connect to a mobile device for video linking via the remote controller cable. Select the cable according to the port type on your mobile device.
9. Mobile Device Holder
   For mounting the mobile device securely on the remote controller.
10. Antennas
    Transmit aircraft control and wireless video signals.
11. USB-C Port
    For charging and connecting the remote controller to your computer.
12. Control Sticks Storage Slot
    For storing the control sticks.
13. Gimbal Dial
    Controls the tilt of the camera. Press and hold the customizable button to use the gimbal dial for zoom control.
14. Shutter/Record Button
    Press once to take photos or start or stop recording.
15. Mobile Device Slot
    For securing the mobile device.

© 2023 DJI All Rights Reserved.

Aircraft

DJI Mini 3 Pro contains a flight controller, video downlink system, vision systems, infrared sensing system, propulsion system, and an Intelligent Flight Battery.

 © 2023 DJI All Rights Reserved.

Aircraft

Introduction

DJI Mini 3 Pro includes a flight controller, video downlink system, vision system, propulsion system, and an Intelligent Flight Battery.

Flight Modes

DJI Mini 3 Pro has three flight modes, plus a fourth flight mode that the aircraft switches to in certain scenarios. Flight modes can be switched via the Flight Mode switch on the remote controller.

Normal Mode: The aircraft utilizes GNSS and the Forward, Backward, and Downward Vision Systems and Infrared Sensing System to locate itself and stabilize. When the GNSS signal is strong, the aircraft uses GNSS to locate itself and stabilize. When the GNSS is weak but the lighting and other environmental conditions are sufficient, it uses the vision systems. When the Forward, Backward, and Downward Vision Systems are enabled and lighting and other environment conditions are sufficient, the maximum tilt angle is 25° and the maximum flight speed is 10 m/s.

Sport Mode: In Sport Mode, the aircraft utilizes GNSS and the Downward Vision System for positioning and the aircraft responses are optimized for agility and speed making it more responsive to control stick movements. Note that obstacle sensing is disabled and the maximum flight speed is 16 m/s.

Cine Mode: Cine mode is based on Normal mode with a limited flight speed, making the aircraft more stable during shooting.

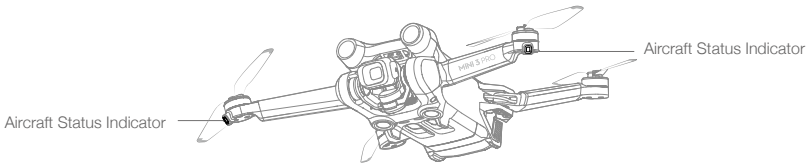
The aircraft automatically changes to Attitude (ATTI) mode when the Vision Systems are unavailable or disabled and when the GNSS signal is weak or the compass experiences interference. In ATTI mode, the aircraft may be more easily affected by its surroundings. Environmental factors such as wind can result in horizontal shifting, which may present hazards especially when flying in confined spaces. The aircraft will not be able to hover or brake automatically, therefore the pilot should land the aircraft as soon as possible to avoid accidents.

⚠
- The Forward and Backward Vision Systems are disabled in Sport mode, which means the aircraft cannot sense obstacles on its route automatically. The user must stay alert about the surrounding environment and control the aircraft to avoid obstacles.
- The maximum speed and braking distance of the aircraft significantly increase in Sport mode. A minimum braking distance of 30 m is required in windless conditions.
- A minimum braking distance of 10 m is required in windless conditions while the aircraft is ascending and descending in Sport mode or Normal mode.
- The responsiveness of the aircraft significantly increases in Sport mode, which means a small control stick movement on the remote controller translates into the aircraft moving a large distance. Make sure to maintain adequate maneuvering space during flight.
- The flight speed and attitude are both restricted when the aircraft is flying leftward or rightward to ensure shooting stability. The restriction reaches its maximum when the tilt of the gimbal is -90°. If there are strong winds, the restriction will be disabled to improve the wind resistance of the aircraft. As a result, the gimbal may vibrate while shooting.
- Users may experience a minor tremor in videos recorded in Sport mode.

© 2023 DJI All Rights Reserved.

Aircraft Status Indicator

DJI Mini 3 Pro has two aircraft status indicators.



When the aircraft is powered on but the motors are not running, the aircraft status indicators will display the current status of the flight control system. Refer to the table below for more information about the aircraft status indicators.

Aircraft Status Indicator Descriptions

Normal States			
R G Y ·····	Alternating red, green, and yellow	Blinks	Turning on and performing self-diagnostic tests
Y ×4 ·····	Yellow	Blinks four times	Warming up
G ·····	Green	Blinks slowly	GNSS enabled
G ×2 ·····	Green	Periodically blinks twice	Vision Systems enabled
Y ·····	Yellow	Blinks slowly	NO GNSS or Vision Systems
Warning States			
Y ·····	Yellow	Blinks quickly	Remote controller signal lost
R ·····	Red	Blinks slowly	Low battery
R ·····	Red	Blinks quickly	Critically low battery
R ——	Red	Solid	Critical error
R Y ·····	Alternating red and yellow	Blinks quickly	Compass calibration required

After the motors start, the aircraft status indicators will blink green.

⚠ • Lighting requirements vary depending on the region. Observe local laws and regulations.

QuickTransfer

DJI Mini 3 Pro can connect directly to mobile devices via Wi-Fi, enabling users to download photos and videos from the aircraft to the mobile device through DJI Fly without using the DJI RC-N1 remote controller. Users can enjoy faster and more convenient downloads with a transmission rate of up to 25 MB/s.

Usage

Method 1: mobile device is not connected to the remote controller

1. Power on the aircraft and wait until the self-diagnostic tests of the aircraft are complete.

 © 2023 DJI All Rights Reserved.

2. Make sure Bluetooth and Wi-Fi are enabled on the mobile device. Launch DJI Fly and a prompt will appear to connect to the aircraft.
3. Tap Connect. Once successfully connected, the files on the aircraft can be accessed and downloaded at high speed.

Method 2: mobile device is connected to the remote controller

1. Make sure that the aircraft is connected to the mobile device via the remote controller and the motors are off.
2. Enable Bluetooth and Wi-Fi on the mobile device.
3. Launch DJI Fly, enter playback, and tap in the upper right corner to access the files on the aircraft to download at high speed.

- DJI RC does not support QuickTransfer.
- The maximum download rate can only be achieved in countries and regions where the 5.8 GHz frequency is permitted by laws and regulations, when using devices that support 5.8 GHz frequency band and Wi-Fi connection, and in an environment without interference or obstruction. If 5.8 GHz is not allowed by local regulations (such as in Japan), or the mobile device of the user does not support the 5.8 GHz frequency band, or the environment has severe interference, then QuickTransfer will use the 2.4 GHz frequency band and its maximum download rate will reduce to 6 MB/s.
- Make sure that Bluetooth, Wi-Fi, and location services are enabled on the mobile device before using QuickTransfer.
- When using QuickTransfer, it is not necessary to enter the Wi-Fi password on the settings page of the mobile device in order to connect. Launch DJI Fly and a prompt will appear to connect the aircraft.
- Use QuickTransfer in an unobstructed environment with no interference and stay away from sources of interference such as wireless routers, Bluetooth speakers, or headphones.

Return to Home

The Return to Home (RTH) function brings the aircraft back to the last recorded Home Point when the positioning system is functioning normally. There are three RTH modes: Smart RTH, Low Battery RTH, and Failsafe RTH. The aircraft will automatically fly back and land at the Home Point when Smart RTH is initiated, the aircraft enters Low Battery RTH, or the signal between the remote controller and the aircraft is lost. RTH will also be triggered in other abnormal scenarios such as where video transmission is lost.

	GNSS	Description
Home Point	10	The first location where the aircraft receives a strong to moderately strong GNSS signal (indicated by a white icon) will be recorded as the default Home Point. It is recommended to wait until the Home Point is successfully recorded before flying. After the Home Point is recorded, a prompt will appear in DJI Fly. The Home Point can be updated before takeoff as long as the aircraft receives another strong to moderately strong GNSS signal. If the signal is weak, the Home Point will not be updated. If it is necessary to update the Home Point during a flight (such as where the user's position has changed), the Home Point can be manually updated in Safety of System Settings on DJI Fly.

© 2023 DJI All Rights Reserved.

Smart RTH

If the GNSS signal is sufficiently strong, Smart RTH can be used to bring the aircraft back to the Home Point. Smart RTH is initiated either by tapping in DJI Fly or by pressing and holding the RTH button on the remote controller until it beeps. Exit Smart RTH by tapping in DJI Fly or by pressing the RTH button on the remote controller. After exiting RTH, users will regain control of the aircraft.

Straight Line RTH

If Smart RTH is initiated by the user, the aircraft will enter Straight Line RTH.

Straight Line RTH Procedure:

1. The Home Point is recorded.
2. Smart RTH is triggered.
3. The aircraft brakes and hovers in place:
    a. If the aircraft is farther than 50 m from the Home Point when RTH begins, the aircraft will adjust its orientation and ascend to the preset RTH altitude, then fly to the Home Point. If the current altitude is higher than the RTH altitude, the aircraft will fly to the Home Point at the current altitude.
    b. If the aircraft is at a distance of 5 to 50 m from the Home Point when RTH begins, the aircraft will adjust its orientation and fly to the Home Point at the current altitude. If the current altitude is less than 2 m when RTH begins, the aircraft will ascend to 2 m and fly back to the Home Point.
    c. The aircraft will land immediately if it is less than 5 m from the Home Point when RTH begins.
4. The aircraft will land and the motors stop after reaching the Home Point.

Low Battery RTH

Low Battery RTH is triggered when the Intelligent Flight Battery is depleted to the point where the aircraft may not be able to return safely. Return home or land the aircraft immediately when prompted.

To avoid unnecessary danger due to insufficient power, DJI Mini 3 Pro will determine whether the current battery level is sufficient for returning home based on the current location. A warning prompt will appear in DJI Fly when the battery level is low and only enough to complete an RTH flight.

The user can cancel RTH by pressing the RTH button on the remote controller. If RTH is cancelled following a low battery warning, the Intelligent Flight Battery may not have enough power for the aircraft to land safely. As a result, you may crash or lose your aircraft.

The aircraft will land automatically if the current battery level can only support the aircraft long enough to descend from its current altitude. Auto landing cannot be canceled but the remote controller can be used to alter the horizontal movement and the speed of descent of the aircraft during landing. If there is sufficient power, the throttle stick can be used to make the aircraft ascend at a speed of up to 1 m/s.

During auto landing, move the aircraft horizontally to find an appropriate place to land as soon as possible. The aircraft will fall if the user keeps pushing the throttle stick upward until the power is depleted.

Failsafe RTH

The action the aircraft performs once it loses the remote controller signal can be set as Return to Home, Land, or Hover in DJI Fly. If the action was set as Return to Home in advance, and where the Home

 © 2023 DJI All Rights Reserved.

Point has been recorded, the GNSS signal is good, and the compass is functioning normally, Failsafe RTH will automatically activate once the remote controller signal is lost for more than three seconds.

If the aircraft is 50 m or less than 50 m from the Home Point when the remote controller signal is lost, it will fly to the Home Point at its current altitude. If the aircraft is more than 50 m from the Home Point when the remote controller signal is lost, it will fly backwards for 50 m on its original flight route, and then enter Straight Line RTH. The aircraft will enter or remain in Straight Line RTH if the remote controller signal is restored during RTH.

After flying backward on the original route for 50 m:

1. If the aircraft is 50 m or less than 50 m from the Home Point, it will fly back to the Home Point at its current altitude.
2. If the aircraft is further than 50 m from the Home Point and the current altitude is higher than the preset RTH altitude, it will fly back to the Home Point at its current altitude.
3. If the aircraft is further than 50 m from the Home Point and the current altitude is lower than the preset RTH altitude, it will ascend to the preset RTH altitude and then fly back to the Home Point.

Obstacle Avoidance During RTH

When the aircraft is ascending:

1. The aircraft will brake if an obstacle is sensed from the front and will fly backward until a safe distance is reached before continuing to ascend.
2. The aircraft will brake if an obstacle is sensed from behind and will fly forward until a safe distance is reached before continuing to ascend.
3. No operation will occur when an obstacle is sensed below the aircraft.

When the aircraft is flying forward:

1. The aircraft will brake if an obstacle is sensed from the front and will fly backward until a safe distance is reached, before ascending until there are no more obstacles in front. Then it will ascend for two seconds before continuing to fly forward.
2. No operation will occur when an obstacle is sensed from behind.
3. The aircraft will brake if an obstacle is sensed from below and will ascend until there are no more obstacles below before flying forward.

⚠
- During RTH, obstacles on either side of the aircraft cannot be detected or avoided.
- The aircraft cannot return to the Home Point if the GNSS signal is weak or unavailable. The aircraft may enter ATTI mode if the GNSS signal becomes weak or unavailable after entering Failsafe RTH. The aircraft will hover in place for a while before landing.
- It is important to set a suitable RTH altitude before each flight. Launch DJI Fly and set the RTH altitude. In RTH, if the current altitude of the aircraft is lower than the RTH altitude, it will automatically ascend to the RTH altitude first. If the current altitude of the aircraft reaches or is higher than the RTH altitude, it will fly to the Home Point at its current altitude.
- During RTH, the speed and altitude of the aircraft can be controlled using the remote controller if the remote controller signal is normal. However, the aircraft cannot be shifted leftward or rightward. When the aircraft is ascending or flying forward, push the control stick completely in the opposite direction to exit RTH, and the aircraft will brake and hover.
- GEO zones may affect the RTH. Avoid flying near GEO zones.
- The aircraft may not be able to return to the Home Point when the wind speed is too high. Fly with caution.

© 2023 DJI All Rights Reserved.

Landing Protection

Smart RTH or Auto Landing activates Landing Protection, which operates as follows:

1. Once Landing Protection determines that the ground is suitable for landing, the aircraft will land gently.
2. If the ground is determined unsuitable for landing, the aircraft will hover and wait for pilot confirmation.
3. If Landing Protection is not operational, DJI Fly will display a landing prompt when the aircraft descends to 0.5 m from the ground. Push the throttle stick down for one second to land.

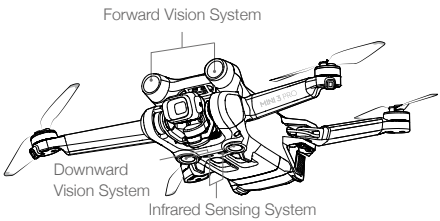
Landing Protection is activated during Failsafe RTH. The aircraft will hover 0.5 m above ground, and DJI Fly will display a landing prompt. To land the aircraft, push the throttle stick down for one second.

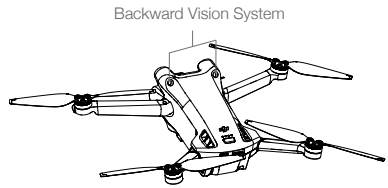
Vision Systems and Infrared Sensing Systems

DJI Mini 3 Pro is equipped with both an Infrared Sensing System and Forward, Backward, and Downward Vision Systems.

The Forward, Backward, and Downward Vision Systems consist of two cameras each.

The Infrared Sensing System consists of two 3D infrared modules. The Downward Vision System and Infrared Sensing System help the aircraft maintain its current position, hover more precisely, and to fly indoors or in other environments where GNSS is unavailable.





Detection Range

Forward Vision System

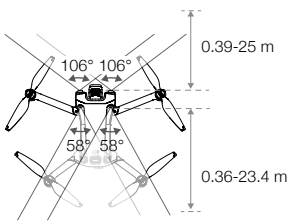
Precision Measurement Range: 0.39-25 m; FOV: 106° (horizontal), 90° (vertical)

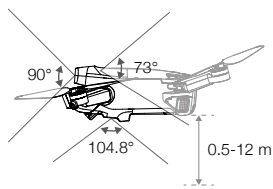
Backward Vision System

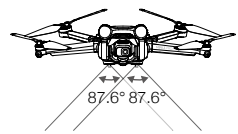
Precision Measurement Range: 0.36-23.4 m; FOV: 58° (horizontal), 73° (vertical)

Downward Vision System

Precision Measurement Range: 0.15-9 m; FOV: 104.8° (front and back), 87.6° (left and right). The Downward Vision System works best when the aircraft is at an altitude of 0.5 to 12 m.







 © 2023 DJI All Rights Reserved.

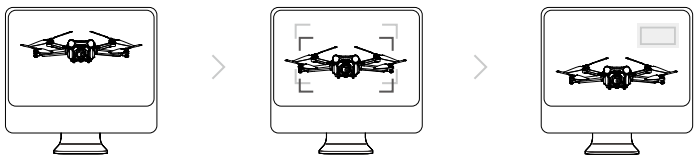
Calibrating Vision System Cameras

Auto Calibration

The Vision Systems installed on the aircraft are factory calibrated. If any abnormality is detected with a vision system camera, the aircraft will automatically perform calibration and a prompt will appear in DJI Fly. No further operation is required.

Advanced Calibration

If the abnormality persists after auto calibration, a prompt will appear in the app indicating that advanced calibration is required. Advanced calibration must be performed with DJI Assistant 2 (Consumer Drones Series).



01

Point the aircraft toward the screen.

02

Align the boxes.

03

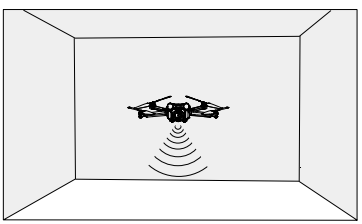
Pan and tilt the aircraft.

Follow the steps below to calibrate the Forward Vision System camera and repeat to calibrate other Vision System cameras.

Using the Vision Systems

The positioning function of the Downward Vision System is applicable when GNSS signals are unavailable or weak. It is automatically enabled in Normal or Cine mode.

The Forward and Backward Vision Systems will activate automatically when the aircraft is in Normal or Cine mode and Obstacle Avoidance is set to Bypass or Brake in DJI Fly. The Forward and Backward Vision Systems work best with adequate lighting and clearly marked or textured obstacles. Due to inertia, users must make sure to brake the aircraft within a reasonable distance.



© 2023 DJI All Rights Reserved.

- Pay attention to the flight environment. The Vision Systems and Infrared Sensing System only work in certain scenarios and cannot replace human control and judgment. During a flight, always pay attention to the surrounding environment and the warnings on DJI Fly, and be responsible for and maintain control of the aircraft.
- When no GNSS signals are available, the Downward Vision System works best at an altitude from 0.5 to 12 m. Extra caution is required if the altitude of the aircraft is above 12 m as the Vision Systems may be affected.
- The Downward Vision System may not function properly when the aircraft is flying over water. Therefore, the aircraft may not be able to actively avoid the water below when landing. It is recommended to maintain flight control at all times, make reasonable judgments based on the surrounding environment, and avoid over-relying on the Downward Vision System.
- The Vision Systems cannot work properly over surfaces without clear pattern variations or where the light is too weak or too strong. The Vision Systems cannot work properly in the following situations:
  a) Flying over monochrome surfaces (e.g., pure black, white, red, or green).
  b) Flying over highly reflective surfaces.
  c) Flying over water or transparent surfaces.
  d) Flying over moving surfaces or objects.
  e) Flying in an area with frequent and drastic lighting changes.
  f) Flying over extremely dark (< 10 lux) or bright (> 40,000 lux) surfaces.
  g) Flying over surfaces that strongly reflect or absorb infrared waves (e.g., mirrors).
  h) Flying over surfaces without clear patterns or texture (e.g., power poles).
  i) Flying over surfaces with repeating identical patterns or texture (e.g., tiles with the same design).
  j) Flying over obstacles with small surface areas (e.g., tree branches).
- Keep the sensors clean at all times. DO NOT block or tamper with the sensors.
- DO NOT obstruct the Infrared Sensing System.
- Vision System cameras may need to be calibrated after being stored for an extended period. In such cases, a prompt will appear in DJI Fly and calibration will start automatically.
- DO NOT fly when it is rainy, smoggy, or the visibility is lower than 100 m.
- Check the following each time before takeoff:
  a) Make sure there are no stickers or any other obstructions over the glass of the infrared sensing systems and vision systems.
  b) Use soft cloth if there is any dirt, dust, or water on the glass of the infrared sensing and vision systems. DO NOT use any cleaning product that contains alcohol.
  c) Contact DJI Support if there is any damage to the glass of the Infrared Sensing System or Vision Systems.

Intelligent Flight Mode

FocusTrack

FocusTrack includes Spotlight 2.0, Point of Interest 3.0, and ActiveTrack 4.0.

Spotlight 2.0

Control the aircraft manually while the camera remains locked on the subject. The mode supports the

 © 2023 DJI All Rights Reserved.

capturing of both stationary and moving subjects such as vehicles and people. Move the roll stick to circle the subject, pitch stick to alter the distance from the subject, throttle stick to change the altitude, and yaw stick to adjust the frame.

In Spotlight mode, when the vision systems are working normally, the aircraft will hover if an obstacle is detected, regardless of whether the obstacle avoidance behavior is set to Bypass or Brake in DJI Fly. Note that obstacle avoidance is disabled in Sport mode.

Point of Interest 3.0 (POI 3.0)

The aircraft tracks the subject in a circle based on the set radius and flight speed. The mode supports the capturing of both static and moving subjects such as vehicles and people. The maximum flight speed is 13 m/s regardless of whether the aircraft is in Normal, Sport or Cine Mode. The flight speed may be adjusted dynamically according the actual radius. Move the roll stick to circle the subject, pitch stick to alter the distance from the subject, throttle stick to change the altitude, and yaw stick to adjust the frame. Note that obstacle avoidance is disabled in POI 3.0.

ActiveTrack 4.0

ActiveTrack 4.0 consists of Trace and Parallel modes, which support the tracking of both stationary and moving subjects such as vehicles and people. In Sport, Normal, and Cine modes, the maximum flight speed remains the same. Move the roll stick to circle the subject, pitch stick to alter the distance from the subject, throttle stick to change the altitude, and yaw stick to adjust the frame.

The aircraft will bypass obstacles in ActiveTrack 4.0 regardless of the settings in DJI Fly when the vision systems are working normally.

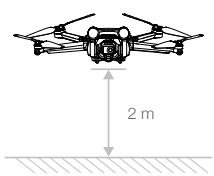
Trace: The aircraft tracks the subject at a constant distance and altitude, and a constant angle with the direction of the subject. The maximum flight speed is 10 m/s. When the user is moving the pitch stick, the aircraft can actively bypass sensed obstacles at the front and back. Note that obstacle avoidance is disabled when the roll stick or the throttle stick is used.

Parallel: The aircraft tracks the subject at a constant angle and distance from the side. The maximum flight speed is 13 m/s. Obstacle avoidance is disabled in this mode.

In ActiveTrack, the aircraft maintains a distance of 4-20 m when tracking people at an altitude of 2-20 m (the optimal distance is 5-10 m and altitude 2-10 m), and a distance of 6-100 m when tracking vehicles at an altitude of 6-100 m (the optimal distance is 20-50 m and altitude 10-50 m). The aircraft will fly to the supported distance and altitude range if the distance and altitude is out of range when ActiveTrack begins. Fly the aircraft at the optimal distance and altitude for the best performance.

Using FocusTrack

1. Launch the aircraft and make it hover at least 2 m (6.6 ft) above ground.



© 2023 DJI All Rights Reserved.

2. Drag-select the subject in the camera view or enable Subject Scanning under Control settings in DJI Fly Control and tap the recognized subject to enable FocusTrack. The default mode is Spotlight. Tap the icon to switch between Spotlight, ActiveTrack, and POI. Tap GO to start FocusTrack.



3. Tap the shutter/record button to take photos or start recording. View the footage in Playback.

Exiting FocusTrack

Tap **Stop** in DJI Fly or press the Flight Pause button once on the remote controller to exit FocusTrack.

⚠
- DO NOT use FocusTrack in areas with people and animals running or vehicles moving.
- DO NOT use FocusTrack in areas with small or thin objects (e.g., tree branches or power lines), transparent objects (e.g., water or glass), or monochrome surfaces (e.g., white walls).
- Operate the aircraft manually. In an emergency, press the Flight Pause button or tap Stop in DJI Fly.
- Be extra vigilant when using FocusTrack in any of the following situations:
  a) The tracked subject is not moving on a level plane.
  b) The tracked subject changes shape drastically while moving.
  c) The tracked subject is out of sight for an extended period.
  d) The tracked subject is moving on a snowy surface.
  e) The tracked subject has a similar color or pattern to its surrounding environment.
  f) The lighting is extremely dark (<300 lux) or bright (>10,000 lux).
- Make sure to follow local privacy laws and regulations when using FocusTrack.
- It is recommended to only track vehicles and people (but not children). Fly with caution when tracking other subjects.
- In supported moving subjects, vehicles refer to cars and small to medium-sized yachts.
- Do not track a remotely controlled model car or boat.
- The tracking subject may be inadvertently swapped to another subject if they pass nearby each other.
- FocusTrack is disabled when using a wide-angle lens or ND filter.
- In Photo mode, FocusTrack is only available when using Single.
- FocusTrack is disabled when recording at a high resolution such as 1080p 48/50/60/120 fps, 2.7K 48/50/60 fps, or 4K 48/50/60 fps.
- When lighting is insufficient and the vision systems are unavailable, Spotlight and POI can still be used for static subjects, but there will not be obstacle avoidance. ActiveTrack can not be used.
- FocusTrack is unavailable when the aircraft is on the ground.
- FocusTrack may not function properly when the aircraft is flying near flight limits or in a GEO Zone.

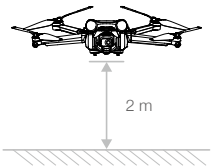
 © 2023 DJI All Rights Reserved.

MasterShots

MasterShots keeps the subject at the center of the frame while executing different maneuvers in sequence to generate a short cinematic video.

Using MasterShots

1. Launch the aircraft and make it hover at least 2 m (6.6 ft) above ground.



2. In DJI Fly, tap the shooting mode icon to select MasterShots and read the instructions. Make sure you understand how to use the shooting mode and there are no obstacles in the surrounding area.
3. Drag-select your target subject in the camera view. Tap **Start** to begin recording. The aircraft will fly back to its original position once shooting is finished.



4. Tap ▶ to access, edit, or share the video to social media.

Exiting MasterShots

Press the Flight Pause button once or tap ⊗ in DJI Fly to exit MasterShots. The aircraft will brake and hover.

⚠
- Use MasterShots at locations that are clear of buildings and other obstacles. Make sure there are no humans, animals, or other obstacles in the flight path. The aircraft will brake and hover in place if an obstacle is detected in front or behind. Note that obstacles cannot be detected on either side of the aircraft.
- Pay attention to objects around the aircraft and use the remote controller to avoid collisions with the aircraft.
- DO NOT use MasterShots in any of the following situations:

  a) When the subject is blocked for an extended period or outside the line of sight.

  b) When the subject is similar in color or pattern with the surroundings.

© 2023 DJI All Rights Reserved.

⚠ c) When the subject is in the air.

d) When the subject is moving fast.

e) The lighting is extremely dark (< 300 lux) or bright (> 10,000 lux).

- DO NOT use MasterShots in places close to buildings or where the GNSS signal is weak, otherwise the flight path may become unstable.
- Make sure to follow local privacy laws and regulations when using MasterShots.

QuickShots

QuickShots shooting modes include Dronie, Rocket, Circle, Helix, Boomerang, and Asteroid. DJI Mini 3 Pro records according to the selected shooting mode and automatically generates a short video. The video can be viewed, edited, or shared to social media from playback.

Dronie: The aircraft flies backward and ascends with the camera locked on the subject.

Rocket: The aircraft ascends with the camera pointing downward.

Circle: The aircraft circles around the subject.

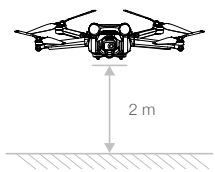
Helix: The aircraft ascends and spirals around the subject.

Boomerang: The aircraft flies around the subject in an oval path, ascending as it flies away from its starting point and descending as it flies back. The starting point of the aircraft forms one end of the long axis of the oval, while the other end is at the opposite side of the subject from the starting point. Make sure the space is sufficient when using Boomerang. Allow a radius of at least 30 m (98 ft) around the aircraft and a space of at least 10 m (33 ft) above the aircraft.

Asteroid: The aircraft flies backward and upward, takes several photos, and then flies back to the starting point. The video generated starts with a panorama of the highest position and then shows the view from the aircraft as it descends. Make sure the space is sufficient when using Asteroid. Allow at least 40 m (131 ft) behind and 50 m (164 ft) above the aircraft.

Using QuickShots

1. Launch the aircraft and make it hover at least 2 m (6.6 ft) above ground.



 © 2023 DJI All Rights Reserved.

2. In DJI Fly, tap the shooting mode icon to select QuickShots and follow the prompts. Make sure you understand how to use the shooting mode and there are no obstacles in the surrounding area.
3. Drag-select your target subject in the camera view. Choose a shooting mode and tap **Start** to begin recording. The aircraft will fly back to its original position once shooting is finished.



4. Tap ▶ to access, edit, or share the video to social media.

Exiting QuickShots

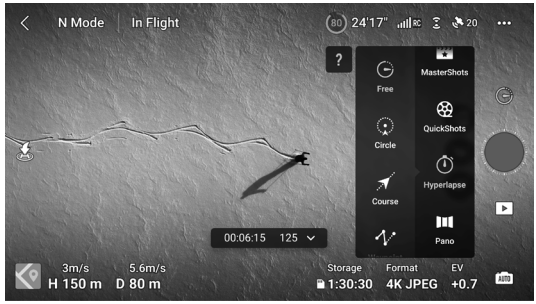
Press the Flight Pause button once or tap ⊗ in DJI Fly to exit QuickShots. The aircraft will brake and hover. Tap the screen again and the aircraft will continue shooting.

⚠
- Use QuickShots at locations that are clear of buildings and other obstacles. Make sure there are no people, animals, or other obstacles in the flight path. The aircraft will brake and hover if an obstacle is detected in front or behind. Note that obstacles cannot be detected on either side of the aircraft.
- Pay attention to objects around the aircraft and use the remote controller to avoid collisions with the aircraft.
- DO NOT use QuickShots in any of the following situations:
  a) When the subject is blocked for an extended period or outside the line of sight.
  b) When the subject is more than 50 m away from the aircraft.
  c) When the subject is similar in color or pattern with the surroundings.
  d) When the subject is in the air.
  e) When the subject is moving fast.
  f) The lighting is extremely dark (< 300 lux) or bright (> 10,000 lux).
- DO NOT use QuickShots in places close to buildings or where the GNSS signal is weak, otherwise the flight path will become unstable.
- Make sure to follow local privacy laws and regulations when using QuickShots.

© 2023 DJI All Rights Reserved.

Hyperlapse

Hyperlapse shooting modes include Free, Circle, Course Lock, and Waypoint.



Free

The aircraft automatically takes photos and generates a timelapse video. Free mode can be used while the aircraft is on the ground. After takeoff, control the aircraft's movements and gimbal angle using the remote controller.

Follow the steps below to use Free:

1. Set the interval time and video duration. The screen displays the number of photos that will be taken and the shooting duration.
2. Tap the shutter/record button to begin.

Cruise Control: Set the function of the customizable button (C1 or C2 button for DJI RC and Fn button for the DJI RC-N1 remote controller) to Cruise Control, and press the customizable button and control stick at the same time to enter Cruise Control. The aircraft will continue flying at the same speed.

Circle

The aircraft automatically takes photos while flying around the selected subject to generate a timelapse video.

Follow the steps below to use Circle:

1. Set the interval time, video duration, and max speed. Circle can be set to either the clockwise or counter-clockwise direction. The screen displays the number of photos that will be taken and the shooting duration.
2. Drag-select a subject on the screen. Use the yaw stick and gimbal dial to adjust the frame.
3. Tap the shutter/record button to begin. Move the pitch stick to alter the distance from the subject, roll stick to control the circling speed, and throttle stick to control the vertical flight speed.

Course Lock

Course Lock allows the user to fix the flight direction. While doing so, the user may either select an object for the aircraft to fly around, or not select any object while being able to control the aircraft

 © 2023 DJI All Rights Reserved.

orientation and gimbal.

Follow the steps below to use Course Lock:

1. Set the interval time, video duration, and max speed. The screen displays the number of photos that will be taken and the shooting duration.
2. Set a flight direction.
3. If applicable, drag-select a subject. Use the gimbal dial and yaw stick to adjust the frame.
4. Tap the shutter/record button to begin. Move the pitch stick and roll stick to control the horizontal flight speed and briefly alter the aircraft orientation. Move the throttle stick to control the vertical flight speed.

Waypoints

The aircraft automatically takes photos on a flight path of two to five waypoints and generates a timelapse video. The aircraft can fly in sequence from waypoints 1 to 5 or 5 to 1.

Follow the steps below to use Waypoints:

1. Set the desired waypoints and the lens direction.
2. Set the interval time and video duration. The screen displays the number of photos that will be taken and the shooting duration.
3. Tap the shutter/record button to begin.

The aircraft will generate a timelapse video automatically, which is viewable in playback. In the camera settings, users can choose whether to save the footage in JPEG or RAW format and to store it in the internal storage or the microSD card. If needed, it is recommended to store the footage in the microSD card.

⚠
- For optimal performance, use Hyperlapse at an altitude higher than 50 m and set a difference of at least two seconds between the interval time and shutter.
- It is recommended to select a static subject (e.g., high-rise buildings, mountainous terrain) located at a safe distance from the aircraft (further than 15 m). Do not select a subject that is too near the aircraft.
- When the lighting is sufficient and the environment is suitable for the vision systems to operate, the aircraft will brake and hover in place if an obstacle is detected in front, behind or below during Hyperlapse. Note that obstacles cannot be detected on either side of the aircraft. If the lighting becomes insufficient or the environment is unsuitable for the vision systems to operate during Hyperlapse, the aircraft will continue shooting without obstacle avoidance. Fly with caution.
- The aircraft will only generate a video after at least 25 photos have been taken, which is the amount required to generate a one-second video. The video will be generated by default regardless of whether Hyperlapse concludes normally or the aircraft exits from the mode unexpectedly (such as when Low Battery RTH is triggered).

Advanced Pilot Assistance Systems (APAS 4.0)

The Advanced Pilot Assistance Systems 4.0 (APAS 4.0) feature is available in Normal mode and Cine mode. When APAS is enabled, the aircraft will continue to respond to user commands and plan its path according to both control stick inputs and the flight environment. APAS makes it easier to avoid obstacles, obtain smoother footage, and gives a better flying experience.

© 2023 DJI All Rights Reserved.

Move the pitch stick forward or backward, and the aircraft will fly over, under, or to the left or right of the obstacle. The aircraft can also respond to the control stick inputs while avoiding obstacles.

When APAS is enabled, the aircraft can be stopped by pressing the Flight Pause button on the remote controller. The aircraft will hover for three seconds and await further pilot commands.

To enable APAS, open DJI Fly, enter System Settings, Safety, and enable APAS by selecting Bypass.

Landing Protection

Landing Protection will activate if Obstacle Avoidance is set to Bypass or Brake and the user pulls the throttle stick down to land the aircraft.

Landing Protection is enabled once the aircraft begins to land.

1. During Landing Protection, the aircraft will automatically detect and carefully land on suitable ground.
2. If the ground is determined unsuitable for landing, the aircraft will hover when the aircraft descends to 0.8 m above ground. Pull the throttle stick down for more than five seconds and the aircraft will land without obstacle avoidance.

⚠
- APAS is disabled when using Intelligent Flight Modes. It will be enabled automatically once the aircraft exits Intelligent Flight Modes. APAS is disabled when recording at a high resolution such as 1080p 120 fps, 2.7K 48/50/60 fps, or 4K 48/50/60 fps.
- APAS is only available when flying forward, backward, and downward. APAS is not available when the aircraft is flying leftward, rightward, or upward, and no bypass or obstacle avoidance in these cases.
- Make sure to use APAS when the Vision Systems are available. Be sure there are no people, animals, objects with small surface areas (e.g., tree branches), or transparent objects (e.g., glass or water) along the desired flight path.
- Make sure to use APAS when the Vision Systems are available or the GNSS signal is strong. APAS may not function properly when the aircraft is flying over water or snow-covered areas.
- Be extra cautious when flying in extremely dark (<300 lux) or bright (>10,000 lux) environments.
- Pay attention to DJI Fly and make sure the aircraft is working normally in APAS mode.
- APAS may not function properly when the aircraft is flying near flight limits or in a GEO zone.

Flight Recorder

Flight data including flight telemetry, aircraft status information, and other parameters are automatically saved to the internal data recorder of the aircraft. The data can be accessed using DJI Assistant 2 (Consumer Drones Series).

Propellers

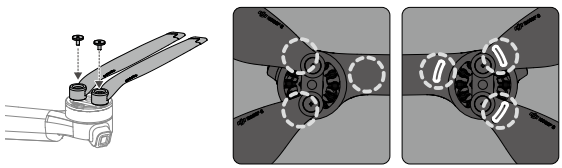
There are two types of DJI Mini 3 Pro propellers, which are designed to spin in different directions. The marked propellers should be attached to the marked motors, and unmarked propellers to the unmarked motors. The two propeller blades attached to one motor are the same. Make sure to match the propellers and motors by following the instructions.

 © 2023 DJI All Rights Reserved.

Propellers	Marked	Unmarked
Illustration		
Mounting Position	Attach to the motors of the marked arm	Attach to the motors of the unmarked arm

Attaching the Propellers

Attach the marked propellers to the motors of the marked arm, and the unmarked propellers to the motors of the unmarked arm. Use the screwdriver from the aircraft package to mount the propellers. Make sure the propellers are secure.



Unmarked Marked

- Make sure to only use the screwdriver from the aircraft package for mounting propellers. Using other screwdrivers may damage the screws.
- Make sure to keep the screws vertical while tightening them. The screws should not be at a tilted angle to the mounting surface. After installation is complete, check whether the screws are flush and rotate the propellers to check for any abnormal resistance.

Detaching the Propellers

User the screwdriver from the aircraft package to loosen the screws and detach the propellers from the motors.

- Propeller blades are sharp. Handle with care.
- The screwdriver is only for mounting the propellers. DO NOT use the screwdriver to disassemble the aircraft.
- If a propeller is broken, remove the two propellers and screws on the corresponding motor and discard them. Use two propellers from the same package. DO NOT mix with propellers from other packages.
- Only use official DJI propellers. DO NOT mix propeller types.
- Purchase additional propellers if necessary.
- Make sure that the propellers and motors are installed securely before each flight. Check to make sure the screws on the propellers are tightened after every 30 hours of flying time (approx. 60 flights).
- Make sure all propellers are in good condition before each flight. DO NOT use aged, chipped, or broken propellers.
- To avoid injury, stand clear of and do not touch propellers or motors when they are spinning.

© 2023 DJI All Rights Reserved.

- DO NOT squeeze or bend the propellers during transportation or storage.
- Make sure the motors are mounted securely and rotating smoothly. Land the aircraft immediately if a motor is stuck and unable to rotate freely.
- DO NOT attempt to modify the structure of the motors.
- DO NOT touch or let hands or body parts come in contact with the motors after flight as they may be hot.
- DO NOT block any of the ventilation holes on the motors or the body of the aircraft.
- Make sure the ESCs sound normal when powered on.

Intelligent Flight Battery

DJI Mini 3 Pro Intelligent Flight Battery is a 7.38 V, 2453 mAh battery. DJI Mini 3 Pro Intelligent Flight Battery Plus is a 7.38 V, 3850 mAh battery. The two batteries have the same structure and dimensions but different weight and capacity. Both batteries are equipped with smart charging and discharging functionality.

Battery Features

1. Balanced Charging: During charging, the voltages of the battery cells are automatically balanced.
2. Auto-Discharging Function: To prevent swelling, the battery automatically discharges to approximately 96% of the battery level when it is idle for one day, and approximately 60% when idle for nine days. It is normal to feel moderate heat from the battery while it is discharging.
3. Overcharge Protection: The battery stops charging automatically once fully charged.
4. Temperature Detection: To prevent damage, the battery only charges at temperatures from 5° to 40° C (41° to 104° F). Charging stops automatically if the temperature of the battery cells exceed 55° C (131° F) during charging.
5. Overcurrent Protection: The battery stops charging if an excess current is detected.
6. Over-Discharge Protection: Discharging stops automatically to prevent excess discharge when the battery is not in use. Over-discharge protection is not enabled when the battery is in use.
7. Short Circuit Protection: The power supply is automatically cut if a short circuit is detected.
8. Battery Cell Damage Protection: DJI Fly displays a warning prompt when a damaged battery cell is detected.
9. Hibernation Mode: If the battery cell voltage is lower than 3.0 V or the battery level is less than 10%, the battery enters Hibernation mode to prevent over-discharge. Charge the battery to wake it from hibernation.
10. Communication: Information about the voltage, capacity, and current of the battery is transmitted to the aircraft.

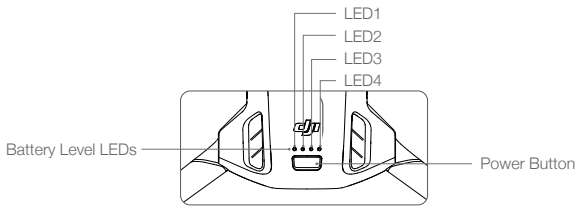
- Refer to the DJI Mini 3 Pro Safety Guidelines and the stickers on the battery before use. Users take full responsibility for any violations of the safety requirements stated on the label.

 © 2023 DJI All Rights Reserved.

Using the Battery

Checking the Battery Level

Press the power button once to check the battery level.



The battery level LEDs display the power level of the battery during charging and discharging. The statuses of the LEDs are defined below:

Battery Level LEDs				
○: LED is on ☼: LED is flashing ○: LED is off				
LED1	LED2	LED3	LED4	Battery Level
○	○	○	○	Battery Level ≥ 88%
○	○	○	☼	75% ≤ Battery Level < 88%
○	○	○	○	63% ≤ Battery Level < 75%
○	○	☼	○	50% ≤ Battery Level < 63%
○	○	○	○	38% ≤ Battery Level < 50%
○	☼	○	○	25% ≤ Battery Level < 38%
○	○	○	○	13% ≤ Battery Level < 25%
☼	○	○	○	0% ≤ Battery Level < 13%

Powering On/Off

Press the power button once and then press again and hold for two seconds to power the aircraft on or off. The battery level LEDs display the battery level when the aircraft is powered on. The battery level LEDs turn off when the aircraft is powered off.

When the aircraft is on, press the power button once and the four battery level LEDs will blink for three seconds. If LEDs 3 and 4 blink simultaneously without the power button being pressed, this indicates the battery is malfunctioning. Remove the battery from the aircraft, insert the battery again and make sure that it is securely mounted.

Low Temperature Notice

1. Battery capacity is significantly reduced when flying at low temperatures from -10° to 5° C (14° to 41° F). It is recommended to hover the aircraft in place for a while to heat the battery. Make sure to fully charge the battery before takeoff.
2. Batteries cannot be used in extremely low-temperature environments of lower than -10° C (14° F).

© 2023 DJI All Rights Reserved.

3. To ensure optimal performance, keep the battery temperature above 20° C (68° F).
4. The reduced battery capacity in low-temperature environments reduces the wind speed resistance performance of the aircraft. Fly with caution.
5. Fly with extra caution at high sea levels.

⚠ • In cold environments, insert the battery into the battery compartment and turn on the aircraft to warm up before taking off.

Charging the Battery

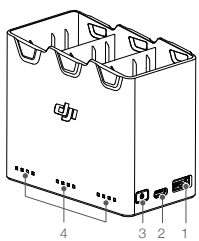
Fully charge the battery before each use. It is recommended to use the charging devices provided by DJI, such as the DJI Mini 3 Pro Two-Way Charging Hub, DJI 30W USB-C Charger, or other USB Power Delivery chargers. The DJI Mini 3 Pro Two-Way Charging Hub and the DJI 30W USB-C Charger are both optional accessories. Visit the official DJI online store for more information.

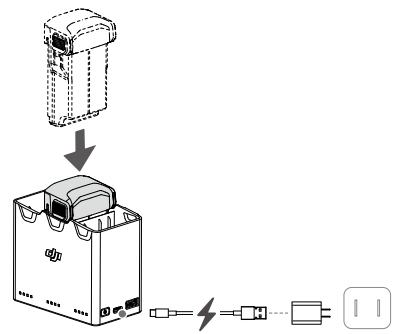
⚠ • When you charge the battery mounted to the aircraft or inserted into the DJI Mini 3 Pro Two-Way Charging Hub, the maximum charging power supported is 30 W.

Using the Charging Hub

When used with a USB charger, the DJI Mini 3 Pro Two-Way Charging Hub can charge up to three Intelligent Flight Batteries or Intelligent Flight Batteries Plus in sequence from high to low power level. When used with the DJI 30W USB-C Charger, the charging hub can fully charge one Intelligent Flight Battery in approximately 56 minutes, and one Intelligent Flight Battery Plus in approximately 78 minutes.

When the charging hub is connected to AC power through a USB charger, users can connect both the Intelligent Flight Batteries and an external device (such as a remote controller or smart phone) to the hub to charge. The batteries will be charged before the external device by default. When the charging hub is not connected to AC power, insert the Intelligent Flight Batteries into the hub and connect an external device to the USB port to charge the device, using the Intelligent Flight Batteries as power banks. Refer to the DJI Mini 3 Pro Two-Way Charging Hub User Guide for more details.





1. USB port
2. Power Port (USB-C)
3. Function Button
4. Status LEDs

 © 2023 DJI All Rights Reserved.

How to Charge

1. Insert the batteries into the charging hub until there is a click.
2. Connect the charging hub to a power outlet (100-240V, 50/60 Hz) using a USB-C cable and a DJI 30W USB-C charger or other USB Power Delivery chargers.
3. The battery with the highest power level will be charged first. The rest will be charged in sequence according to their power levels. The corresponding status LEDs will display the charging status (see table below). After the battery is fully charged, the corresponding LEDs will change to solid green.

Status LEDs Descriptions

Charging Status

Blinking Pattern	Description
Status LEDs in an array blink successively (quickly)	The battery in the corresponding battery port is being charged using a Quick Charge charger.
Status LEDs in an array blink successively (slowly)	The battery in the corresponding battery port is being charged using a normal charger.
Status LEDs in an array are solid	The battery in the corresponding battery port is fully charged.
All status LEDs blink in sequence	No battery is inserted.

Battery Level

Each battery port of the charging hub has its corresponding status LED array, from LED1 to LED4 (left to right). Check battery levels by pressing the function button once. The battery level LED statuses are the same as those on the aircraft. For details, refer to aircraft battery level LEDs statuses and descriptions.

Abnormal Status

The LED status for battery abnormality is the same as that on the aircraft. Refer to the Battery Protection Mechanisms section for details.

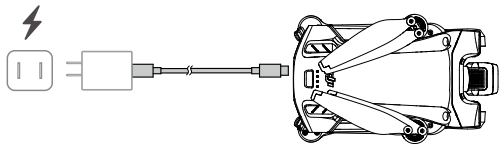
- It is recommended to use a DJI 30W USB-C Charger or other USB Power Delivery chargers to power the charging hub.
- The environmental temperature affects the charging speed. Charging is faster in a well-ventilated environment at 25°C.
- The charging hub is only compatible with BWX162-2453-7.38 Intelligent Flight Battery and BWX162-3850-7.38 Intelligent Flight Battery Plus. DO NOT use the charging hub with other battery models.
- Place the charging hub on a flat and steady surface when in use. Make sure the device is properly insulated to prevent fire hazards.
- DO NOT touch the metal terminals on the charging hub.
- Clean the metal terminals with a clean, dry cloth if there is any noticeable buildup.

Using A Charger

1. Ensure the battery has been correctly installed on the aircraft.

© 2023 DJI All Rights Reserved.

2. Connect the USB charger to an AC outlet (100-240V, 50/60 Hz). Use a power adapter if necessary.
3. Connect the USB charger to the charging port on the aircraft using a USB-C cable.
4. The battery level LEDs display the current battery level during charging.
5. The battery is fully charged when all the battery level LEDs emit a solid light. Remove the charger after charging is complete.



- The battery cannot be charged if the aircraft is powered on.
- The maximum charge voltage for the aircraft charging port is 12 V.
- DO NOT charge an Intelligent Flight Battery immediately after flight as it may be too hot. Wait for the battery to cool down to room temperature before charging again.
- The charger stops charging the battery if the cell temperature is not within 5° to 40° C (41° to 104° F). The ideal charging temperature is from 22° to 28° C (71.6° to 82.4° F).
- Fully charge the battery at least once every three months to maintain battery health. It is recommended to use the DJI 30W USB-C Charger or other USB Power Delivery chargers.

- When using the DJI 30W USB-C Charger, the charging time for Mini 3 Pro Intelligent Flight Battery is approximately 1 hour and 4 minutes, while for Mini 3 Pro Intelligent Flight Battery Plus it is approximately 1 hour and 41 minutes.
- For safety purposes, keep the batteries at a low power level in transit. Before transportation, it is recommended to discharge the batteries to 30% or lower.

The table below shows the battery level LED statuses during charging.

LED1	LED2	LED3	LED4	Battery Level
☼	☼	○	○	0% < Battery Level ≤ 50%
☼	☼	☼	○	50% < Battery Level ≤ 75%
☼	☼	☼	☼	75% < Battery Level < 100%
○	○	○	○	Fully Charged

- The blinking frequency of the battery level LEDs differs depending on the USB charger used. If the charging speed is fast, the battery level LEDs will blink quickly.
- If the battery is not correctly inserted into the aircraft, LEDs 3 and 4 will blink simultaneously. Insert the battery again and make sure it is securely mounted.
- The four LEDs blinking simultaneously indicates the battery is damaged.

Battery Protection Mechanisms

The battery LEDs can display battery protection notifications triggered by abnormal charging conditions.

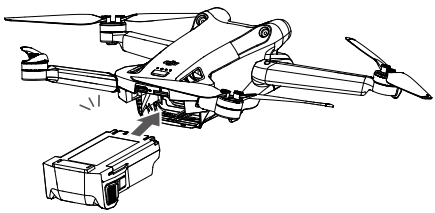
 © 2023 DJI All Rights Reserved.

Battery Protection Mechanisms					
LED1	LED2	LED3	LED4	Blinking Pattern	Status
○	☼	○	○	LED2 blinks twice per second	Overcurrent detected
○	☼	○	○	LED2 blinks three times per second	Short circuit detected
○	○	☼	○	LED3 blinks twice per second	Overcharge detected
○	○	☼	○	LED3 blinks three times per second	Over-voltage charger detected
○	○	○	☼	LED4 blinks twice per second	Charging temperature is too low
○	○	○	☼	LED4 blinks three times per second	Charging temperature is too high

If any of the battery protection mechanisms are activated, unplug the charger, and plug it in again to resume charging. If the charging temperature is abnormal, wait for it to return to normal and the battery will automatically resume charging without the need to unplug and plug the charger again.

Inserting the Intelligent Flight Battery

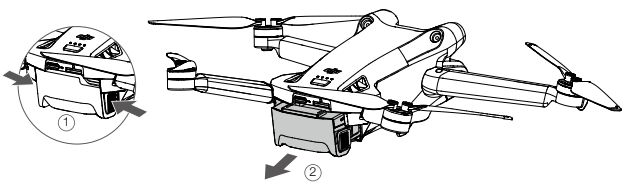
Insert the Intelligent Flight Battery or Intelligent Flight Battery Plus into the battery compartment of the aircraft. Make sure the battery is fully inserted with a clicking sound, which indicates the battery buckles are securely fastened.



⚠ • Ensure the battery is inserted with a clicking sound. DO NOT launch the aircraft when the battery is not securely mounted, as this may cause poor contact between the battery and the aircraft and present hazards.

Removing the Intelligent Flight Battery

Press the textured part of the battery buckles on the sides of the battery to remove it from the compartment.



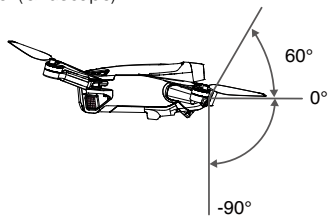
⚠ • DO NOT insert or remove the battery while the aircraft is powered on.
• Make sure the battery is mounted securely.

© 2023 DJI All Rights Reserved.

Gimbal and Camera

Gimbal Profile

The DJI Mini 3 Pro 3-axis gimbal stabilizes the camera, allowing you to capture clear and steady images and videos at high flight speed. The gimbal has a control tilt range of -90˚ to +60˚, and two control roll angles of -90˚ (portrait) and 0˚ (landscape).



Use the gimbal dial on the remote controller to control the tilt of the camera. Alternatively, do so through the camera view in DJI Fly. Press the screen until an adjustment bar appears and drag up and down to control the camera's tilt. Tap the Landscape/Portrait Mode Switch in DJI Fly to switch between the two gimbal roll angles. The roll axis will rotate to -90° when Portrait Mode is enabled, and back to 0° in Landscape Mode.

Gimbal Mode

Two gimbal operation modes are available. Switch between the different operation modes in DJI Fly.

Follow Mode: The angle between the gimbal's orientation and aircraft front remains constant at all times. Users can adjust the gimbal tilt. This mode is suitable for shooting stills.

FPV Mode: When the aircraft is flying forward, the gimbal synchronizes with the movement of the aircraft to provide a first-person flying experience.

⚠
- Make sure there are no stickers or objects on the gimbal before taking off. When the aircraft is powered on, DO NOT tap or knock the gimbal. Take off from open and flat ground to protect the gimbal.
- Precision elements in the gimbal may be damaged in a collision or impact, which may cause the gimbal to function abnormally.
- Avoid getting dust or sand on the gimbal, especially in the gimbal motors.
- A gimbal motor may enter protection mode in the following situations: a. The aircraft is on uneven ground and the gimbal is impacted. b. The gimbal experiences excessive external force, such as during a collision.
- DO NOT apply external force to the gimbal after the gimbal is powered on. DO NOT add any extra payload to the gimbal as this may cause the gimbal to function abnormally or even lead to permanent motor damage.
- Make sure to remove the gimbal protector before powering on the aircraft. Make sure to mount the gimbal protector when the aircraft is not in use.
- Flying in heavy fog or clouds may make the gimbal wet, leading to temporary failure. The gimbal will recover full functionality once it is dry.

 © 2023 DJI All Rights Reserved.

Camera

DJI Mini 3 Pro uses a 1/1.3-in CMOS sensor, which can shoot 4K videos and 48MP photos. The equivalent focal length is approximately 24 mm. The aperture of the camera is F1.7 and shoots from 1 m to infinity.

The DJI Mini 3 Pro camera can take 48MP stills and supports shooting modes such as Single, Burst, AEB, Timed Shot and Panorama. It also supports H.264/H.265 video recording, digital zoom and slow motion recording.

- Make sure the temperature and humidity are suitable for the camera during use and storage.
- Use a lens cleanser to clean the lens to avoid damage or poor image quality.
- DO NOT block any ventilation holes on the camera as the heat generated may damage the device and injure the user.

Storing Photos and Videos

DJI Mini 3 Pro supports the use of a microSD card to store your photos and videos. A microSD card with a UHS-I Speed Grade 3 rating or above is required due to the fast read and write speeds necessary for high-resolution video data. Refer to the Specifications for more information about recommended microSD cards.

Photos and videos can also be saved into the internal storage of the aircraft when no microSD card is available. Use of a microSD card is recommended for large data storage.

- DO NOT remove the microSD card from the aircraft while it is powered on, or the microSD card may be damaged.
- To ensure the stability of the camera system, single video recordings are limited to 30 minutes.
- Check camera settings before use to ensure they are configured correctly.
- Before shooting important photos or videos, shoot a few images to test whether the camera is operating correctly.
- Photos or videos cannot be transferred from the microSD card in the aircraft using DJI Fly if the aircraft is powered off.
- Make sure to power off the aircraft correctly. Otherwise, the camera parameters will not be saved and any recorded videos may be affected. DJI is not responsible for any loss caused by an image or video recorded in a way that is not machine-readable.

© 2023 DJI All Rights Reserved.

Remote Controller

This section describes the features of the remote controller and includes instructions for controlling the aircraft and the camera.

 © 2023 DJI All Rights Reserved.

Remote Controller

DJI RC

When used with DJI Mini 3 Pro, DJI RC remote controller features OcuSync O3 video transmission, works at both 2.4 GHz and 5.8 GHz frequency bands. It is capable of selecting the best transmission channel automatically and can transmit 1080p 30fps HD live view from the aircraft to the remote controller at a distance of up to 12 km (7.5 mi) (compliant with FCC standards, and measured in a wide open area without interference). The DJI RC is also equipped with a 5.5-in touchscreen (1920×1080 pixel resolution) and a wide range of controls and customizable buttons, enabling users to easily control the aircraft and remotely change the aircraft settings. The built-in 5200 mAh battery with a power of 18.72 Wh provides the remote controller with a maximum operating time of four hours. The DJI RC comes with many other functions such as Wi-Fi connection, built-in GNSS (GPS+Beidou+Galileo), Bluetooth, built-in speakers, detachable control sticks, and microSD storage.

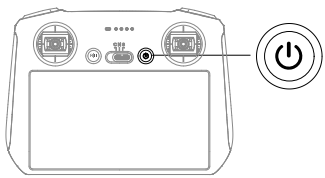
- Compliance Version: The remote controller is compliant with local regulations.
- Control Stick Mode: The control stick mode determines the function of each control stick movement. Three pre-programmed modes (Mode 1, Mode 2, and Mode 3) are available and custom modes can be configured in DJI Fly. The default mode is Mode 2.

Using the Remote Controller

Powering On/Off

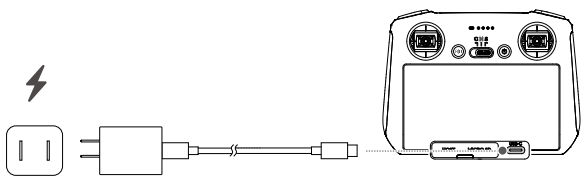
Press the power button once to check the current battery level.

Press once then press again and hold to power the remote controller on or off.



Charging the Battery

Use a USB-C cable to connect a USB charger to the USB-C port of the remote controller. The battery can be fully charged in about 1 hour and 30 minutes with a maximum charging power of 15 W (5V/3A).



- It is recommended to use a USB Power Delivery charger.

Controlling the Gimbal and Camera

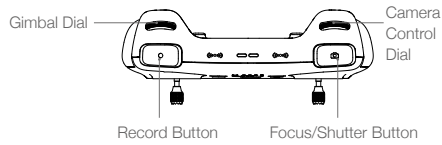
Focus/Shutter Button: Press halfway down to auto-focus and press all the way down to take a photo.

© 2023 DJI All Rights Reserved.

Record Button: Press once to start or stop recording.

Camera Control Dial: Adjust the zoom.

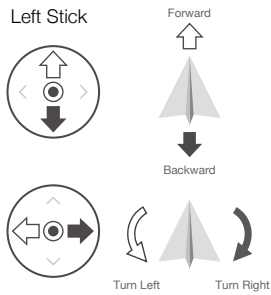
Gimbal Dial: Control the tilt of the gimbal.

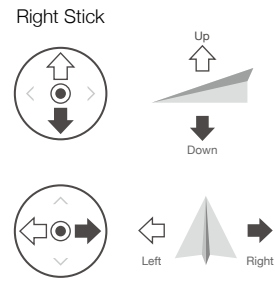


Controlling the Aircraft

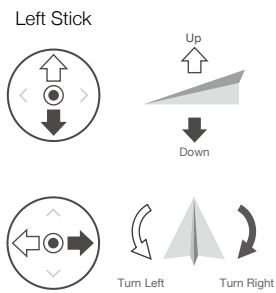
The control sticks control the aircraft's orientation (pan), forward/backward movement (pitch), altitude (throttle), and left/right movement (roll). The control stick mode determines the function of each control stick movement. Three preprogrammed modes (Mode 1, Mode 2, and Mode 3) are available and custom modes can be configured in DJI Fly.

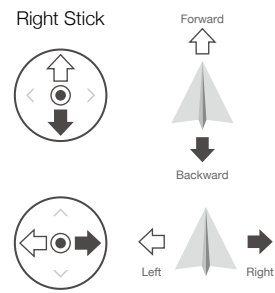
Mode 1



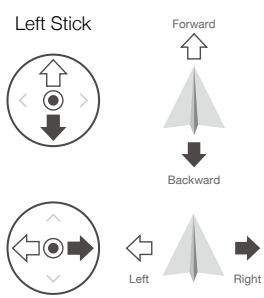


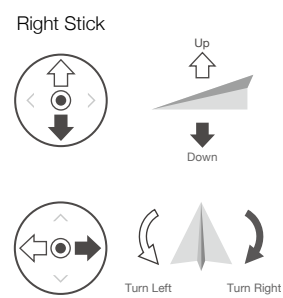
Mode 2





Mode 3

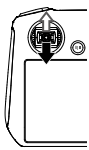
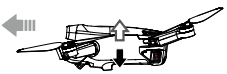
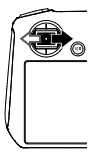
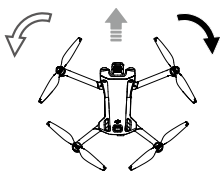
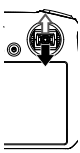
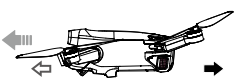
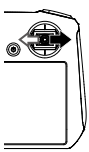




 © 2023 DJI All Rights Reserved.

The default control mode of the remote controller is Mode 2. In this manual, Mode 2 is used as the example to illustrate how to use the control sticks.

- Stick Neutral/Center Point: Control sticks are in the center.
- Moving the control stick: The control stick is pushed away from the center position.

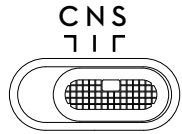
Remote Controller (Mode 2)	Aircraft (Indicates Nose Direction)	Remarks
		Throttle Stick: Moving the left stick up or down changes the aircraft's altitude. Push the stick up to ascend and down to descend. The more the stick is pushed away from the center position, the faster the aircraft will change altitude. Push the stick gently to prevent sudden and unexpected changes in altitude.
		Yaw Stick: Moving the left stick to the left or right controls the orientation of the aircraft. Push the stick left to rotate the aircraft counter-clockwise and right to rotate the aircraft clockwise. The more the stick is pushed away from the center position, the faster the aircraft will rotate.
		Pitch Stick: Moving the right stick up and down changes the aircraft's pitch. Push the stick up to fly forward and down to fly backward. The more the stick is pushed away from the center position, the faster the aircraft will move.
		Roll Stick: Moving the right stick to the left or right changes the aircraft's roll. Push the stick left to fly left and right to fly right. The more the stick is pushed away from the center position, the faster the aircraft will move.

© 2023 DJI All Rights Reserved.

Flight Mode Switch

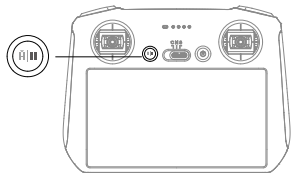
Toggle the switch to select the desired flight mode.

Position	Flight Mode
S	Sport Mode
N	Normal Mode
C	Cine Mode



Flight Pause/RTH Button

Press once to make the aircraft brake and hover in place. Press and hold the button until the remote controller beeps to start RTH, the aircraft will return to the last recorded Home Point. Press this button again to cancel RTH and to regain control of the aircraft.



Customizable Buttons

Go to System Settings in DJI Fly and select Control to set the functions of the customizable C1 and C2 buttons.

Status LED and Battery Level LEDs Description

Status LED

Blinking Pattern		Description
R ——	Solid red	Disconnected from the aircraft
R ·····	Blinking red	The battery level of the aircraft is low
G ——	Solid green	Connected with the aircraft
B ·····	Blinking blue	The remote controller is linking to an aircraft
Y ——	Solid yellow	Firmware update failed
B ——	Solid blue	Firmware update successful
Y ·····	Blinking yellow	The battery level of the remote controller is low
C ·····	Blinking cyan	Control sticks not centered

 © 2023 DJI All Rights Reserved.

Battery Level LEDs

Blinking Pattern				Battery Level
●	●	●	●	75%~100%
●	●	●	○	50%~75%
●	●	○	○	25%~50%
●	○	○	○	0%~25%

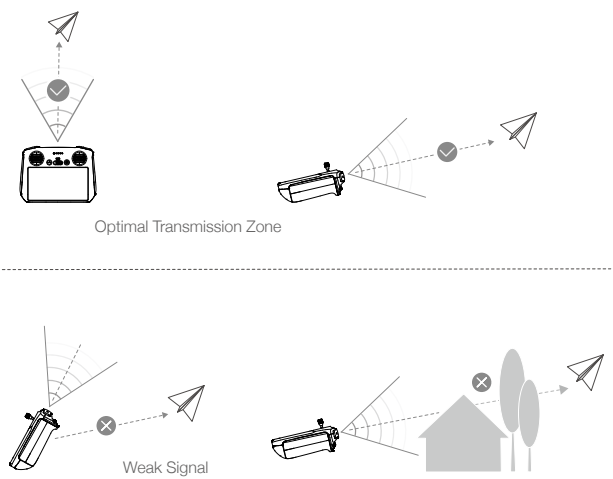
Remote Controller Alert

The remote controller beeps when there is an error or warning. Pay attention when prompts appear on the touch screen or in DJI Fly. Slide down from the top and select Mute to disable all alerts, or slide the volume bar to 0 to disable some alerts.

The remote controller sounds an alert during RTH. The RTH alert cannot be cancelled. The remote controller sounds an alert when the battery level of the remote controller is low (6% to 10%). A low battery level alert can be cancelled by pressing the power button. The critical low battery level alert, which is triggered when the battery level is less than 5%, cannot be cancelled.

Optimal Transmission Zone

The signal between the aircraft and the remote controller is most reliable when the remote controller is positioned towards the aircraft as depicted below.



- DO NOT use other wireless devices operating at the same frequency as the remote controller. Otherwise, the remote controller will experience interference.
- A prompt will be displayed in DJI Fly if the transmission signal is weak during flight. Adjust the remote controller orientation to make sure that the aircraft is in the optimal transmission range.

© 2023 DJI All Rights Reserved.

Linking the Remote Controller

The remote controller is already linked to the aircraft when purchased together as a combo. Otherwise, follow the steps below to link the remote controller and the aircraft after activation.

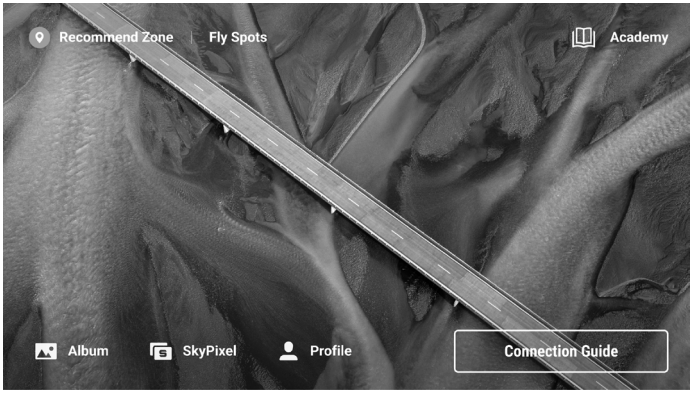
1. Power on the aircraft and the remote controller.
2. Launch DJI Fly.
3. In camera view, tap ••• and select Control and then Pair to Aircraft (Link).
4. Press and hold the power button on the aircraft for more than four seconds. The aircraft will beep once when it is ready to link. After the linking is successful, the aircraft will beep twice and the battery level LEDs of the remote controller will appear on and solid.

- Make sure the remote controller is within 0.5 m of the aircraft during the linking.
- The remote controller will automatically unlink from an aircraft if a new remote controller is linked to the same aircraft.
- Turn off Bluetooth and Wi-Fi of the remote controller for optimal video transmission.

- Fully charge the remote controller before each flight. The remote controller sounds an alert when the battery level is low.
- If the remote controller is powered on and not in use for five minutes, an alert will sound. After six minutes, the remote controller automatically powers off. Move the control sticks or press any button to cancel the alert.
- Fully charge the battery at least once every three months to maintain the battery's health.

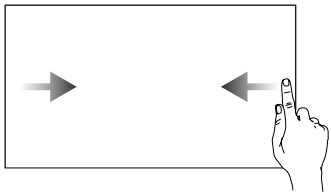
Operating the Touchscreen

Home

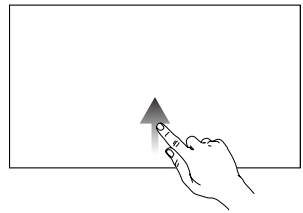


 © 2023 DJI All Rights Reserved.

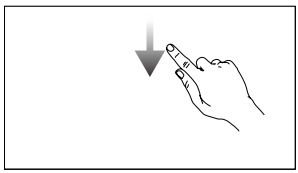
Operations



Slide from the left or right to the center of the screen to return to the previous screen.

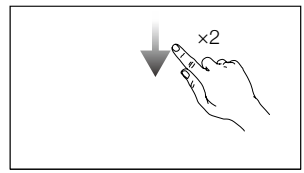


Slide up from the bottom of the screen to return to DJI Fly.



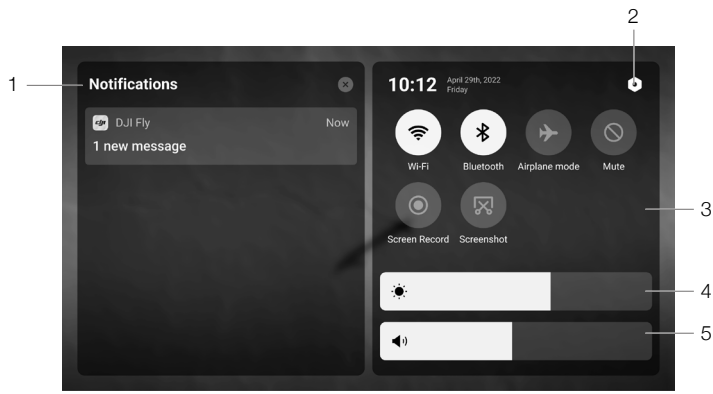
Slide down from the top of the screen to open the status bar when in DJI Fly.

The status bar displays the time, Wi-Fi signal, battery level of the remote controller, etc.



Slide down twice from the top of the screen to open Quick Settings when in DJI Fly.

Quick Settings



© 2023 DJI All Rights Reserved.

1. Notifications
   Tap to check system notifications.
2. System Settings
   Tap to access system settings and configure the Bluetooth, volume, network, etc. You can also view the Guide to learn more about the controls and status LEDs.
3. Shortcuts
   : Tap to enable or disable Wi-Fi. Hold to enter settings and then connect to or add a Wi-Fi network.
   : Tap to enable or disable Bluetooth. Hold to enter settings and connect with nearby Bluetooth devices.
   : Tap to enable Airplane mode. Wi-Fi and Bluetooth will be disabled.
   : Tap to turn off system notifications and disable all alerts.
   : Tap to start recording the screen.
   : Tap to take a screenshot. The function will be available only after a microSD card is inserted into the microSD slot on the remote controller.
4. Adjusting Brightness
   Slide the bar to adjust the screen brightness.
5. Adjusting Volume
   Slide the bar to adjust the volume.

Advanced Features

Calibrating the Compass

The compass may need to be calibrated after the remote controller is used in areas with electromagnetic interference. A warning prompt will appear if the compass of the remote controller requires calibration. Tap the warning prompt to start calibrating. In other cases, follow the steps below to calibrate your remote controller.

1. Power on the remote controller, and enter Quick Settings.
2. Tap to enter system settings, scroll down and tap Compass.
3. Follow the on-screen instructions to calibrate the compass.
4. A prompt will be displayed when the calibration is successful.

 © 2023 DJI All Rights Reserved.

DJI RC-N1

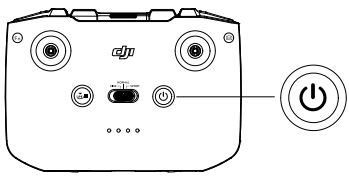
When used with DJI Mini 3 Pro, DJI RC-N1 features OcuSync O3 video transmission, works at both 2.4 GHz and 5.8 GHz frequency bands, is capable of selecting the best transmission channel automatically, and offers 1080p 30fps HD live view transmission from the aircraft to DJI Fly on a mobile device (depending on mobile device performance) at a maximum transmission range of 12 km (7.5 mi) (compliant with FCC standards, and measured in a wide open area without interference). Users can control the aircraft and change the settings easily within this range. The built-in battery has a capacity of 5200 mAh and power of 18.72 Wh that supports a maximum run time of six hours. The remote controller charges Android mobile devices automatically with a charging rate of 500 mA@5 V. Charging for iOS devices is disabled by default. To charge iOS devices, make sure that the charging function is enabled in DJI Fly each time the remote controller is powered on.

- Compliance Version: The remote controller is compliant with local regulations.
- Control Stick Mode: The control stick mode determines the function of each control stick movement. Three pre-programmed modes (Mode 1, Mode 2, and Mode 3) are available and custom modes can be configured in DJI Fly. The default mode is Mode 2.

Powering On/Off

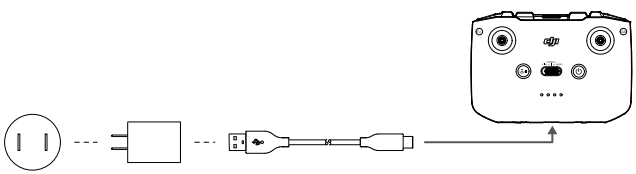
Press the power button once to check the current battery level. If the battery level is too low, recharge before use.

Press once then press again and hold for two seconds to power the remote controller on or off.



Charging the Battery

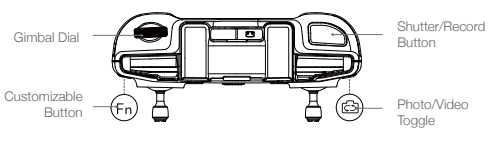
Use a USB-C cable to connect a USB charger to the USB-C port of the remote controller.



Controlling the Gimbal and Camera

Shutter/Record Button: Press once to take a photo or to start or stop recording.

Photo/Video Toggle: Press once to switch between photo and video mode.



© 2023 DJI All Rights Reserved.

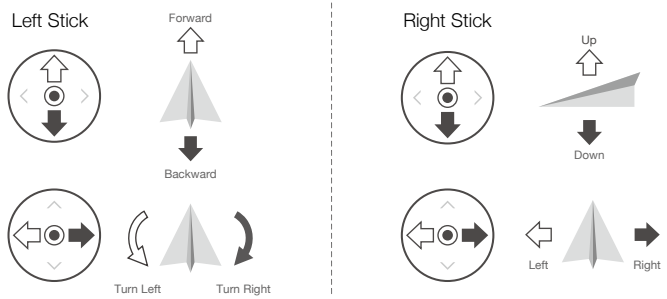
Gimbal Dial: For controlling the tilt of the gimbal.

Press and hold the customizable button and then use the gimbal dial to zoom in or out.

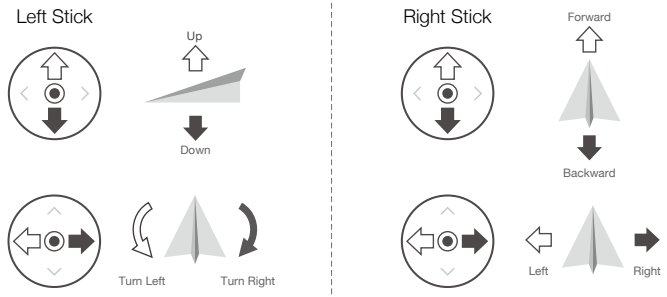
Controlling the Aircraft

The control sticks control the aircraft's orientation (pan), forward/backward movement (pitch), altitude (throttle), and left/right movement (roll). The control stick mode determines the function of each control stick movement. Three preprogrammed modes (Mode 1, Mode 2, and Mode 3) are available and custom modes can be configured in DJI Fly.

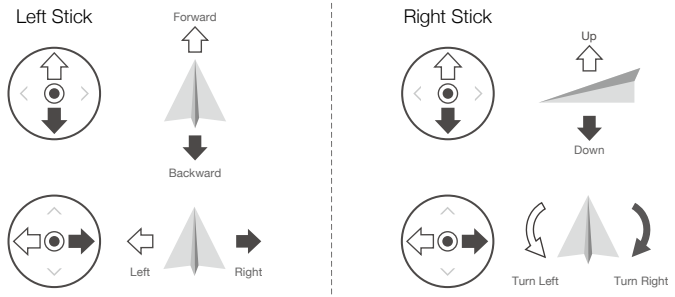
Mode 1



Mode 2



Mode 3

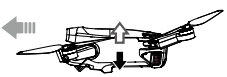
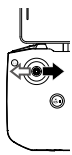
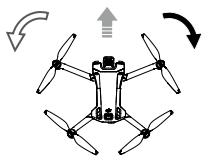
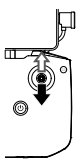
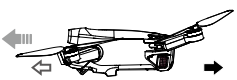
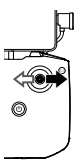


 © 2023 DJI All Rights Reserved.

The default control mode of the remote controller is Mode 2. In this manual, Mode 2 is used as the example to illustrate how to use the control sticks.

Stick Neutral/Center Point: Control sticks are in the center.

Moving the control stick: The control stick is pushed away from the center position.

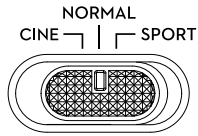
Remote Controller (Mode 2)	Aircraft (Indicates Nose Direction)	Remarks
		Moving the left stick up or down changes the aircraft's altitude. Push the stick up to ascend and down to descend. The more the stick is pushed away from the center position, the faster the aircraft will change altitude. Push the stick gently to prevent sudden and unexpected changes in altitude.
		Moving the left stick to the left or right controls the orientation of the aircraft. Push the stick left to rotate the aircraft counter-clockwise and right to rotate the aircraft clockwise. The more the stick is pushed away from the center position, the faster the aircraft will rotate.
		Moving the right stick up and down changes the aircraft's pitch. Push the stick up to fly forward and down to fly backward. The more the stick is pushed away from the center position, the faster the aircraft will move.
		Moving the right stick to the left or right changes the aircraft's roll. Push the stick left to fly left and right to fly right. The more the stick is pushed away from the center position, the faster the aircraft will move.

© 2023 DJI All Rights Reserved.

Flight Mode Switch

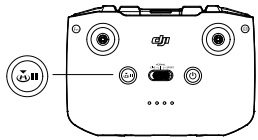
Toggle the switch to select the desired flight mode.

Position	Flight Mode
SPORT	Sport Mode
NORMAL	Normal Mode
CINE	Cine Mode



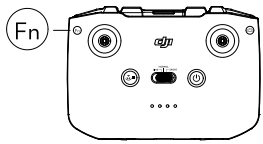
Flight Pause/RTH Button

Press once to make the aircraft brake and hover in place. Press and hold the button until the remote controller beeps to start RTH. The aircraft will return to the last recorded Home Point. Press this button again to cancel RTH and to regain control of the aircraft.



Customizable Button

To customize the function of this button, go to System Settings in DJI Fly and select Control. Customizable functions include recentering the gimbal and toggling between the map and live view.



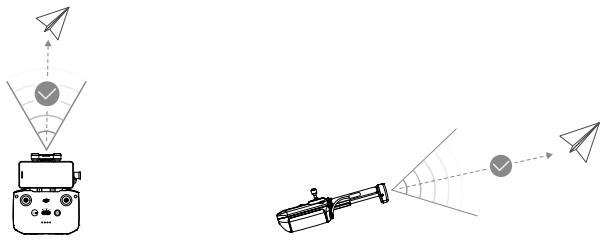
Remote Controller Alert

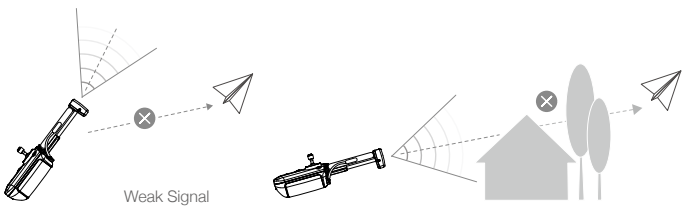
The remote controller sounds an alert during RTH. The RTH alert cannot be cancelled. The remote controller sounds an alert when the battery level of the remote controller is low (6% to 10%). A low battery level alert can be cancelled by pressing the power button. The critical low battery level alert, which is triggered when the battery level is less than 5%, cannot be cancelled.

 © 2023 DJI All Rights Reserved.

Optimal Transmission Zone

The signal between the aircraft and the remote controller is most reliable when the remote controller is positioned towards the aircraft as depicted below.





Linking the Remote Controller

The remote controller is already linked to the aircraft when purchased together as a combo. Otherwise, follow the steps below to link the remote controller and the aircraft after activation.

1. Power on the aircraft and the remote controller.
2. Launch DJI Fly.
3. In camera view, tap ••• and select Control and then Pair to Aircraft (Link).
4. Press and hold the power button of the aircraft for more than four seconds. The aircraft will beep once when it is ready to link. After the linking is successful, the aircraft will beep twice and the battery level LEDs of the remote controller will appear on and solid.

- Make sure the remote controller is within 0.5 m of the aircraft during the linking.
- The remote controller will automatically unlink from an aircraft if a new remote controller is linked to the same aircraft.
- Turn off Bluetooth and Wi-Fi of the mobile device for optimal video transmission.

- Fully charge the remote controller before each flight. The remote controller sounds an alert when the battery level is low.
- If the remote controller is powered on and not in use for five minutes, an alert will sound. After six minutes, the remote controller automatically powers off. Move the control sticks or press any button to cancel the alert.
- Adjust the mobile device holder to make sure your mobile device is secure.
- Fully charge the battery at least once every three months to maintain the battery's health.

© 2023 DJI All Rights Reserved.

DJI Fly App

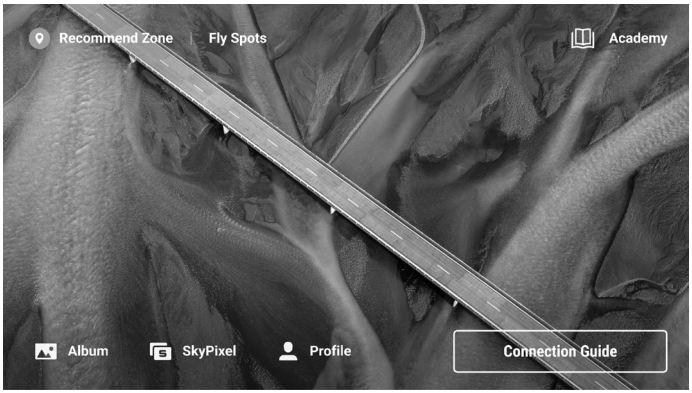
This section introduces the main functions of the DJI Fly app.

 © 2023 DJI All Rights Reserved.

DJI Fly App

Home

Launch DJI Fly and enter the home screen.



Fly Spots

View or share suitable flight and shooting locations nearby, learn more about GEO Zones, and preview aerial photos of different locations taken by other users.

Academy

Tap the icon in the top right corner to enter Academy and view product tutorials, flight tips, flight safety notices, and manual documents.

Album

View photos and videos from DJI Fly and your mobile device. MasterShots and QuickShots videos can be viewed after downloading them to your mobile device and rendering. Tap Create and select Templates or Pro. Templates provide an auto-edit feature for imported footage. Pro allows users to edit footage manually.

SkyPixel

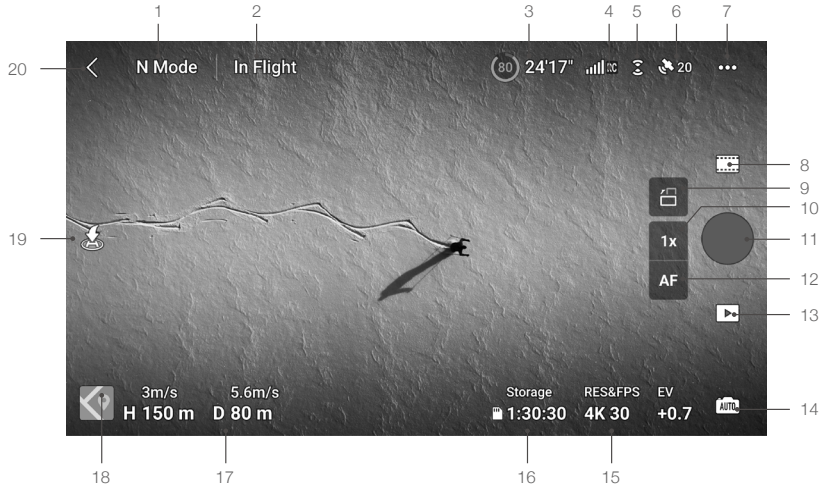
Enter SkyPixel to view videos and photos shared by users.

Profile

View account information, flight records; visit the DJI forum, online store; access the Find My Drone feature, and other settings such as firmware updates, camera view, cached data, account privacy, and language.

© 2023 DJI All Rights Reserved.

Camera View



1. Flight Mode

   N: Displays the current flight mode.

2. System Status Bar

   In Flight: Indicates the aircraft flight status and displays various warning messages. Tap to view more information when a warning prompt appears.

3. Battery Information

   80 24'17" : Displays the current battery level and remaining flight time.

4. Video Downlink Signal Strength

   RC : Displays the video downlink signal strength between the aircraft and the remote controller.

5. Vision System Status

   : The upper part of the icon indicates the status of the Forward Vision System, and the lower part indicates the status of the Backward Vision System. The icon is white when the vision system is working normally and turns red when the vision system is unavailable.

6. GNSS Status

   20 : Displays the current GNSS signal strength. Tap to check the GNSS signal status. The Home Point can be updated when the icon is white, which indicates the GNSS signal is strong.

7. System Settings

   System settings provide information about safety, control, the camera, and transmission.

   • Safety

   Flight Assistance: Forward and Backward vision systems are enabled after setting Obstacle Avoidance to Bypass or Brake. The aircraft cannot sense obstacles if Obstacle Avoidance is disabled. The aircraft cannot fly left or right if Sideways Flight is disabled.

   Radar Map Display: When enabled, the real-time obstacle detection radar map will be displayed.

   Flight Protection: Tap to set the max altitude and the max distance for flights.

 © 2023 DJI All Rights Reserved.

RTH: Tap to set the Return to Home Altitude and update the Home Point.
Sensors: Tap to view the IMU and compass statuses and start calibration if necessary.
Battery: Tap to view battery information such as battery cell status, serial number, and number of times charged.
Unlock GEO Zone: Tap to view information about unlocking GEO Zones.
The Find My Drone feature uses the map to find the location of the aircraft on the ground.
Advanced Safety Settings include the behavior settings for the aircraft when remote controller signals are lost and stopping the propellers mid-flight during emergencies.
The behavior of the aircraft when remote controller signals are lost can be set to Return to Home, Descend, or Hover.
"Emergency Only" indicates that the motors can only be stopped mid-flight in case of an emergency, such as a collision, a motor stalling, the aircraft rolling in the air, or the aircraft being out of control and ascending or descending quickly. "Anytime" indicates that the motors can be stopped mid-flight anytime once the user performs a combination stick command (CSC).

⚠ • Stopping the motors mid-flight will cause the aircraft to crash.

• Control

Aircraft Settings

Unit	Can be set to metric or imperial.
Subject Scanning	When enabled, aircraft automatically scans and displays subjects in the Camera View (only available for single-shot photos and normal video recording).
Gain and Expo Tuning	Supports the gain and expo settings to be fine-tuned on the aircraft and the gimbal in different flight modes, including the max horizontal speed, max ascent speed, max descent speed, max angular velocity, yaw smoothness, brake sensitivity, and expo and the gimbal max tilt control speed and tilt smoothness.

⚠ • When releasing the control sticks, an increased brake sensitivity reduces the braking distance of the aircraft, while a decreased brake sensitivity increases the braking distance. Fly with caution.

Gimbal Settings: Tap to set the gimbal mode, enter advanced settings, perform gimbal calibration, and recenter or tilt the gimbal down.
Remote Controller Settings: Tap to set the function of the customizable button, calibrate the remote controller, switch control stick modes (Mode 1, Mode 2, Mode 3, or custom mode), or set the advanced settings of the remote controller.
Beginner Flight Tutorial: View the flight tutorial.
Connect to the Aircraft: Tap to start linking when the aircraft is not linked to the remote controller.

• Camera

Camera Parameter Settings: Displays different settings according to the shooting mode.
General Settings: Tap to view and set histogram, overexposure warning, peaking level, gridlines, and white balance.
Storage Location: Footage can be stored in the aircraft's internal storage or on a microSD card. Internal storage and microSD cards can be formatted. The footage downloaded to the aircraft's internal storage or microSD card can be synced to the user's mobile device, and the max video cache capacity settings can also be adjusted.

© 2023 DJI All Rights Reserved.

Reset Camera Settings: Tap to restore camera parameters to the default settings.
USB Mode: When the aircraft is connected to a computer for copying footage, the aircraft will enter a low-power state if USB mode is enabled, which can extend the time for copying footage. Power on the aircraft, enable USB mode and connect to a computer to use USB mode. To disable USB mode, disable USB mode in DJI Fly.

⚠ • In USB mode, the aircraft will disconnect from the remote controller.

• Transmission
A livestreaming platform can be selected to broadcast the camera view in real time.
The frequency band and channel mode can also be set in the transmission settings.

• About
View device information, firmware information, app version, battery version, and more. Tap Reset All Settings to reset settings including camera, gimbal and safety settings to default. Tap Clear All Data to reset all settings to default, and delete all the data stored in internal storage, mircroSD card and SSD, including flight log. It is recommended to provide proof (flight log) when claiming compensation. Contact DJI support before clearing the flight log if an accident occurs during flight.

8. Shooting Modes
Photo: Single, Burst Shooting, AEB, 48MP, or Timed Shot.
Video: Normal, Slow Motion. Digital zoom is supported in normal video mode.
MasterShots: Select a subject. The aircraft will record while executing different maneuvers in sequence and keeping the subject in the center of the frame. A short cinematic video will be generated afterward.
Hyperlapse: Choose from Free, Circle, Course Lock, and Waypoints.
Pano: Choose from Sphere, 180°, Wide Angle, and Vertical.
QuickShots: Choose from Dronie, Rocket, Circle, Helix, Boomerang, and Asteroid.

9. Landscape/Portrait Mode Switch
: Tap to switch between Landscape and Portrait modes. The camera will rotate 90 degrees when switching to Portrait mode, for shooting portrait videos and photos. Portrait mode is not supported when using Pano or the Asteroid shooting mode in QuickShots.

10. Zoom
1x : The icon shows the zoom ratio. Tap to adjust the zoom ratio. Tap and hold the icon to expand the zoom bar and slide on the bar to adjust the zoom ratio.

11. Shutter/Record Button
● : Tap to take a photo or to start or stop recording a video.

12. Focus Button
AF / MF : Tap the icon to switch the focus mode. Tap and hold the icon to expand the focus bar and slide on the bar to focus the camera.

13. Playback
▶ : Tap to enter playback and preview photos and videos as soon as they are captured.

14. Camera Mode Switch
AUTO : Choose between Auto and Pro modes when in photo mode. The parameters differ with each mode.

 © 2023 DJI All Rights Reserved.

15. Shooting Parameters

RES&FPS EV
4K 30 +0.7 : Displays the current shootings parameters. Tap to access parameter settings.

16. microSD Card Information

Storage
1:30:30 : Displays the remaining number of photos or video recording time on the current microSD card. Tap to view the available capacity of the microSD card.

17. Flight Telemetry

H 150m : Vertical distance from the aircraft to the Home Point.

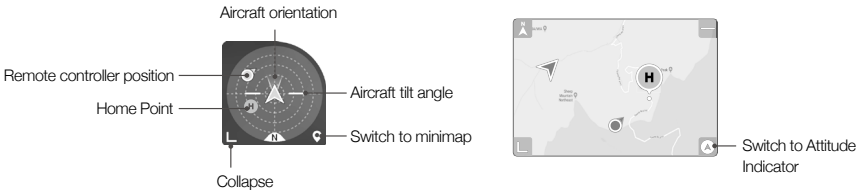
D 80m : Horizontal distance from the aircraft to the Home Point.

3m/s : Vertical speed of the aircraft.

5.6m/s : Horizontal speed of the aircraft.

18. Map

: Tap to switch to the Attitude Indicator, which displays information such as the orientation and tilt angle of the aircraft, as well as the locations of the remote controller and the Home Point.



19. Auto Takeoff/Landing/RTH

/ : Tap the icon. When the prompt appears, press and hold the button to initiate auto takeoff or landing.

: Tap to initiate Smart RTH and have the aircraft return to the last recorded Home Point.

20. Back

: Tap to return to the home screen.

Tap and hold anywhere on the screen in the camera view until the gimbal adjustment bar appears. Slide on the bar to adjust the gimbal angle.

Drag-select anywhere on the screen in the camera view to start FocusTrack.

Tap on the screen to enable focus or spot metering. Focus or spot metering will display differently depending on the focus mode, exposure mode, and spot metering mode. After using spot metering, tap and hold on the screen to lock the exposure. To unlock the exposure, tap and hold on the screen again.

- Fully charge your device before launching DJI Fly.
- Mobile cellular data is required when using DJI Fly. Contact your wireless carrier for data charges.
- DO NOT answer phone calls, text, or use other mobile functions during flight if you are using a mobile phone as your display device.
- Read all safety prompts, warning messages, and disclaimers carefully. Familiarize yourself with relevant regulations in your area. You are solely responsible for being aware of all relevant regulations and flying in a way that is compliant.
  a) Read and understand the warning messages before using the auto-takeoff and auto-landing features.

© 2023 DJI All Rights Reserved.

b) Read and understand the warning messages and disclaimers before setting the altitude beyond the default limit.
c) Read and understand the warning messages and disclaimers before switching flight modes.
d) Read and understand the warning messages and disclaimer prompts near or in GEO zones.
e) Read and understand the warning messages before using the Intelligent Flight modes.

- Land the aircraft immediately at a safe location if a prompt appears in the app instructing you to do so.
- Review all warning messages on the checklist displayed in the app before each flight.
- Use the in-app tutorial to practice your flight skills if you have never operated the aircraft or if you do not have sufficient experience to operate the aircraft with confidence.
- Cache the map data of the area where you intend to fly the aircraft by connecting to the internet before each flight.
- The app is designed to assist in your operations. Use your sound discretion and DO NOT rely on the app to control your aircraft. Your use of the app is subject to DJI Fly Terms of Use and DJI Privacy Policy. Read them carefully in the app.

 © 2023 DJI All Rights Reserved.

Flight

This section describes safe flight practices and flight restrictions.

© 2023 DJI All Rights Reserved.

Flight

After completing the pre-flight preparation, it is recommended to train your flying skills and practice flying safely. Make sure that all flights are carried out in an open area. The flying height is limited to 500 m. DO NOT exceed this height. Strictly abide by local laws and regulations when flying. Read the Safety Guidelines before flight to ensure the safe use of the product.

Flight Environment Requirements

1. Do not operate the aircraft in severe weather conditions including wind speeds exceeding 10.7 m/s, snow, rain, and fog.
2. Only fly in open areas. Tall buildings and large metal structures may affect the accuracy of the onboard compass and GNSS system. It is recommended to keep the aircraft at least 5 m away from structures.
3. Avoid obstacles, crowds, high-voltage power lines, trees, and bodies of water (recommended height is at least 3 m above water).
4. Minimize interference by avoiding areas with high levels of electromagnetism such as locations near power lines, base stations, electrical substations, and broadcasting towers.
5. The performance of the aircraft and its battery is limited when flying at high altitudes. Fly with caution. The maximum service ceiling above sea level of the aircraft is 4,000 m (13,123 ft) when flying with the Intelligent Flight Battery. If the Intelligent Flight Battery Plus is used, the maximum service ceiling above sea level drops to 3,000 m (9,843 ft). If a propeller guard is installed on the aircraft with the Intelligent Flight Battery, the maximum service ceiling above sea level becomes 1,500 m (4,921 ft).
6. GNSS cannot be used on the aircraft in the polar regions. Use the Vision Systems instead.
7. DO NOT take off from moving objects such as cars and ships.

Flight Limits

GEO (Geospatial Environment Online) System

DJI's Geospatial Environment Online (GEO) System is a global information system that provides real-time information on flight safety and restriction updates and prevents UAVs from flying in restricted airspace. Under exceptional circumstances, restricted areas can be unlocked to allow flights in. Prior to that, the user must submit an unlocking request based on the current restriction level in the intended flight area. The GEO system may not fully comply with local laws and regulations. Users shall be responsible for their own flight safety and must consult with the local authorities on the relevant legal and regulatory requirements before requesting to unlock a flight in a restricted area. For more information about the GEO system, visit https://www.dji.com/flysafe.

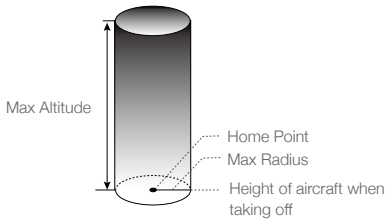
Flight Limits

For safety reasons, flight limits are enabled by default to help users operate this aircraft safely. Users can set flight limits on height and distance. Altitude limits, distance limits, and GEO zones function concurrently to manage flight safety when GNSS is available. Only altitude can be limited when GNSS is unavailable.

 © 2023 DJI All Rights Reserved.

Flight Altitude and Distance Limits

Maximum flight altitude restricts an aircraft's flight altitude, while maximum flight distance restricts an aircraft's flight radius around the Home Point. These limits can be set using the DJI Fly app for improved flight safety.



Home Point not manually updated during flight

Strong GNSS Signal

	Restriction	Prompt in DJI Fly
Max Altitude	Altitude of the aircraft cannot exceed the value set in DJI Fly.	Max flight altitude reached.
Max Radius	The straight-line distance from the aircraft to the Home Point cannot exceed the max flight distance set in DJI Fly.	Max flight distance reached.

Weak GNSS Signal

	Restriction	Prompt in DJI Fly
Max Altitude	Height is restricted to 30 m from the takeoff point if lighting is sufficient. Height is restricted to 5 m above the ground if lighting is not sufficient and the Infrared Sensing System is operating. Height is restricted to 30 m from the takeoff point if lighting is not sufficient and the Infrared Sensing System is not operating.	Max flight altitude reached.
Max Radius	No limits	N/A

⚠
- The altitude limit when the GNSS is weak will not be restricted if there was a strong GNSS signal (GNSS signal strength ≥ 2) when the aircraft was powered on.
- If the aircraft reaches a limit, you can still control the aircraft, but you cannot fly it any further. If the aircraft flies out of the max radius, it will automatically fly back within range when the GNSS signal is strong.
- For safety reasons, do not fly close to airports, highways, railway stations, railway lines, city centers, or other sensitive areas. Fly the aircraft only within your line of sight.

© 2023 DJI All Rights Reserved.

GEO Zones

DJI's GEO System designates safe flight locations, provides risk levels and safety notices for individual flights, and offers information on restricted airspace. All restricted flight areas are referred to as GEO Zones, which are further divided into Restricted Zones, Authorization Zones, Warning Zones, Enhanced Warning Zones, and Altitude Zones. Users can view such information in real time in DJI Fly. GEO Zones are specific flight areas, including but not limited to airports, large event venues, locations where public emergencies have occurred (such as forest fires), nuclear power plants, prisons, government properties, and military facilities. By default, the GEO system limits flights into or takeoffs within zones that may cause safety or security concerns. A GEO Zone Map that contains comprehensive information on GEO Zones around the globe is available on the official DJI website: https://www.dji.com/flysafe/geo-map.

Pre-Flight Checklist

1. Make sure the remote controller, mobile device, and Intelligent Flight Battery are fully charged.
2. Make sure the Intelligent Flight Battery and the propellers are mounted securely.
3. Make sure the aircraft arms are unfolded.
4. Make sure the gimbal and camera are functioning normally.
5. Make sure that there is nothing obstructing the motors and that they are functioning normally.
6. Make sure that DJI Fly is successfully connected to the aircraft.
7. Make sure all camera lenses and sensors are clean.
8. Only use genuine DJI parts or parts certified by DJI. Unauthorized parts or parts from non-DJI certified manufacturers may cause the system to malfunction and compromise safety.

Auto Takeoff/Landing

Auto Takeoff

Use the Auto Takeoff function:

1. Launch DJI Fly and enter the camera view.
2. Complete all steps in the pre-flight checklist.
3. Tap . If conditions are safe for takeoff, press and hold the button to confirm.
4. The aircraft will take off and hover approximately 1.2 m (3.9 ft) above the ground.

Auto Landing

Use the Auto Landing function:

1. Tap . If conditions are safe for landing, press and hold the button to confirm.
2. Auto landing can be cancelled by tapping .
3. If the Downward Vision System is working normally, Landing Protection will be enabled.
4. Motors will stop automatically after landing.

⚠ • Choose the proper place for landing.

 © 2023 DJI All Rights Reserved.

Starting/Stopping the Motors

Starting the Motors

Perform the Combination Stick Command (CSC) as shown below to start the motors. Once the motors have started spinning, release both sticks simultaneously.

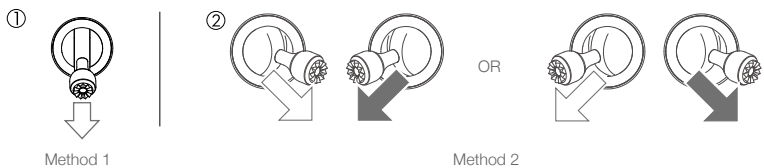


Stopping the Motors

The motors can be stopped in two ways:

Method 1: When the aircraft has landed, push the throttle stick down and hold. The motors will stop after three seconds.

Method 2: When the aircraft has landed, push the throttle stick down, and perform the same CSC used to start the motors. Release both sticks once the motors have stopped.



Stopping the Motors Mid-Flight

Stopping the motors mid-flight will cause the aircraft to crash. DO NOT stop the motors mid-flight unless you encounter an emergency situation, for example, if a collision has occurred, or if the aircraft is out of control and ascending or descending quickly, or the aircraft is rolling in the air. To stop the motors mid-flight, perform the same CSC used to start the motors. The default setting can be changed in DJI Fly.

Flight Test

Takeoff/Landing Procedures

1. Place the aircraft in an open, flat area with the rear of the aircraft facing towards you.
2. Power on the remote controller and the aircraft.
3. Launch DJI Fly and enter the camera view.
4. Wait for the aircraft self-diagnostics to complete. If DJI Fly does not show any irregular warning, you can start the motors.
5. Push the throttle stick up slowly to take off.
6. To land, hover over a level surface and gently push the throttle stick down to descend.

© 2023 DJI All Rights Reserved.

7. After landing, push the throttle down and hold. The motors will stop after three seconds.
8. Power off the Intelligent Flight Battery before the remote controller.

Video Suggestions and Tips

1. The pre-flight checklist is designed to help you fly safely and shoot videos during flight. Go through the full pre-flight checklist before each flight.
2. Select the desired gimbal operation mode in DJI Fly.
3. It is recommended to take photos or record videos when flying in Normal or Cine mode.
4. DO NOT fly in bad weather such as on rainy or windy days.
5. Choose the camera settings that best suit your needs.
6. Perform flight tests to establish flight routes and preview scenes.
7. Push the control sticks gently to ensure smooth and stable movement of the aircraft.

⚠ • Make sure to place the aircraft on a flat and steady surface before takeoff. DO NOT launch the aircraft from your palm or while holding it with your hand.

 © 2023 DJI All Rights Reserved.

Appendix

© 2023 DJI All Rights Reserved.

Appendix

Specifications

Aircraft	
Takeoff Weight	< 249 g (including the Intelligent Flight Battery, propellers, and a microSD card)
Dimensions (L×W×H)	Folded: 145×90×62 mm Unfolded (without propellers): 171×245×62 mm Unfolded (with propellers): 251×362×70 mm
Diagonal Distance	247 mm
Max Ascent Speed	S Mode: 5 m/s N Mode: 3 m/s C Mode: 2 m/s
Max Descent Speed	S Mode: 5 m/s N Mode: 3 m/s C Mode: 1.5 m/s
Max Horizontal Speed (near sea level, no wind)	S Mode: 16 m/s N Mode: 10 m/s C Mode: 6 m/s
Max Service Ceiling Above Sea Level	With Intelligent Flight Battery: 4,000 m (13,123 ft) With Intelligent Flight Battery Plus: 3,000 m (9,843 ft) With Intelligent Flight Battery and propeller guard: 1,500 m (4,921 ft)
Max Flight Time	34 minutes (with Intelligent Flight Battery and a flight speed of 21.6 kph in windless conditions) 47 minutes (with Intelligent Flight Battery Plus and a flight speed of 21.6 kph in windless conditions)
Max Hovering Time	30 minutes (with Intelligent Flight Battery and in windless conditions) 40 minutes (with Intelligent Flight Battery Plus and in windless conditions)
Max Flight Distance	18 km (with Intelligent Flight Battery and measured while flying at 43.2 kph in windless conditions) 25 km (with Intelligent Flight Battery Plus and measured while flying at 43.2 kph in windless conditions)
Max Wind Speed Resistance	10.7 m/s
Max Tilt Angle	S Mode: 40° (flying forward); 35° (flying backward) N Mode: 25° C Mode: 25°
Max Angular Velocity	S Mode: 130°/s by default (the adjustable range on DJI Fly is 20-250°/s) N Mode: 75°/s by default (the adjustable range on DJI Fly is 20-120°/s) C Mode: 30°/s by default (the adjustable range on DJI Fly is 20-60°/s)
Operating Temperature	-10° to 40° C (14° to 104° F)
GNSS	GPS + BEIDOU + GALILEO

© 2023 DJI All Rights Reserved.

Hovering Accuracy Range	Vertical: Vision Positioning: ±0.1 m GNSS Positioning: ±0.5 m Horizontal: Vision Positioning: ±0.3 m High Accuracy System Positioning: ±0.5 m
Transmission	
Video Transmission System	O3
Operating Frequency	2.400-2.4835 GHz, 5.725-5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <26 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.8 GHz: <26 dBm (FCC/SRRC), <14 dBm (CE)
Wi-Fi	
Protocol	802.11 a/b/g/n/ac
Operating Frequency	2.400-2.4835 GHz, 5.725-5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <19 dBm (FCC/CE/SRRC/MIC) 5.8 GHz: <20 dBm(FCC/SRRC), <14 dBm(CE)
Bluetooth	
Protocol	Bluetooth 5.2
Operating Frequency	2.400-2.4835 GHz
Transmitter Power (EIRP)	<8 dBm
Gimbal	
Mechanical Range	Tilt: -135° to +80° Roll: -135° to +45° Pan: -30° to +30°
Controllable Range	Tilt: -90° to +60° Roll: 0° or -90° (Landscape or Portrait)
Stabilization	3-axis (tilt, roll, pan)
Max Control Speed (tilt)	100°/s
Angular Vibration Range	±0.01°
Sensing System	
Forward Vision System	Precision Measurement Range: 0.39 m to 25 m Effective Sensing Speed: Flight speed < 10.5 m/s FOV: 106° (horizontal), 90° (vertical)
Backward Vision System	Precision Measurement Range: 0.36 m to 23.4 m Effective Sensing Speed: Flight speed < 8 m/s FOV: 58° (horizontal), 73° (vertical)
Downward Vision System	Precision Measurement Range: 0.15 m to 9 m Precision Hovering Range: 0.5 m to 12 m Effective Sensing Speed: Flight speed < 3 m/s FOV: Front and back 104.8°, left and right 87.6°
Operating Environment	Non-reflective, discernible surfaces with diffuse reflectivity of >20%, and adequate illuminance of >15 lux
Camera	
Image Sensor	1/1.3-in CMOS, Effective Pixels: 48 MP

© 2023 DJI All Rights Reserved.

Lens	FOV: 82.1° Format Equivalent: 24 mm Aperture: f/1.7 Shooting Range: 1 m to ∞
ISO	Video: 100-6400 Photo: 100-6400
Electronic Shutter Speed	1/8000-2 s
Max Image Size	4:3: 8064×6048 (48 MP); 4032×3024 (12 MP) 16:9: 4032×2268 (12 MP)
Still Photography Modes	Single Interval: 2/3/5/7/10/15/20/30/60 s (JPEG) 2/3/5/7/10/15/20/30/60 s (JPEG+RAW) Automatic Exposure Bracketing (AEB): 3/5 bracketed frames at 0.7 EV Step Pano: Sphere, 180°, Wide Angle, Vertical
Video Resolution	4K: 3840×2160@24/25/30/48/50/60 fps 2.7K: 2720×1530@24/25/30/48/50/60 fps FHD: 1920×1080@24/25/30/48/50/60 fps Slow Motion: 1920×1080@120 fps
Max Video Bitrate	150 Mbps
Supported File System	FAT32 (≤32 GB) exFAT (>32 GB)
Photo Format	JPEG/DNG
Video Format	MP4/MOV (H.264/H.265)
DJI RC-N1 Remote Controller	
Transmission	
Video Transmission System	When used with different aircraft hardware configurations, the DJI RC-N1 Remote Controller will automatically select the corresponding firmware version for updating, and support the following transmission technologies depending on the linked aircraft model: a. DJI Mini 2/ DJI Mavic Air 2: O2 b. DJI Air 2S: O3 c. DJI Mavic 3: O3+ d. DJI Mini 3 Pro: O3
Operating Frequency	2.400 - 2.4835 GHz, 5.725 - 5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <26 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.8 GHz: <26 dBm (FCC), <23 dBm (SRRC), <14 dBm (CE)
Max Transmission Distance (unobstructed, free of interference)	12 km (FCC); 8 km (CE/SRRC/MIC)
Transmission Distance (in common scenarios)	Strong interference (e.g., city center): 1.5-3 km Moderate interference (e.g., suburbs, small towns): 3-7 km No interference (e.g., rural areas, beaches): 7-12 km

 © 2023 DJI All Rights Reserved.

General	
Operating Temperature	-10° to 40° C (14° to 104° F)
Battery Capacity	5,200 mAh
Battery Type	Li-ion
Chemical System	LiNiMnCoO2
Operating Current/Voltage	1200 mA@3.6 V (with Android device) 700 mA@3.6 V (with iOS device)
Supported Mobile Device Size	180×86×10 mm (Height×Width×Thickness)
Supported USB Port Types	Lightning, Micro USB (Type-B), USB-C
DJI RC Remote Controller	
Transmission	
Video Transmission System	When used with different aircraft hardware configurations, the DJI RC Remote Controller will automatically select the corresponding firmware version for updating. It supports the O3 transmission technology when linked with DJI Mini 3 Pro.
Operating Frequency	2.400 - 2.4835 GHz, 5.725 - 5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <26 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.8 GHz: <26 dBm (FCC), <23 dBm (SRRC), <14 dBm (CE)
Max Transmission Distance (unobstructed, free of interference)	12 km (FCC); 8 km (CE/SRRC/MIC)
Transmission Distance (in common scenarios)	Strong interference (e.g., city center): 1.5-3 km Moderate interference (e.g., suburbs, small towns): 3-7 km No interference (e.g., rural areas, beaches): 7-12 km
Wi-Fi	
Protocol	802.11a/b/g/n
Operating Frequency	2.400-2.4835 GHz; 5.150-5.250 GHz; 5.725-5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <23 dBm (FCC); <20 dBm (CE/SRRC/MIC) 5.1 GHz: <23 dBm (FCC/CE/SRRC/MIC) 5.8 GHz: <23 dBm (FCC/SRRC), <14 dBm (CE)
Bluetooth	
Protocol	Bluetooth 4.2
Operating Frequency	2.400-2.4835 GHz
Transmitter Power (EIRP)	<10 dBm
General	
Operating Temperature	-10° to 40° C (14° to 104° F)
GNSS	GPS + BEIDOU + GALILEO
Battery Capacity	5,200 mAh
Battery Type	Li-ion
Chemical System	LiNiMnCoO2
Operating Current/Voltage	1250 mA@3.6 V
Storage Capacity	microSD card supported

© 2023 DJI All Rights Reserved.

Supported microSD Cards for DJI RC Remote Controller	UHS-I Speed Grade 3 rating microSD card
Recommended microSD Cards for DJI RC Remote Controller	SanDisk Extreme 64GB V30 A1 microSDXC SanDisk Extreme 128GB V30 A2 microSDXC SanDisk Extreme 256GB V30 A2 microSDXC SanDisk Extreme 512GB V30 A2 microSDXC SanDisk Extreme Pro 64GB V30 A2 microSDXC SanDisk Extreme Pro 256GB V30 A2 microSDXC SanDisk Extreme Pro 400GB V30 A2 microSDXC SanDisk High Endurance 64GB V30 microSDXC SanDisk High Endurance 256GB V30 microSDXC Kingston Canvas Go Plus 64GB V30 A2 microSDXC Kingston Canvas Go Plus 256GB V30 A2 microSDXC Lexar High Endurance 64GB V30 microSDXC Lexar High Endurance 128GB V30 microSDXC Lexar 633x 256GB V30 A1 microSDXC Lexar 1066x 64GB V30 A2 microSDXC Samsung EVO Plus 512GB microSDXC
Intelligent Flight Battery	
Battery Capacity	2453 mAh
Standard Voltage	7.38 V
Max Charging Voltage	8.5 V
Battery Type	Li-ion
Chemical System	LiNiMnCoO2
Energy	18.10 Wh
Weight	Approx. 80.5 g
Charging Temperature	5° to 40° C (41° to 104° F)
Intelligent Flight Battery Plus	
Battery Capacity	3850 mAh
Standard Voltage	7.38 V
Max Charging Voltage	8.5 V
Battery Type	Li-ion
Chemical System	LiNiMnCoO2
Energy	28.4 Wh
Weight	Approx. 121 g
Charging Temperature	5° to 40° C (41° to 104° F)
Two-Way Charging Hub	
Input	USB-C: 5V ⎓ 3A, 9V ⎓ 3A, 12V ⎓ 3A
Output	USB: 5V ⎓ 2A
Rated Power	30 W
Charging Type	Charge three batteries in sequence
Charging Temperature	5° to 40° C (41° to 104° F)

 © 2023 DJI All Rights Reserved.

Supported Batteries	DJI Mini 3 Pro Intelligent Flight Battery (BWX162-2453-7.38) DJI Mini 3 Pro Intelligent Flight Battery Plus (BWX162-3850-7.38)
App	
Name	DJI Fly
Required Operating System	iOS v11.0 or later; Android v6.0 or later
Storage	
Supported microSD Cards for Aircraft	UHS-I Speed Grade 3 rating microSD card
Recommended microSD Cards for Aircraft	SanDisk Extreme 64GB V30 A1 microSDXC SanDisk Extreme 128GB V30 A2 microSDXC SanDisk Extreme 256GB V30 A2 microSDXC SanDisk Extreme 512GB V30 A2 microSDXC SanDisk Extreme Pro 64GB V30 A2 microSDXC SanDisk Extreme Pro 256GB V30 A2 microSDXC SanDisk Extreme Pro 400GB V30 A2 microSDXC SanDisk High Endurance 64GB V30 microSDXC SanDisk High Endurance 256GB V30 microSDXC SanDisk Max Endurance 32GB V30 microSDHC SanDisk Max Endurance 128GB V30 microSDXC SanDisk Max Endurance 256GB V30 microSDXC Kingston Canvas Go Plus 64GB V30 A2 microSDXC Kingston Canvas Go Plus 256GB V30 A2 microSDXC Lexar High Endurance 64GB V30 microSDXC Lexar High Endurance 128GB V30 microSDXC Lexar 667x 64GB V30 A1 microSDXC Lexar 633x 256GB V30 A1 microSDXC Lexar 1066x 64GB V30 A2 microSDXC Lexar 1066x 128GB V30 A2 microSDXC Lexar 1066x 256GB V30 A2 microSDXC Samsung PRO Plus 128GB V30 A2 microSDXC Samsung EVO Plus 512GB microSDXC

⚠
- Different shooting modes may support different ISO ranges. See the actual adjustable ISO range for different shooting modes in DJI Fly.
- The photos taken in Single Shot mode have no HDR effect in the following situations:

  a) When the aircraft is in motion or stability is affected due to high wind speeds;
  b) When using FocusTrack;
  c) When white balance is set to manual mode;
  d) The camera is in Auto mode and the EV setting is adjusted manually;
  e) The camera is in Auto mode and the AE lock is turned on;
  f) The camera is in Pro mode.
- DJI Mini 3 Pro doesn't include a built-in fan, which effectively reduces the drone's power consumption and increases the battery life. Meanwhile, it uses the wind generated by the propellers to dissipate heat during the flight, ensuring excellent heat dissipation effects and preventing overheating. When DJI Mini 3 Pro stays in standby mode for a long time, its temperature may continuously rise. With a built-in temperature control system, the drone, when in standby mode can detect the current temperature and decide whether to automatically power off to prevent overheating. The common standby time periods of DJI Mini 3 Pro in the stationary state are as follows. If the time is exceeded, the drone may automatically power off to prevent overheating (tested in an indoor environment with an ambient temperature of 25°C).

© 2023 DJI All Rights Reserved.

a) When in standby mode on the ground: about 22 minutes;
b) When updating firmware: about 19 minutes (sufficient for 3 times of upgrades);
c) When using QuickTransfer immediately after powering on: about 35 minutes;
d) When using QuickTransfer after landing: about 35 minutes;

Firmware Update

Use DJI Fly or DJI Assistant 2 (Consumer Drones Series) to update the aircraft and the remote controller firmware.

Using DJI Fly

When connecting the aircraft or remote controller to DJI Fly, you will be notified if a new firmware update is available. To start updating, connect your remote controller or mobile device to the internet and follow the on-screen instructions. Note that you cannot update the firmware if the remote controller is not linked to the aircraft. An internet connection is required.

Using DJI Assistant 2 (Consumer Drones Series)

Update the aircraft and remote controller firmware separately using DJI Assistant 2 (Consumer Drones Series).

Follow the instructions below to update the aircraft firmware:

1. Launch DJI Assistant 2 (Consumer Drones Series) on your computer and log in with your DJI account.
2. Power on the aircraft and connect the aircraft to the computer via the USB-C port within 20 seconds.
3. Select DJI Mini 3 Pro and click Firmware Updates.
4. Select the firmware version.
5. Wait for the firmware to download. The firmware update will start automatically.
6. Wait for the firmware update to complete.

Follow the instructions below to update the remote controller firmware:

1. Launch DJI Assistant 2 (Consumer Drones Series) on your computer and log in with your DJI account.
2. Power on the remote controller and connect it to the computer via the USB-C port.
3. Select the corresponding remote controller and click Firmware Updates.
4. Select the firmware version.
5. Wait for the firmware to download. The firmware update will start automatically.
6. Wait for the firmware update to complete.

 © 2023 DJI All Rights Reserved.

- Make sure to follow all the steps to update the firmware, otherwise the update may fail.
- The firmware update will take approximately 10 minutes. It is normal for the gimbal to go limp, aircraft status indicators to blink, and the aircraft to reboot. Wait patiently until the update is complete.
- Make sure the computer is connected to the internet during the update.
- Before performing an update, make sure the Intelligent Flight Battery has at least 40% power and the remote controller 20%.
- Do not unplug the USB-C cable during an update.

Aftersales Information

Visit https://www.dji.com/support to learn more about aftersales service policies, repair services, and support.

FAR Remote ID Compliance Information

The aircraft complies with the requirements of 14 CFR Part 89:

- The aircraft automatically broadcasts Remote ID messages from takeoff to shut down. An external device such as a cell phone or tablet is required to be connected as a location source to DJI mobile devices without an integrated GNSS system [1], and must run the DJI flight control app such as DJI Fly in the foreground and always allow the DJI flight control app to obtain its accurate location information. The connected external device must minimally be one of the following:
  a) FCC Certified personal wireless device that uses GPS with SBAS (WAAS) for location services; or
  b) FCC Certified personal wireless device with integrated GNSS.

  Also, the external device must be operated in a way that does not interfere with the location reported and its correlation to the operator location.
- The aircraft automatically initiates a pre-flight self-test (PFST) of the Remote ID system before takeoff and cannot take off if it does not pass the PFST [2]. The results of the PFST of the Remote ID system can be viewed in either a DJI flight control app such as DJI Fly or DJI goggles.
- The aircraft monitors the Remote ID system functionality from pre-flight to shut down. If the Remote ID system malfunctions or has a failure, an alarm will be displayed in either a DJI flight control app such as DJI Fly or DJI goggles.

Footnotes

[1] DJI mobile devices without an integrated GNSS system such as DJI RC-N1, DJI FPV Goggles V2, and DJI Goggles 2.

[2] The pass criterion for PFST is that the hardware and software of the Remote ID required-data source and transmitter radio in the Remote ID system are functioning properly.

 © 2023 DJI All Rights Reserved.

DJI Support
http://www.dji.com/support

This content is subject to change.

Download the latest version from
http://www.dji.com/mini-3-pro

If you have any questions about this document, please contact DJI by sending a message to **DocSupport@dji.com**.

DJI is a trademark of DJI.
Copyright © 2022 DJI All Rights Reserved.