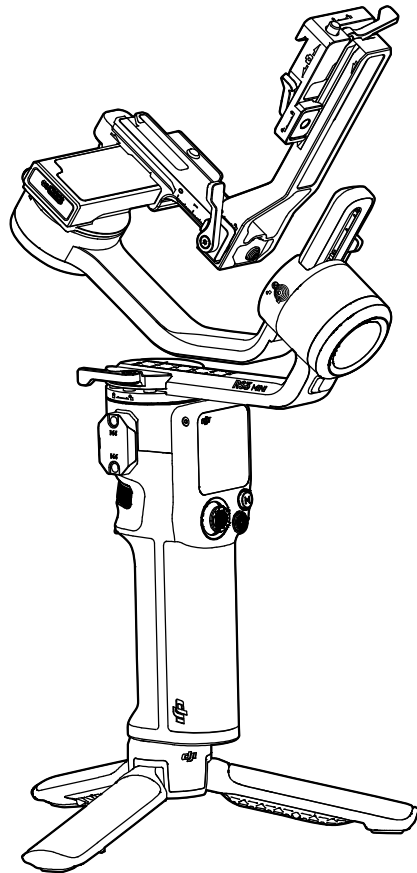


# **dji** RS 3 MINI

## User Manual

v1.0 2023.01



### **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

## Read Before First Use

Read the following documents before using DJI™ RS 3 Mini.

DJI RS 3 Mini Safety Guidelines

DJI RS 3 Mini Quick Start Guide

DJI RS 3 Mini User Manual

It is recommended to watch all the tutorial videos on the official website (<https://www.dji.com/rs-3-mini>) or in the DJI Ronin app and read the Safety Guidelines before using for the first time. Make sure to review the Quick Start Guide before using for the first time and refer to this user manual for more information.

## Download the Ronin App and Watch the Tutorial Videos

Scan the QR code to download the RONIN™ app and watch the tutorial videos.



<https://s.dji.com/guide22>



iOS 11.0 or above



Android 7.0 or above

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# Introduction

DJI RS 3 Mini is a professional single-handed 3-axis gimbal specifically designed for mirrorless cameras. It is compatible with a wide range of mainstream cameras and lenses and supports a tested payload of up to 2 kg (4.4 lbs). DJI RS 3 Mini boasts enhanced gimbal performance thanks to the 3rd-Gen RS Stabilization Algorithm.

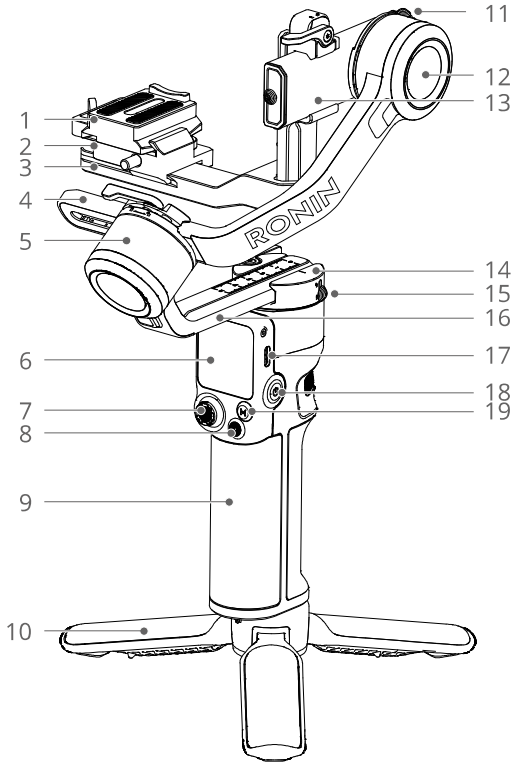
DJI RS 3 Mini weighs 850 g, which makes it lightweight for users to carry on the go. <sup>[1]</sup> The gimbal can be switched between horizontal and vertical shooting without additional accessories. With a 1.4-inch full-color touchscreen, users can calibrate the gimbal and set parameters. Users can control the gimbal movement, shutter, recording, and camera focus using the onboard buttons. DJI RS 3 Mini can be paired with mainstream mirrorless cameras via Bluetooth for wireless camera control. With the NATO port, accessories such as the DJI RS Briefcase Handle can be used. The grip has a built-in battery with a capacity of 2450 mAh, providing a maximum runtime of up to 10 hours. <sup>[2]</sup>

After connecting to the Ronin app, easily control gimbal movement and parameter settings with intelligent functions such as Panorama, Timelapse, and Track.

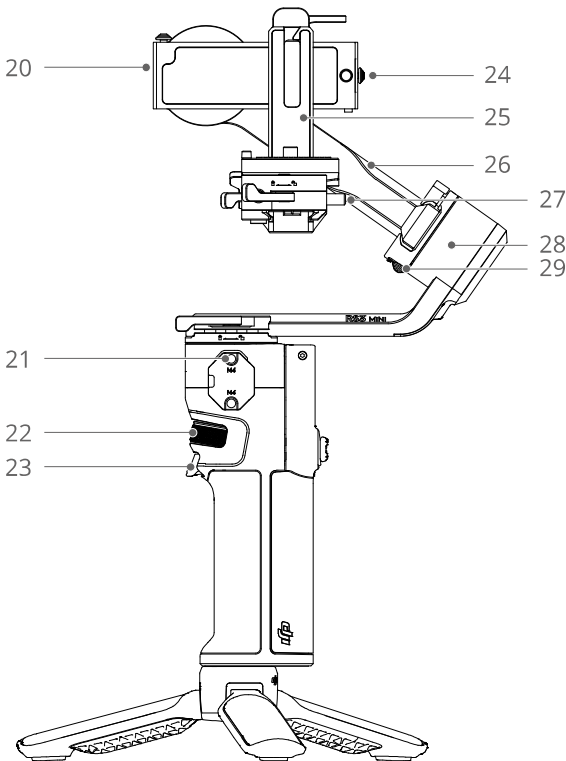
[1] The weight in Horizontal Shooting Mode is 850 g (1.8 lbs), and in Portrait Mode is 795 g (1.75 lbs) with the quick-release plate attached (excluding both the extended Grip/Tripod and arm protector and screw kit). The actual weight may vary depending on the manufacturing process.

[2] Measured with the equipment in a level and stationary state. The maximum runtime is for reference only.

## DJI RS 3 Mini Diagram



1. Upper Quick-Release Plate
2. Lower Quick-Release Plate
3. Horizontal Arm
4. Roll Arm
5. Roll Motor
6. 1.4-inch Full-Color Touchscreen
7. Joystick
8. Camera Control Button
9. Grip (Built-in battery with 1/4"-20 screw hole)
10. Extended Grip/Tripod
11. Tilt Lock
12. Tilt Motor
13. Tilt Arm
14. Pan Motor
15. Pan Lock
16. Pan Arm
17. Power Port (USB-C)
18. Power Button
19. M Button

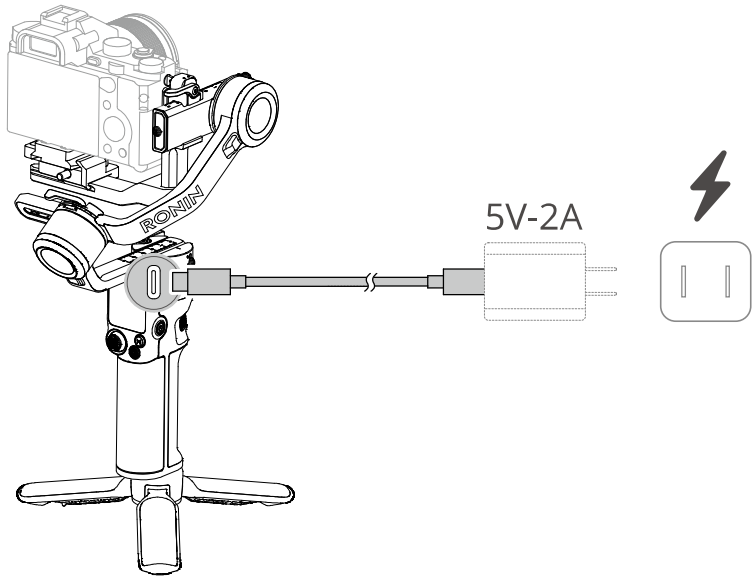


20. RSS Camera Control Port (USB-C)
21. NATO Port
22. Front Dial
23. Trigger
24. Safety Lock
25. Vertical Arm
26. Roll Arm
27. Safety Lock
28. Roll Motor
29. Roll Lock

# Using for the First Time

## Charging DJI RS 3 Mini

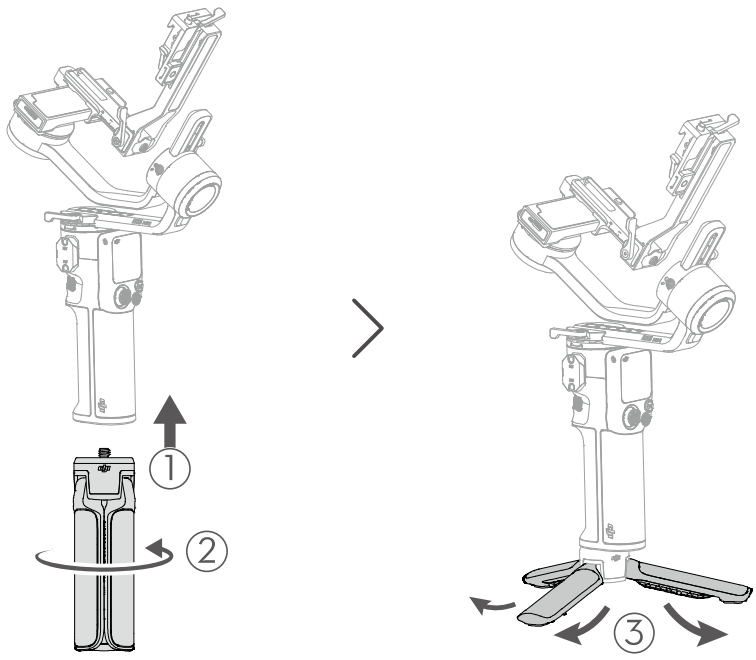
Charge DJI RS 3 Mini through the power port (USB-C) using the charging cable (included) and a USB adapter (not included). It is recommended to use a 5V-2A USB adapter. The battery can be fully charged in approximately 2.5 hours. [1] Press the power button to check the battery level on the screen when powered off.



[1] Tested in a 25° C (77° F) environment while using a 10W charger.

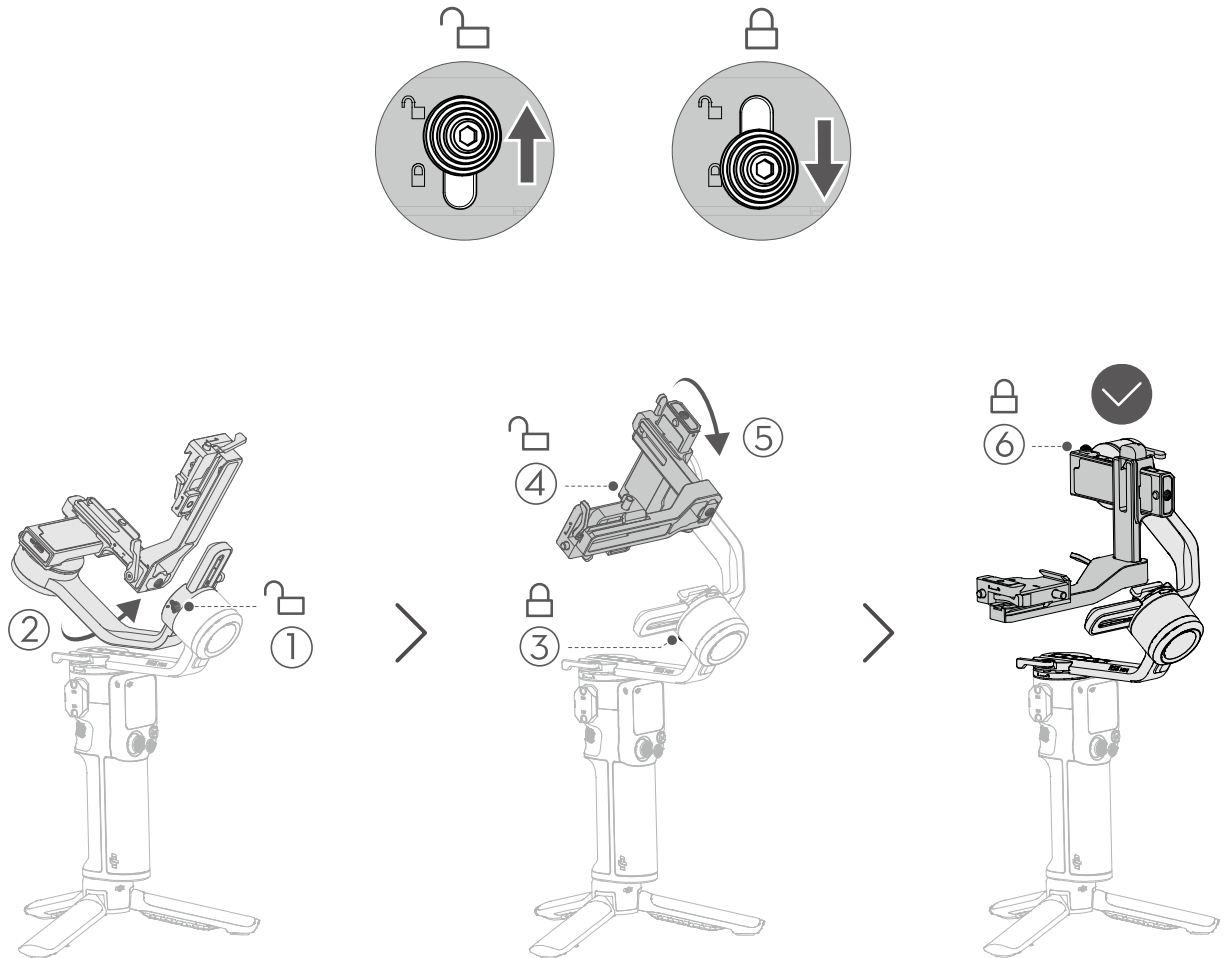
## Attaching the Extended Grip/Tripod

Attach the extended grip/tripod to the gimbal, tighten and unfold the tripod and place the gimbal on a level surface.



## Unlocking and Locking the Gimbal

Each axis of the gimbal is equipped with a lock, which can lock the axes for convenient storage and installation. The gimbal is packaged in the locked position. Toggle the tilt and roll lock to the unlocked position. Adjust the gimbal position as shown and toggle the tilt and roll locks in the locked position before mounting the camera.



- The tilt and roll axis of DJI RS 3 Mini have different locked positions, which can be locked and stored according to the actual situation.



## Mounting the Camera

### Supported Cameras and Lenses

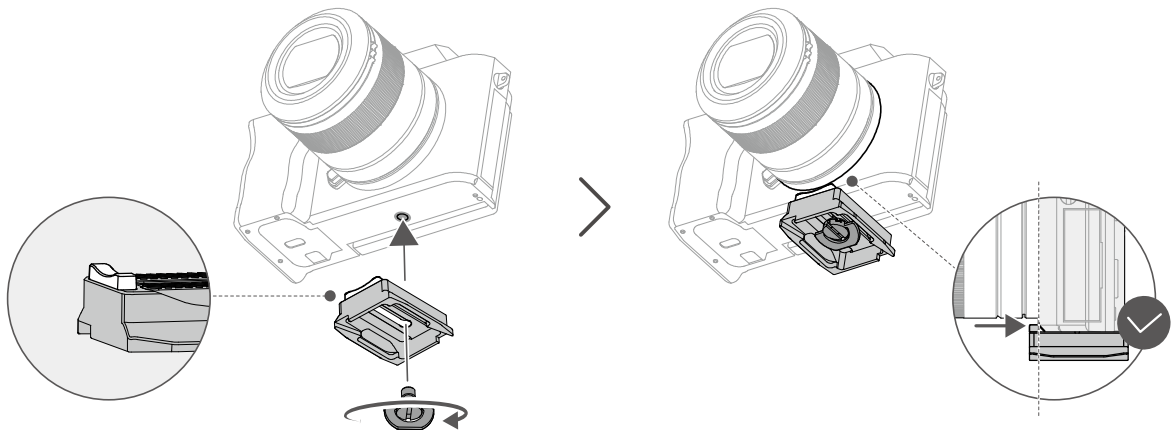
DJI RS 3 Mini has been rigorously tested to support a payload of 2 kg (4.4 lbs). Make sure the combined weight of the camera, lens, and other accessories are within 2 kg (4.4 lbs). Refer to the official DJI website (<https://www.dji.com/support/compatibility>) for the most updated Ronin Series Compatibility List.

### Mounting a Camera

Make sure to prepare the camera before mounting it to DJI RS 3 Mini. Remove the lens cap and check that the battery and memory card are inserted in the camera.

1. Attach the Upper Quick-Release Plate

Attach the upper quick-release plate to the camera by tightening the screw. Note: use the curved placement guide to secure the camera on the upper quick-release plate firmly.



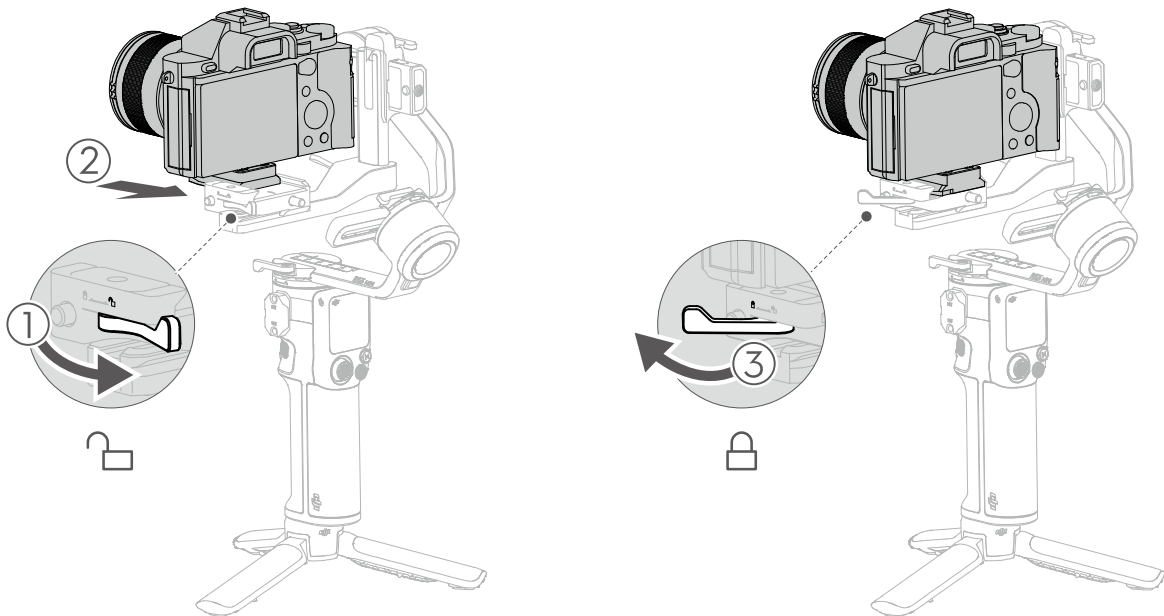
- If the curved placement guide of the upper quick-release plate cannot be used to firmly secure the camera, change the direction of the upper quick-release plate and then install it.
- 

2. Attach the Camera to the Gimbal

DJI RS 3 Mini supports horizontal shooting and vertical shooting. Follow the steps to install the camera in horizontal and vertical shooting modes.

### Horizontal Shooting

1. Loosen the lever ① on the lower quick-release plate.
2. Insert the upper quick-release plate with the camera attached into the lower quick-release plate ②, as shown below.
3. Adjust the lower quick-release plate to an appropriate position according to the width of the camera, and then tighten the lever ③.



- 
- 💡 • The position of the lower quick-release plate on the horizontal arm can be adjusted according to the width of the camera. Loosen the red lever on the lower quick-release plate and then move the lower quick-release plate.
  - To remove the upper quick-release plate, loosen the red lever on the lower quick-release plate and press and hold the safety lock beside the lever.
-

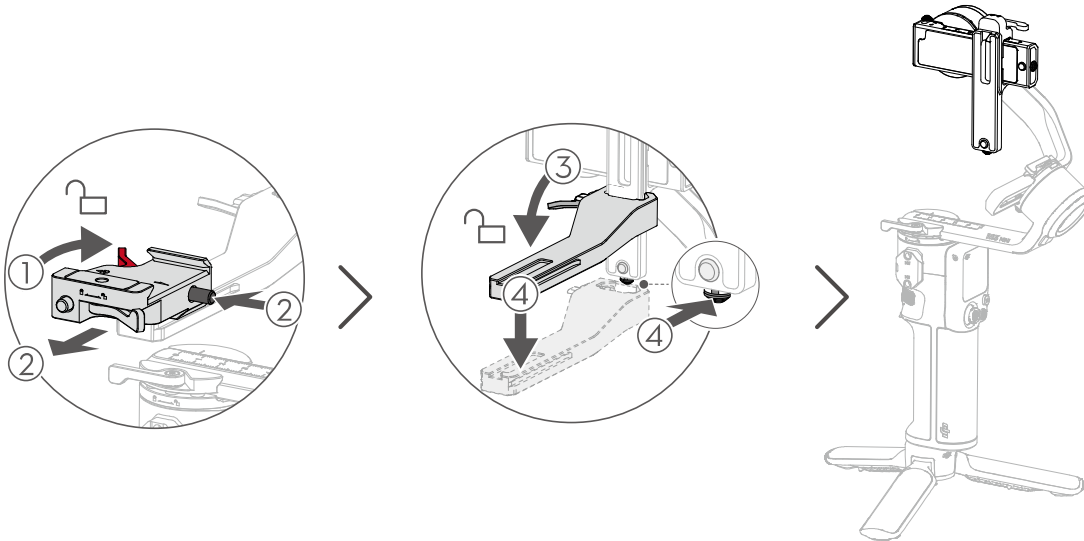
### Vertical Shooting

1. Detach the Lower Quick-Release Plate

Loosen the red lever ① on the lower quick-release plate, and then move the lower quick-release plate while pressing the safety lock ② beside the lever.

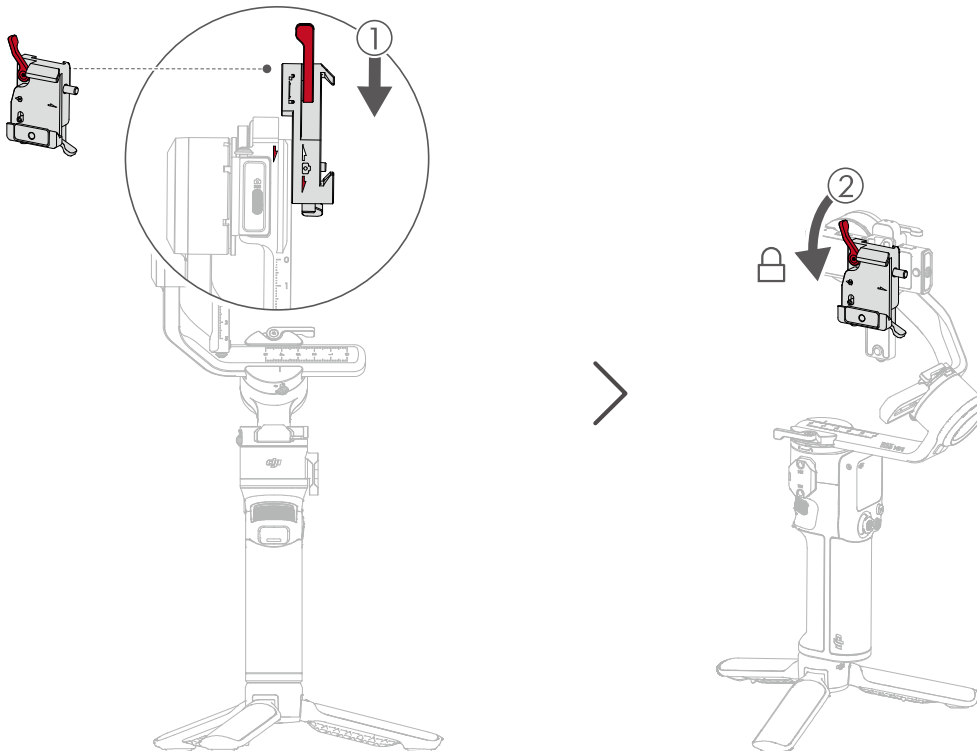
2. Detach the Horizontal Arm

Loosen the lever ③ on the horizontal arm, slide the horizontal arm down and unlock the safety lock ④ on the bottom of the vertical arm to separate the horizontal arm from the vertical arm.



3. Mount the Lower Quick-Release Plate to the Vertical Arm

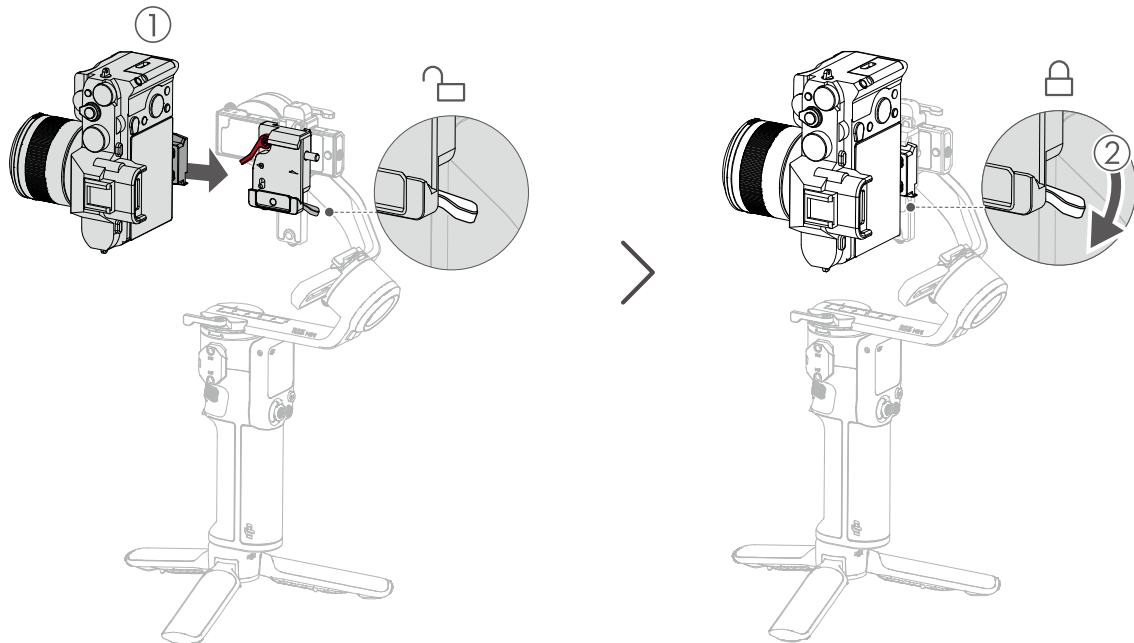
Make sure that the red lever ① of the lower quick-release plate is unlocked and points upward when mounting. Make sure that the red arrows on the side of the lower quick-release plate and the vertical arm are in the same direction. Align the lower quick-release plate with the groove of the vertical arm, install the lower quick-release plate, and then tighten the red lever ②.



- 
- ⚠ • DO NOT install the lower quick-release plate in the wrong direction. Otherwise, the camera will not be properly secured to the vertical arm.
- 

4. Attach a Camera to the Gimbal

Make sure the lever ② on the lower quick-release plate is the unlocked position. Insert the camera and upper quick-release plate ① into the lower quick-release plate, as shown in the diagram below. Tighten the lever ② to the locked position after it is engaged.



## Balancing

To obtain the best performance from DJI RS 3 Mini, proper balancing is essential. Proper balance is critical for shots with DJI RS 3 Mini where fast motion or acceleration is required and also offers longer battery runtimes. There are three axes that need to be properly balanced before powering on DJI RS 3 Mini and setting up the software.

### Before Balancing

1. The camera needs to be fully configured, with all accessories and cables connected, before installing and balancing the camera on the gimbal. If the camera has a lens cap, make sure to remove it before balancing. Before balancing, make sure to power on the camera if using an optical zoom lens and to select the focal length if using a varifocal lens.
2. Make sure DJI RS 3 Mini is powered off or in sleep mode before balancing.

### Balancing Steps

DJI RS 3 Mini supports horizontal shooting and vertical shooting. Follow the steps below to balance the gimbal in different shooting modes. Make sure to use the diagrams below as a reference when balancing.

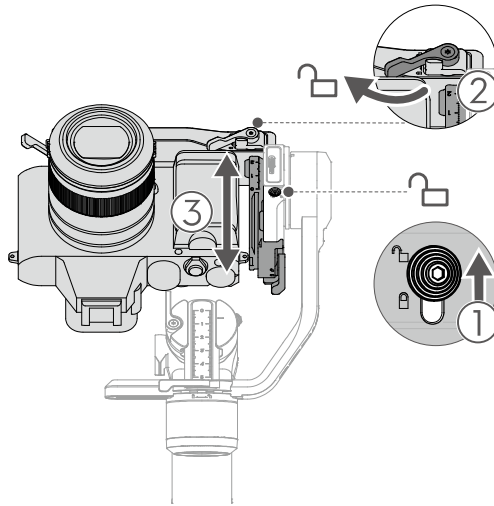


**Tutorial Videos:** <https://www.dji.com/guide22>

## Balancing in Horizontal Shooting

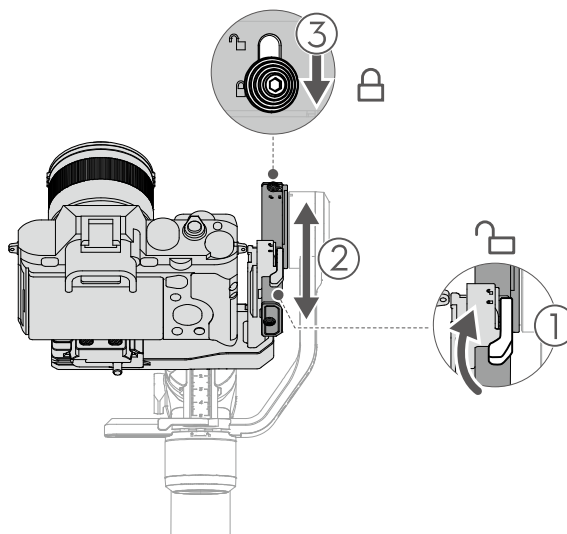
### 1. Balancing the Vertical Tilt

- Unlock the tilt axis ① and loosen the lever on the horizontal arm ②.
- Rotate the tilt arm, so that the camera lens points upward. Check to make sure the camera is not top or bottom-heavy. If the camera is top-heavy, move the camera backward ③. If the camera is bottom-heavy, move the camera forward ③.
- Lift the camera upwards slightly so that the gimbal does not bear the weight of the camera, and then tighten the lever on the horizontal arm. The vertical tilt is balanced when the camera lens is steady while pointing upward.



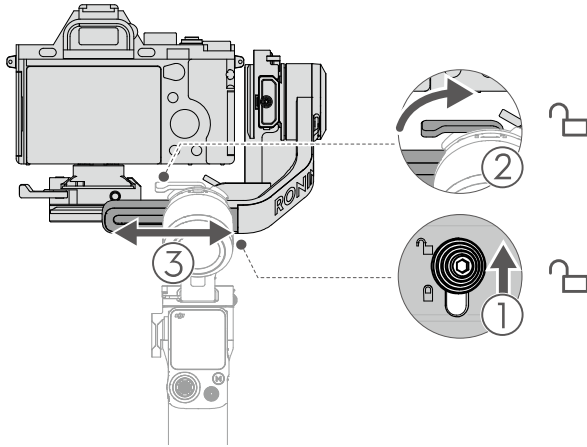
### 2. Balancing Depth for the Tilt Axis

- Rotate the tilt arm, so that the camera lens points forward. Loosen the lever on the vertical arm ①.
- Check to make sure the camera is not front or back-heavy. If the camera is front-heavy, move the camera backward ②. If the camera is back-heavy, move the camera forward ②.
- Tighten the lever on the vertical arm to the locked position. The tilt axis is balanced when the camera lens is steady while pointing forward.
- Toggle the tilt lock to the locked position ③.



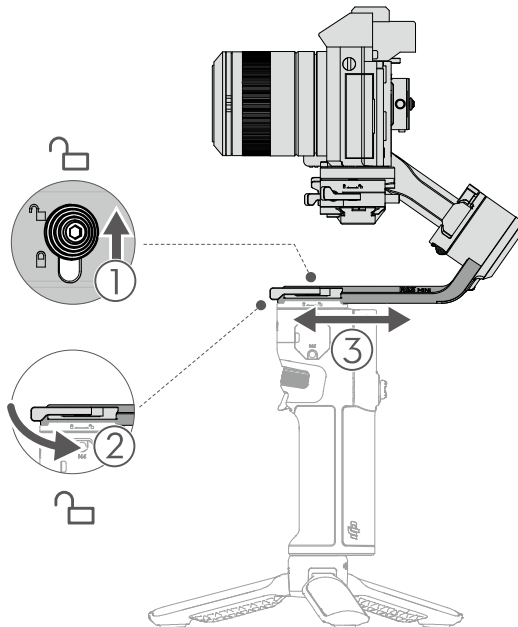
### 3. Balancing the Roll Axis

- a) Unlock the roll axis ① and loosen the lever on the roll axis ②.
- b) Check the direction in which the roll motor swings. If the camera rotates to the left, move the camera to the right ③. If the camera rotates to the right, move the camera to the left ③.
- c) Tighten the lever on the roll axis. The roll axis is balanced when the horizontal arm maintains parallel with a level surface.
- d) Toggle the roll lock to the locked position.



### 4. Balancing the Pan Axis

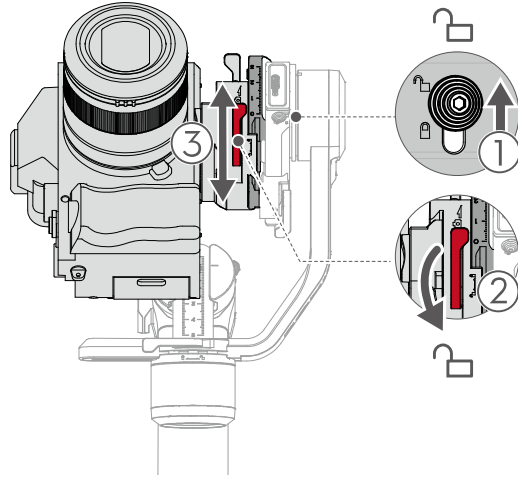
- a) Unlock the pan axis ① and loosen the lever on the pan axis ②.
- b) While holding the grip, tilt the gimbal forward and rotate the pan arm until it is parallel with a level surface. Check the movement of the pan axis. If the camera lens rotates to the left, move the camera to the right ③. If the camera lens rotates to the right, move the camera to the left ③.
- c) Tighten the lever on the pan axis. The pan axis is balanced when the pan arm maintains parallel with a level surface while the grip is tilted.



## Balancing in Vertical Shooting

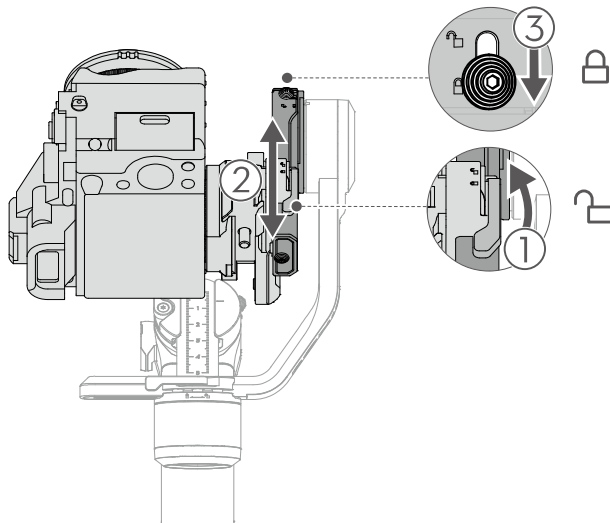
### 1. Balancing the Vertical Tilt

- Unlock the tilt axis ① and loosen the red lever on the lower quick-release plate ②.
- Rotate the tilt arm, so that the camera lens is in the upward. Check to make sure the camera is not top or bottom-heavy. If the camera is top-heavy, move the camera backward ③. If the camera is bottom-heavy, move the camera forward ③.
- Tighten the red lever on the lower quick-release plate. The vertical tilt is balanced when the camera lens is steady while pointing upward.



### 2. Balancing Depth for the Tilt Axis

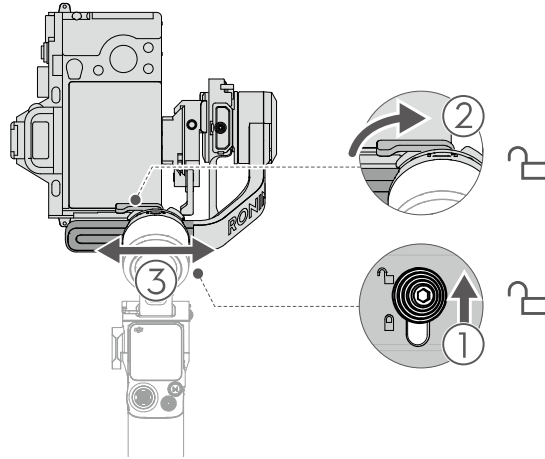
- Rotate the tilt axis, so that the camera lens points forward. Loosen the lever on the vertical arm ①.
- Check to make sure the camera is not front or back-heavy. If front-heavy, move the camera backward ②. If back-heavy, move the camera forward ②.
- Tighten the lever on the vertical arm. The tilt axis is balanced when the camera lens is steady while pointing forward.
- Toggle the tilt lock to the locked position ③.





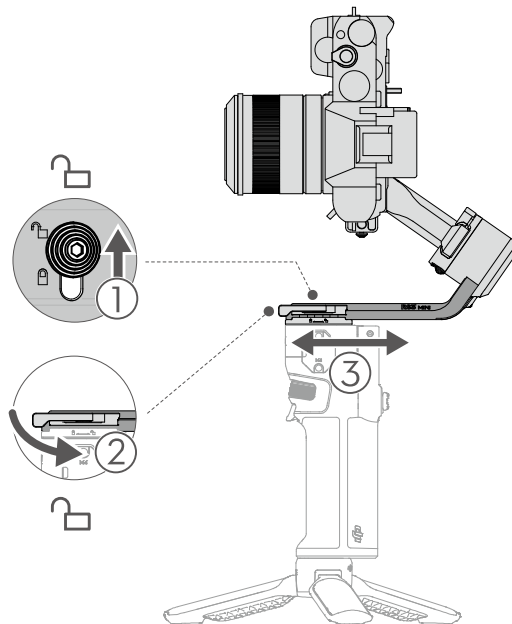
### 3. Balancing the Roll Axis

- a) Unlock the roll axis ① and loosen the lever on the roll axis ② .
- b) Check the direction in which the roll motor swings. If the camera rotates to the left, move the camera to the right ③ . If the camera rotates to the right, move the camera to the left ③ .
- c) Tighten the lever on the roll axis. The roll axis is balanced when the vertical arm maintains perpendicular with a level surface.
- d) Toggle the roll lock to the locked position.



### 4. Balancing the Pan Axis

- a) Unlock the pan axis ① and loosen the lever on the pan axis ② .
- b) While holding the grip, tilt the gimbal forward and rotate the pan arm until it is parallel with a level surface. Check the movement of the pan axis. If the camera lens rotates to the left, move the camera to the right ③ . If the camera lens rotates to the right, move the camera to the left ③ .
- c) Tighten the lever on the pan axis. The pan axis is balanced when the pan arm maintains parallel with a level surface while the grip is tilted.



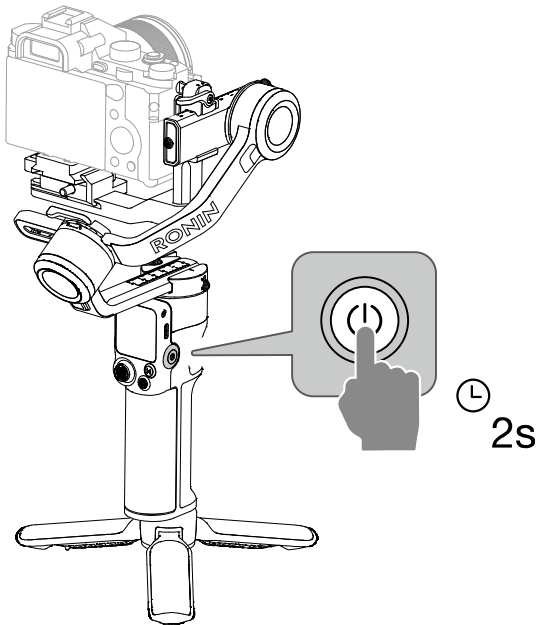
## Activating DJI RS 3 Mini

Activation is required for DJI RS 3 Mini through the Ronin app. Follow the steps below to activate DJI RS 3 Mini:

1. Press and hold the power button to power on DJI RS 3 Mini, and select the language on the touchscreen.
2. Scan the QR code on the screen to download the Ronin app.
3. Enable Bluetooth on the mobile phone. Launch the Ronin app and log in with a DJI account. Select DJI RS 3 Mini, type in the default password 12345678, and activate the gimbal according to the instructions. An internet connection is required for activation.



- DJI RS 3 Mini supports up to five uses without activation. After that, activation is required for further use.
  - Make sure the tilt, roll, and pan locks are in the unlocked position before using the gimbal.
- 



## Connecting a Camera

DJI RS 3 Mini supports wireless camera connection using Bluetooth, camera control is available without a cable connection. Swipe down from the top of the touchscreen on the Home screen to enter the Control Center. Tap the Bluetooth icon and select the device, the gimbal and camera will start to pair. The Bluetooth icon turns blue indicating connection is successful.

For Sony-series cameras, remote Bluetooth control needs to be enabled before connecting to the gimbal.

For Canon-series cameras, remote control mode for photo or record mode needs to be enabled before connecting to the gimbal.

Refer to the Ronin Series Compatibility list for more camera settings when using a Bluetooth connection.

Choose the proper camera control cable for cameras that do not support Bluetooth according to the camera type. Connect the camera and the RSS camera control port of the gimbal with the cable.



- Refer to the Ronin Series Compatibility list (<https://www.dji.com/support/compatibility>) for supported camera models.
  - Some camera control cables need to be purchased separately.
- 

## Auto Tune

Use the auto tune to adjust the stiffness of the motor before using the gimbal. Auto tune provides the proper stiffness for the motor according to the payload to obtain the optimum gimbal performance. The gimbal is ready to be used after the auto tune calibration is complete.

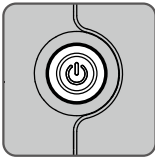
Press and hold the power button to power on DJI RS 3 Mini, or press once or twice to exit sleep mode. Tap the auto tune icon  on the touchscreen to enable the auto tune calibration.



- Place the gimbal on a steady flat surface. DO NOT move the gimbal during auto tune. It is normal for the gimbal to shake or make sounds during the auto tune calibration.
-

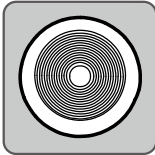
# Operations

## Button and Port Functions



### Power Button

- Press and hold: power on/off
- Press once/twice: enter or exit sleep mode
- Press to check the battery level when powered off



### Camera Control Button

After connecting the camera with Bluetooth or a camera control cable, the camera control button can realize the following functions:

- Press halfway: autofocus
- Press once: start or stop recording
- Press and hold: take a photo

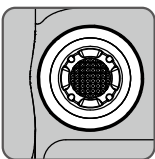
Refer to <https://www.dji.com/support/compatibility>. Check the Ronin Series Compatibility list for detailed information on supported camera features.



### M Button

- Press once: select a user profile
- Press and hold: enter Sport Mode, and press the trigger twice to remain in Sport Mode. Repeat to exit Sport mode
- Press and hold the M button together with the trigger: begin auto tune

In Sport Mode, the follow speed of the gimbal increases greatly. It is suitable for shooting in scenarios where subjects move suddenly and at fast speeds.



### Joystick

The default settings of the joystick control directions are as follows:

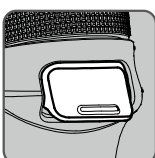
- Push up or pull down: control the movement of the tilt axis
- Push left or right: control the movement of the pan axis

The joystick control direction can be set in the Ronin app.



### Front Dial

Turn to control the focus/zoom by default. The settings can be changed via the touchscreen. Refer to the Touchscreen section for more details.

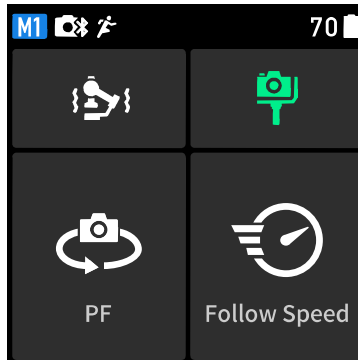






### Trigger

- Press and hold: enter Lock mode, tap the touchscreen to stay in lock mode, and then the trigger can be released
- Tap twice: recenter the gimbal
- Tap three times: the gimbal rotates 180°, so the camera can face the user (selfie mode)

## Touchscreen

### Home



- M1** Indicates the current user profile. Users can set and save three user profiles: M1, M2, and M3.
-  Indicates a camera control cable is connected.
-  Indicates Bluetooth is connected.
-  Indicates Sport Mode is enabled. In Sport Mode, the follow speed of the gimbal increases. It is suitable for shooting in scenarios where subjects move suddenly and at fast speeds.
- 70**  Displays the current battery level of the gimbal.

### Auto Tune

Use Auto Tune after balancing. Auto Tune provides the proper stiffness for the motor according to the payload to obtain the optimum gimbal performance.

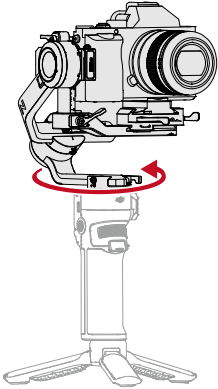
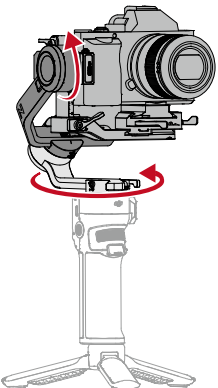
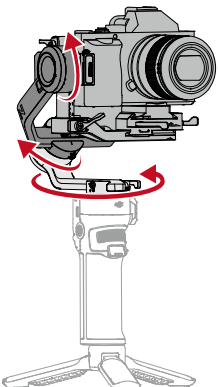
The three values indicate the stiffness of the three axes on the Auto Tune page. Users can also manually change the motor stiffness of the three axes. The motor stiffness adjustment allows you to fine-tune the power that is applied by the motors as they react and balance the weight on each axis. Make sure you leave an extra margin to ensure stability at all times. If the stiffness value is too high, the gimbal may shake. If the value is too low, the gimbal performance will be affected.

### Balance Status

When the status bar shows green, this indicates the gimbal is balanced. If the status bar shows yellow, the gimbal is slightly unbalanced. The status bar shows red when the gimbal is critically unbalanced. In this case, re-balance the corresponding axis. To check the balance status of the pan axis, tilt the gimbal 15° left or right and check the status bar. To check the balance status of the tilt axis, use the joystick to rotate the gimbal until the camera lens points upward, and then check the status bar.

 **Follow Mode**

The three motors of the gimbal control the three axes. The tilt motor controls the tilt axis to follow, the pan motor controls the pan axis to follow, and the roll motor controls the roll axis to follow. DJI RS 3 Mini supports the following Follow Modes: PF, PTF, FPV, Custom, and 3D Roll 360. The Follow Modes can be switched by clicking the M button or tapping directly on the touch screen.

<p style="text-align: center;"><b>PF</b></p> 	<p>PF: pan follow, where only the pan axis follows the movement of the grip. Suitable for scenarios such as shooting emerging walk-through and arc shots or moving from left to right.</p>
<p style="text-align: center;"><b>PTF</b></p> 	<p>PTF: pan and tilt follow, where both the pan and tilt axes follow the movement of the grip. Suitable for scenarios when moving up and down or on a slant.</p>
<p style="text-align: center;"><b>FPV</b></p> 	<p>FPV: pan, tilt, and roll follow, where all three axes follow the movement of the grip. Suitable for scenarios when rotating the camera or shooting from a low angle.</p>

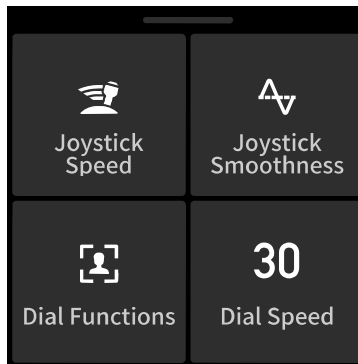
<p><b>Custom</b></p>	<p>Custom: enables or disables any axis follow as required. Lock mode is enabled when the three axes are disabled. All the three axes will not follow the movement of the grip in lock mode.</p>
<p><b>3D Roll 360</b></p>	<p>3D Roll 360: enables footage to be shot while rotating the camera 360°. The tilt axis will rotate 90° so that the camera lens will point up. Push the joystick to the left or right to begin 3D Roll 360. Push the joystick to the left or right twice in quick succession to trigger auto rotation. During auto rotation, press the trigger twice or three times and the camera will stop.</p>

 **Follow Speed**

Tap to select follow speed. Users can choose fast, medium, slow, and custom.

**Slide Up: Gimbal Settings Screen**

Slide up from the bottom of the screen to enter the gimbal settings screen.



**Joystick Speed:** allows users to control the speed of the joystick for the gimbal. Users can select from fast, medium, slow, and custom. Tap the icon on the top-right of the touchscreen to customize the speed. The larger the value, the faster the joystick speed.

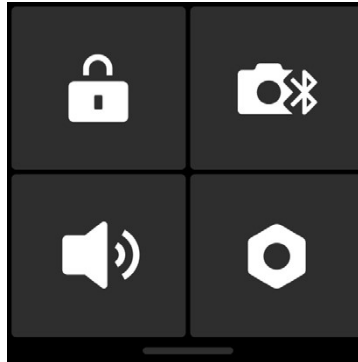
**Joystick Smoothness:** allows users to control the sensitivity of the gimbal. The lower the smoothness value, the more sensitive the movement of the gimbal.

**Dial Functions:** allows users to set the function of the front dial. Users can choose to control focus/zoom, ISO, aperture, shutter speed, roll axis, pan axis, and tilt axis.

**Dial Speed:** tap to set the response speed and smoothness for the front dial. Dial Speed allows users to set the response speed of the function set for the front dial. Dial Smoothness allows users to set the sensitivity of the function set for the front dial. The larger the smoothness value, the smoother the movement. Users can enable Reverse Dial to reverse the direction of the dial.

## Slide Down: Control Center Screen

Slide down from the top of the screen to enter the control center screen.



### Screen Lock

Tap the screen lock to lock the touchscreen to avoid unexpected operation. Slide up to unlock the touchscreen after enabling screen lock.

### Bluetooth

Tap the Bluetooth icon to connect the camera via Bluetooth. Tap Connect to pair the Bluetooth of the gimbal and camera. The icon turns blue after connecting successfully.

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 • The gimbal can only connect to one camera at a time.

---

### Silent Mode

Enable to turn off sounds including the alert tone. The sounds of the motor and axis locks cannot be muted.

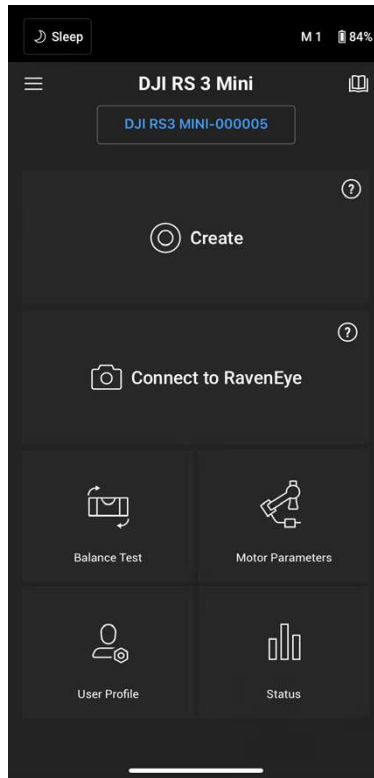


## Settings

Item	Description
Disable Selfie	Disable Selfie prevents accidentally entering selfie mode and interrupting recording. If disabled, Selfie mode will not be entered if the trigger is pressed three times.
Orbit Follow	When enabled, the gimbal obtains smoother movements after enabling when shooting arc shots.
Push Mode	Enable to manually control the tilt and pan axis.
Horizontal Calibration	Use if the gimbal is unlevel when the gimbal is steady. If the issue persists, use Tune Manually.
Gimbal Auto Check	Tap to analyze and output hardware status information of the gimbal.
Restore Parameters	Tap to restore the gimbal parameters and Bluetooth password to default settings.
Language	Choose the on-screen language from Chinese (Simplified), English, Chinese (Traditional), Japanese, Korean, French, German, Brazilian Portuguese, Spanish, Thai, and Russian.
Device Info	Tap to view device information like device SN, device name, and password.
Firmware Version	Tap to view the firmware version of the gimbal.
Compliance Info	Tap to view the compliance information.

## Ronin App Settings

The Ronin App contains the features of the touchscreen as well as more features of the gimbal. The screenshots below are based on the iOS version of the app.



### Top Bar

**Sleep/Wake:** tap to enter or exit sleep mode.

**User Profile:** displays the current user profile.

**Battery Level:** displays the battery level of the gimbal.

### ☰ About

**Settings:** log in to the account, change the language, and view the quick start guide.

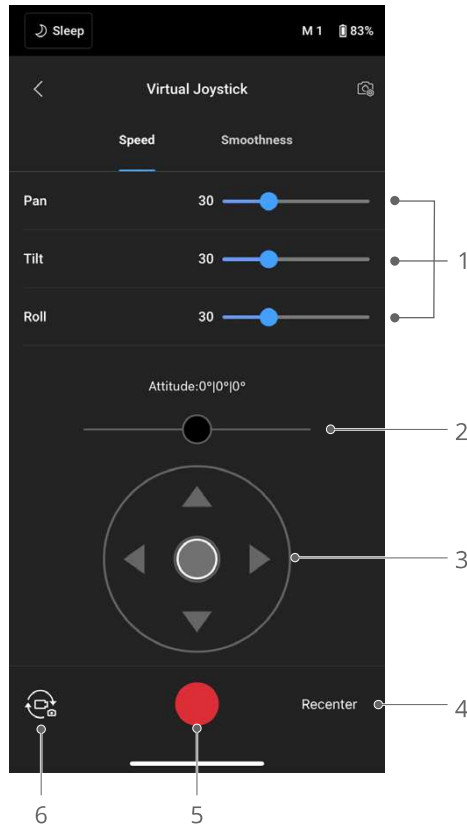
**Device List:** displays the device SN, device name and password.

**Firmware:** displays the firmware version.

### 📖 Academy

Watch the tutorials and read the manual documents.

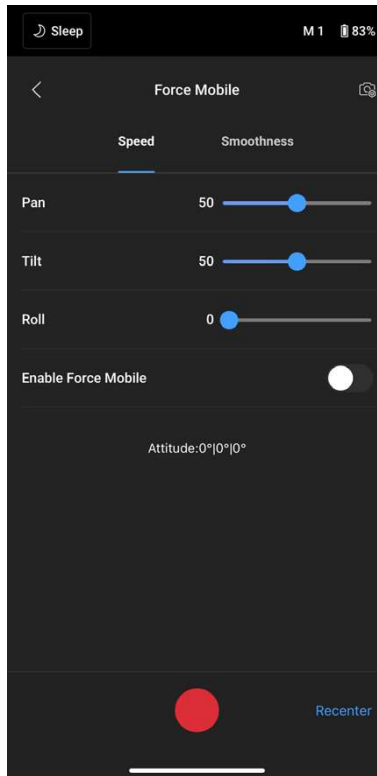
## Create Virtual Joystick



Use the virtual joystick in the app to control the movement of the gimbal and to capture images or record video.

1. **Control Bar:** control the speed and smoothness of the gimbal by adjusting the control bar. Speed allows users to adjust the remote-controlled rotational speed. Smoothness allows users to adjust the sensitivity of the gimbal. The lower the smoothness value, the more sensitive the movement of the gimbal.
2. **Roll Stick:** control the roll axis movement of the gimbal using the virtual joystick.
3. **Pan/Tilt Stick:** control the pan and tilt axis movement of the gimbal using the virtual joystick.
4. **Recenter:** tap to recenter the gimbal.
5. **Shoot/Record Button:** tap to take photos or record videos.
6. **Photo/Video Toggle:** tap to switch between photo and video modes. Make sure the mode is the same as the settings on the camera.

## Force Mobile



Force Mobile requires the phone holder and a mobile phone mounted on a tripod or handlebar vertically. After enabling this feature in the Ronin app, the gimbal movement can be controlled by tilting and rotating your mobile phone. (The gimbal movement cannot be controlled by rolling the mobile phone by default.)

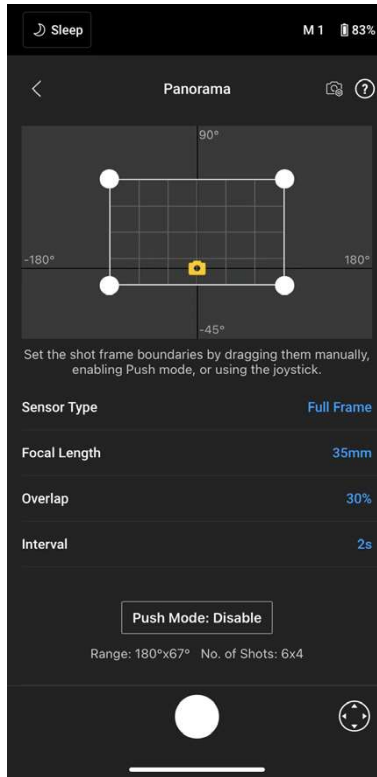
Speed determines the relationship between the rotational speed and angle. When the speed is set to 50, the angle of rotation for the gimbal and mobile phone is 1:1. The gimbal will move at an identical angle to the mobile phone. When the speed is set to less than 50, the gimbal will rotate slower than the movement of the phone. When the max speed is set to a higher value than 50, the rotation of the gimbal is faster than the mobile phone.

Smoothness allows users to control the sensitivity of the gimbal. The lower the smoothness value, the more sensitive the movement of the gimbal.

**Recenter:** tap to recenter the gimbal.

**Shutter/Record Button:** tap to take photos or record videos.

## Panorama



Panorama allows users to capture a series of interconnecting still images with precise control based on the sensor type, lens focal length, overlap, and interval.

Make sure you have connected the camera and gimbal using the corresponding camera control cable before using Panorama.

**Overlap:** determines the overlap ratio of every photo when generating a panorama.

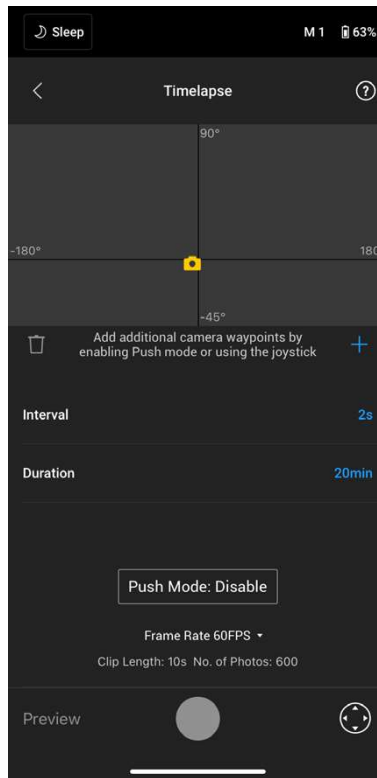
The interval time between shooting photos should be set to one second more than the shutter time to avoid blurred footage when using a long exposure.

After confirming the camera settings, the panorama range can be set by dragging the white dots on the grid map, pushing the gimbal manually, or using the virtual joystick.

The total range covered by the endpoints and the shots required to compose the panorama is displayed above the grid map. The tilt axis range in Panorama is  $-45^{\circ}$  to  $+90^{\circ}$  in order to avoid capturing the gimbal in the shot, while the pan axis allows you to capture a full  $360^{\circ}$  rotation.

Tap the shutter/record button to begin a Panorama.

## Timelapse



In Timelapse, DJI RS 3 Mini triggers the camera to capture still images with a set interval time and will automatically stop when completed. The duration for the Timelapse and the frame rate can be set so that DJI RS 3 Mini can calculate the exact number of images required.

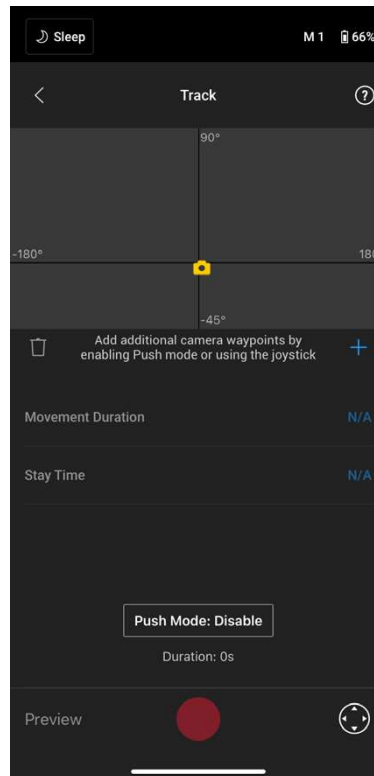
By enabling Push mode, users can manually adjust the pan and tilt axes before starting the Timelapse. Users can push DJI RS 3 Mini to alter the camera orientation and adjust the framing. Tap the virtual joystick icon to use the virtual joystick to adjust the camera orientation.

Motionlapse allows users to set up to five waypoints so that the camera moves during the Timelapse.

To adjust the position of a waypoint, adjust the camera to the desired position, and tap the + icon to confirm the waypoint. You can also use the virtual joystick to control the pan, tilt, and roll axis.

To add another waypoint, move the gimbal to the next waypoint, and tap the + icon above the grid map. Afterwards, to delete a waypoint, select the waypoint and tap the trash icon. After setting up the waypoints, you can either tap Preview to make sure the Motionlapse includes everything or tap the shutter/record button to start shooting. Make sure the camera and gimbal have been connected using the corresponding camera control cable.

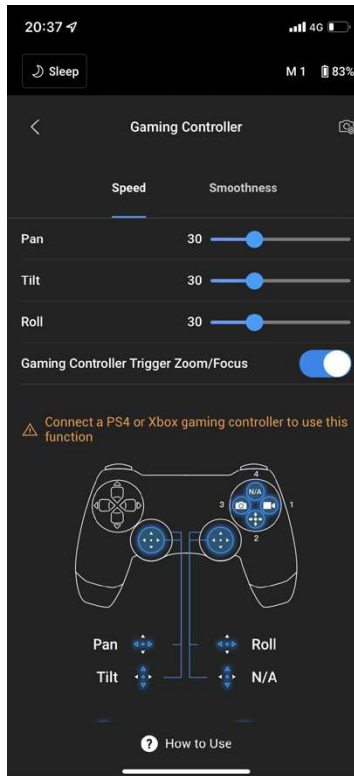
## Track



Track is designed to capture video with up to 10 waypoints. Users need to select the waypoint manually by moving the gimbal or using the virtual joystick. The duration parameter below the grid map indicates how much time it will take for the gimbal to travel from one waypoint to the next. The stay time indicates how long the gimbal will remain steady at the waypoint before moving to the next waypoint.

- 
-  • DO NOT press the shutter button of the camera while using Track.
-

## Gaming Controller



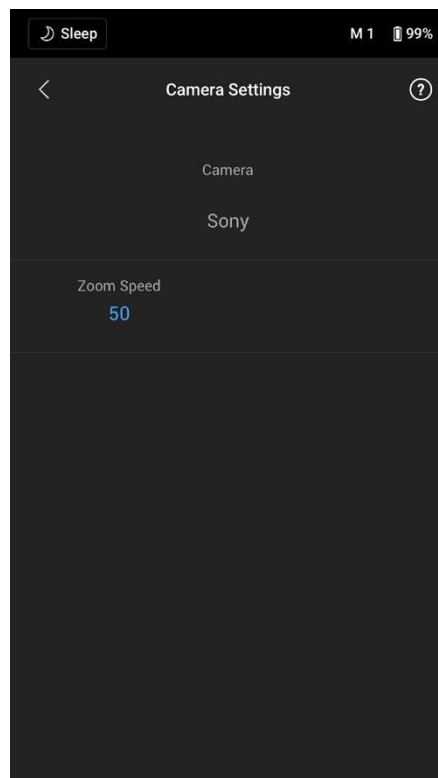
PS4 DualShock and Xbox controllers can be used to control the gimbal and camera. After connecting the controller to the mobile device and gimbal, users can control gimbal movements, focus, and zoom, and can record videos, recenter gimbal, switch user profile, and capture images.

The speed and smoothness of the control sticks can be adjusted. Set the focus value within 10 on the camera settings for optimal performance. iOS 11, Android 7.0, and Ronin app v1.6.0 or higher are required.

Tap How to Use to learn more about the gaming controller.

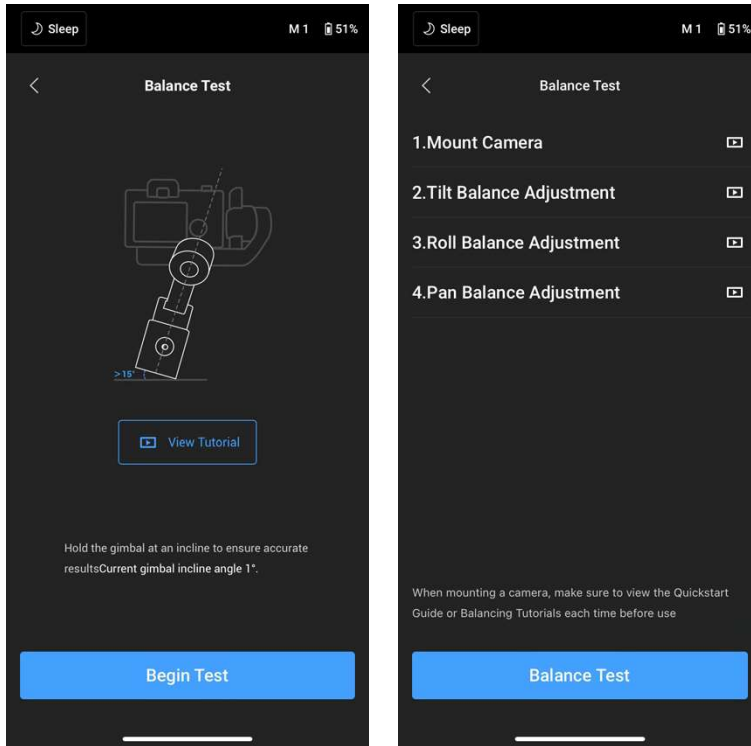


## Camera Setting



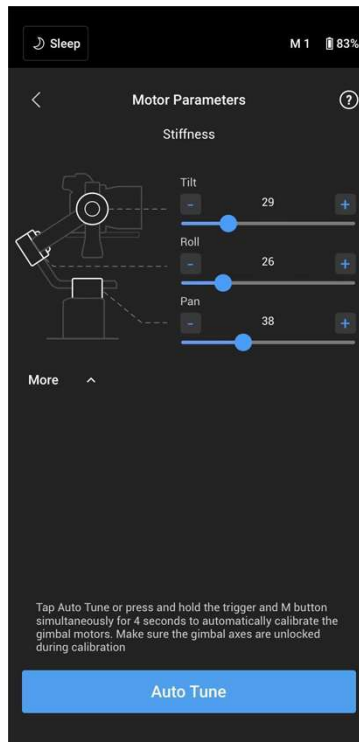
All displayed parameters (excluding high ISO) can only be controlled based on the capabilities of the camera. Refer to camera instructions for more information.

## Balance Test



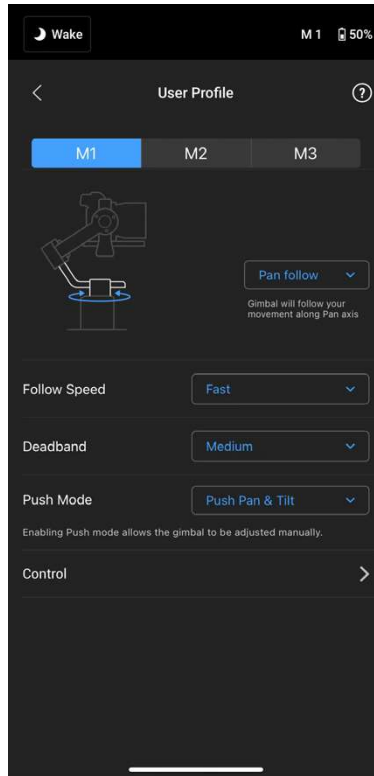
Tap **Begin Test** to check the balance status and provide a score for each axis. If the balance status is not good, view the on-screen tutorial videos on how to balance. Ensure the gimbal is held at an incline between 15° to 45° before starting the test.

## Motor Parameters



Stiffness can be displayed and adjusted on the motor parameters page. Tap Auto Tune to automatically calculate the result based on the weight of the gimbal setup. After auto tune is complete, the user can see detailed motor diagnostics at the bottom of the screen. Tap More to display the detailed motor diagnostic information. If the gimbal is properly balanced, the power value of the motors should be in the range of  $\pm 5$ . If power consumption on a particular axis constantly goes beyond that range, check the mechanical balance of the gimbal.

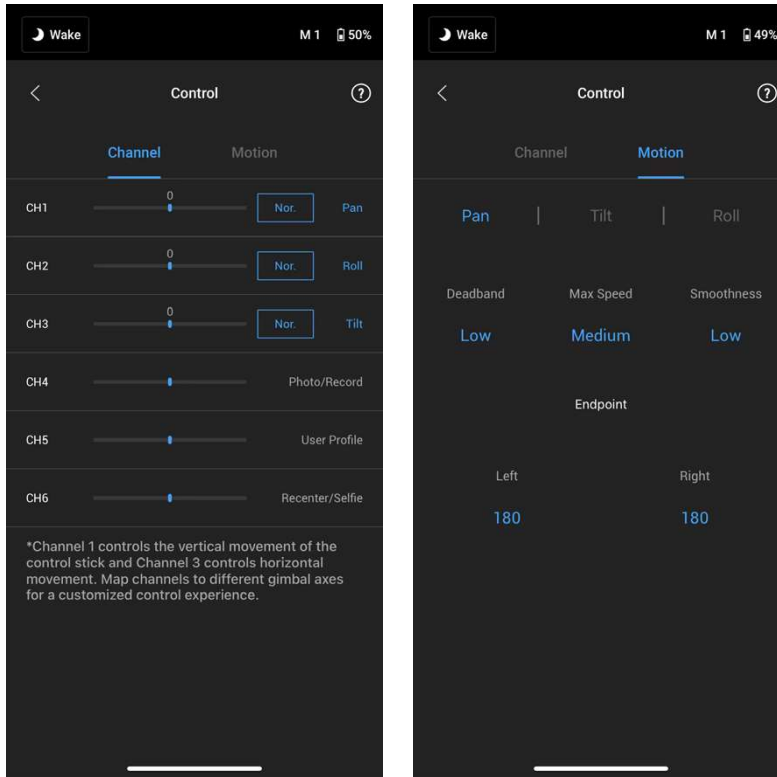
## User Profile



On this page, users can customize parameters in different user profiles such as Follow Speed, Deadband, and Push Mode.

- Follow Speed: determines how fast the camera travels while translating a pan, tilt, or roll movement.
- Deadband: determines how much movement the gimbal tolerates prior to translating the pan, tilt, and roll movement of the camera.
- Push Mode: after enabling Push, the gimbal axis can be manually pushed to the desired position.

Click Control to set the following parameters:



## Channels

The channel indicator provides feedback when configuring remote operation. Pan, tilt, and roll channels can be reassigned and each axis can also be inverted. Normal means the direction of movement is the same as the joystick. Inverted means the direction of movement is the opposite of the joystick.

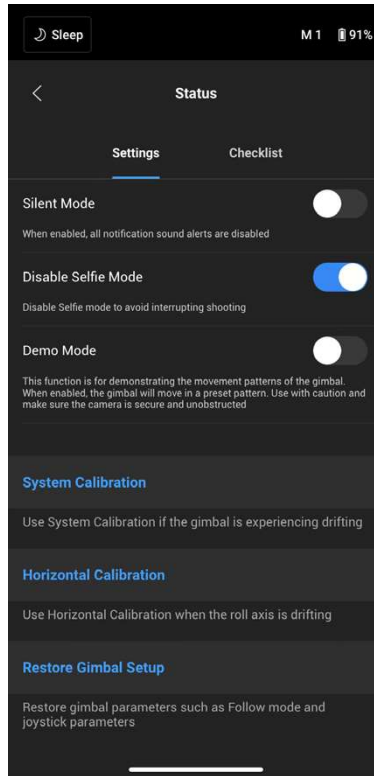
When using the joystick, the user can only control CH1 and CH3, which are mapped to the tilt and pan axes by default. The user can customize channel mapping by tapping on the name of the axis on the right of the screen.

## Motion

The user can set the joystick control by adjusting deadband, max speed, smoothing, and endpoints for each axis. There are three default profiles for each settings.

- **Deadband:** when the deadband value increases, more stick movement will be required to translate into the actual movement of the gimbal.
- **Max Speed:** allows the remote-controlled rotational speed to be adjusted.
- **Smoothness:** allows the user to control the sensitivity of the gimbal.
- **Endpoint:** limits the rotational range of the gimbal by setting the endpoints. The pan axis has a slip-ring, enabling DJI RS 3 Mini to rotate continuously when the endpoints are set to 180°. On the tilt axis, the user can set the endpoints according to the desired requirements. Some longer lenses may hit the gimbal frame. Set the endpoint angle to prevent such cases.

## Status



### Settings

Use more features such as Silent Mode, System Calibration, Horizontal Calibration, and Restore Gimbal Setup.

### Checklist

Displays the connection status of the Bluetooth and camera. When the gimbal status is abnormal, the status information is displayed here.

## Firmware Update

The firmware of DJI RS 3 Mini is updated using Ronin App.

If new firmware is available, users will be notified by the Ronin app. Update the firmware according to the on-screen instructions. DO NOT power off the gimbal or exit the app during the firmware update.

The Ronin app will prompt if the update is successful. If the update fails, restart the gimbal and Ronin app, and try again.

- 
- ⚠ • Make sure the gimbal has sufficient power before updating.
  - Ensure the mobile phone is connected to the internet when updating.
  - DO NOT power off the gimbal when updating.
-

# Grip and Built-In Battery

The built-in battery within the grip has a capacity of 2450 mAh and a maximum runtime of approximately 10 hours. \*

\* Measured with the equipment in a level and stationary state and the gimbal balanced. When the gimbal is in motion, the operating time will be reduced.

## Safety Guidelines

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

**⚠ WARNING** Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

**NOTICE** Procedures, which if not properly followed, create a possibility of physical property damage AND a little or no possibility of injury.

### **⚠ WARNING**

Read the user manual to become familiar with the features of this product before operating. Failure to operate the product correctly can result in damage to the product, personal property, and cause serious injury. This is a sophisticated product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property.

This product is not intended for use by children without direct adult supervision. DO NOT alter this product in any way outside of the documents provided by SZ DJI TECHNOLOGY CO., LTD. These Safety Guidelines contain instructions for safety, operation and maintenance. It is essential to read and follow all of the instructions and warnings in the user manual, prior to assembly, setup or use, in order to operate the product correctly and avoid damage or serious injury.

### **⚠ WARNING**

To avoid fire, serious injury, and property damage, observe the following safety guidelines when using, charging, or storing the grip.

## Grip Use

1. DO NOT allow the grip to come into contact with any kind of liquid. DO NOT leave the grip out in the rain or near a source of moisture. DO NOT drop the grip into water. If the inside of the battery comes into contact with water, chemical decomposition may occur, potentially resulting in the battery catching on fire, and may even lead to an explosion.
2. If the grip falls into water by accident, put it in a safe and open area immediately. Maintain a safe distance from the grip until it is completely dry. DO NOT use the grip again, and dispose of the grip properly as described in the Grip Disposal section.
3. Put out any fire using water, sand, fire blanket, or a dry powder fire extinguisher.

4. DO NOT use or charge a swollen, leaky, or damaged grip. If the grip is abnormal, contact DJI or a DJI authorized dealer for further assistance.
5. The grip should be used in temperatures from -10° to 45° C (-14° to 113° F). Use of the grip in environments above 50° C (122° F) can lead to a fire or explosion. Use of grip below 0° C (32° F) can significantly reduce operation time.
6. DO NOT use the grip in strong electrostatic or electromagnetic environments. Otherwise, the battery control board may malfunction.
7. DO NOT disassemble or pierce the grip in any way or the battery may leak, ignite, or explode.
8. DO NOT drop or strike batteries. DO NOT place heavy objects on the grip or charger.
9. Electrolytes in the battery are highly corrosive. If any electrolytes make contact with your skin or eyes, immediately wash the affected area with fresh running water for at least 15 minutes, and then see a doctor immediately.
10. DO NOT use the grip if dropped.
11. DO NOT heat batteries. DO NOT put the grip in a microwave oven or in a pressurized container.
12. DO NOT manually short-circuit the grip.
13. Clean grip terminals with a clean, dry cloth.

### Grip Charging

1. DO NOT leave the grip unattended during charging. DO NOT charge the grip near flammable materials or on flammable surfaces such as carpet or wood.
2. Charging the grip outside of the temperature range of 5° to 40° C (41° to 104° F) may lead to leakage, overheating, or battery damage. The ideal charging temperature is 22° to 28° C (72° to 82° F).

### Grip Storage

1. Keep the grip out of the reach of children and animals.
2. If the grip will be stored for an extended period, charge the grip until the battery level reaches between 30% and 50%.
3. DO NOT leave the grip near heat sources such as a furnace or heater. DO NOT leave the grip inside of a vehicle on hot days. The ideal storage temperature is 22° to 28° C (72° to 82° F).
4. Keep the grip dry.

### Grip Maintenance

1. DO NOT use the grip when the temperature is too high or too low.
2. DO NOT store the grip in environments with a temperature higher than 45° C (113° F) or lower than 0° C (32° F).

### Travel Notice

1. Before carrying the grip on an airline flight, it must first be discharged until the battery level is lower than 30%. Only discharge the grip in a fireproof location and store the grip in a ventilated location.
2. Keep the grip away from metal objects such as glasses, watches, jewelry, and hairpins.
3. DO NOT transport a damaged grip or a grip with battery level higher than 30%.

## Grip Disposal

Dispose of the grip in specific recycling boxes only after a complete discharge. DO NOT place the grip in regular trash containers. Strictly follow your local regulations regarding the disposal and recycling of batteries.

### NOTICE

## Grip Use

1. Make sure the grip is fully charged before use.
2. If a low-battery warning appears, charge the grip as soon as possible.

## Grip Charging

The grip is designed to stop charging when it is full. It is good practice, however, to monitor the charging progress and disconnect the gimbal when fully charged.

## Grip Storage

1. Discharge the grip to 40%-65% if it will not be used for 10 days or more. This can greatly extend the battery life.
2. DO NOT store the grip for an extended period after fully discharging. Doing so may over-discharge the battery and cause irreparable damage to the battery cell.
3. If the grip is stored for an extended period and the battery is depleted, the grip will enter sleep mode. Recharge the grip to exit sleep mode.

## Grip Maintenance

1. Battery life may be reduced if not used for an extended period.
2. Discharge and charge the grip completely once every three months to keep it in good condition.

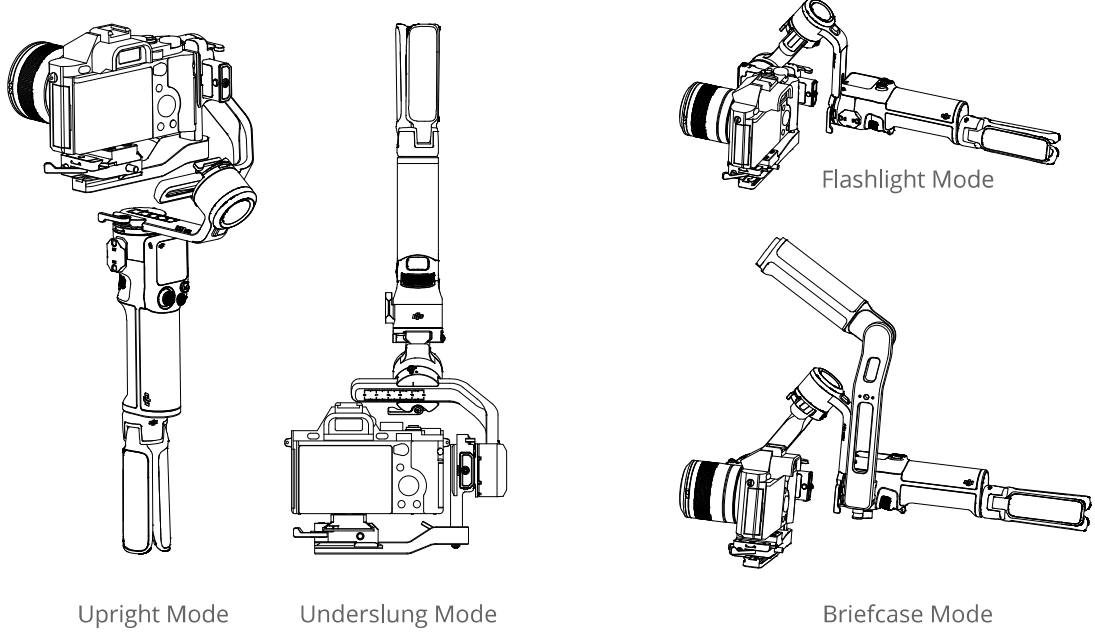
## Grip Disposal

1. If the grip is disabled and the battery cannot be fully discharged, contact a professional battery disposal or recycling agent for further assistance.
2. Dispose of the grip immediately if it cannot be powered on after over-discharging.

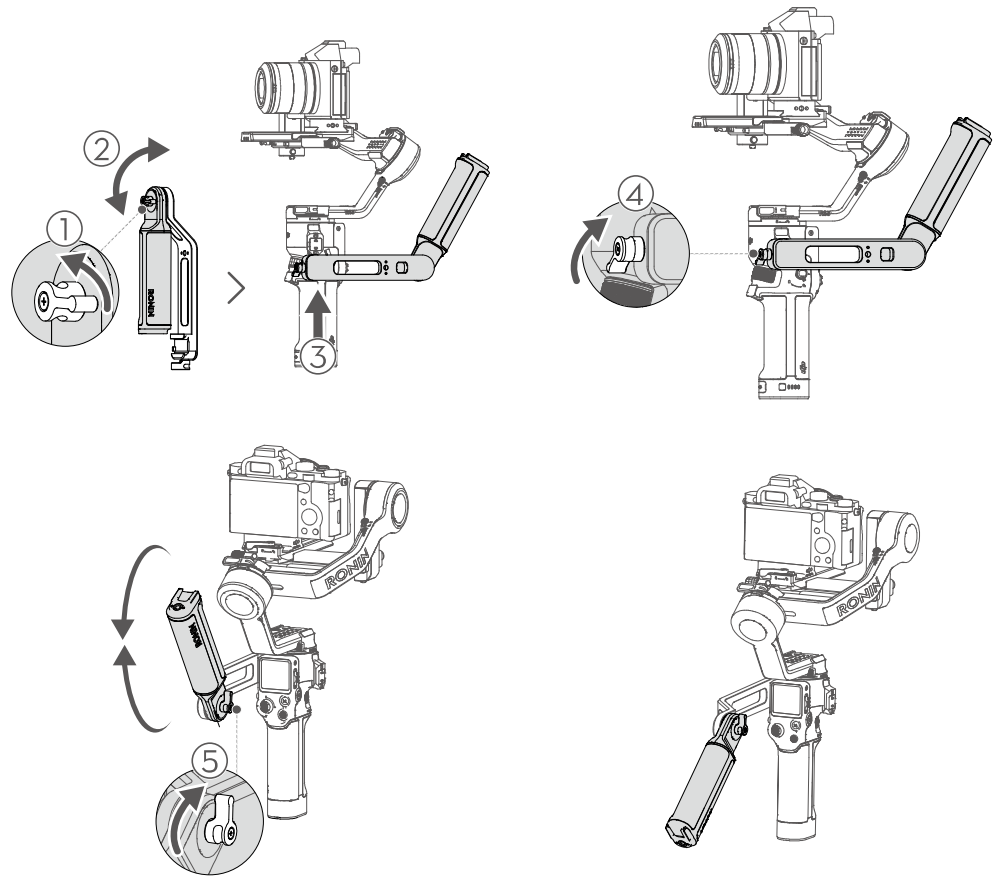


# Operation Modes

There are four operation modes for the DJI RS 3 Mini: Upright, Underslung, Flashlight, and Briefcase.



The NATO port on the side of DJI RS 3 Mini supports the installation of the DJI RS Briefcase Handle (sold separately). The angle of the briefcase handle can be adjusted using the knob, which makes low-angle camera movements more intuitive.



# Maintenance

DJI RS 3 Mini is not waterproof. Make sure to protect it from dust and water during use. After use, it is recommended to wipe DJI RS 3 Mini with a soft dry cloth. DO NOT spray any cleaning liquids onto DJI RS 3 Mini.

# Specifications

Peripheral	Accessory Port	1/4"-20 Mounting Hole RSS Camera Control Port (USB-C) NATO Expansion Port
	Battery	Model: HB7-2450mAh-7.2V Type: 18650 Li-ion 2S Capacity: 2450 mAh Energy: 17.64 Wh Operating Time: 10 hours <sup>[1]</sup> Charging Specification: 5 V/2 A Charging Time: Approx. 2.5 hours <sup>[2]</sup> Suggested Charging Temperature: 5° to 40° C (41° to 104° F)
	Connections	Bluetooth 5.1 USB-C Charging Port
	Ronin App Requirements	iOS 11.0 or above Android 7.0 or above
	Languages Supported by the Touchscreen	English, Simplified Chinese, Traditional Chinese, German, French, Korean, Japanese, Spanish, Portuguese (Brazil), Russian, Thai
	Working Performance	Tested Payload
Maximum Controlled Rotation Speed		Pan: 360°/s Tilt: 360°/s Roll: 360°/s
Mechanical Range		Pan Axis: 360° continuous rotation Roll Axis: -95° to +240° Tilt Axis: -10° to +210°
Mechanical & Electrical Properties	Operating Frequency	2.4000-2.4835 GHz
	Bluetooth Transmitter Power	<4 dBm
	Operating Temperature	-10° to 45° C (14° to 113° F)
	Weight	Gimbal: 795 g (1.75 lbs) in portrait mode and 850 g (1.8 lbs) in horizontal shooting mode (both including the Quick-Release Plate and excluding the Extended Grip/Tripod) Extended Grip/Tripod: Approx. 128 g (0.2 lbs)
	Dimensions	Folded: 323×195×98 mm (L×W×H, height excludes the Extended Grip/Tripod) Unfolded: 180×159×296 mm (L×W×H, excluding camera and the Extended Grip/Tripod)

[1] Measured with the equipment in a level and stationary state and the gimbal balanced. When the gimbal is in motion, the operating time will be reduced.

[2] Tested in a 25° C (77° F) environment while using a 10W charger.



Contact  
DJI SUPPORT

<https://www.dji.com/support>

This content is subject to change.

**Download the latest version from**  
<https://www.dji.com/rs-3-mini>

If you have any questions about this document, please contact  
DJI by sending a message to [DocSupport@dji.com](mailto:DocSupport@dji.com).

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