SUMMON

3-Axis Stabilized Handheld Camera

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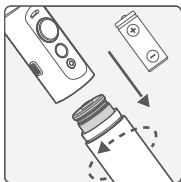
Summon is a controllable all−in−one camera with 3−axis stabilization function. It has simple and elegant structure and is easy to operate, the photographing and shooting are controllable so as to take stable HD videos and pictures. It has realized some functions including fixed point shooting, following shooting and time−lapse photography.
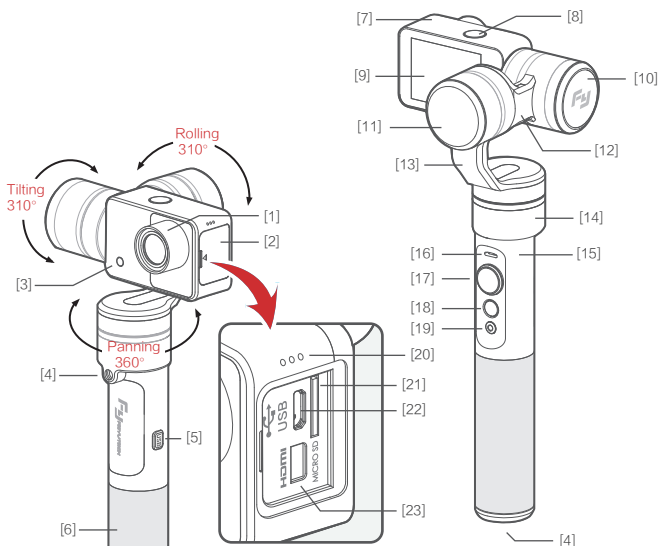
[1] Camera lens
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II How to use Summon

Power on:
Long press the function button until the green light up, then release it to turn on the gimbal.

Power off:
Long press the function button until the red light always on, then release it to turn off the gimbal.

1 **Install battery**

Remove the hand shank and insert one 22650 battery into it.
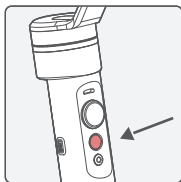
2 **Power on / off**

The function button can control power on or power off.

⚠ If the battery power is too low, the screen shall turn off automatically, **please long press the function button for 3 seconds** so as to make sure the unit completely powers off. Then you can recharge or replace the battery.

1. Function introduction of buttons and ports

● **Photo / Video switchover button**

Single tap this button to switch below Photo mode and Video mode.

Long press this button to open WiFi function, and long press again to turn off WiFi function.

The default is Video mode.
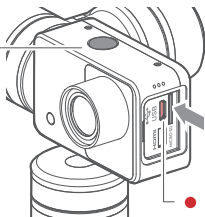
* Class10 high−speed micro SD card is recommended

Micro SD card *
(Equipped by users)

● **SD reading port**

Connect to a computer with USB data cable so as to read the video and picture files in a SD card.
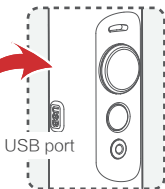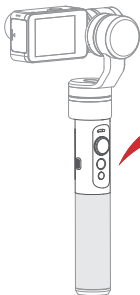
● **USB port**

Connect with USB data cable by this port to upgrade firmware or charge the battery.

Please refer to "Firmware upgrade" for the operation of firmware upgrade.

Please refer to "Charging mode" for the charging mode.

USB port

● **Joystick**
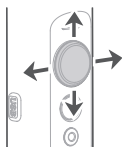
Control the orientation of camera lens

Joystick	Camera lens
Up	Down
Down	Up
Left	Left
Right	Right

Control camera menu *

Joystick	Camera menu
Up	Upward selection
Down	Downward selection
Left	Return to the previous menu / Exit
Right	Access the next menu / Confirm

* Triple tap function button to access camera menu, the joystick can set the camera menu at this moment.

● **Function button**

Switch working mode or access camera menu.
Please refer to "Introduction of camera menu" and "Introduction of working mode"

● **Shutter**

Single tap this button to start or stop photographing or recording.
In Photo mode, single tap this button to take a picture.
In Video mode, single tap this button to start recording, and press again to stop recording.
Double tap this button to turn on the fill flash, and double tap again to turn off the fill flash.

The video files are named as MOV_xxxxx.mov, for example, "MOV_00001.mov"
The picture files are named as IMG_xxxxx.jpgv, for example, "IMG_00001.jpg"

2. Camera menu introduction

Triple tap function button to access camera menu

Menu display in Video mode

Media Playback	
Movie Size	1080
Field Of View	H
Distortion Correct	ON
Slow Motion	OFF
White Balance	AUTO
Timelapse	OFF
Timelapse Duration	OFF
Level Speed	
Vertical Speed	
Invert Mode	OFF
Date Stamp	OFF
Date & Time	
Language	EN
System	
Wi-Fi-Password	
Format	

Menu display in Photo mode

Media Playback	
Resolution	16M
Field Of View	H
Distortion Correct	ON
Scheduled picture	OFF
Photo Burst	OFF
Timelapse	OFF
Timelapse Duration	OFF
Level Speed	
Vertical Speed	
Invert Mode	OFF
Date Stamp	OFF
Date & Time	
Language	EN
System	
Wi-Fi-Password	
Format	

● Menu introduction

📹 Only display in Video mode
📷 Only display in Photo mode

Media Playback

VIDEO	Play back recorded videos		JPG	Check the pictures

Joystick	VIDEO	JPG
Up	Check the previous video	Check the previous picture
Down	Check the next video	Check the next picture
To the left	Return to menu	Return to menu
To the right	Play videos	Check picture information

Under the "VIDEO" or "JPG" option，click the " Photo / Video switchover button" enter the delete menu, you can choose to delete a single file or delete all files.

Movie Size 📹 Only display in Video mode. You can choose from below video sizes:

1080P (60fps) / 1080P (30fps) / 720P (120fps) / 720P (60fps) / VGA (240fps) / 4K (25fps) / 4K (15fps) / 2.7K (30fps) / 1440P (30fps)
Factory default setting is 1080P (60fps)

Tips: non-high-speed micro SD card is not available for 4K format shooting.

Resolution 📷 Only display in Photo mode. You can choose from below :

16M (4508*3456) / 12M (4000*3000) / 8M (3264*2448) / 5M (2592*1944)
Factory default setting is 16M (4508*3456)

Field Of View You can choose from Wide, Medium and Narrow grades. The factory default setting is Wide.

Distortion Correct Repair the distortion caused by camera lens to avoid the barrel shape distortion of pictures. Factory default setting is "On" .

Slow Motion 📹 Open the slow motion function. Only display in Video mode except 4K video sizes. Factory default setting is "Off" .

White Balance 📹 Tap to adjust the white balance. Only display in Video mode. Can be set to be Auto / Daylight / Cloudy / Fluor H / Tungsten, the boot-up default is "Auto" .

Scheduled picture 📷 Only display in Photo mode. Factory default setting is "Off" . You can choose from below:

2S	Take a picture after 2 seconds	10S	Take a picture after 10 seconds
Double	Take the first picture after 10 seconds and take the second picture after 2 seconds		
Off	Don't use this function		

Photo Burst 📷   Only display in Photo mode. 3 / 5 / 10 pictures are settable for continuous shooting, factory default setting is Off.
Press **Shutter** botton for continuous shooting after setting.

Timelapse   Open the timelapse function and set the internal time for shooting two adjacent photos. You can choose from 3 sec / 5 sec / 10 sec / 30 sec /1 min / Off.
Factory default setting is Off.

Timelapse Duration   Set the shooting time of time-lapse photography.

Level Speed   Open the panning axis rotation function and set the panning axis rotation speed for time-lapse photography.
The settable numerical range is −20 ← 0 → +20 ("+" stands for clockwise rotation, "−" stands for anticlockwise rotation) , the bigger the number the faster the rotation speed, the maximum rotation speed is 360° / 6 min, and the minimum is 360° / 120 min.
If the number increases by 1, the time needs for rotating 360° shall decrease by 6 minutes;
if the number decreases by 1, the time needs for rotating 360° shall increase by 6 minutes.
The time needs for rotating 360° between two numbers is as following table ("min" stands for minutes)
There is no rotation when the number is set as 0.

Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Time	120 min	114 min	108 min	102 min	96 min	90 min	84 min	78 min	72 min	66 min	60 min	54 min	48 min	42 min	36 min	30 min	24 min	18 min	12 min	6 min

Vertical Speed   Turn on the tilting axis rotation function to set the tilting axis rotation speed for time-lapse photography. Please refer to "Level Speed setting".

Invert Mode   Invert the screen display after opening.
Can be used for inversion shooting. Factory default setting is "Off".

Date Stamp   The shooting date and time shall be displayed on the picture after this function is opened. Settable options: Off / Date / Date & Time. Factory default setting is Off.

Date & Time   Can set the current date, time and format. Turn the joystick to the right to successively select the date and time format desired to be modified, turn the joystick up to increase the numerical value while turn it down to decrease the numerical value. After setting all items, turn the joystick to the right to save the settings and return to the previous menu.

Language   Set the menu to be in English / Simplified Chinese / Traditional Chinese / German / French / Spanish / Portuguese. The factory default setting is English.

System	Factory Reset	Restore to the factory settings
	System Info	Check information related to the system
	Card Info	Check the capacity and free space of SD card

WIFI-Password   Set WiFi password.

Format   Format SD card

Photo / Video
switchover button

3. Introduction of photographing and shooting

Photographing

Switch to Photo mode by "Photo / Video switchover button".
Single tap "**Shutter**" button to photograph.
Special modes: Photo Burst / Scheduled picture

Shooting

Switch to Video mode by "Photo / Video switchover button".
Single tap "**Shutter**" button to start recording and press this
button again to stop recording.
Special mode: Slow Motion / Panorama shooting

Timelapse (Please refer to "Actual Operations" for detailed operations)

Automatically take a picture in the set time interval, panning axis moves by the set
horizontal speed (or tilting axis moves by the set vertical speed), and automatically
compose a video after shooting.

Shutter

Panorama Shooting

In video mode, triple tap the "Shutter" button to start panorama shooting, heading axis will
automatically rotate shooting.   Shooting range: 360 °   Recording Time: 8s
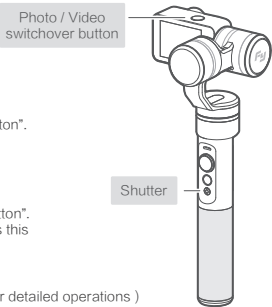
4. Introduction of operating mode

Working mode

Panning mode
The camera is allowed to pan left or right.
Vertical tilts or rolls are disabled.

Panning and Tilting mode
The camera is allowed to pan left or right
and tilt up and down. Rolls are disabled.

Lock mode
The camera stays in its current orientation.
All panning, tilting and rolls are disabled.

Other functions

Reset
Reset the tilting axis to initial
orientation and initial mode.

Standby
In standby mode, keep in power-up
state, the motor stops working, the
indicator light flashes for three times,
and single tap again to wake it up.

Operation instructions of function button

Operation	Function	Explanation
Single tap	Panning Mode / Lock Mode	Single tap to switch between panning mode and lock mode
Double tap	Panning and Tilting Mode	Under panning and tilting mode, single tap to switch to lock mode
Triple tap	Access camera menu	Control camera menu by the joystick (Please refer to "Joystick")
Quadruple tap	Reset	Reset the tilting axis to initial orientation and initial mode
Long press for 1 second	Standby	Single tap again to wake it up, or triple tap to initialize (Please refer to "Initialization")

5. LED indicator instructions

| Color	Flashes	Mode / Status
Blue	Single	Panning mode
Blue	Double	Panning and Tilting mode
Blue	Triple	Standby
Blue	Always on	Lock mode / Initializing
Blue	Quickly	Initialization failure / Malfunction

Indicator
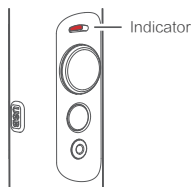
6. Inversion shooting

Turn the hand shank to the upward side of camera to realize the inversion for shooting in the scenes with low angle.

7. Firmware upgrade

Micro port

USB data cable

Upgrade........

PC

USB port
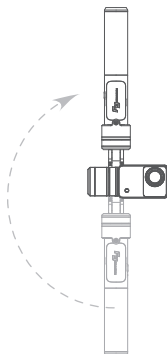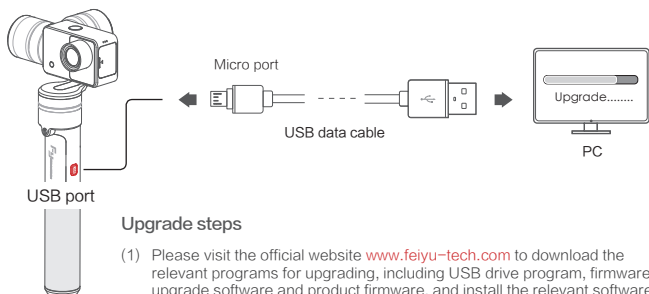
Upgrade steps

(1) Please visit the official website www.feiyu-tech.com to download the relevant programs for upgrading, including USB drive program, firmware upgrade software and product firmware, and install the relevant software, decompress the firmware files for standby application.

(2) Connect the USB cable with micro port as the above picture.

(3) Please upgrade the relevant firmware according to the operation instructions of firmware upgrade software.

8. Charging

Micro port

USB data cable

5V USB power adapter
(Equipped by user)

USB port

After power off, connect the USB data cable to USB port, and connect with 5V USB power adapter by USB cable (equipped by user).
Or take out the battery, and use the corresponding charger to charge the battery (equipped by user).
The red indicator light is on during charging, and green light is on after the battery is fully charged.

9. Initialization

Initialization is required in these cases

（1）There is small angular deviation between tilting angle and horizontal line after boot-up.
（2）There is small angular deviation between rolling angle and horizontal line.
（3）Under lock mode, panning angle drifts.

Initialization steps:

（1）In boot-up state, long press for 0.5 second to make the motor stop working, the indicator light shall flash for three times.

（2）Triple tap function button, place it on a still surface after the indicator light is on, and keep it in a static state as shown in the right picture:

Place Still

（3）Initialization succeeds if the indicator light restores to flashing for three times.

When the initialization failed, the LED indicator will flash quickly, repeat step (2) & (3) to reinitialize.

10. Operating example

Take time-lapse photography as an example:

（1）Install the battery, long press the function button for 0.5 second to power on.

（2）Triple tap function button to access the menu.

Function button

Turn up to select

Access to the next menu or confirm

Return to the previous menu or exit

Turn down to select

Introduction of the joystick under menu mode
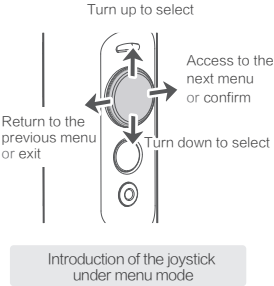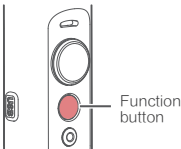
（3）To select "Timelapse", turn the joystick to the right to access this interface, you can set the interval time of continuous pictures taken by time-lapse photography. For example, you can set it as 5 seconds. Turn the joystick to the right to save, and return to the previous menu.
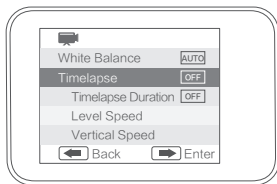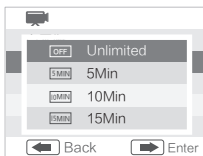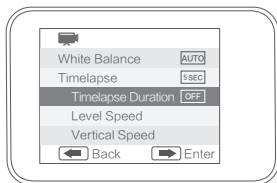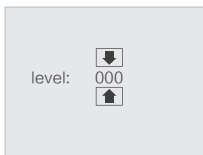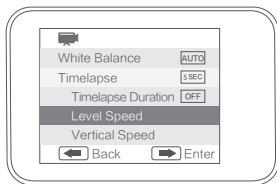
White Balance	AUTO
Timelapse	OFF
Timelapse Duration	OFF
Level Speed	
Vertical Speed	
⬅ Back	➡ Enter

OFF	Off
3SEC	3sec
5SEC	5sec
10SEC	10sec
⬅ Back	➡ Enter

▲ After enter "Timelapse"

（4）To select "Timelapse Duration", turn the joystick to the right to access this interface, you can select from unlimited / 5 / 10 / 15 / 20 / 30 / 60 minutes. The default is "unlimited", i.e. no limit to the shooting time. Turn the joystick to the right to save, and return to the previous menu.

White Balance	AUTO
Timelapse	5SEC
Timelapse Duration	OFF
Level Speed	
Vertical Speed	
⬅ Back	➡ Enter

OFF	Unlimited
5MIN	5Min
10MIN	10Min
15MIN	15Min
⬅ Back	➡ Enter

▲ After enter "Timelapse Duration"

（5）To select "Level Speed", turn the joystick to the right to access this interface, set the speed of panning movement, take "+15" as an example ("+" is for clockwise rotation, "−" is for anticlockwise rotation). Turn the joystick to the right to save, and return to the previous menu.

White Balance	AUTO
Timelapse	5SEC
Timelapse Duration	OFF
Level Speed	
Vertical Speed	
⬅ Back	➡ Enter

level: ⬇ 000 ⬆

▲ After enter "Level Speed"
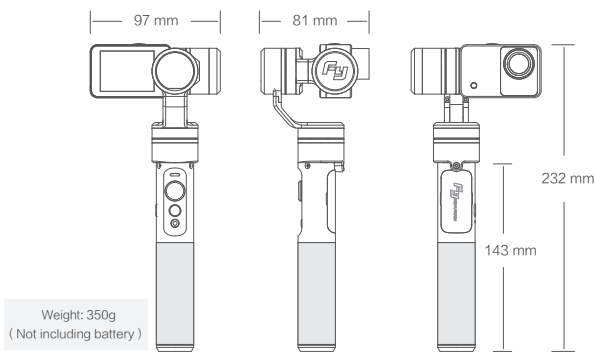
（6）Single tap the **Shutter** after setting, panning axis shall rotate according to the set speed and take a picture for every 5 seconds. The pictures shall automatically generate videos after shooting.

Single tap the **Shutter** button to end the shooting in advance, the pictures shall automatically generate videos after shooting and can be previewed in "Media Playback"

🔴 Shutter

III Product Parameters

| — 97 mm — | — 81 mm — | |
| Weight: 350g
(Not including battery) | | 232 mm
143 mm |

Tilting angle range	310°		Maximum control speed	± 120° /s
Rolling angle range	310°		Battery model	22650
Panning angle range	360°		Working voltage	3.7V ~ 4.2V
Graph sensor	16 mega pixels		Lens field angle	95°
Lens specification	1 / 2.3"		Aperture Size	f 2.8
Display screen	2.0 inch / 4:3, Resolution: 320x240			
ISO	50~3200 , Automatic			
Video resolution	4K@25FPS / 4K@15FPS / 2.7K@30FPS / 2.7K@15FPS / 1920x1440P@30FPS / 1080P@60FPS / 720P@120FPS / VGA@240FPS			
Photograph resolution	16M (4608*3456) / 12M (4000*3000) / 8M (3264*2448) / 5M (2592*1944)			
Video format	MOV			
Picture format	JPG			
Working environment	Temperature: −10 ~ +50℃ Humidity: 30%~80%			
Storage environment	Temperature: −10 ~ +150℃ Humidity: 30% ~ 90%			
Memory card	Maximum support 64GB Support transfer rate of Class 10 Micro SD card			
WIFI	High−performance and low power consumption SDIO WiFi 2.4G, 802.11b/g/n Farthest distance is 10 meters in open and clear environment			

Package List

Name	Quantity	Name	Quantity
Summon	1	Lens filter cap	1
22650 rechargeable battery	1	User manual	1
USB cable (micro port, 50cm)	1	Warranty card	1

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DISCLAIMER

Prohibit any user for any illegal purpose. Users will be responsible for all behaviors of purchase and use products.

The Company assumes no liability for any risks related to or resulting from the debug and use of this product (including the direct, indirect or third-party losses).

For any unknown sources of using, we will not be at any services.

The updating and changes of product firmware and program may cause changes in function descriptions in this user manual, please read the instructions carefully before upgrading the firmware and use the corresponding user manual.

You can get the latest user manual from the official website: www.feiyu-tech.com

Feiyu Tech reserves the right to amend this manual and the terms and conditions of use the product at any time.

Attention

- Please correctly assemble the product in accordance with the installation diagram.

- Please upgrade the firmware and program with the standard data cable.

- Please make sure the product is powered off when not in use.

FEIYUTECH

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.