DJI CP.MA.00000406.01

DJI RC Pro Remote Controller User Manual

Model: CP.MA.00000406.01

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1. INTRODUCTION

The DJI RC Pro is a high-performance remote controller designed for professional-level aerial photography, compatible with DJI Mavic 3 series and Air 2S drones. It features a high-bright 1080p screen and utilizes O3+ video transmission technology for a stable and extended transmission range of up to 15 km. Equipped with a next-generation processor, the DJI RC Pro ensures stable and smooth operation, enhancing the overall flight experience. It also supports the DJI Cellular Dongle for 4G communication and incorporates the precise control sticks found in DJI FPV systems.

Figure 1.1: Front view of the DJI RC Pro Remote Controller, showcasing its integrated screen and control sticks.

2. WHAT'S IN THE BOX

Upon unboxing your DJI RC Pro, please verify that all components are present and in good condition:

- DJI RC Pro Remote Controller
- Additional accessories (e.g., charging cable, spare control sticks) may vary by package. Refer to your specific product packaging for a complete list.

Figure 2.1: The DJI RC Pro Remote Controller shown alongside a DJI Mavic 3 drone, illustrating its intended use.

3. KEY FEATURES AND COMPONENTS

The DJI RC Pro is engineered with advanced features to provide a superior control experience:

- **Integrated 1080p High-Bright Screen:** A 5.5-inch display with up to 1000 nits brightness, optimized for outdoor visibility, even under direct sunlight.
- **O3+ Video Transmission:** Offers a robust and stable video feed with a transmission range of up to 15 km and latency as low as 120 ms.
- **Next-Generation Processor:** Enhanced processing power for smoother and more stable system performance.
- **Precise Control Sticks:** Adopts the same control stick design as DJI FPV for accurate and responsive drone control.
- **4G Communication Support:** Compatible with DJI Cellular Dongle for enhanced connectivity.

Faster and More Stable Video Transmission

The upgraded O3+ system supports a video transmission range of up to 15 km with a latency as low as 120 ms.

Figure 3.1: A user operating the DJI RC Pro, highlighting the faster and more stable video transmission capabilities of the device.

High-Bright Screen

DJI RC Pro's 5.5-inch 1080p screen with a brightness of up to 1000 nits is perfect for Outdoor mode. Shadow details are enhanced for a clear display, even under direct sunlight.
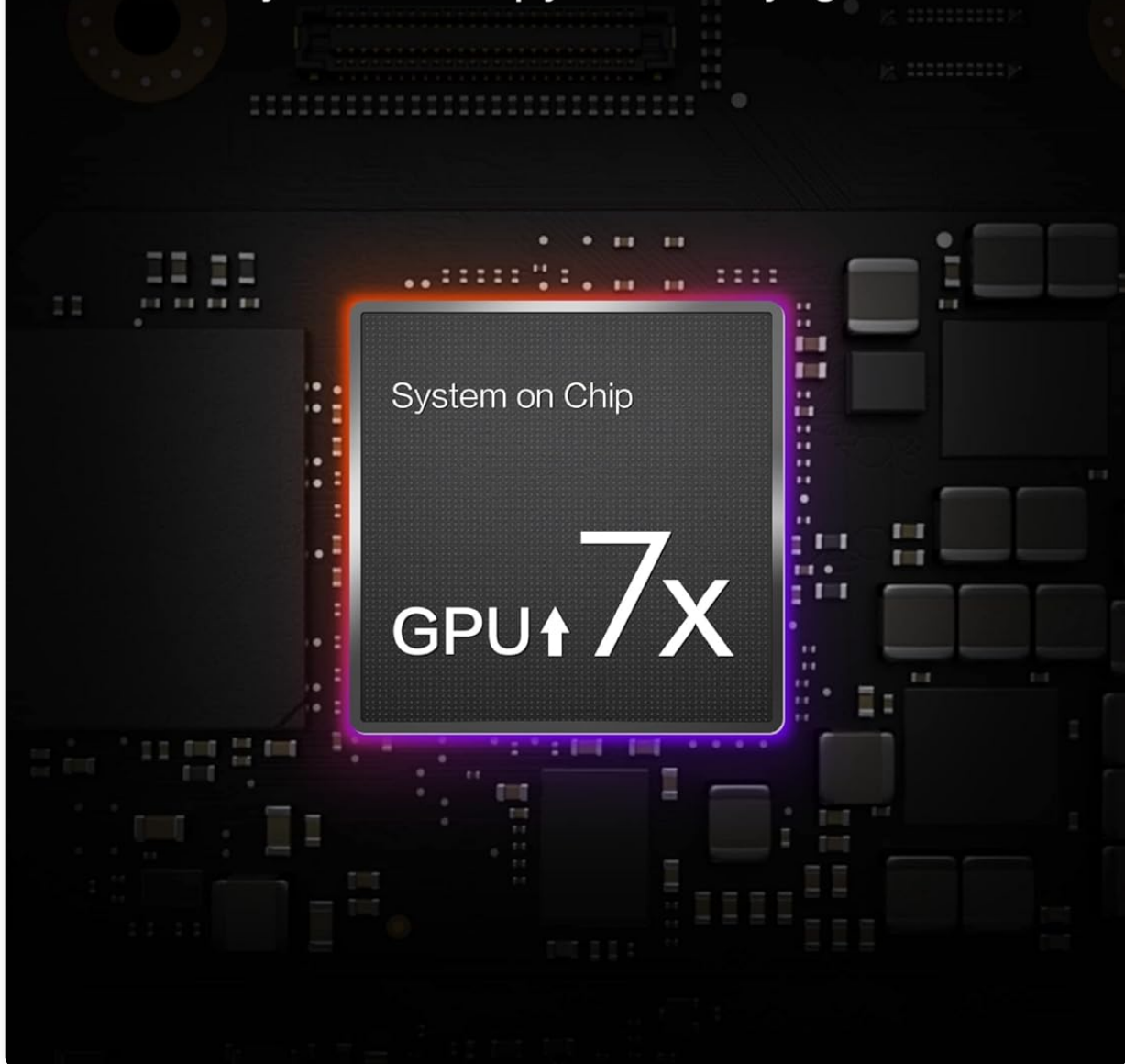

Figure 3.2: Close-up of the DJI RC Pro's high-bright 1080p screen, demonstrating its clarity and visibility in outdoor conditions.

Figure 3.3: An illustration depicting the updated processor (System on Chip with GPU 7x) within the DJI RC Pro, signifying its upgraded performance.

4. SETUP GUIDE

Follow these steps to prepare your DJI RC Pro for first use:

1. **Charge the Remote Controller:** Connect the DJI RC Pro to a power source using a compatible USB-C cable and charger. The battery level indicators will show charging progress. Ensure it is fully charged before initial use.

2. **Power On:** Press the power button once, then press and hold it for two seconds to power on the remote controller.

3. **Activate the Device:** Follow the on-screen prompts to activate the DJI RC Pro. This typically involves connecting to the internet and logging into your DJI account.

4. **Link to Aircraft:** Ensure your drone is powered on. On the DJI RC Pro, navigate to the linking menu (usually found in the settings or connection section) and follow the instructions to link the remote controller with your DJI aircraft.

5. **Firmware Update:** It is highly recommended to update the firmware of both the remote controller and the aircraft to the latest version for optimal performance and compatibility. Perform updates via the DJI Fly app or DJI Assistant 2 (Consumer Drones Series) software.

5. OPERATING INSTRUCTIONS

The DJI RC Pro provides intuitive control over your DJI drone. Familiarize yourself with the controls and screen interface:

- **Control Sticks:** Use the left stick to control altitude and yaw, and the right stick to control forward/backward and left/right movement of the aircraft.
- **Customizable Buttons:** The RC Pro features several customizable buttons (e.g., C1, C2, 5D button) that can be assigned to various functions within the DJI Fly app for quick access.
- **Screen Interface:** The integrated 1080p screen displays real-time flight parameters, camera view, and access to the DJI Fly app. Swipe down from the top of the screen to access quick settings and notifications.
- **Flight Modes:** Select different flight modes (e.g., Normal, Sport, Cine) using the dedicated switch on the remote controller to adjust the drone's responsiveness.
- **Return to Home (RTH):** Press the RTH button to initiate the Return to Home procedure, causing the aircraft to return to its recorded Home Point.

Always ensure you have a clear line of sight to your aircraft and are aware of your surroundings during operation.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your DJI RC Pro:

- **Cleaning:** Use a soft, dry cloth to clean the remote controller's surface and screen. Avoid using liquid cleaners or solvents that may damage the device.
- **Storage:** Store the DJI RC Pro in a cool, dry place away from direct sunlight and extreme temperatures. If storing for extended periods, ensure the battery is charged to approximately 50-60% to preserve battery health.
- **Battery Care:** Avoid fully discharging the battery frequently. Recharge the battery regularly, even if not in use, to prevent deep discharge.
- **Firmware Updates:** Regularly check for and install the latest firmware updates to ensure compatibility and access to new features and bug fixes.
- **Physical Inspection:** Periodically inspect the control sticks, buttons, and ports for any signs of wear or damage.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your DJI RC Pro:

Problem	Possible Cause	Solution
Remote Controller does not power on.	Low battery; incorrect power-on procedure.	Charge the remote controller. Press the power button once, then press and hold for two seconds.
Cannot link to aircraft.	Aircraft not powered on; remote controller too far from aircraft; linking procedure not followed correctly.	Ensure aircraft is powered on and close to the RC Pro. Re-attempt the linking procedure as per the setup guide.
Video transmission signal is weak or lost.	Obstructions between RC Pro and aircraft; strong interference; aircraft too far.	Fly in an open area with minimal interference. Ensure antennas are correctly positioned. Reduce distance to aircraft.
Screen is unresponsive or frozen.	Software glitch; system overload.	Restart the remote controller. If the issue persists, consider performing a factory reset (backup data first).

For more detailed troubleshooting or issues not listed here, please refer to the official DJI support resources or contact DJI customer service.

8. TECHNICAL SPECIFICATIONS

Feature	Detail
Model Number	CP.MA.00000406.01
Product Dimensions	6.9 x 4.1 x 3.15 inches
Item Weight	1.5 pounds
Screen	5.5-inch, 1080p, 1000 nits brightness
Video Transmission System	O3+
Max Transmission Range	15 km (FCC compliant, unobstructed, free of interference)
Compatible Devices	DJI Mavic 3 series, DJI Air 2S (and other compatible DJI drones)
Color	Gray
Manufacturer	DJI
Date First Available	December 2, 2022

9. SAFETY INFORMATION

Adhere to the following safety guidelines when operating your DJI RC Pro and associated aircraft:

- **Local Regulations:** Always comply with local laws and regulations regarding drone operation.

- **Visual Line of Sight:** Maintain a visual line of sight with your aircraft unless otherwise permitted by regulations.
- **Environmental Awareness:** Be aware of your surroundings, including obstacles, people, and other aircraft.
- **Battery Safety:** Use only approved chargers and batteries. Do not expose batteries to extreme temperatures or physical damage.
- **Interference:** Avoid operating in areas with strong electromagnetic interference, which can affect signal transmission.
- **Pre-Flight Checks:** Before each flight, ensure the remote controller and aircraft are fully charged, linked, and all components are functioning correctly.

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your DJI RC Pro, please visit the official DJI website or contact DJI customer support directly. Keep your proof of purchase for warranty claims.

DJI Official Website: www.dji.com

Note: DJI is not responsible for permissions or information security related to third-party apps, and does not provide any technical support for compatibility issues with third-party applications. If an installed third-party app prevents you from enjoying optimal use of your controller, it is suggested to remove the app or restore the controller to original factory settings.

Related Documents - CP.MA.00000406.01

[DJI Mavic 3 Enterprise Series Datasheet and Specifications](#)
Comprehensive technical datasheet for the DJI Mavic 3 Enterprise Series drones, including the Mavic 3E and Mavic 3T models. Details aircraft, wide camera, tele camera, thermal camera, gimbal, sensing, video transmission, DJI RC Pro Enterprise, storage, battery, charger, RTK module, and speaker specifications.

[DJI Mavic 3 User Manual: Comprehensive Guide to Features and Operation](#)
Explore the capabilities of the DJI Mavic 3 drone with its advanced camera systems, intelligent flight modes, and remote controller features. This user manual provides detailed instructions for operation, safety, and specifications.

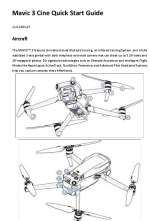|	
	[DJI Mavic 3 Pro User Manual - Comprehensive Guide to Drone Operation and Features](#) Explore the DJI Mavic 3 Pro and Mavic 3 Pro Cine drones with this official user manual. Learn about advanced features, flight modes, camera capabilities, safety guidelines, and remote controller operation for optimal aerial photography and videography.
	[DJI Care Refresh: Allgemeine Geschäftsbedingungen & Serviceumfang](#) Umfassende Informationen zu den Allgemeinen Geschäftsbedingungen von DJI Care Refresh. Erfahren Sie mehr über Austausch, Reparatur, Wartung, Ausschlüsse und wie Sie den Service für Ihre DJI Drohnen und Produkte beanspruchen.
	[DJI Mavic 3 Pro User Manual - Features, Setup, and Operation](#) Official user manual for the DJI Mavic 3 Pro drone. Covers product features, initial setup, flight safety, intelligent flight modes, DJI Fly app usage, and troubleshooting for optimal performance.
	[DJI Mavic 3 Cine Quick Start Guide](#) A concise guide to getting started with the DJI Mavic 3 Cine drone, covering aircraft and remote controller setup, flight operations, and specifications.