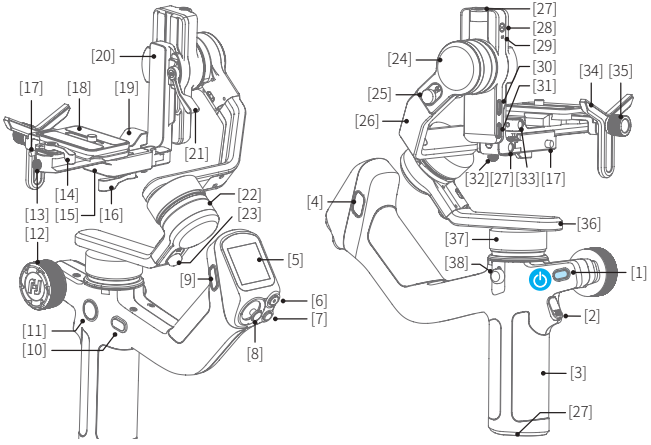
1. Overview

* Not include camera/ smartphone.



[1] Power button
[2] Trigger button
[3] Handle
[4] F2 button
[5] Touch screen
[6] Shutter button
[7] Mode button
[8] Joystick
[9] F1 button
[10] FPV button
[11] Knob function switching button
[12] Multifunction knob
[13] Anti-drop lock for slider
[14] Quick release plate lock
[15] Fixed plate
[16] Slider lock
[17] Anti-drop lock
[18] Quick release plate
[19] Slider
[20] Slide arm
[21] Slider lock
[22] Roll axis
[23] Roll lock
[24] Tilt axis
[25] Tilt lock
[26] Cross arm
[27] 1/4 inch thread hole
[28] Camera for tracking module
[29] Indicator light for tracking module
[30] Extension port
[31] Camera control port/USB-C Power Output Port ①
[32] Anti-drop lock for sliding arm
[33] M6 threaded hole
[34] Lens holder
[35] Lens holder screw
[36] Versatile arm
[37] Pan axis
[38] Pan lock

① Supports charging for shooting devices compatible with the USB power supply protocol.

User manual

Scan the QR code to get the latest user manual or download it from the official website.

https://www.feiyu-tech.com/feiyu-scorp-mini-2/

Download the App

When mounting mirrorless camera, pocket camera or action camera on gimbal for shooting, please download "**Feiyu SCORP**".
When mounting smartphone on gimbal for shooting, please download "**Feiyu ON**".

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

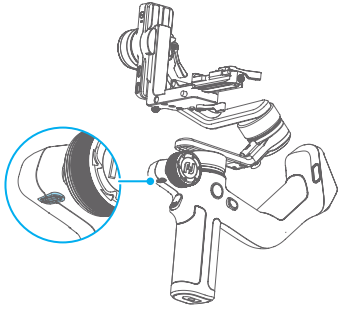
* Feiyu SCORP: Requires iOS 11.0 or above, Android 6.0 or above.
Feiyu ON: Requires iOS 12.0 or above, Android 8.0 or above.

iOS		Android	
Feiyu SCORP	Feiyu ON	Feiyu SCORP	Feiyu ON

2. Getting started

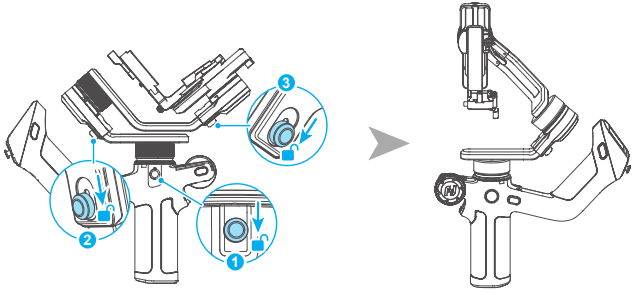
2.1 Charging

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

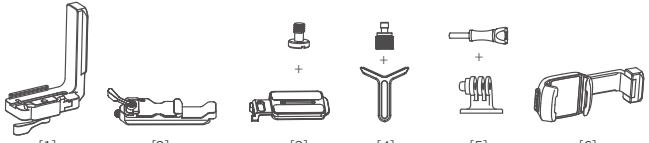
The gimbal is folded by default, please unlock all the three axes and adjust the gimbal to gimbal balancing position, and then lock the three axes.



Gimbal folded position　　Gimbal balancing position

2.3 Installing fixing accessories

When using cameras, phones, and other shooting devices, you need to install the fixing accessories first.

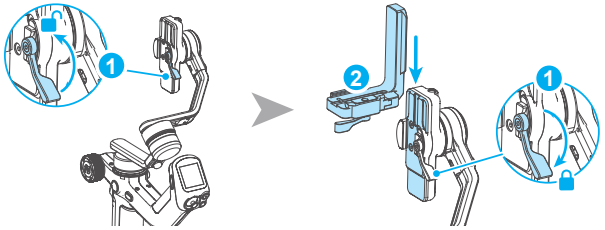


[1]　[2]　[3]　[4]　[5]　[6]

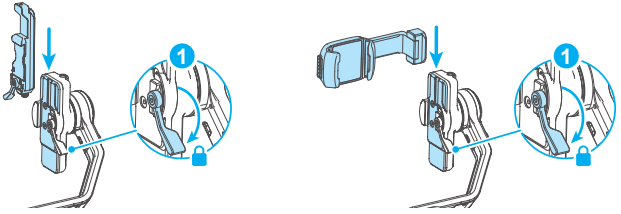
[1] Fixed Plate
[2] Slider
[3] Quick release plate+ screw
[4] Lens holder+ screw
[5] GoPro adapter+ screw
[6] Smartphone holder

Equipped devices	Fixing accessories	Installation reference
Mirrorless camera	Horizontal mounting: [1] Vertical mounting: [2]	Horizontal mounting: [1] + [2] + [3] + [4] Vertical mounting: [2] + [3] + [4]
Pocket camera		Horizontal mounting: [1] + [2] + [3] Vertical mounting: [2] + [3]
Action camera		Horizontal mounting: [1] + [2] + [3] + [5] Vertical mounting:[2] + [3] + [5]
Smartphone	[6]	[6]

Install the fixed plate [1]: Unlock ① , slide ② into the slot, and lock ① .



You can also install the slider [2] or smartphone holder [6] in the same way.



3. Mounting the shooting equipment

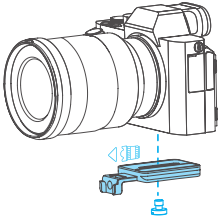
Take camera mounting as an example.

Before mounting the camera, 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 quick release plate

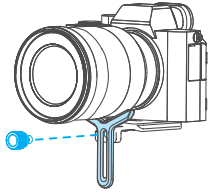
Attach the quick release plate to camera by tightening the screw.

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.
Users can mount smartphone into the optional smartphone holder, and follow the steps above to install it on the gimbal.



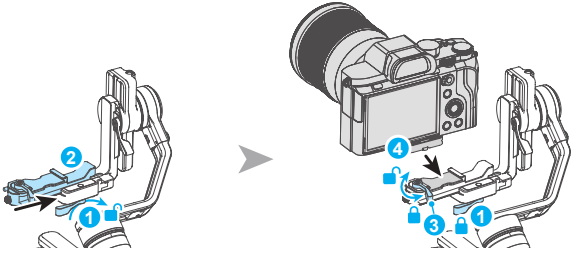
3.2 Install lens holder (Optional)

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.

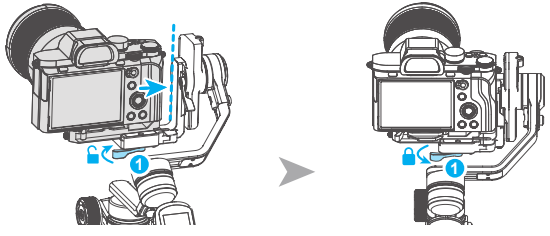


3.3 Mount camera on gimbal

Unlock ① , slide ② into the slot, lock ① , loosen ③ , slide ④ into the slot as indicated, adjust the camera forward and backward until roughly balanced, then tighten ③ .



It is recommended to push the camera against the tilt axis. Unlock ① to move the camera left or right according to camera's width to adjust, then lock ① .



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.**

Tutorial Videos

4.1 Balancing the tilt axis

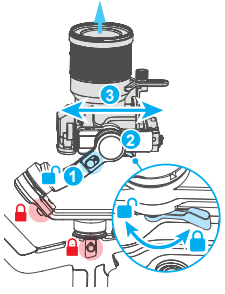
4.1.1 Balancing the vertical tilt

a. Unlock the tilt lock ① , and loosen the slide arm lock ② .

b. Rotate the tilt axis so that the camera lens is pointing upward. Check the direction which the lens tilts to.

c. If the lens tilts to one side, then the camera is that side heavy, move the slide arm ③ to the opposite direction, until the camera is steady pointing upward.

d. Tighten the slide arm lock ② while holding the camera.



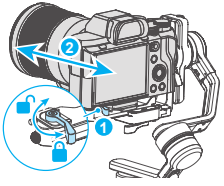
4.1.2 Adjust depth for the tilt axis

a. Rotate the tilt axis so that the camera lens is pointing forward. Check the direction which the lens tilts to.

b. If the lens tilts to one side, then the camera is that side heavy, unlock the quick release plate lock ① and then move the quick release plate to the opposite direction, until the camera is steady pointing forward.

c. Lock the quick release plate lock ① while holding the camera.

The tilt axis is balanced when the camera is steady while tilted up or down by 45° .



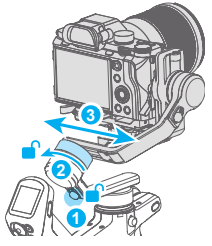
4.2 Balancing the roll axis

a. Unlock the roll lock ① , check the direction which the camera tilts to.

b. If the camera tilts to one side, then the camera is that side heavy, loosen the cross arm lock knob ② and then move the cross arm to the opposite direction, until the camera can stay still and horizontal to the ground.

c. Tighten the cross arm lock knob ② .

The roll axis is balanced when the camera can stay still and horizontal to the ground.



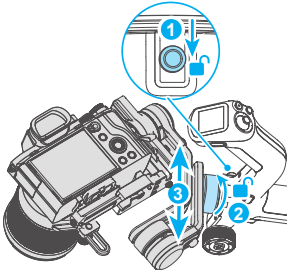
4.3 Balancing the pan axis

a. Unlock the pan lock ① . Hold the tripod, and tilt the gimbal forward until it is horizontal to the ground.

b. If the camera tilts to one side, then the camera is that side heavy, loosen the vertical arm lock knob ② and then move the vertical arm ③ to the opposite direction, until the camera can stay still and horizontal to the ground.

c. Tighten the vertical arm lock knob ② .

The pan axis is balanced when the camera can stay still and horizontal to the ground.



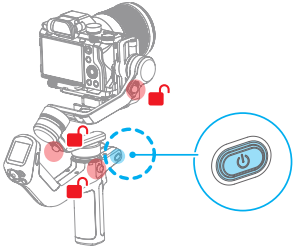
5. Operation

5.1 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.



5.2 Follow mode introduction

PF: Pan follow, only the pan axis follows the movement of user's hand.

PTF: Pan and tilt follow, where both the pan and tilt axes follow the movement of user's hand, but roll axis does not.

FPV: Pan, tilt and roll follow, where all 3 axes follow the movement of user's hand.

Lock: All 3 axes do not follow the movement of user's hand, gimbal keeps the direction of the camera fixed.

FFW: Flash follow, where all 3 axes follow the movement of user's hand in high follow speed.

5.3 Button operation

Power button

Long press: Power on/off
Single tap: Wake up(In sleep mode)/Battery level display (When powered off)
Double tap: Enter sleep mode

Mode button

Single tap: PF mode(Default) /PTF/FPV (Switch in turn)
Tap five times: Horizon calibration

Joystick

Push:
(1) Control the movement of the tilt and pan axes.
(2) Control album (In Feiyu ON App)

Trigger button

Single tap: Face tracking (In Feiyu ON App)
Double tap: Recenter
Triple tap: Enter/Exit selfie mode (Pan axis turn 180°)
Tap four times: Switch roll axis to back/front (Useful for reducing obstruction of front/ rear camera when shooting)
Press and hold: Lock mode (Release to exit)

You can custom the function via APP

Shutter button

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

Phone Connected
Press half way: Focus (Feiyu ON App)
Single tap (Fully): Shutter
Long press (Fully): Switch among video/ photo mode (Feiyu ON App)

FPV button

Single tap: Enter/Exit FPV mode

F1 button

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

F2 button

Single tap:
(1) Lock/Unlock screen (In home page)
(2) Return to home page (In other pages)
Double tap: Enter FFW mode
Long Press: Enter motor power auto tuning

Multifunction knob

Turn:
(1) Control the movement of the roll, tilt and pan axes.
(2) Control electronic focus/ zoom (The smartphone requires the use of the Feiyu ON App)
(3) Contol focus motor.
(4) Adjust the parameter in the touch screen.

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

Knob function switching button

Single tap:
(1) Switch the control object while controlling the movement of the 3 axes (Tilt/ Pan/Roll)
(2) When in electronic focus/ zoom control state, single tap to switch between electronic focus and electronic zoom (The smartphone requires the use of the Feiyu ON App)

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

Key Combinations:

Long press F1 button + F2 button: Clear bluetooth

*(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-mini-2/

(2) We recommend using this product in conjunction with the Feiyu ON / Feiyu SCORP App.

5.4 Touch screen operation

Home page

Motor power

Use auto tune to adjust the motor power automatically, or adjust motor power for each axis manually.

Follow speed

User can select different gimbal follow speed profiles, or custom follow speed.

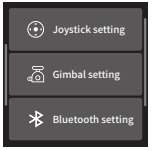
Follow mode

Select gimbal follow mode

PF PTF FPV Lock FFW

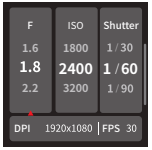
Scenario

Scenario-based functional application.



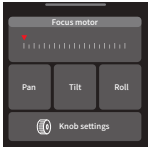
Swipe from right to left

Joystick, gimbal and more settings



Swipe from left to right

Shooting parameters settings



Swipe up

Multifunction knob settings

- Return to previous menu: Swipe to right

5.5 AI Tracking

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

When the smartphone is 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.

Button control

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

6. Specifications

Product name	Feiyu SCORP-Mini 2 3-Axis Handheld Gimbal for Camera
Product model	FeiyuF1-2
Max. Tilt Range	+163° ~-155°（±3°）
Max. Roll Range	+70° ~-250°（±3°）
Max. Pan Range	360°
Weight	About 852g (Not including tripod)
Payload Capability	About 1200g (Well-balanced)
Battery life	⩽ 10 Hours*
Battery	2500mAh
Operating Voltage	6.8V-8.4V
Compatible	Mirrorless camera and pocket camera (Sony, Canon, Nikon, Panasonic,etc. For specific camera and lens compatibility, please refer to the official website's compatibility list.) , action camera like GoPro, and smartphone (Width: 52mm~82mm, thickness: ＜ 8.9mm)

*Experimental conditions: Payload about 1000g, balanced, in Pan Follow mode on standby

Accessories

[1] USB-C Charging Cable x1
[2] USB-C to Micro Camera Control Cable x1
[3] USB-C to USB-C Camera Control Cable x1
[4] USB-C to TRS2.5 Camera Control Cable x1
[5] USB-C to Multi Camera Control Cable x1
[6] USB-C to 2.5mm Camera Control Cable (DC2.5mm) x1
[7] USB-C to TRS3.5 Camera Control Cable x1
[8] USB-C to Mini Camera Control Cable x1
[9] Tripod x1
[10] Fixed plate x1
[11] Slider x1
[12] Quick release plate x1
[13] Lens holder x1
[14] Focus motor support rod x1
[15] Smartphone holder x1
[16] Long thumb screw x1
[17] Gopro adapter x1
[18] Lens holder screw x1
[19] Camera fixed screw x1
[20] Fixed screw for support rod x1

Kit Version Additions:

[21] Wireless fill light x1
[22] Expandable module x1
[23] Carbon fiber rod x1
[24] Storage bag x1