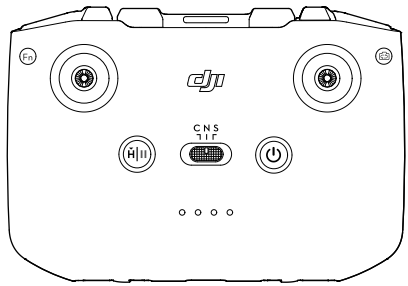
RC-N3

User Manual

v1.2 2025.01



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.

Using this Manual

Legend

⚠ Important Hints and Tips Reference

Downloading the DJI Fly App

Make sure to use DJI Fly with this product. Scan the QR code to download the latest version.

⚠
- To check the Android and iOS operating system versions supported by DJI Fly, visit https://www.dji.com/downloads/djiapp/dji-fly.
- The interface and functions of DJI Fly may vary as the software version is updated. Actual usage experience is based on the software version used.

Downloading DJI Assistant 2

Download DJI ASSISTANT™ 2 (Consumer Drones Series) at:

https://www.dji.com/downloads/softwares/dji-assistant-2-consumer-drones-series

Download DJI ASSISTANT™ 2 at:

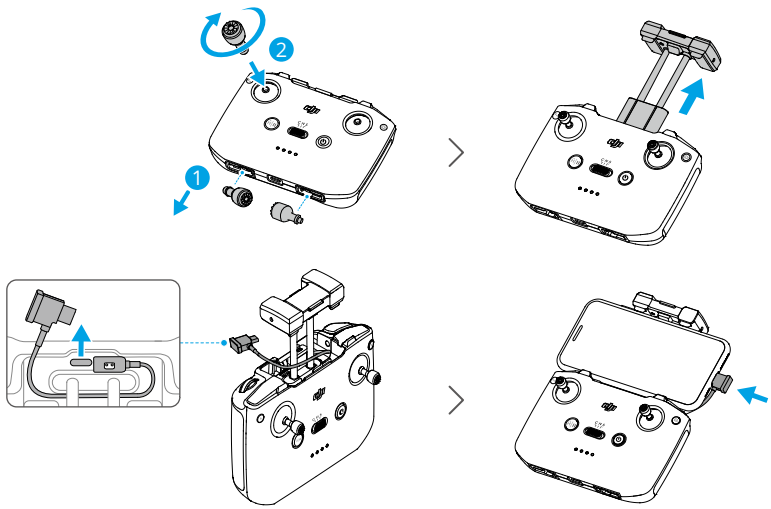
https://www.dji.com/downloads

⚠
- 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 meet the operating temperature range requirements of that grade.

Contents

1 Preparing the 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 (the cable with a USB-C connector is connected by default). 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.
- Adjust the mobile device holder to make sure your mobile device is firmly secure.

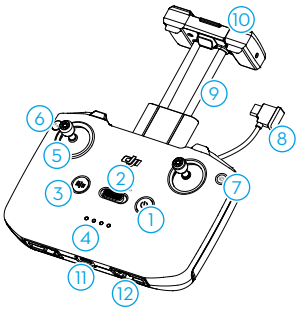
2 Linking the Remote Controller

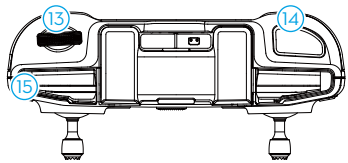
The remote controller is already linked to the aircraft when purchased together as a combo. Otherwise, follow the steps below to link the devices.

1. Power on the aircraft and the remote controller.
2. Launch DJI Fly.
3. In camera view, tap ••• > **Control** > **Re-pair to Aircraft**. During linking, the remote controller beeps.
4. Press and hold the power button of the aircraft for more than four seconds. The aircraft beeps once, and its battery level LEDs blink in sequence to indicate it is ready to link. The remote controller will beep twice to indicate linking is successful.

- Make sure the remote controller is within 0.5 m of the aircraft during linking.
- The remote controller will automatically unlink from an aircraft if a new remote controller is linked to the same aircraft.
- You can also start linking by following the method below. In the home screen of DJI Fly, tap **Connection Guide**, select aircraft model, and then select **Connect with RC Only**.

3 Overview





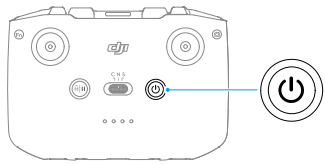
1. Power Button
2. Flight Mode Switch
3. Flight Pause/Return to Home (RTH) Button
4. Battery Level LEDs
5. Control Sticks
6. Customizable Button
7. Photo/Video Button
8. Remote Controller Cable
9. Mobile Device Holder
10. Antennas
11. USB-C Port
12. Control Stick Storage Slots
13. Gimbal Dial
14. Shutter/Record Button
15. Mobile Device Slot

4 Operations

4.1 Powering On/Off

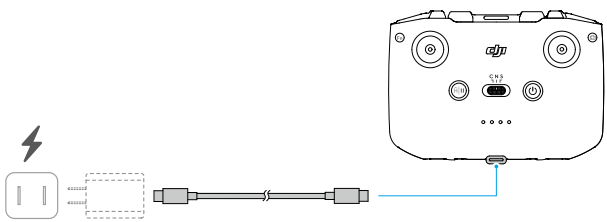
Press the power button once to check the current battery level.

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



4.2 Charging the Battery

Connect the charger to the USB-C port on the remote controller.

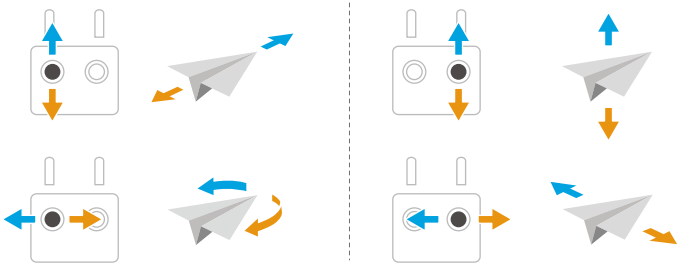


- Fully charge the remote controller before each flight. The remote controller sounds an alert when the battery level is low.
- Fully charge the battery at least once every three months to maintain the battery's health.

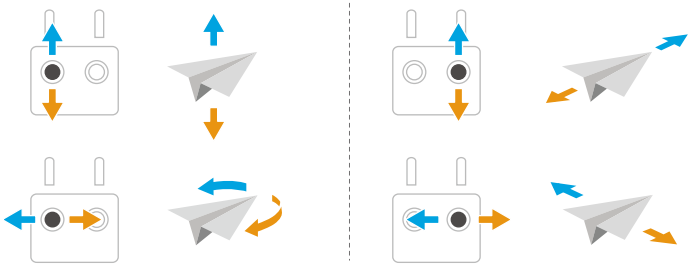
4.3 Controlling the Aircraft

The control sticks of the remote controller can be used to control the aircraft movements. The control sticks can be operated in Mode 1, Mode 2, or Mode 3, as shown below.

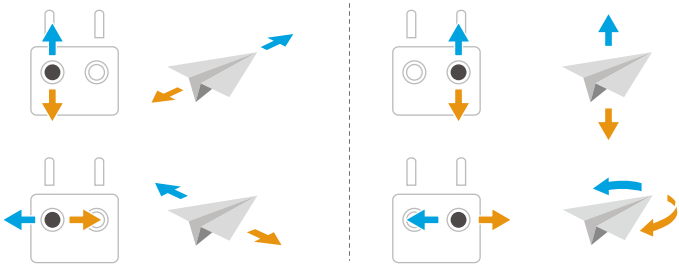
Mode 1



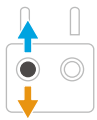
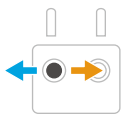
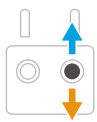
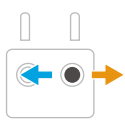
Mode 2



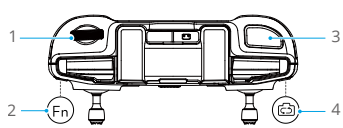
Mode 3



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

Remote Controller (Mode 2)	Aircraft	Operation
		Throttle Stick • Push the stick up to ascend and down to descend. • The more the stick is pushed away from the center, the faster the aircraft changes elevation. Make sure to gently push the stick up when taking off to prevent sudden and unexpected changes in altitude.
		Yaw Stick • Push the stick left to rotate the aircraft counterclockwise and right to rotate the aircraft clockwise. • The more the stick is pushed away from the center, the faster the aircraft rotates.
		Pitch Stick • Push the stick up to fly forward and down to fly backward. • The more the stick is pushed away from the center, the faster the aircraft moves.
		Roll Stick • Push the stick left to fly left and right to fly right. • The more the stick is pushed away from the center, the faster the aircraft moves.

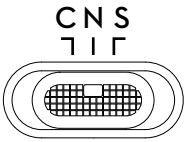
4.4 Controlling the Gimbal and Camera



1. **Gimbal Dial:** Control the tilt of the gimbal.
2. **Customizable Button:** Press once to recenter the gimbal or point the gimbal downward by default.
3. **Shutter/Record Button:** Press once to take a photo or to start or stop recording.
4. **Photo/Video Button:** Press once to switch between photo and video mode.

4.5 Flight Mode Switch

Toggle the switch to select the desired flight mode.

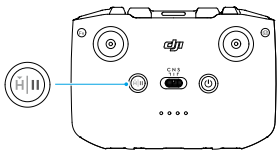


Position	Flight Mode
S	Sport Mode
N	Normal Mode
C	Cine Mode

4.6 Flight Pause/RTH Button

Press once to make the aircraft brake and hover in place.

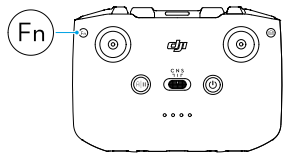
Press and hold the button until the remote controller beeps and starts RTH. The aircraft will return to the last recorded Home Point. Press the button again to cancel RTH and regain control of the aircraft.



Refer to the Return to Home (RTH) section for more details about RTH function.

4.7 Customizable Button

Press the customizable button to recenter the gimbal or point the gimbal downward by default. To set the function, go to camera view in DJI Fly, and tap ••• > **Control** > **Button Customization**.



5 Battery Level LEDs

Blinking Pattern	Battery Level
	76-100%
	51-75%
	26-50%
	0-25%

6 Remote Controller Alert

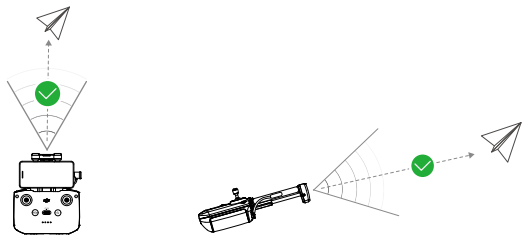
The remote controller sounds an alert during RTH, which cannot be cancelled. The remote controller sounds an alert when the battery level of the remote controller is low. A low battery level alert can be cancelled by pressing the power button. When the battery level is critically low, the alert cannot be cancelled.

There will be an alert if the remote controller is not used for a period while it is powered on but is not connected to the aircraft or the DJI Fly app on the mobile device. The remote controller will automatically power off after the alert stops. Move the control sticks or press any button to cancel the alert.

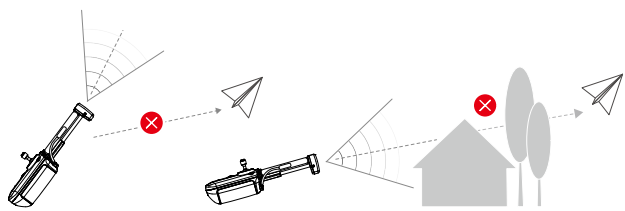
7 Optimal Transmission Zone

The signal between the aircraft and the remote controller is most reliable when the antennas are positioned in relation to the aircraft as illustrated below. If the signal is weak, adjust the remote controller orientation or antenna position, or fly the aircraft closer to the remote controller.

Optimal Transmission Zone



Weak Signal



- 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 according to the attitude indicator display to make sure that the aircraft is in the optimal transmission range.

8 Appendix

8.1 Specifications

DJI RC-N3 Remote Controller

Max Operating Time	Without Charging Any Mobile Device: 3.5 hours When Charging a Mobile Device: 1.5 hours
Operating Temperature	-10° to 40° C (14° to 104° F)
Charging Temperature	5° to 40° C (14° to 104° F)
Charging Time	2 hours
Charging Type	5 V, 2 A
Battery Capacity	2600 mAh
Weight	Approx. 320 g
Dimensions	104.2×150×45.2 mm (L×W×H)
Operating Frequency [1]	2.400-2.4835 GHz 5.170-5.250 GHz 5.725-5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: < 33 dBm (FCC) < 20 dBm (CE/SRRC/MIC) 5.1 GHz: < 23 dBm (CE) 5.8 GHz: < 33 dBm (FCC) < 14 dBm (CE) < 30 dBm (SRRC)

[1] Operating frequency allowed varies among countries and regions. Please refer to local laws and regulations for more information.

8.2 Firmware Update

Use DJI Fly or DJI Assistant 2 (Consumer Drones Series) to update the device.

Using DJI Fly

When using the remote controller, connect the aircraft and remote controller, and run DJI Fly. You will be notified if a new firmware update is available. Follow the on-screen instructions to start the update. Note that you cannot update the firmware if the remote

controller is not linked to the aircraft. An internet connection is required during the firmware update.

Using DJI Assistant 2 (Consumer Drones Series)

Use DJI Assistant 2 (Consumer Drones Series) to update all your devices separately.

1. Power on the device. Connect the device to a computer with a USB-C cable.
2. Launch DJI Assistant 2 (Consumer Drones Series) and log in with your DJI account.
3. Select the device and click **Firmware Update** on the left side of the screen.
4. Select the firmware version.
5. Wait for the firmware to download. The firmware update will start automatically. Wait for the firmware update to complete.

⚠
- Make sure to follow all the steps to update the firmware, otherwise the update may fail.
- Make sure the computer is connected to the internet during the update.
- DO NOT unplug the USB-C cable during an update.
- Before performing an update, make sure that the device is at least 20% charged.

8.3 Return to Home (RTH)

Read this section carefully and make sure that you are familiar with the aircraft action during Return to Home (RTH). The following descriptions are only suitable for scenarios where the remote controller is used with the DJI Neo aircraft.

When using the aircraft with remote control devices, RTH is supported. The RTH function will automatically fly the aircraft back to the last recorded Home Point. RTH can be triggered in three ways: the user actively triggers RTH, the aircraft has low battery, or the remote control signal or video transmission signal has been lost (Failsafe RTH is triggered). If the aircraft records the Home Point successfully and the positioning system is functioning normally, when the RTH function is triggered, the aircraft will automatically fly back and land at the Home Point.

- Home Point: The Home Point will be recorded at takeoff as long as the aircraft has a strong GNSS signal 26. After the Home Point is recorded, a prompt will appear in the DJI Fly app. If it is necessary to update the Home Point during a flight (such as if you have changed position), the Home Point can be manually updated in settings in the DJI Fly app.

When using the aircraft with the remote controller, during RTH, the AR RTH route will be displayed in the camera view, in order to view the return path and ensure flight safety.

The camera view also displays the AR Home Point. When the aircraft reaches above the Home Point, the gimbal camera will automatically point downwards. The AR aircraft shadow will appear in the camera view when the aircraft is approaching the ground, enabling you to control the aircraft to land more accurately in your preferred location.

The AR Home Point, AR RTH route, and AR aircraft shadow will be displayed in the camera view by default. The display can be changed in DJI Fly. Go to camera view, tap ••• > **Safety** > **AR Settings**.

⚠
- The AR RTH route is only used for reference, and may deviate from the actual flight route in different scenarios. Always pay attention to the liveview on the screen during RTH. Fly with caution.
- During RTH, the aircraft will automatically adjust the gimbal tilt to point the camera toward the RTH route by default. Adjusting the camera orientation manually will stop the aircraft from automatically adjusting the gimbal tilt, which may prevent the AR RTH route from being viewed.

Notice

⚠
- The aircraft may not be able to return to the Home Point normally if the positioning system is functioning abnormally. During Failsafe RTH, the aircraft may enter ATTI mode and land automatically if the positioning system is functioning abnormally.
- When the aircraft is flying in an environment surrounded by obstacles (such as near tall buildings or under trees), the location of the Home Point displayed in the liveview may be inaccurate. Fly with caution.

- It is important to set a suitable RTH altitude before each flight. Launch DJI Fly and set the RTH altitude. The default RTH altitude is 30 m.
- GEO zones may affect 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.
- If the max altitude is adjusted below the current altitude during RTH, the aircraft will descend to the max altitude first and then continue returning to home.
- The RTH Altitude cannot be changed during RTH.
- When the remote controller signal is normal during RTH, the pitch stick can only be used to control the flight speed. The orientation and altitude cannot be controlled and the aircraft cannot be controlled to fly to the left or right. Constantly pushing the pitch stick to accelerate will increase the battery power consumption speed. The aircraft will brake and hover in place and exit RTH if the pitch stick is pushed all the way down. You will regain control of the aircraft after the pitch stick is released.
- If the Home Point is within the Altitude Zone but the aircraft is not, when the aircraft reaches the Altitude Zone it will descend below the altitude limit, which may be lower than the set RTH altitude. Fly with caution.
- RTH cannot be triggered during auto landing.

Trigger Method

The user actively triggers RTH

During flight, you can trigger RTH by pressing and holding the RTH button on the remote controller, or tapping on the left side of the camera view in DJI Fly and then pressing and holding the RTH icon.

Aircraft low battery

During flight, if the battery level is low and only sufficient to fly to the Home Point, a warning prompt will appear in DJI Fly. If you confirm RTH or do not take action before the countdown ends, the aircraft will automatically initiate low battery RTH.

If you cancel the low battery RTH prompt and continue flying the aircraft, the aircraft will land automatically when the current battery level can only support the aircraft long enough to descend from its current altitude.

The remote control devices can be used to control the horizontal movement of the aircraft during the landing process. Fly the aircraft to a suitable place for landing as soon as possible.

⚠
- When the battery level is too low and there is not enough power to return home, land the aircraft as soon as possible. Otherwise, the aircraft will crash after the battery power runs out.
- DO NOT keep pushing the throttle stick upward during auto landing. Otherwise, the aircraft will crash after the battery is completely depleted.

Loss of remote control or video transmission signal

When the remote control signal or video transmission signal is lost, the aircraft will automatically initiate Failsafe RTH if the Signal Lost Action is set to RTH.

The aircraft will fly backwards 20 m along its original flight route and then perform the RTH procedure. The aircraft will directly perform the RTH procedure if the signal is restored when flying backward along the original flight route.

RTH Procedure

After RTH is triggered, the aircraft brakes and hovers in place.

- If the RTH distance is farther than 20 m, it ascends to the RTH altitude and flies back to the Home Point. The aircraft flies to the Home Point at the current altitude if the current altitude is higher than the RTH altitude.
- If the RTH distance is farther than 5 m but less than 20 m, the aircraft adjusts its orientation and flies straight at the current altitude back to the Home Point.
- The aircraft lands immediately if the RTH distance is less than 5 m.

8.4 Aftersales Information

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

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