# Ronin Series Repair Manual

#### **Purpose**

This document aims to show users how to repair the DJI product and list common issues
and their solutions. For complex exceptions or error messages, it is recommended to
contact DJI Support for assistance.

 To find the related product features and usage information, please visit DJI's official website at http://www.dji.com/.

#### **Notices**

- Keep the product and other modules away from children.
- Do not let the product come into contact with liquid or water.
- Do not power on the product immediately after it has fallen into the water.
- Do not store the product in a humid area.

### **Battery Safety Notices**

- Do not let a battery come into contact with liquid or leave it in the water.
- Do not use swollen, leaking, or damaged batteries.
- Do not install or remove a battery when it is turned on.
- Use a battery at temperatures from -10°C to 40°C.
- Do not use batteries in strong electrostatic or electromagnetic environments.
- Do not disassemble or pierce batteries in any way.
- Do not place wires or metal objects on a battery. Otherwise, the battery may short-circuit.
- Do not drop or strike a battery or place heavy objects on the battery.
- Electrolytes in batteries are highly corrosive. In the event of a leakage, please stay away from the battery.
- Keep batteries out of the reach of children.
- Do not leave batteries near heat sources.
- Keep batteries dry.
- During transportation or storage, keep batteries away from the metal objects, such as glasses, watches, or necklaces.
- Do not transport a damaged battery.
- Do not store batteries in environments with temperatures higher than 45°C or lower than 0°C.
- Do not place batteries in regular trash containers.

# **Applicable Models**

No.	Model
1	DJI RS 3 Pro
2	DJI RS 3
3	DJI RS 3 Mini
4	DJI RS 2
5	DJI RSC 2
6	Ronin-SC

## **Gimbal**

Common Issue	Inspection Method	Repair Method	
M button insensitivity	Check if the button cannot bounce back after being pressed down or is collapsed.	Replace the gimbal.	
The Power button cannot bounce back or bounces back weakly.	Check if the button cannot bounce back after pressed down or is collapsed.	Replace the gimbal.	
Unable to take photos or videos after pressing the Camera Control button.	<ol> <li>Check the Camera         Compatibility List and         see if the product and         camera are compatible.</li> <li>Reinstall the camera         control cable and         camera, and check         again if photos or         videos can be captured.</li> </ol>	<ol> <li>If the camera model is not on the compatibility list, the issue occurs due to a compatibility error. Try using a camera mentioned in the compatibility list.</li> <li>If the camera model is on the compatibility list and there are special firmware requirements, update the camera or product to the compatible firmware version.</li> <li>Attach the camera control cable again if the product and camera are compatible. If the issue persists, replace the gimbal or camera control cable.</li> </ol>	

The joystick is stuck or cannot be moved smoothly.	Move the joystick up, down, left, and right to the endpoint and check if the joystick can be moved smoothly. Release the joystick and check if it can re-center.	If the joystick is stuck or cannot re-center, replace the gimbal.		
Touchscreen Not Working	Tap on the screen and swipe up, down, left, and right on the touchscreen to see if the screen display follows the operation.	Replace the gimbal.		
Touchscreen freezing or incomplete screen display	Check if the screen freezes or is not displayed completely.	Replace the gimbal.		
Pan lock stuck	Toggle the axis lock and check if it can be toggled normally.	Replace the gimbal.		
Firmware update failure	Check the battery level is extremely low, and check if the gimbal is connected to the mobile phone/DJI Ronin app normally.	<ol> <li>If the battery level is extremely low, charge the gimbal and update the firmware again;</li> <li>Restart DJI Ronin and the gimbal, and update the firmware after the gimbal is connected to the app. If the issue persists, replace the gimbal.</li> </ol>		
Connection failure between the gimbal and mobile phone	Check if the phone's WLAN, Bluetooth, and Location are turned on, check if the version of the DJI Ronin app is the latest, and check if the Bluetooth of the gimbal can be detected by the DJI Ronin app.	<ol> <li>If the phone's WLAN,         Bluetooth, and Location         are not turned on, turn         them on, and try         connecting again.</li> <li>If the version of DJI         Ronin app is not the         latest, update the app         to the latest version and         try connecting again. If         the issue is resolved, it         indicates that the         gimbal is not supported         by the original version         of the app.</li> </ol>		

		3. If the Bluetooth of the gimbal cannot be detected by the DJI Ronin app, replace the gimbal.
Skewed Gimbal	Check if balancing can be performed normally. Then perform Auto Tune and Horizontal Calibration.	If the gimbal is skewed after balancing and calibration, replace the gimbal.
Gimbal drifting	<ol> <li>Check if the joystick is stuck or cannot recenter.</li> <li>Check if balancing can be performed normally. Then perform Auto Tune and Horizontal Calibration.</li> </ol>	<ol> <li>If the joystick is stuck or cannot re-center, replace the gimbal.</li> <li>If the gimbal drifts after balancing and calibration, replace the gimbal.</li> </ol>
Roll axis cracked or misshapen	Perform a visual inspection and check if the roll axis is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the gimbal.
Tilt motor cracked or misshapen	Perform a visual inspection and check if the tilt motor is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the gimbal.

# **Battery Grip**

Common Issue	Inspection Method	Repair Method		
Outer shell cracked or misshapen	Perform a visual inspection and check if the outer shell is obviously cracked or misshapen or if there are any other cosmetic damages.	<ol> <li>DJI RS 3 Mini and DJI RSC 2: Replace the gimbal.</li> <li>DJI RS 3, DJI RS3 Pro, DJI RS 2, and Ronin-SC: Replace the battery grip.</li> </ol>		
Charging failure	Check if the USB adapter and charging cable meet the requirements in the user manual, replace the USB adapter and	If the USB adapter and charging cable do not meet the requirements in the		

charging cable, and check if there is		usei	r manual, or the
debris on the power port or the		chai	rging is normal
power port is misshapen.		afte	r replacing the
		USB	adapter or
		chai	rging cable, replace
		the	USB adapter or
		chai	rging cable.
	2.	If th	ere is debris on
		the	power port or the
		power port is	
		misshapen, or the	
		issue persists after	
		replacing the USB	
		adapter or charging	
		cabl	le:
		1)	DJI RS 3 Mini and
			DJI RSC 2: Replace
			the gimbal.
		2)	DJI RS 3, DJI RS3
			Pro, DJI RS 2, and
			Ronin-SC: Replace
			the battery grip.

### **Camera Control Cable**

Common Issues	Inspection Method	Repair Method		
Camera control cable broken	Perform visual inspection and check if the cable is obviously broken, or if there are any other cosmetic damages.	Replace the camera control cable.		
Unable to take photos or videos	<ol> <li>Check the Camera Compatibility         List and see if the product and         camera are compatible.</li> <li>Reinstall the camera control         cable and camera, and check         again if photos or videos can be         captured.</li> </ol>	<ol> <li>If the camera model is not on the compatibility list, the issue occurs due to a compatibility error.         Try using a camera mentioned in the compatibility list.</li> <li>If the camera model is on the compatibility list and there are special firmware requirements, update the camera or product</li> </ol>		

		to the compatible
		firmware version.
	3.	If the product and
		camera are
		compatible, attach the
		camera control cable
		again. If the issue
		persists, replace the
		gimbal or camera
		control cable.

### **Other Accessories**

Perform a visual inspection and check if accessories are cracked or structurally damaged. Then replace the corresponding accessories.