GOCam PM GR

User Manuals Guide
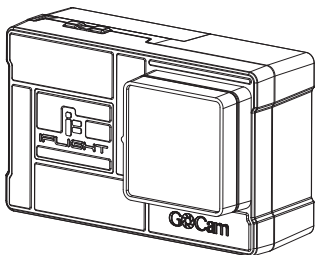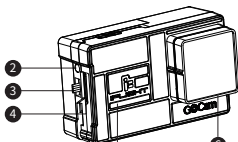
1.Name of Parts
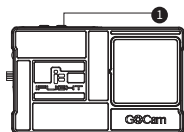
1 Power/Record Button   **3** Terminal   **5** Heat Sinks
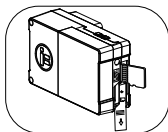
2 LED Indicator   **4** Micro SD Card Slot   **6** Lens Filter

2 .Install Camera

(1)Install Micro SD Card

You will need a Micro SD card (sold separately) to save videos and photos, please choose the SD Card brands which can meet the following requirements:

- MicroSD, MicroSDHC or MicroSDxc

- Class 10 or UHS-3

- Storage up to 256GB

Note: Always wash and dry your hands before handling the SD card. Check the manufacture's manual, learn about the acceptable temperature range formemory cards and other important information.

Professional Tip: It is recommended to periodically format the SD card regularly to keep it in good condition. This will erase all media files, be sure to save the files first

(2).Install battery or adaptor

Professional Tip: Ensure that the camera battery is fully charged beforeusing. GOCam PM GR special charger can charge 3 batteries at the sametime, takes about an hour to fully charge and the LED light will become solid green. Besides being powered by the camera battery, it can be also power by the BEC adapter cable, which supports 2-6S voltage input
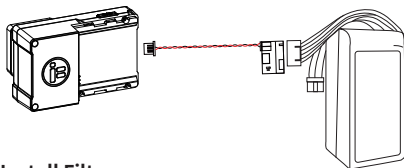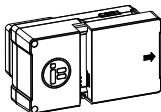
3. Install Filter

Professional Tip: Please select the appropriate filter for your environment. It comes with 4 filteres.(UV filter, ND8, ND16, ND32)
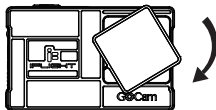
4 .Camera ting

GOCam PM GR using QRCode to adjust parameters.
App install: https://www.runcam.com/download/GOCamPMGR

GOCam PM GR ▼

QRCode Configuration

Video / General

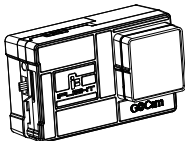|	
Video Quality	High ▼
Loop Recording	OFF ▼
Power on Auto Recording	
Resolution	4k@30fps ▼
Volume	FPV ▼
Shutter	自动 ▼
ISO	自动 ▼
Distortion correction	

Note: Distortion correction function is currently only effective at 4k@30fps, 2.7k@60fps, 1080p@60fps resolution.

EIS Electronic Image stabilization	

Note: EIS function is currently only effective at 4k@30fps,2.7K@60fps,2.7K@50fps,1440P@60fps,1080p@60fps resolution.

WDR(Wide Dynamic Range)	

Generate QRCode

GOCam PM GR   QR Code   ···

Scan the following QR code in GOCam R1's Setting mode to apply the configuration

Mobile phone screen reflection may affect the recognition rate of QR code

Configuration Details	
Video Quality	High
Loop Recording	OFF
Power on Auto Recording	ON
Resolution	4K30FPS
Volume	FPV
Shutter	Auto
ISO	Auto

Screen 1

Scan the following QR code in GOCam R1's Setting mode to apply the configuration

Mobile phone screen reflection may affect the recognition rate of QR code

Usage Guidelines

Step1

Step1: Long press the Record Button to power on the camera and ensure insert the Micro SD card.

Loop Recording	OFF
Power on Auto Recording	Off
Resolution	4k@30fps
Volume	70%
Shutter	0(4)
ISO	0(3)

Screen 2

Scan the following QR code in GOCam R1's Setting mode to apply the configuration

Mobile phone screen reflection may affect the recognition rate of QR code

Usage Guidelines

Step2

Step2: Double press the Record Button to parameters mode (indicator light changes to solid green).

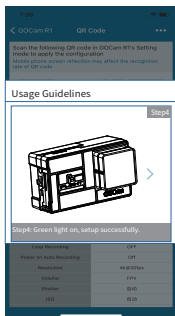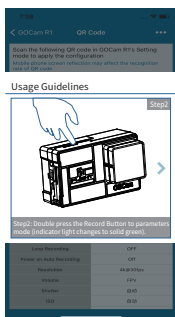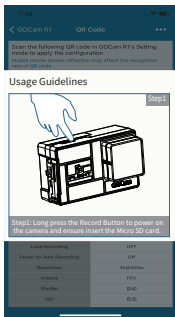|	
Loop Recording	OFF
Power on Auto Recording	Off
Resolution	4k@30fps
Volume	70%
Shutter	0(4)
ISO	0(3)

Screen 3

Scan the following QR code in GOCam R1's Setting mode to apply the configuration

Mobile phone screen reflection may affect the recognition rate of QR code

Step3

Step3: Scan the QRCode, when it configures the application successfully, it will beep 2 times.

Loop Recording	OFF
Power on Auto Recording	Off
Resolution	4k@30fps
Volume	70%
Shutter	0(4)
ISO	0(3)

Screen 4

Scan the following QR code in GOCam R1's Setting mode to apply the configuration

Mobile phone screen reflection may affect the recognition rate of QR code

Usage Guidelines

Step4

Step4: Green light on, setup successfully.

Loop Recording	OFF
Power on Auto Recording	Off
Resolution	4k@30fps
Volume	70%
Shutter	0(4)
ISO	0(3)

5 .Camera Operation

Turn on
Press "Mode" [⊙/⏻] button, GOCam PM GR will turn on.

Turn off
Press "Mode" [⊙/⏻] button for 3 seconds.
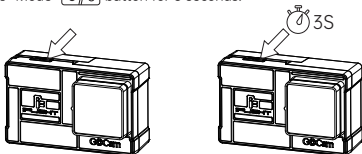
|	
Turn on/off	Press the Record Button for 3 seconds, enters standby mode, red light on.
Start/stop recording	In standby mode, single press Record Button then starts recording, red light flashing. Then single press Record Button again, stop recording, red light stop flashing.
Enter QRCode Mode	In standby mode, double press Record Button, enters QRCode mode, green light on. After scanning successfully then turns to standby mode with red light on.

(2) Remote Control Instruction

Connect camera and FC to extra UART (corresponds to RX、TX).
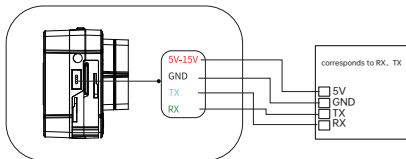
(3)FC Recognize Camera

For instance, connect camera to UART3(corresponds to R3, T3): connect FC to your PC, open parameter adjustment configurator (choose the corresponding software according to the type of FC firmware, such as CleanFlight Configurator or BetaFlight Configurator). Then choose RunCam Device at Peripherals in UART3 and click Save And Reboot.
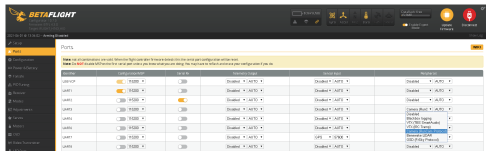
(4)Binding Camera Control Function With Channel

Enter Mode page, at the bottom of the page, you'll see CAMERA WI-FI, CAMERA POWER, CAMERA CHANGE MODE.
CAMERA POWER: Start and stop recording. Select the next in OSD mode.
CAMERA CHANGE MODE: Switching between Recording and OSD mode.
Exit the page in OSD setting .
Bind the functions you need to any available channels.
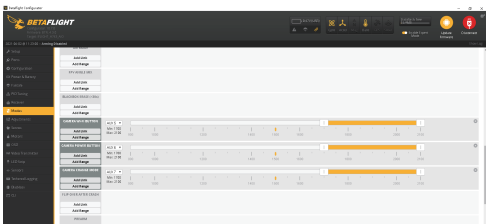
(5) Binding Remote Controller With Channel

Select your Model on remote controller, enter MIXER, bind to the specific channel.
Take the opentx 2.2.0, bind SA, SB, SD to CH5, CH6 and CH7 respectively.

(6)Testing

Charge FC and camera
Toggle SA to the bottom, camera will start/stop recording.
Toggle SD to the bottom, camera will switching between Recording and OSD mode.
In OSD mode, toggle SD can toggle the option, toggle SD can access to sub-menus
or confirm the settings.

(6)Technical Specification

(1)Video bit rates and encoding methods

Resolution	Video Quality			Encoding
	High	Medium	Low	
4K@30fps	60Mbps	50Mbps	40Mbps	H.264
2.7K@60fps	60Mbps	50Mbps	40Mbps	
2.7K@50fps	60Mbps	50Mbps	40Mbps	
1440P@60fps	40Mbps	30Mbps	20Mbps	
1080P@120fps	60Mbps	50Mbps	40Mbps	
1080P@60fps	45Mbps	30Mbps	22Mbps	

(2)Camera Parameters

Image Sensor	Sony imx577 12MP 1/2.3"
Video Resolution	4K@30fps/2.7K@60fps/2.7K@50fps/1440P@60fps/1080P@120fps/1080P@60fps
FOV	155°
Video Format	MP4
ISO	100/200/400/800/1600
Operation Temperature	-10℃~45℃
Lens Aperture	F2.8
Video Mode	HDR suppor (on by default)
Communication Interface	UART
icroSD Card	Up to 256GB U3 recommended (2.7K50/2.7K60 1080P120 requires U3 or above. Other resolutions require U1 or above). Please ensure that the file format of the SD card is FAT32/exFAT, otherwise it may cause abnormal work.
Shutter	1~1/500s
Battery Capacity	3.7V 450mAh
Power Dissipation	maximum 620mA @5V
Size	64.7*45*31.3mm
Weight	37G without battery, 52g with fuselage battery
Power-on function	On by default
Parameter Adjustment	Using QRCode in RUNCAM APP via mobile.

7.Technical Support

8.Reminder

(1) Make sure the battery is fully charged before using

(2) Do not touch the camera's heat sink directly.

(3) If you shoot high resolution or high frame rate video when the temperature is high outside, it will cause the camera to heat up and consume more power.

(4)Please do understand that we are not responsible for the camera damages that caused by disassemble.

9.Included

GOCam PM GR *1

BEC Adaptor *1

UV Filter *1

ND8 Filter *1

ND16 Filter *1

ND32 Filter *1

Manual *1

Camera Mount *1