Ronin 4D & DJI Transmission 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 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℃ to 40℃.
- 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℃ or lower than 0℃.
- Do not place batteries in regular trash containers.

Applicable Models

No.	Model
1	DJI Ronin 4D
2	DJI Transmission

Ronin 4D Main Body

Common Issue	Inspection Method	Repair Method
Bottom shell module cracked or misshapen	Perform a visual inspection and check if the bottom shell module is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the Ronin 4D Main Body.
Z-Axis arm broken	Perform a visual inspection and check if the Z-Axis arm is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the Ronin 4D Main Body.
Lock button stuck	Check if the Lock button can be toggled normally.	Replace the Ronin 4D Main Body.
Record button insensitivity	Check if the button cannot bounce back after pressed down or is collapsed.	Replace the Ronin 4D Main Body.
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 Ronin 4D Main Body.
Unable to connect to DJI Assistant 2	Check if the USB-C port is misshapen. Update DJI Assistant 2 to the latest official version, then try connecting again. Or try replacing the Type-C cable.	1. If the USB-C port is misshapen, replace the Ronin 4D Main Body. 2. If the issue is resolved after DJI Assistant 2 is updated to the latest version, the original version of DJI Assistant 2 is not compatible with the product. 3. If the issue is resolved after the Type-C cable is replaced, the Type-C cable is defective. If the issue persists, replace

		the Ronin 4D Main Body.
HDMI video output error	Check if the HDMI port is misshapen and if the HDMI cable is broken or cracked. Replace the HDMI cable or HDMI display, and test again.	1. If the HDMI port is misshapen, replace the Ronin 4D Main Body. 2. If the HDMI cable is broken or cracked, or if the issue is resolved after the HDMI cable or HDMI display is replaced, there is an error with the HDMI cable or HDMI display.
Forward or downward vision sensor broken or cracked	Perform a visual inspection and check if the vision sensor is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the Ronin 4D Main Body.

DJI Zenmuse X9 Gimbal and Camera & Lens

Common Issue	**Inspection Method**	**Repair Method**
Lens cracked or misshapen	Perform a visual inspection and check if the lens is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the lens.
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 Zenmuse X9 Gimbal and Camera.
Pan lock stuck	Check if the pan lock can be toggled normally.	Replace the Zenmuse X9 Gimbal and Camera.
The gimbal and camera cannot be detached.	Check if the gimbal ring is loose and if the release button is stuck.	1. If the gimbal ring is not loose, loosen it and detach the gimbal and camera again. 2. If the release button is stuck and cannot be pressed down, replace

		the Zenmuse X9 Gimbal and Camera.
Unable to connect DJI Zenmuse X9 Focus Motor or LiDAR Range Finder	Check if the X9 Focus Motor port and LiDAR Range Finder port are connected incorrectly, if the corresponding port is misshapen, and if the LiDAR Range Finder/Focus Motor cable is broken, cracked, or misshapen.	1. If the Focus Motor port and LiDAR Range Finder port are connected incorrectly, connect the focus motor to the X9 Focus Motor port and LiDAR Range Finder to the LiDAR Range Finder port again. 2. If the corresponding port is misshapen, replace the DJI Zenmuse X9 Gimbal and Camera. 3. If the LiDAR Range Finder/Focus Motor cable is broken, cracked, or misshapen, replace the cable.
Video/image spots, moiré pattern, misshapen, stripes, or color aberration	Replace the lens, capture a photo or video, and check the shooting effect.	If the issue is resolved after replacing the lens, there is an error with the original lens. Then replace the lens. If the issue persists, replace the DJI Zenmuse X9 Gimbal and Camera.
The gimbal balance icon on the high-bright main monitor is red or orange.	Tap the gimbal balance icon and balance the gimbal. Check the bar below the pan or tilt axis on the screen.	Balance the gimbal pan or tilt axis according to the tips on the screen.

Left Hand Grip

Common Issue	Inspection Method	Repair Method
Joystick stuck	Move the joystick up, down, left and right to the endpoint, and check if the joystick can be moved smoothly and if the joystick can re-center after release.	If the joystick is stuck or cannot re-center, replace the left hand grip.

Left hand grip front cover or rear cover cracked or misshapen	Perform a visual inspection and check if the front cover or rear cover is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the Left Hand Grip.
M button insensitivity	Check if the button cannot bounce back after pressed down or is collapsed.	Replace the Left Hand Grip.
Safety lock stuck	Check if the safety lock cannot be toggled.	Replace the Left Hand Grip.

Right Hand Grip

Common Issue	**Inspection Method**	**Repair Method**
Dial stuck	Turn the dial and check if the dial is stuck and if the dial is misshapen.	If the dial cannot be turned smoothly or is misshapen, replace the Right Hand Grip.
Right hand grip front cover or rear cover cracked or misshapen	Perform a visual inspection and check if the front cover or rear cover is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the Right Hand Grip.
Unable to record when pressing the Record button	Check if the memory card is inserted into the Storage Media Compartment on the Ronin 4D Main Body and if the button cannot bounce back after pressed down or is collapsed.	1. If no memory card is inserted into the Storage Media Compartment on the Ronin 4D Main Body, insert the memory card and test again. 2. If the button cannot bounce back after pressed down or is collapsed, replace the Right Hand Grip.
Mode button insensitivity	Check if the button cannot bounce back after pressed down or is collapsed.	Replace the Right Hand Grip.
Safety lock stuck	Check if the safety lock cannot be toggled.	Replace the Right Hand Grip.

Top Handle

Common Issue	Inspection Method	Repair Method
Tilt slider stuck	Check if the tilt slider can be toggled normally.	If the tilt slider cannot be toggled normally, replace the Top Handle.
The tilt of the gimbal cannot be controlled by the tilt slider.	Check if the tilt slider can be toggled normally, if the positioning hole and pins are aligned, and if the pins are misshapen.	1. If the tilt slider cannot be toggled normally, replace the Top Handle. 2. If the positioning hole and pins are not aligned, detach and re-attach the Top Handle and test again 3. If the pins are misshapen, replace the Top Handle.
Handel or base cracked or misshapen	Perform a visual inspection and check if the handle or base is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the Top Handle.
M button insensitivity	Check if the button cannot bounce back after pressed down or is collapsed.	Replace the Top Handle.

High-Bright Main Monitor

Common Issue	Inspection Method	Repair Method
Button insensitivity	Check if the button cannot bounce back after pressed down or is collapsed.	Replace the High-Bright Main Monitor.
Dial stuck	Check if the dial can be rotated smoothly and if the dial is misshapen.	If the dial cannot be rotated smoothly or if the dial is misshapen, replace the High-Bright Main Monitor.
Middle frame or rear cover cracked or misshapen	Perform a visual inspection and check if the middle frame or rear cover is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the High-Bright Main Monitor.

LCD screen cracked	Perform a visual inspection and check if the screen is obviously cracked or if there are any other cosmetic damages.	Replace the High-Bright Main Monitor.
LCD screen not working	Tap on the screen, and swipe up, down, left and right to check if the display changes with the operation.	Replace the High-Bright Main Monitor.
LCD screen freezing or incomplete screen display	Check if the screen freezes or is not displayed completely.	Replace the High-Bright Main Monitor.

DJI High-Bright Remote Monitor

Common Issue	Inspection Method	Repair Method
Power button insensitivity	Check if the button cannot bounce back after pressed down or is collapsed.	Replace the High-Bright Remote Monitor.
Middle frame or rear cover cracked or misshapen	Perform a visual inspection and check if the middle frame or rear cover is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the High-Bright Remote Monitor.
Detachable antenna cracked or misshapen	Perform a visual inspection and check if the antenna is obviously cracked or misshapen, or if there are any other cosmetic damages.	Replace the DJI FPV Goggles V2 Antenna (Dual-Frequencies).
LCD screen cracked	Perform a visual inspection and check if the screen is obviously cracked or if there are any other cosmetic damages.	Replace the High-Bright Remote Monitor.
LCD screen not working	Tap on the screen, and swipe up, down, left and right to check if the display changes with the operation.	Replace the High-Bright Remote Monitor.
LCD screen freezing or incomplete screen display	Check if the screen freezes or is not displayed completely.	Replace the High-Bright Remote Monitor.

Linking failure	Check if the video transmitter is mounted to a compatible device before linking and if the remote monitor and video transmitter can enter the linking status.	1. If the video transmitter is not installed properly, attach the video transmitter and link again. 2. If the video transmitter cannot enter the linking status, the video transmitter is malfunctioning. 3. If the remote monitor cannot enter the linking status, replace the High-Bright Remote Monitor.
Unable to connect to DJI Assistant 2	Check if the USB-C port is misshapen. Update DJI Assistant 2 to the latest official version, then try connecting again. Or try replacing the Type-C cable.	1. If the USB-C port is misshapen, replace the High-Bright Remote Monitor. 2. If the issue is resolved after DJI Assistant 2 is updated to the latest version, the original version of DJI Assistant 2 is not compatible with the product. 3. If the issue is resolved after the Type-C cable is replaced, the Type-C cable is defective. If the issue persists, replace the High-Bright Remote Monitor.

Battery

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.	Replace the corresponding battery.
Charging failure	Install the battery into another charging slot of the	1. If the issue persists after inserting the battery

	corresponding charging hub or power adapter, or replace the battery and test again.	into another charging slot of the corresponding charging hub or power adapter, but the charging is normal after replacing the battery, replace the corresponding battery. 2. If the issue is resolved after inserting the battery into another charging slot of the corresponding charging hub or power adapter, or ithe charging fails after replacing the battery, replace the corresponding charging hub or power adapter.

Other Accessories

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