



SKYDROID C01 PRO Electronic Gimbal

User Manual v1.0

Caution:

This product uses the following terms to classify and explain potential hazards that may arise from improper operation.

Caution: Failure to follow the instructions may result in property damage and minor injury.

Caution: Failure to follow the instructions may result in property damage, major accidents, and serious injury.

Warning: Operate the product only after reading the entire user manual and becoming familiar with its functions. Improper operation of this product may cause serious injury to yourself or others, or lead to product damage and property loss. This product is relatively complex and requires a period of time to become familiar with before it can be used safely; additionally, basic knowledge is required to operate it. Without a strong safety awareness, improper operation may cause product damage and property loss, and even serious injury to yourself or others.

This product is not suitable for children. Do not use parts that are not provided or recommended by Skydroid. You shall strictly follow Skydroid's guidelines when using the product.

After-Sales Service Terms

1. These terms apply only to products manufactured by Quanzhou Skydroid Technology Co., Ltd. They also apply to products sold by authorized Skydroid distributors.

2. For products of our company, if non-human-caused quality issues are verified by our company within one week from the date of purchase, Skydroid will afford the round-trip courier fees for the returned and repaired products. If quality issues are verified by our company for Skydroid products purchased for more than one week but less than one year, the user and Skydroid shall each afford the courier fee for sending the product for repair.

3. When returning a product for repair, the purchase certificate, warranty card, or online platform transaction record should be provided.

4. If a Skydroid product has non-human-caused quality issues under normal use within seven days from the date of purchase, and the appearance is undamaged, the user can negotiate with the distributor for a free replacement of the same-model product with the warranty card and purchase certificate. The distributor is requested to notify Skydroid immediately for filing and replacement when receiving the product to be replaced.

5. Skydroid provides lifelong after-sales service for all Skydroid products. For non-human-caused quality issues, free warranty service is provided within one year. For damages caused by human factors, modifications, disassembly, or products beyond the one-year free warranty period from the date of purchase, the user shall pay the round-trip shipping fees and repair costs.

6. To ensure your rights are protected and that you can get timely and effective service, please fill out the warranty card completely and request a purchase certificate when buying a Skydroid product. Users shall provide the warranty card and purchase certificate to enjoy the services under these after-sales service terms.

7. Repaired products will be sent back to the customer within 15 working days after Skydroid receives them, along with a repair report.

8. The above after-sales service terms apply only to Skydroid products sold in China Mainland.

For after-sales issues of customers in Hong Kong, Macau, Taiwan, and overseas regions, please send email to sales01@skydroid.xin. The specific after-sales details will be determined based on the actual situation.

Disclaimer

The content mentioned herein concerns your safety, as well as your legal rights and responsibilities. Please read this document carefully before using the product to ensure proper setup. Failure to follow the instructions and warnings in this document may result in injuring to you or others, damaging to the product, or harming to other surrounding objects. The interpretation of this document and all related documents is reserved by Skydroid. Any updates are subject to change without prior notice. Please visit the official website at <https://skydroidglobal.com> for the latest product information.

The C01 PRO has been calibrated before shipment according to the camera and lens it is equipped with. DO NOT disassemble the camera or alter its mechanical structure by yourself, as this may cause abnormal operation or performance degradation of the camera.

For your safety and the safety of others, please ensure that the drone is in a safe condition during gimbal debugging. DO NOT power on the device in flammable, explosive, or child-friendly environments. It is strongly recommended to remove the propellers from the drone before debugging.

- A) Ambient temperature: $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$
- B) Storage temperature: $-25^{\circ}\text{C} \sim 60^{\circ}\text{C}$
- C) Atmospheric pressure: $86\text{kPa} \sim 106\text{kPa}$
- D) The usage location shall not have explosive hazardous media, and the surrounding media should not contain gases that corrode metals and damage insulation, nor should it be filled with water vapor or have severe mold growth.
- E) The usage location should have facilities to prevent rain, snow, wind, sand, and dust.

As our company cannot control the user's specific usage, installation, modification, or improper operation, we shall not be liable for any direct or indirect losses or damages caused by the above circumstances. If you use, install, or assemble Skydroid products, the corresponding consequences shall be borne by the user. Our company shall not be responsible for any indirect or direct losses or injuries caused by the use of this product.

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I 、 Product Brief-Introduction

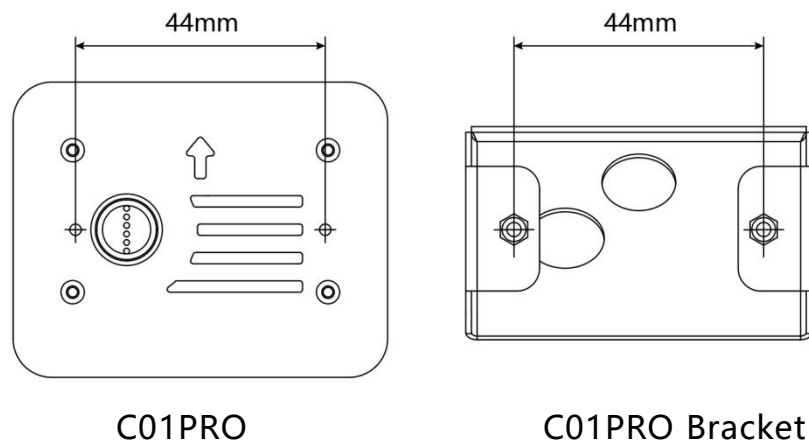
Engineered specifically for mobile devices where mechanical gimbals cannot be installed—such as drones, unmanned ground vehicles (UGVs), and unmanned surface vessels (USVs)—the C01 PRO features an ultra-wide-angle fisheye lens design. Equipped with a 1/2.53-inch sensor and 5-megapixel high-definition resolution, it delivers smooth, clear 720P/30fps video quality. The wide-angle field of view covers the entire operational scenario, while the high-definition resolution captures every detail, providing the pilot with comprehensive visibility of every corner of the field and the surrounding environment during operation, thereby reinforcing operational safety from a visual perspective.

Lightweight design is another significant advantage of the C01 PRO. Weighing only 60 grams, and just 72 grams with the bracket, it substantially reduces the payload burden on the carrying device. This indirectly enhances battery life and operational maneuverability, providing reliable support for extended outdoor operations.

Considering the complex conditions frequently encountered in agricultural scenarios—such as frequent pesticide spraying and dust intrusion—the C01 PRO is rigorously designed and third-party certified to the IP65 ingress protection rating. It effectively withstands high-pressure liquid spray and dust ingress, ensuring stable operation under harsh conditions and significantly improving durability and reliability. (Note: The splash, water, and dust resistance are not permanently effective and may diminish due to normal wear over time. Damage resulting from liquid immersion is not covered under the warranty.)

II、Installation&Usage

C01 PRO Electronic Gimbal and C01 PRO Bracket Screw Hole Positions and Spacing Diagram (See Figure Below)



Recommended Installation Screws:

For securing the C01 PRO: HM2*8 machanical screws (Quantity: 2)

For securing the C01 PRO bracket: PM2.5*3 screws (Quantity: 2)

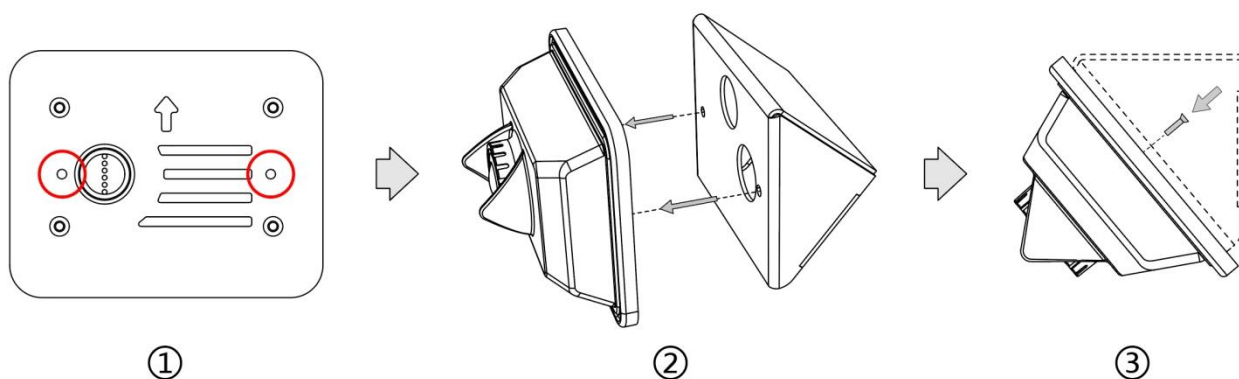
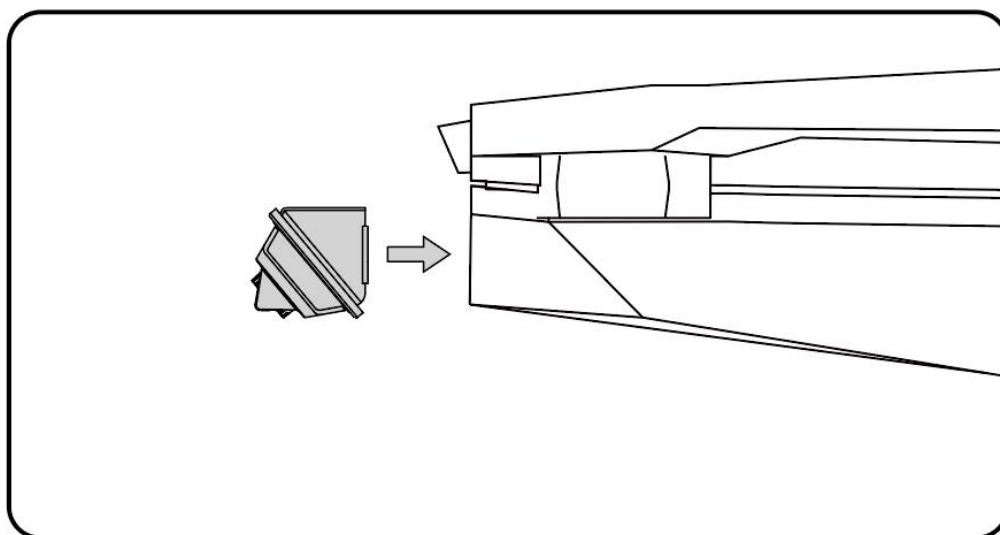
Installation Method 1:

With Bracket Installation

Ensure the arrow on the back of the C01 PRO lens is pointing upward.

Secure it to the included 40° bracket using the specified screws, as shown in the figure below

Note: During installation, ensure a rigid connection with the carrier to guarantee a stable and reliable structure.

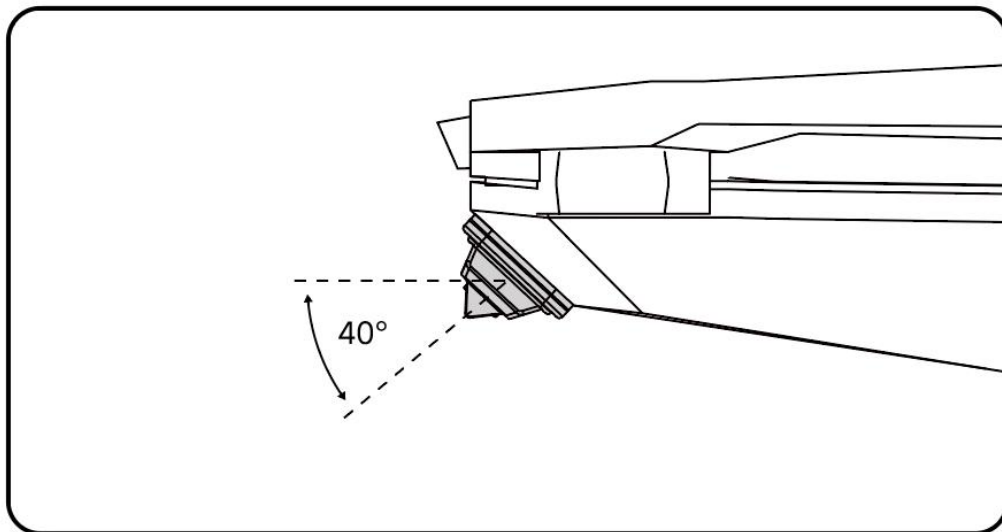


Installation Method 2:

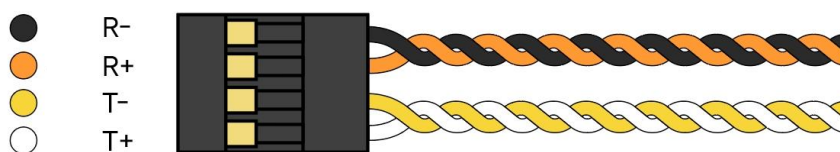
Without Bracket Installation

If the mounting position on the carrier satisfies the 40° installation requirement, the 40° bracket can be omitted. Ensure the arrow on the back of the C01 PRO lens is pointing upward, and secure it directly to the carrier to achieve stable image transmission with your drone.

Note: During installation, ensure a rigid connection with the carrier to guarantee a stable and reliable structure.



Ⅲ、Interface Definition Explanations



IV、Parameters

C01 PRO Parameters	
Video Output Interface	LAN Port
Input Power Supply	7.2V~80V
Operation Current	100mA/12V
Working temperature	-10℃~60℃
Weight	60g
Bracket weight	12g
IP rate	IP65
C01 PRO Dimension	66mm×52mm×31.9mm
Bracket dimension	61mm×46.7mm×26.5mm
Controllable Tilt Angle	-90°~0°
Pixel	5MP
Sensor dimension	1/2.53 inches
Aperture	F2.2
Focal length	2.20mm
HFOV/ VFOV/DFOV	154.4°/ 111.8°/204°
Output method	RTSP Stream H265
Image-transmission resolution	720P (1280*720) @30fps
Stabilization method	EIS Stabilization
Video stream address	rtsp://192.168.144.108:554/stream=0

V、The Usage of C01 PRO Electronic Gimbal

Install the latest gimbal FPV APP and open it via the remote controller.



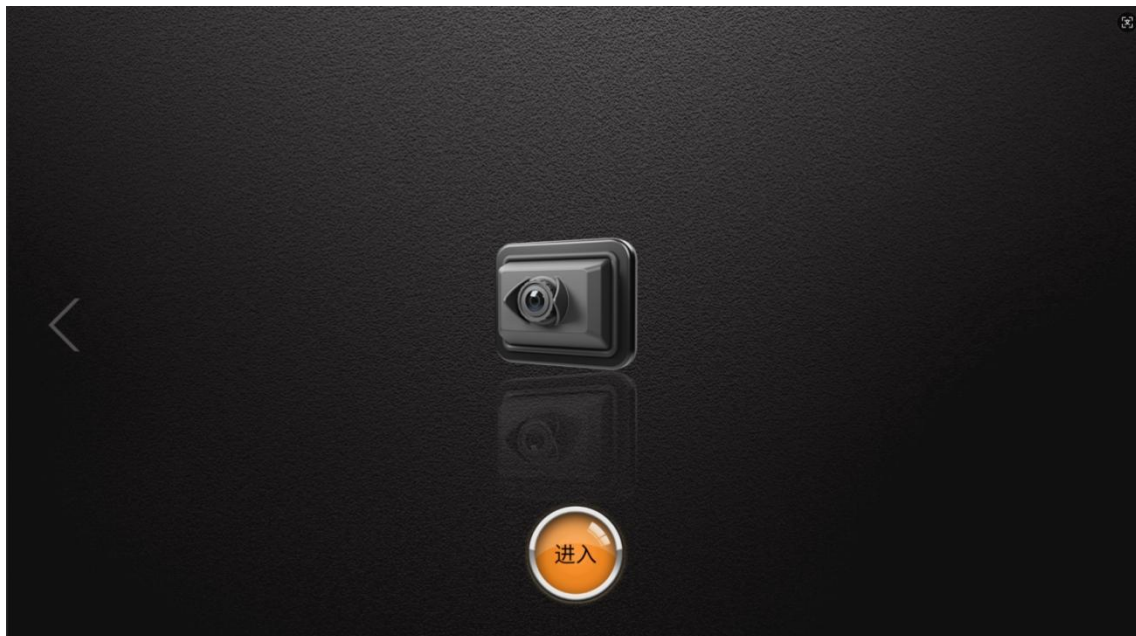
APP Address: <https://file.skydroid.xin/SkydroidCameraFPV.apk>

1. Gimbal Startup

Note: When powering on the C01 PRO, the gyroscope calibration will be automatically performed. Please keep the gimbal at the stationary state.

2. Open the Gimbal FPV

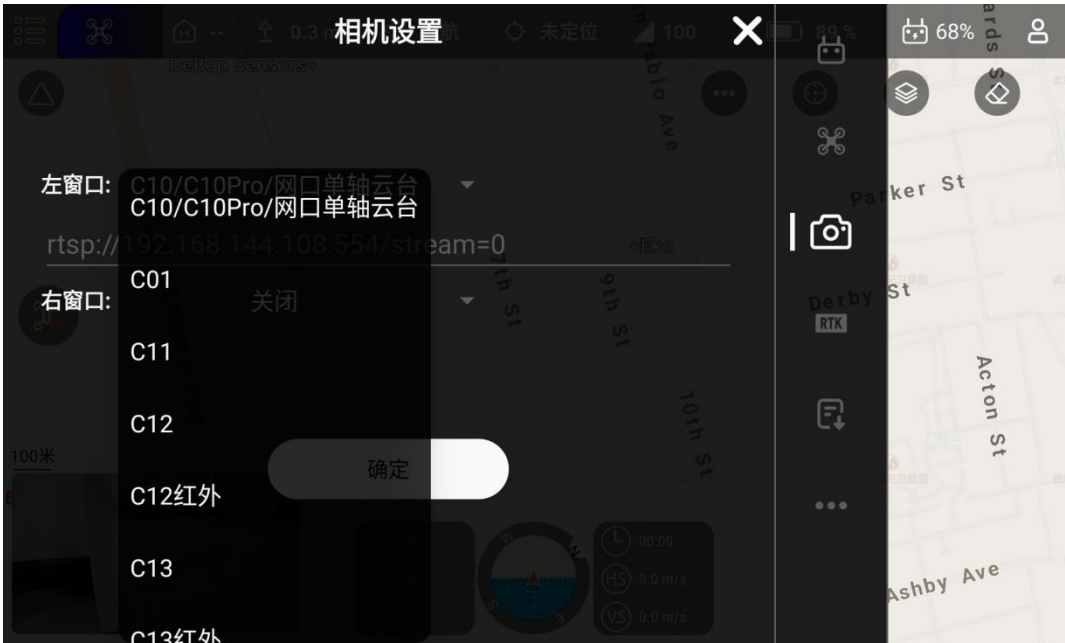
Choose C01 icon and click in



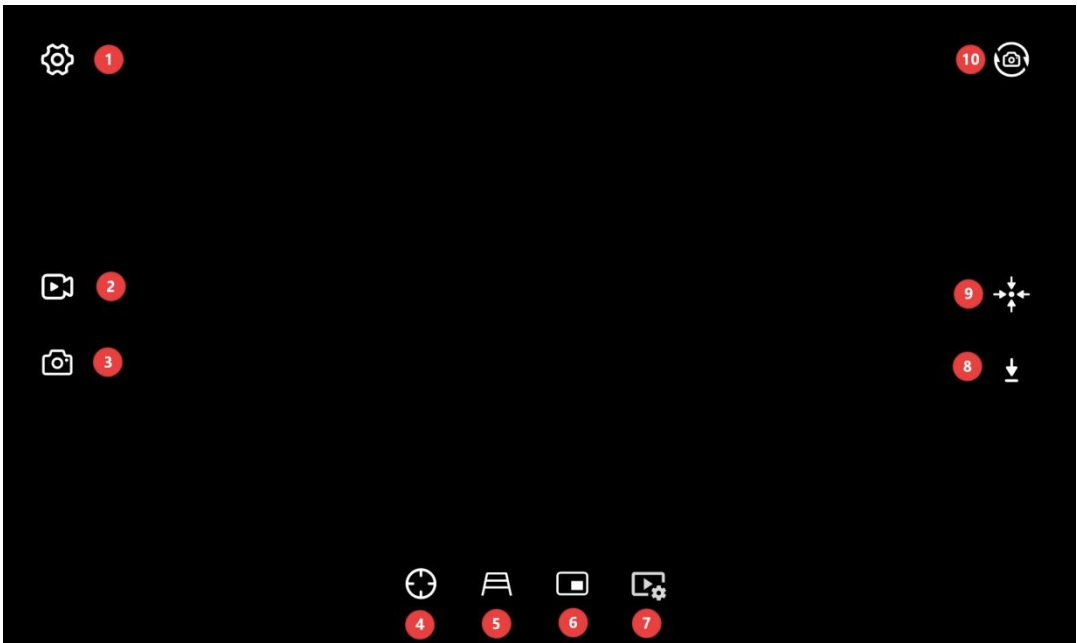
If using FLY GCS, then you can see the video via following settings:

APP Address <https://file.skydroid.xin/SkydroidFly.apk>

FLY APPHomepage top left corner  ->  -> C01



3. Gimbal FPV Homepage Introduction



NO.	Annotation	NO.	Annotation
1	System settings	6	Floating window
2	Recording	7	Parameter setting
3	Photographing	8	One-key tilt down
4	Crosshair	9	Return to center
5	Reverse line	10	camera switch

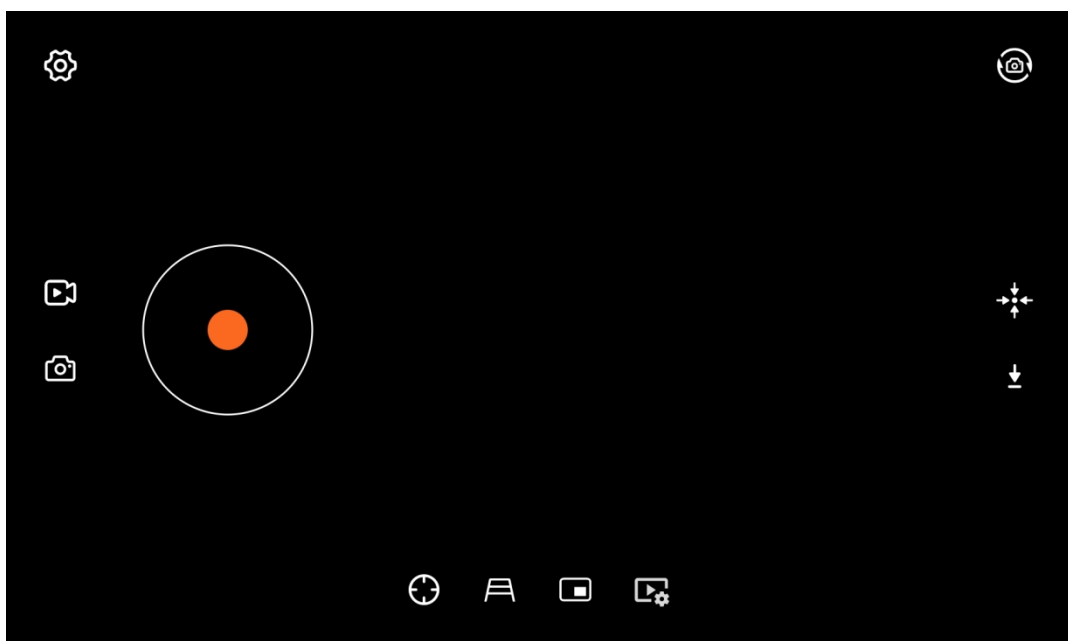
4. Gimbal Control

Navigate to: Parameter Settings  -> Gimbal Control. Three control modes are available and can be enabled simultaneously by checking the corresponding boxes.



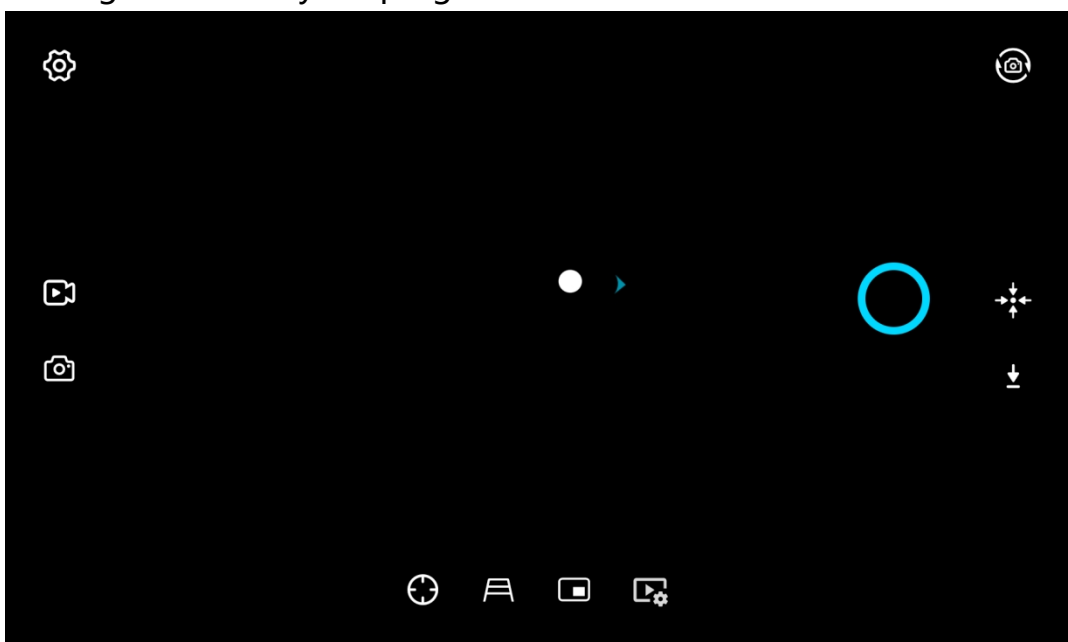
(1) Using Virtual Joystick Control:

Control the gimbal tilt via the on-screen virtual joystick. Features such as one-key return to center are also supported.



(2) Using Gesture Control:

Control the gimbal tilt by swiping on the screen.



(3) Using Remote Controller Channel Control:

Control the gimbal tilt via Channel 12th of the remote controller.

Note: The remote controller channel can be checked and verified via Device Assistant -> Servo Monitor.

5. IP Settings

The IP address and gateway of the C01 PRO camera can be modified when needed.

Note: After modification, the corresponding video stream address shall be updated accordingly to ensure normal video feed retrieval. The function setting password is 999999.

Example:

If the device IP address is changed to 192.168.144.107, the corresponding video stream address should be adjusted to:

rtsp://192.168.144.107:554/stream=0 。





6. Firmware Update

Before upgrading the firmware, please ensure that the remote controller is connected to the internet. Once connected, click “Firmware Update” and select from the following update options.



6.1 MCU Firmware Upgrade

(1) Online Update

Click "Check for Updates" to view the current MCU firmware version and the

latest available version online.

To upgrade, click "Update Now" to begin the online upgrade process. The entire upgrade process takes approximately 1 minute.



(2) Local Firmware Update

Click the "Local Firmware" option on the page and select the corresponding local file to upgrade.



6.2 Camera Firmware Upgrade

(1) Online Upgrade

Click "Check for Updates" to view the current camera firmware version and the

latest available version online.

To upgrade, click "Update Now" to begin the online upgrade process. The entire upgrade process takes approximately 2 minutes.



(2) Local Firmware Update

Click the "Local Firmware" option on the page and select the corresponding local file to upgrade.



VI、 After-Sale Address and Technical Support

After-sales or Returns&Exchanges Address: 1st Floor, Building E, Yucheng Base,
Fengze Science and Technology Road, Quanzhou City, Fujian Province, China
Recipient: After-sales repair, Mobile: +86 18876386351

After-sales service:

When returning the product for repair, please include a note with the following information(contact information, return shipping address, reason for return etc); otherwise, the return will not be processed

Returns&Exchanges:

When returning the product for a refund or exchange, please include a note with the following information(contact information, reason for return). Also, keep the shipping receipt and the original packaging. Any losses resulting from failure to provide a clear reason for the return will be borne by the party returning the item. We will not accept returned items that are not properly explained.

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<https://skydroidglobal.com>