SCORP-C 2

User Manual

Catalogue

Tutorial

The tutorial videos can be watched at FeiyuTech official website
or scan the QR code.
https://www.feiyu-tech.com/play/

Download the App

Scan the QR code to download the app, or search for "**Feiyu SCORP**" in the App Store
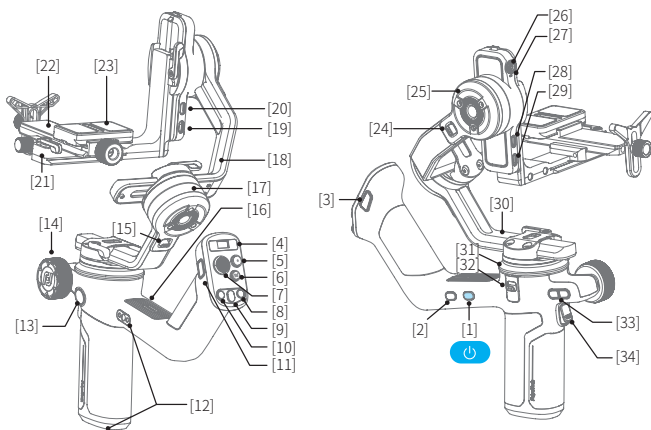or Google Play.
* Feiyu SCORP: OS ≥ V13.0，Android ≥ V10.0

iOS   Android

1. Overview

[1] Power button
[2] FPV button
[3] F2 button
[4] Screen
[5] Shutter button
[6] Mode button
[7] Joystick
[8] R button
[9] Auto rotation button
[10] L button
[11] F1 button
[12] 1/4 inch thread hole
[13] Knob function switching button
[14] Multifunction knob
[15] Roll lock
[16] Indicator
[17] Roll axis
[18] Cross arm
[19] Focus motor port 2

[20] Extension port
[21] Fixed plate
[22] Quick release plate
[23] Upper quick release plate
[24] Tilt lock
[25] Tilt axis
[26] AI tracking camera
[27] AI tracking indicator
[28] Camera control port/USB-C power output
port*
[29] Focus motor port 1
[30] Versatile arm
[31] Pan axis
[32] Pan lock
[33] A/B button
[34] Trigger button

* Supports charging for shooting devices compatible
with the USB power supply protocol

2. Getting started

2.1 Charging

Please fully charge the battery before power on the gimbal for the first time. Charging with USB-C cable, supports quick charge.
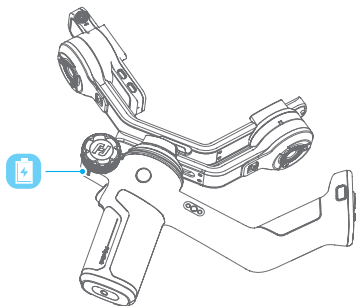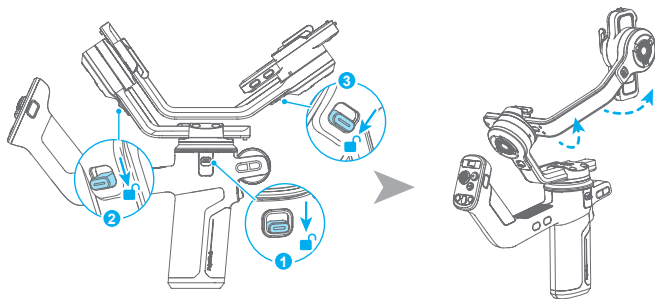

2.2 Adjust the gimbal to gimbal balancing position

The gimbal is folded by default, please unlock all the three axes and adjust the gimbal to **gimbal balancing position**, and then lock the three axes.

Gimbal folded position   Gimbal balancing position

3. Mounting the shooting equipment

Before mounting, please ensure that the mounted shooting equipment and accessories are within the load requirements. For camera setup steps, please refer to the relevant compatibility list.

Visit https://www.feiyu-tech.com/feiyu-scorp-c-2/down.html to check the latest relevant compatibility and controllable device list.

Before mounting the shooting equipment, make sure the camera is ready for shooting (Install the camera lens, and the lens cover should be removed, the memory card and battery needs to be inserted to the camera, and battery is fully charged) , complete all the steps which mentioned in chapter "2. Getting started" and the gimbal is adjusted to **gimbal balancing position**. Make sure the gimbal is **powered off** or in **sleep mode** before mounting the camera.

3.1 Attach the upper quick release plate

Attach the upper quick release plate to camera by tightening the screw.
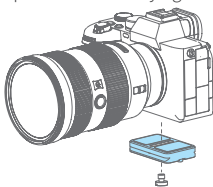
If the camera doesn't have the 1/4-20 inch screw hole, please put the camera on mount adapter, which has 1/4-20 inch screw hole, and then follow the steps above to mount it.

3.2 Mounting fixed plate

① Unlock the fixed plate lock.   ② Slide the fixed plate into the slot.
③ Lock the fixed plate lock.
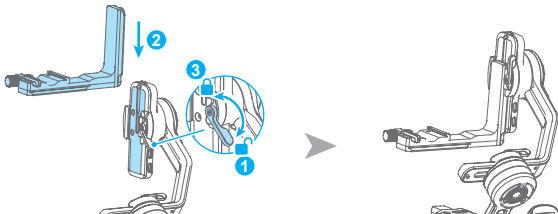
3.3 Mounting quick release plate

① Unlock the quick release plate lock.
② Slide the quick release plate into the slot.
③ Lock the quick release plate lock.
Use the balancing knob to fine-tune the position of the quick release plate.
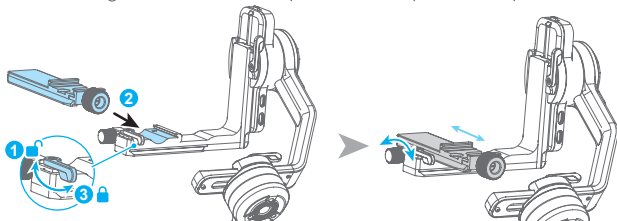
3.4 Mount camera on gimbal

① Unlock the upper quick release plate lock.
② Slide the camera (mounted on the upper quick release plate) into the slot.
③ Lock the upper quick release plate lock.
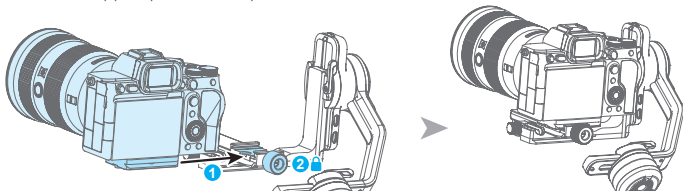
3.5 Install lens holder (Optional)

Install the lens holder on the quick release plate if needed, the rubber of the lens holder must be directly under the lens. It is recommended to use the lens holder when using a long or heavy lens.

4. Gimbal balancing

Please balance the gimbal before shooting. Take camera mounting as an example. Make sure the camera and lens are ready for shooting, and the gimbal is powered off or in sleep mode before balancing.

It is recommended to hold up the camera first, then move the slide arm, cross arm and vertical arm.

4.1 Balancing the tilt axis

4.1.1 Balancing the vertical tilt

Unlock motor lock **A**; lock motor locks **B** and **C**. Point the camera lens upward and observe its tilt direction.
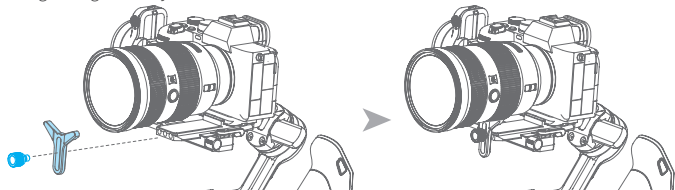
① Unlock the fixed plate lock.

② Move the camera in the opposite direction of its tilt until the lens remains perfectly vertically upward.

③ Lock the fixed plate lock, supporting the camera upward from below to ensure proper fixation.
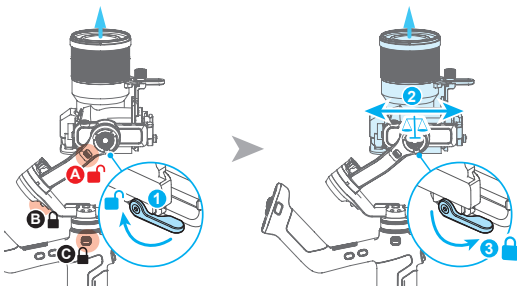
4.1.2 Adjust depth for the tilt axis

Keep motor lock **A** unlocked; motor locks **B** and **C** locked. Place the camera lens pointing horizontally forward, and observe its tilt direction.

① Unlock the quick release plate lock.

② Move the camera opposite its tilt and use the balancing knob to fine-tune until the lens remains horizontally forward.

③ Lock the quick release plate lock, supporting the camera upward from below to ensure proper fixation.

If the camera remains stationary at a tilt angle of about ±45° , the tilt axis is balanced.
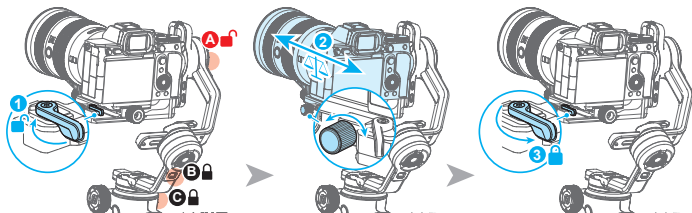
4.2 Balancing the roll axis

Unlock motor lock **B**; lock motor locks **A** and **C**. Observe the camera's swing direction.

① Unlock the cross arm lock.

② Move the camera opposite its swing until the cross arm remains level.

③ Lock the cross arm lock.

If the camera remains stationary at a horizontal angle, the roll axis is balanced.
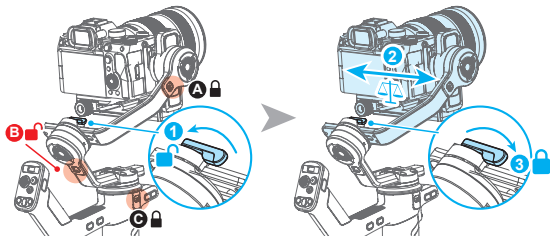
4.3 Balancing the pan axis

Unlock motor lock **C**; lock motor locks **A** and **B**. Hold the handle and tilt the gimbal about 45° ,rotate pan axis until parallel with ground, then observe the camera's swing direction.

① Unlock the vertical arm lock.

② Move the vertical arm opposite its swing until the vertical arm remains level.

③ Lock the vertical arm lock.

If the camera remains stationary at a horizontal angle, the pan axis is balanced.
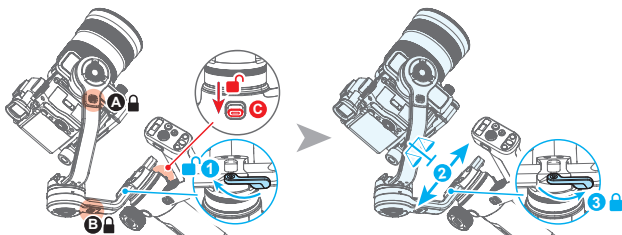
5. Power ON/ OFF

Before power on the gimbal, make sure you have balanced gimbal, and unlocked all the three axes. If you haven't unlocked all the 3 axes, gimbal will enter sleep mode to protect itself. Please single tap power button to wake up gimbal after unlocked all the 3 axes.

! Please set motor power first after powering on gimbal for the first time or after changing a new camera/lens.

Long press the power button and release it when you hear the beep sound to power on/off.
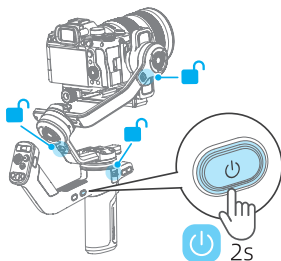
6. Function/Modes introduction

6.1 Follow modes introduction

	OSD	Mode	Introduction
①	**PF**	PF mode	Pan follow, only the pan axis follows the movement of user's hand.
②	**PTF**	PTF mode	Pan and tilt follow, where both the pan and tilt axes follow the movement of user's hand, but roll axis does not.
③	**FPV**	FPV mode	Pan, tilt and roll follow, where all 3 axes follow the movement of user's hand.
④	**AL**	Lock mode	All 3 axes do not follow the movement of user's hand, gimbal keeps the direction of the camera fixed.
⑤	**FFW**	FFW mode	Flash follow, where all 3 axes follow the movement of user's hand in high follow speed.
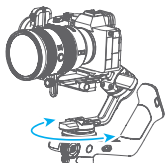
① PF
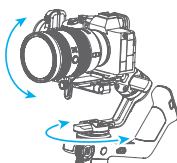
② PTF
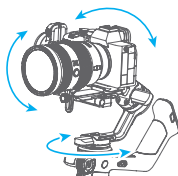
③ FPV
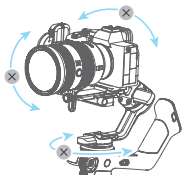
④ Lock
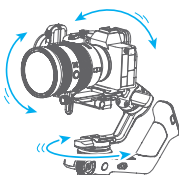
⑤ FFW

6.2 Other function introduction

Auto rotation

Camera will auto rotate to shoot according to the rotation speed and direction that set by users. It can be used to achieve the image rotating scene which been used frequently in movie Inception.

Portrait mode

Enter portrait mode for recording portrait video or live streaming.

Selfie mode

The camera turns 180° horizontally, selfie shooting is available.

Track video

Record track video according to the waypoints which has been set.

Manual lock

Manually move camera to desired position, and hold for half a second. New tilt /pan positions are automatically saved.

7. App Connecting

Download the App

Scan the QR code to download the app, or search for "**Feiyu SCORP**" in the App Store or Google Play.

* Feiyu SCORP: OS ≥ V13.0，Android ≥ V10.0

iOS

Android

7.1 Connect App

(1)Turn on the gimbal
(2)Turn on the smartphone Bluetooth, run Feiyu SCORP App, tap the top of the home page to connect gimbal.
After the connection succeed, it's easy to control gimbal via App, including control the

pan and tilt axis angle with the virtual joystick, switch modes, set motor power/camera parameters/follow speed, set other functions, parameters, and update firmware.

7.2 Function introduction of Feiyu SCORP App
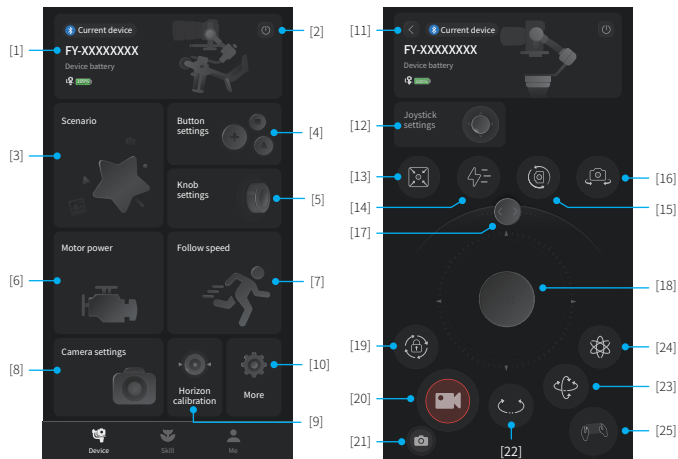
[1] Gimbal control access
Display the product name and device battery of current connecting gimbal, tap to enter gimbal operation interface, which allows user to use virtual joystick to control gimbal, switch follow modes, recenter gimbal, adjust horizontal angle manually. When not connected to gimbal, prompt user to connect with gimbal.

[2] Disconnect device
Tap to disconnect current connecting device.

[3] Scenarios
Provide auto rotation (can be used to achieve the image rotating scene which been used frequently in movie Inception), panorama, timelapse (Motionlapse/Static timelapse/Hyperlapse) , track video and other usage scenarios for user.

[4] Button settings
Set the function when press and hold the trigger button.

[5] Knob settings
Set the control object for multifunction knob, can be set as control axes, control electronic focus, control focus motor.
Set damp, speed, smooth and sound for multifunction knob in "More".

[6] Motor power settings
Adjust tilt, roll, pan axes motor power manually or use auto tune function to tune the motor power automatically (Recommended).

⚠️ Please set motor power first after power on gimbal for the first time or after change a new camera/lens.

[7] Follow speed
Select different preset gimbal follow speed profiles: Slow/Med/Fast, or custom follow speed and dead zone.

[8] Camera settings
Can set camera aperture, shutter speed and ISO parameters after connecting with camera.

[9] Horizon calibration
Calibrate the gimbal with the auto calibration function(Recommended) or adjust it manually (When not in FPV or FFW mode).

[10] More
Set boot silent, disable selfie, manual lock, check firmware information and update firmware, restore the default settings.

[11] Back

Tap to return to home page.

[12] Joystick settings
Can set the joystick speed for controlling pan/tilt axis, and joystick as pan axis/tilt axis inverted.

[13] Recenter
Tap to recenter the gimbal.

[14] Flash follow(FFW)
Tap to enter Flash follow.

[15] Portrait mode
Tap to enter portrait mode.

[16] Selfie mode
Tap to enter selfie mode.

[17] Adjust horizontal angle
Slide the slider to control roll axis to adjust the current horizontal angle.

[18] Virtual joystick
Use virtual joystick to control pan and tilt axis.

[19] Lock mode
Tap to enter lock mode.

[20] Shutter
Tap to take photo in photo mode.
Tap to start/stop recording in video mode.

[21] Switch between photo/video mode
Tap to switch between switch between photo/video mode

[22] Pan follow (PF)
Tap to enter pan follow (PF) mode.

[23] Pan and tilt follow (PTF)
Tap to enter pan and tilt follow (PTF) mode.

[24] FPV
Tap to enter FPV mode.

[25] Motion sensing mode
Tap to enter motion sensing mode which can control the pan and tilt axis to follow the movement of smartphone, can not switch follow modes in motion sensing mode (PF/PTF/FPV/Lock).

8. Operation

8.1 Button operation

Power button

Long press: Power on/Power off
Single tap:
(1) Wake up(In sleep mode)
(2) Display battery levels of the gimbal (When powered off)
Double tap: Enter sleep mode

M button

Single tap: PF mode(Default) /PTF/FPV (Switch in turn)

Double tap: Recenter
Long press for 3 seconds: Enter the auto tune
Tap five times: Horizon calibration

Joystick

Push：
(1) Control the movement of the tilt and pan axes.
(2) Control album ☆
(3) Framing Adjustment (While AI Tracking)

Shutter button

Camera Connected
Press half way: Focus
Single tap (Fully): Start/stop recording
Long press (Fully): Take photo

Auto rotation button

Single tap: Enter auto rotation mode
Single tap again:
(1) Exit auto rotation mode (When gimbal is not rotating)
(2) Pause the rotation (When gimbal is rotating)

L button

Single tap: Turn left continuously
Single tap again: Switch rotating speed (Switch cyclically among Slow/Med/Fast orderly, the preset speed is Med)
Active in auto rotation mode

R button

Single tap: Turn right continuously
Single tap again: Switch rotating speed (Switch cyclically among Slow/Med/Fast orderly, the preset speed is Med)
Active in auto rotation mode

F1 button

Single tap: Enter/exit album ☆
Double tap: Enter/exit portrait mode
Triple Tap: AI power on/off
Long Press: Enter/Exit AI tracking (With AI Power enabled)

F2 button

Double tap: Enter FFW mode

Trigger button

Double tap: Recenter (in non-selfie mode) / Selfie recenter (in selfie mode)
Triple tap: Enter/Exit selfie mode (Pan axis turn 180°)
Press and hold: Lock mode (Release to exit)

You can custom the function via App

FPV button

Single tap: Enter FPV mode

A/B Button

Long press: Mark the current position as A/B
Single tap: Return to the position A/B that you
have marked

Can be used to mark axes/focus position.

Multifunction knob

Turn:

(1) Control the movement of the roll, tilt and pan axes.
(2) Control electronic focus/zoom
(3) Contol focus motor.

Set current control option as option (1) or (2) or (3) through long press the knob function switching button.

Knob function switching button

Single tap: Switch the control object while controlling the movement of the 3 axes (Tilt/Pan/Roll)

Long press: Switch the control options of Multifunction knob in turn (The movement of the 3 axes, electronic focus/zoom)

Key Combinations:

A: Joystick down + triple tap the F2 button: Clears all Bluetooth pairing information for the smartphone. After reboot, you can re-pair devices.

B: Joystick up + triple tap F2 button: Clears all Bluetooth pairing information for the mirrorless camera. After reboot, you can re-pair the camera.

C: Knob function switching button + FPV button: Press together to force the main body to power off within 1 second.

Note:

(1)When using a camera or the original camera app on your smartphone to capture photos or videos, some features may require specific camera or smartphone support. You can visit the official website to check the list of compatible devices: https://www.feiyu-tech.com/feiyu-scorp-c-2/

(2) We recommend using this product in conjunction with the Feiyu SCORP App. Operations marked with a ☆ are designed for use with smartphones paired with the Feiyu SCORP App.

8.2 Screen Icons Description

	Power on logo
	Sleep mode
	Current work mode

PF	PF mode
PTF	PTF mode
FPV	FPV mode
AL	Lock mode
FFW	FFW mode
CM	Custom Mode
🅐	Auto-Rotation Mode
🅐	Left Rotation Mode
🅐	Right Rotation Mode

Multi-function knob control object

MF	Controlling the focus motor
EF	Control electronic focus
P	Controlling the movement of the pan axis
R	Controlling the movement of the roll axis
T	Controlling the movement of the tilt axis

Shooting status

	Horizontal shooting
	Vertical shooting
	Selfie mode

Bluetooth connection status

	Smartphone bluetooth connected (Data transfer active)
	Smartphone bluetooth connected (No data transfer)

No icon displayed when disconnected

Camera connection status

	Camera bluetooth connected
	Camera wired remote connected
	Camera bluetooth & wired remote connected

Current battery status

	100%
	75%
	50%
	25%
	0%
	Charging

AI Connecting

AI	**AI power oN**
	AI power oFF
	Pairing with bluetooth remote
	Clear bluetooth pairings
	Clear camera bluetooth pairings
	Mark position A
	Mark position B
	Return to the position A
	Return to the position B
	Auto tune
MF AI	**Calibrating**
MF AI	**Calibration successful**

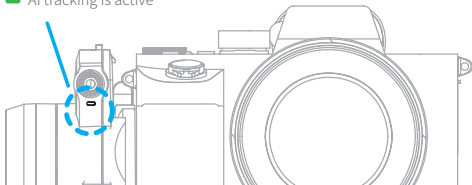|	
🌡️⚠️ E1	**E1——Overheat protection**
⏏️⚠️ E2	**E2——Handle idle protection**
⚖️⚠️ E3	**E3——Overload protection**
📳⚠️ E4	**E4——Vibration protection**
⊗⚠️ E5	**E5——Stabilizer internal error**

8.3 AI Tracking

Triple tap the F1 button can turn AI power on or off.

After turning on the AI power, the tracking module indicator light will remain solid red.

— AI power is now on
— AI tracking is active

Under AI Power-On State, the following controls are available:

AI Gesture Control

OK gesture (Left or right hand): Start tracking/Stop tracking

Start tracking with the green light stays on.Repeat this gesture, stop tracking, enter standby mode with the red light stays on.Two gestures must be separated by 3 seconds.

Thumbs opposite direction: Stop tracking

Stop tracking, enter standby mode with the red light stays on.

Spread palm (Left or right hand): Shutter

In photo/video mode: Take photo or start recording after a 3-second countdown with beep sound.
After started the recording, do the gesture again to stop recording.

Double L-Shaped gestures: Custom framing

Start framing, green light blinks fast. When the subject moves to the desired position, perform this gesture again to complete framing, and the green light stays on.

Two thumbs up gesture: Disable gesture control

In tracking mode, this gesture can disable the gesture control function. Once disabled, AI tracking can still be controlled via the buttons.
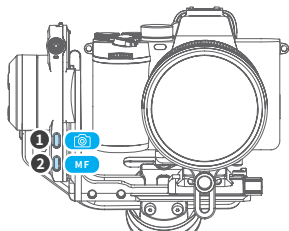
Button control

Long press F1 button: Start tracking/Stop tracking
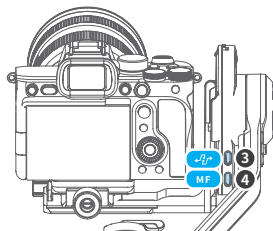Triple tap F1 button: AI power on/off
Double tap Trigger button: Stop tracking

8.4 Control ports

There is a camera control port and extension port on the fixed plate, to control camera ,follow focus and other extension devices, the expansion port also enable AI firmware upgrades.

① Camera control port
② Focus motor port 1

③ Extension por
④ Focus motor port 2
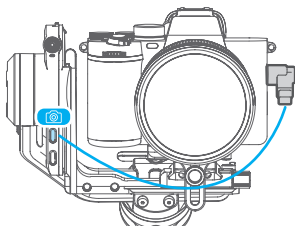
Connect camera with shutter cable

8.5 Specifications

[1] Follow status indicator

TILT = Tilt axis

ROLL= Roll aixs

PAN = Pan axis

The indicator is on which means the corresponding axis follows the movement of user's hand.

[2] Camera/Bluetooth indicator

[3] Battery indicator

Green light: Power on / Charging complete
Red light: Charging
Red light flashing rapidly: Low power, will auto power off
Light off: Power off

9. Specifications

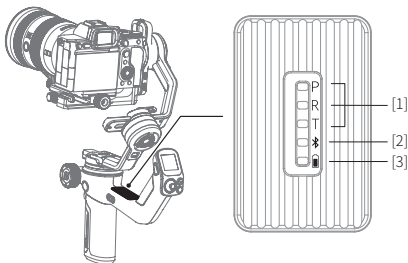|	
Product name	Feiyu SCORP-C 2 Handheld Gimbal for Camera
Product model	FeiyuSC2
Rotatable Range	Tilt: +120° ~-200°（±3°）
	Roll: +70° ~-245°（±3°）
	Pan: 360°
Size (Mainbody)	About 292.1×250.4×65.7mm (Folded)
Weight (Mainbody)	About 1320g (Not including tripod)
Payload Capability	About 3500g (Well-balanced)
Battery life	≤ 14 Hours (Motion State)
Battery	4500mAh
Operating Voltage	6.8V-8.4V
Compatible Cameras	Sony, Canon, Nikon, Panasonic, Fujifilm, etc. (For specific camera and lens compatibility, please refer to the official website's compatibility list.)

Bluetooth name: FY_SCORP3_C2_XX

List
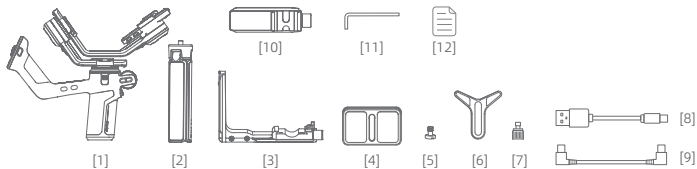
[1] Main body   x1
[2] Tripod   x1
[3] Fixed plate   x1
[4] Upper quick release plate   x1
[5] Camera fixed screw   x1
[6] Lens holder   x1

[7] Lens holder screw   x1
[8] Type-C Cable   x1
[9] Type-C to Type-C Cable   x1
[10] Quick release plate   x1
[11] Hex key   x1
[12] Manual   x1

Notice:

1. Ensure the motors are not obstructed by external forces during power-on and operation.
2. DO NOT expose the gimbal to water or other liquids.
3. DO NOT disassemble the gimbal. If it is accidentally disassembled and malfunctions, send it to after-sales for repair. All related costs are the user's responsibility.
4. Continuous operation may cause the motor housing to become hot. Operate with care.
5. DO NOT drop or strike the gimbal. Impact may damage it or cause malfunction. If abnormal operation occurs after a drop or impact, contact after-sales support immediately.

Storage and Maintenance:

1. Keep the gimbal out of reach of children and pets.
2. DO NOT leave the gimbal near heat sources (e.g., furnaces or heaters) or inside a vehicle on hot days.
3. Store the gimbal in a dry environment.
4. DO NOT overcharge or overdischarge the battery, as this can damage the cells. If unused for extended periods, charge it at least once a month.
5. DO NOT use the gimbal in environments that are excessively hot or cold.

⚠️

Warning: Please read the user manual carefully before use. Improper use of this product may cause damage and pose a risk to your safety.

This document is subject to change without notice.

Tutorial Videos

IC warning

This device contains license-exempt transmitter(s)/re-ceiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC Radiation Exposure Statement

This equipment complies with the limits of exposure to IC radiation defined for an uncontrolled environment.
Cet équipement est conforme aux limites d'exposition aux rayonnements de la IC établies pour unenvironnement non contrôé.

FCC regulatory conformance

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.
(2) This device must accept any interference received, including interference that may cause undesired operation.

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 and can radiate radio frequency energy and, if not installed and used in accordance with the 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.

NOTE

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

Feiyu Gimbal Privacy Policy

Guilin Feiyu Technology Incorporated Company (hereinafter referred to as "Feiyu", "we", or "us") understands the importance of your privacy and is committed to protecting it. This Privacy Policy (the "Policy") applies to the gimbals we provide.

If under the laws of your jurisdiction you are considered a minor or do not have full legal capacity (hereinafter "Minor"), please carefully read and fully understand this Policy together with your legal guardian. You may use Feiyu products and services only after obtaining your guardian's consent.

Please read this Policy carefully to ensure you understand how we handle your personal information. We will process your personal information in compliance with applicable laws and regulations, based on lawful and legitimate purposes and in accordance with the principle of good faith. If you have any questions about this Policy, you can contact us using the information provided on our website.

I. How we collect and use your personal information

Personal information is information recorded electronically or otherwise that relates to an identified or identifiable natural person, and does not include information that has been fully anonymized. Please note that definitions of "personal information" (also referred to as "personal data") may vary in different countries or regions; for specifics, please refer to the personal information protection laws and regulations applicable in your location.

We adhere to the principles of lawfulness, fairness, and necessity when collecting and using your personal information for the purposes described below. We collect the personal information you voluntarily provide during your use of our products and services, or that is generated as a result of such use. If we need to use your personal information for any purposes not stated in this Policy, or to use information collected for one purpose for another purpose, we will notify you in a reasonable manner and obtain your consent again before such use.

(A) Collection of Personal Information

When you use our products/services, we will collect and use the following personal information:

1. To provide you with the "Gesture Control" service, when you enable the "Gesture Control" feature and make a gesture, the gimbal captures images of your head and hands. On-device AI analyzes your hand structure in real time to recognize the gesture command and activate the specified function.This processing is one-time only and is necessary to provide the service. Rest assured, we do not store any images of your head or data about your hand structure. You can turn off the AI camera at any time under More Settings > AI Power.

2. To provide you with the "AI Tracking" service, when you enable the "AI Tracking" feature during use, the gimbal captures images of your head and body. On-device AI analyzes your head and body structure in real time to track movement. This processing occurs only during each recognition session and is necessary to provide the service. We do not store or retain any of your head or body structure data.

3. In addition to the information described above, in order to provide you with customer support services, we may collect the content you submit to our support team.

4. The content of this Policy will be updated periodically. Specific updates will be detailed in the manual on our official website at https://www.feiyu-tech.com.

Please be informed and rest assured that we deeply respect and prioritize the protection of your personal privacy. We will not store any video or audio content or recordings generated during your communications using our device.

FeiyuTech