



# SMOOTH 4

User Guide

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## Product Introduction

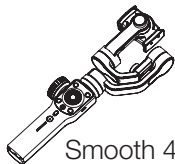
Thanks for using ZHIYUN products. ZHIYUN™ products bring you the fun of more professional shooting.

As the latest flagship phone stabilizer born for filmmakers, Smooth 4 is equipped with diverse function keys. It can navigate camera parameter settings and realize zooming and focusing. Its four redesigned working and operating modes can capture more advanced footage. Smooth 4 will be your great and innovative camera assistant.

Please read the user manual carefully before using the product.

## Packing List

The product comes with the following items. In case that any item is found missing, please contact ZHIYUN or your local selling agent.



Smooth 4 Stabilizer × 1



Tripod × 1

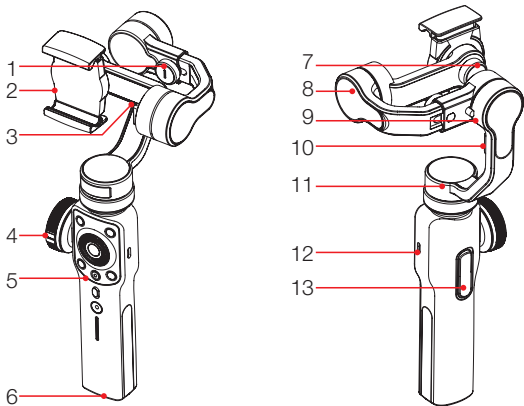


Carrying Case × 1



USB Cable × 1

## Get to Know Smooth 4

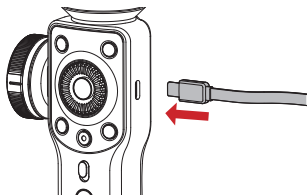


1. Roll Axis Thumb Screw
2. Phone Clamp
3. Mobile Charging Port
4. Zoom/Focus Handwheel
5. Control Panel (see more on Page 6)
6. 1/4" Threaded Hole
7. Mobile Clamp Thumb Screw
8. Tilt Axis Motor
9. Roll Axis Motor
10. Fixing Buckle
11. Pan Axis Motor
12. Type-C USB Port
13. Trigger Button (see more on Page 6)

### Battery and Charging Instructions

Smooth 4 is charged by built-in Li-ion batteries. During first use of Smooth 4, please fully charge it to activate batteries and guarantee the appropriate use of Smooth 4.

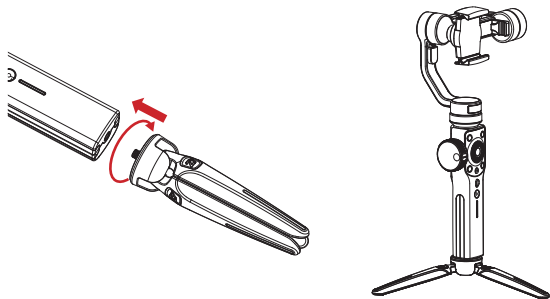
Charging method: Connect Type-C cable provided in the package with adapter and Smooth 4.



### Installation

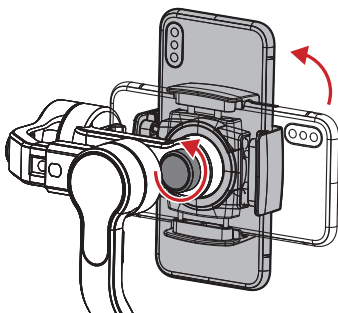
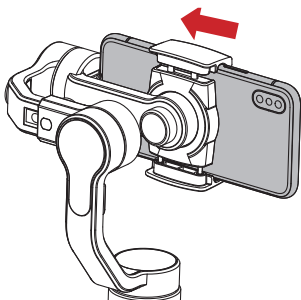
#### Installation of Tripod

Get the tripod ready and tighten it to the 1/4" threaded hole at the bottom of the stabilizer, then unfold the tripod on a flat surface.



## Installation of Phone

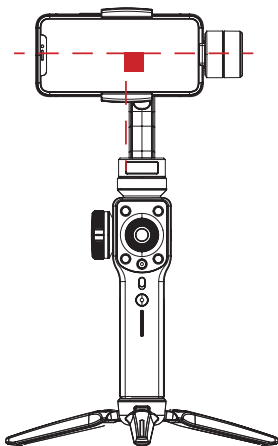
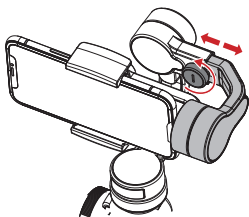
Push and hold open the camera clamp, slide the smartphone in as close as possible against the tilt axis motor, and clamp on. You can also loosen the Mobile Clamp Thumb Screw on the back and rotate the clamp to make the phone vertical.



**⚠** Please do not turn on the Smooth 4 before putting in the phone.

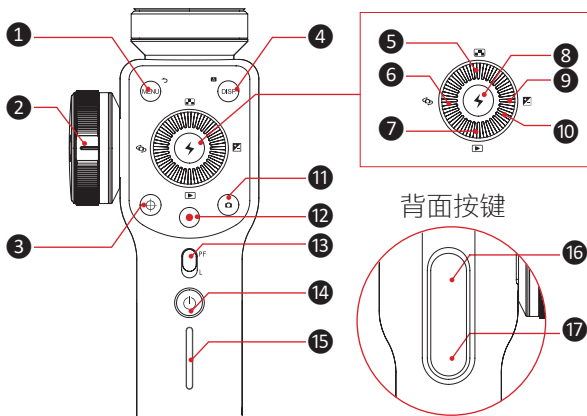
## Balancing

If the smartphone fails to stay in level and keeps tilting when mounted, loosen the Roll (Y) Axis Thumb Screw to adjust the gravity center by sliding the horizontal arm (as marked red in the Figure) until the smartphone stays still and vertical on the tilt axis. Tighten the Thumb Screw after the smartphone is well balanced in level to ensure normal operations.



- ⚠ Proper adjustment of gravity center ensures better power saving during operation. The stabilizer may still function well when the gravity center is not properly configured, however, it may lead to more power consumption on the motors, and can greatly affect the torque output.

## The Introduction of Control Panel



背面按键

### 1 Menu/Return Button [ MENU ]

- In general menu, press the button once to enter parameter adjustment menu;
- In parameter adjustment menu, click the button to save settings and return to previous option;

### 2 Zoom/Focus Handwheel

Handwheel can adjust the focal length of phone camera focus and its zoom ratio.

### 3 Handwheel Zoom/Focus Switch Button [ ⊕ ]

- Press the button once to switch functions
- When the button light is on, handwheel on the side controls the zoom of phone camera lens.
- When the button light is off, handwheel on the side controls the focus of phone camera lens.



### ④ Parameter Display Button [ DISP. ]

- Press the button once to display/close shooting parameters;
- In album mode, press the button once to display photo parameters;
- Long press the button to automatically return to “Full Auto Mode” on the APP.

### ⑤ Resolution Ratio/Frame Rate Selection Button [ ]

Press the button once to enter resolution ratio/frame rate adjustment menu.

### ⑥ Camera Switch Button [ ]

Press the button once to switch between front and rear phone cameras.

### ⑦ Album Mode Button [ ]

Press the button once to enter phone album and playback photos or videos.

### ⑧ Confirm/LED Light Button [ ]

- The Button works as Confirm Button when pressed once;
- Long Press the button to turn on/off Fill Light.

### ⑨ Exposure Compensation Button [ ]

Press the button once to enter exposure compensation adjustment menu.

### ⑩ Thumb Wheel

Rotate the Thumb Wheel to adjust current option parameters.

### ⑪ Photo Button [ ]

Single press to take pictures.

### 12 Video Button [ ● ]

Single press to start or stop recording.

### 13 Mode Switch Button

- Push slider up to enter PF(Pan Following) Mode;
- Push slider down to enter L(Locking) Mode.

### 14 Power Button [ ⏻ ]

Press the button for 2 seconds to turn on/off the stabilizer;

### 15 Battery Level Indicator

- The button shows how much power is left.
- 0~25%: one blue light;
- 25~50%: two blue lights;
- 50~75%: three blue lights;
- 75~100%: four blue lights.

### 16 “PhoneGo” Mode Button - Full-speed Following Mode Button

When pressing this button, the stabilizer enters Full-speed Following Mode - “PhoneGo”. Smooth 4 can then follow your move synchronously at full speed.

### 17 Following Mode Button

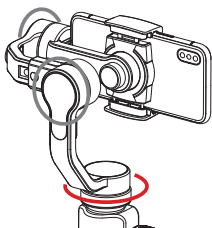
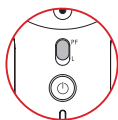
- When pressing the button, the stabilizer enters following mode;
- When double pressing the button, the tilt axis motor and roll axis motor go back to initial state.

💡 1. In standby mode, the stabilizer can still adjust phone camera parameters;

2. Part of the function buttons mentioned above can only be used when the stabilizer is connected to "ZY Play" App in the phone.

## The Introduction of Operation Mode

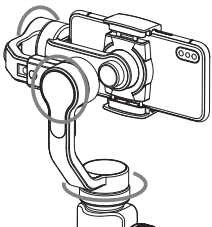
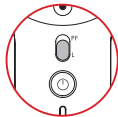
Buttons on the Front



### **Pan-Following Mode:**

Tilt axis and roll axis motors are locked and phone follows handle to move in the horizontal direction.

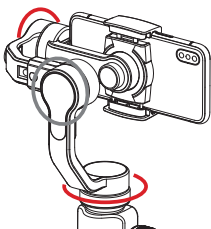
Buttons on the Front



### **Locking Mode:**

All three axes are locked and phone does not follow handle to move.

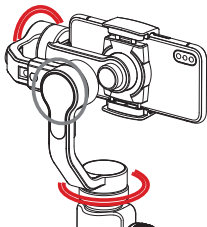
Buttons on the Back



## Following Mode :

The roll axis is locked and phone follows the handle to move in the tilt and horizontal direction.

Buttons on the Back



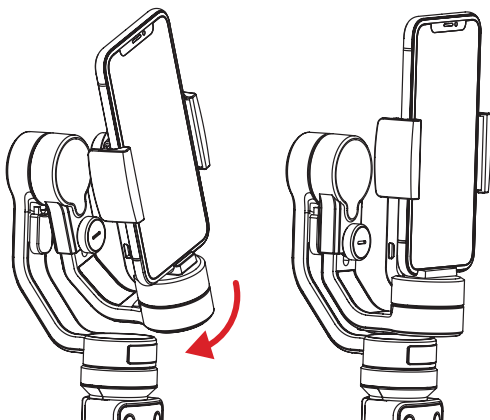
## “PhoneGo” Mode:

The roll axis is locked and phone follows the handle to move in the tilt and horizontal direction.

## Quick Switch to Standby Mode

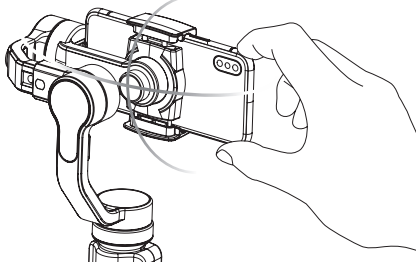
While stabilizer is powered on, put the horizontal arm down by hand, the horizontal arm is automatically locked with Fixing Buckle and the stabilizer enters standby mode. Before turning on or waking up stabilizer, manually separates stabilizer from the Fixing Buckle.

Moving horizontal arm to horizontal position to wake up stabilizer.



## Manual Reposition

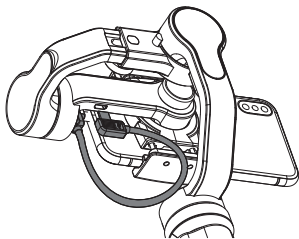
In pan following mode or locking mode, you can rotate phone to the angle that you want, then release it and phone angle can be fixed. In pan following mode, you can manually adjust tilt angle and in locking mode you can manually adjust tilt axis and pan axis angle.



## Charging Phone

To charge the phone, you should use the cable with one end as Micro USB port and another as charging port for phone, connect stabilizer and phone, then stabilizer starts charging the phone.

**⚠ DO NOT charge via the Micro USB port on tilt axis, otherwise it may lead to a short or burn in the circuit board.**



## Downloading APP



Download the APP from ZHIYUN's official website [www.zhiyun-tech.com](http://www.zhiyun-tech.com), or by directly scanning the QR code on the left (Android 5.0 above or iOS9.0 above required) to download. iOS or Android users can also download the APP by searching "ZY Play" in APP Store/Android Store.

1. You can make the most use of the functions matching the Smooth 4 tailor-made "ZY Play " APP.
2. The ZHIYUN APP is subject to regular update, try out now to discover more functions.

## How to connect

1. Power on the stabilizer and open phone bluetooth.
2. Open "ZY Play" APP and Tap "Connect Your Device" to connect the stabilizer

## The Introduction of Main Features



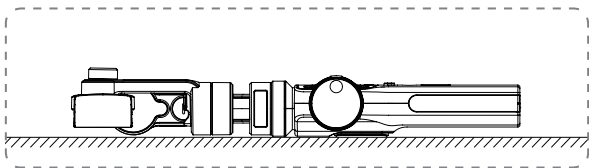
## When the stabilizer needs calibration

Please calibrate stabilizers when needed.

When	How
<ol style="list-style-type: none"> <li>1.Slight deviation is found in the tilt angle of the camera in level position after startup.</li> <li>2.Slight deviation is found in the roll angle of the camera in level position after startup.</li> <li>3.Frequent small angle correction is found when the camera is in level position while the stabilizer stays still.</li> </ol>	Initialize the stabilizer
<ol style="list-style-type: none"> <li>1.Slight deviation is still found in the tilt angle of the camera in level position after startup.</li> <li>2.Stabilizer unused for a long time.</li> <li>3.Too large temperature difference between operation environments.</li> </ol>	Conduct six-side calibration
Slight deviation is still found in the tilt or roll angle of the camera in level position after the initialization and six-side calibration of the stabilizer.	Fine tune motor force



## Initialization Method



After activating stabilizer and entering stand-by mode, put the stabilizer on the ground and wait for 30 seconds, then the initialization of stabilizer is finished.

**⚠** If the angle deviation still persists after the initialization, please try again following the procedure.

## Six-side Calibration

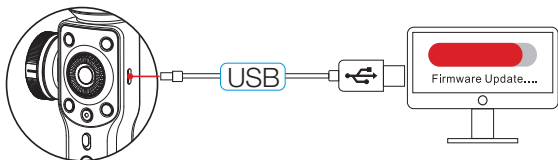
Six-side calibration through APP:  
Please refer to “APP Operations” on Page 13 for more information; Connect the stabilizer to ZHIYUN’s APP - ZY Play - via Bluetooth, enter “calibration” and finish the six-side calibration following the APP instruction.

**💡** Six-side calibration is to make all six sides of the phone clamp vertical to the level surface.

## Motor Fine-tuning

Please refer to “APP Operations” on Page 13 for more information; Connect the stabilizer to ZHIYUN’s APP - ZY Play - via Bluetooth, enter “PTZ” and adjust the value of the tilt and roll axis angle to your actual needs.

## Firmware Upgrade Step



Connect the stabilizer to your computer via Type-C USB cable to get ready for the firmware upgrade and calibration.

1. Visit ZHIYUN’s official website: [www.zhiyun-tech.com](http://www.zhiyun-tech.com); Click “DOWNLOAD” and find the Firmware Upgrade Tutorial package, then download the driver, calibration tool and latest firmware corresponding to your stabilizer. (USB driver installation is not needed for Mac and WIN 10 system).
2. Connect the stabilizer to your computer via Micro USB cable, power on the stabilizer and finish the installation of the driver.
3. Power on the stabilizer and long press mode button to enter standby mode.
4. Enter the downloaded “Zhiyun Gimbal Tools” and upgrade firmware following the instructions indicated in the Firmware Upgrade Tutorial.

## Product model: SMA04

	Min.	Standard	Max.	Remarks
Operation Vol.		7.4V		
Operation Current	120mA		2500mA	
Charging Input Vol.	4.7V	5V	5.5V	
Charging Input Current	500mA	-	2000mA	
Power Output Vol.	-	5V	-	
Power Output Current	-	-	1500mA	
Built-in Battery Volume	-	2000mAh*2	-	
Tilt Angle Range	-	240°	-	
Roll Angle Range	-	240°	-	
Pan Angle Range	-	300°	-	
Operation Temperature	-10°C	25°C	45°C	
Operation Time	-	12h	-	Experimental Data <sup>1</sup>
Charging Time	-	3.5h	-	Experimental Data <sup>2</sup>
Charging Environment Temperature	-5°C	-	+60°C	
Payload	75g	-	210g	
Horizontal Arm Adjustment Range	-	10mm	-	
Clamp Range	65mm	-	82mm	
Application Sphere	Any smart phone with width within the range of clamp			

"1" This data is gathered when the temperature is 25°C and the stabilizer is properly balanced.

"2" Smooth 4 is protected and stops charging when the charging temperature is too high in order to protect device and batteries. When the temperature is 25°C , please use 5V/2A battery charger to proceed this test. The charging time varies according to different environment and actual results may be different.

💡 All the data in this guide is gathered from internal experiments of Zhiyun laboratories. Under different scenarios, data is different to some extent and please refer to actual use of Smooth 4.

Thank you for using ZHIYUN Smooth 4. The information contained herein affects your safety and your legal rights and responsibilities. Read this entire document carefully to ensure proper configuration before use. Failure to read and follow the instructions and warnings herein may result in serious injury to you or bystanders, or damage to your device or property. ZHIYUN reserves the right of final explanation for this document and all relevant documents relating to Smooth 4, and the right to make changes at any time without notice. Please visit [www.zhiyun-tech.com](http://www.zhiyun-tech.com) for the latest product information.

By using this product, you hereby signify that you have read this document carefully and that you understand and agree to abide by the terms and conditions herein. You agree that you are solely responsible for your own conduct while using this product, and for any consequences thereof. You agree to use this product only for purposes that are proper and in accordance with all terms, precautions, practices, policies and guidelines ZHIYUN has made and may make available.

ZHIYUN™ accepts no liability for damage, injury or any legal responsibility incurred directly or indirectly from the use of this product. Users shall observe safe and lawful practices including, but not limited to, those set forth herein.

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This guide is for reference only and does not constitute any kind of commitment. Product(s), including but not limited to its color, size, etc., are subject to the actual product.

## Glossary

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product.

**WARNING:** Procedures, which if not properly followed, may incur property damage, grave accident, or serious injury.

**CAUTION:** Procedures, which if not properly followed, may incur property damage and serious injury.

**NOTICE:** Procedures, which if not properly followed, may incur property damage or minor injury.

## Reading Tip

Symbol Description:  Operation and Use Tips  
 Important Notes

Data charges may occur when you scan QR code to read or download the electronic user manual online, so you'd better process under WIFI environment.

## Warning

Read the ENTIRE User Guide to become familiar with the features of this product before operating. Failure to operate the product correctly can result in damage to the product or personal property and cause serious injury. This is a sophisticated product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. DO NOT use with incompatible components or in any way otherwise as mentioned or instructed in the product documents provided by ZHIYUN. The safety guidelines herein contain instructions for safety, operation and maintenance. It is essential to read and follow all of the instructions and warnings in the User Guide, prior to assembly, setup or use, in order to operate the product correctly and avoid damage or serious injury.

## Safe Operation Guidelines

### ■ CAUTION

- 1) Smooth 4 is a high-precision control device. Damage may be caused to Smooth 4 if it is dropped or subject to external force, and this may result in malfunction.
- 2) Make sure the rotation of the gimbal axes is not blocked by external force when Smooth 4 is turned on.
- 3) Smooth 4 is not waterproof. Prevent contacts of any kind of liquid or cleaner with CRANE 2. It is recommended to use dry cloth for cleaning.
- 4) Protect Smooth 4 from dust and sand during use.

### ■ WARNING

To avoid fire, serious injury, and property damage, observe the following safety guidelines when using, charging, or storing your batteries.

### ■ NOTICE

#### Battery Use

Make sure the batteries are fully charged before each time of use.

#### Battery Charging

The battery will stop charging automatically when it is full. Disconnect the batteries from the charger when fully charged.



## Battery Storage

1. Discharge the battery to 40%-65% if it will NOT be used for over 10 days. This can greatly extend the battery life.
2. The battery enters hibernation mode when voltage gets too low. Charge the battery will bring it out of hibernation.

## Certificate of Quality

This product is confirmed to meet quality standards and permitted for sale after strict inspection.

QC Inspector: \_\_\_\_\_



Please download the latest version from [www.zhiyun-tech.com](http://www.zhiyun-tech.com)

This document is subject to change without notice.

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## Warranty Period

1. Customers are entitled to replacement or free repair service in case of quality defect(s) found in the product within 15 days upon receipt of the product.
2. Customers are entitled to free repair service from ZHIYUN for any product proven defective in material or workmanship that results in product failure during normal consumer usage and conditions within the valid warranty period, which is 12 months counting from the date of selling.
3. Some states or countries do not allow limitations on how long an implied warranty lasts, so the above warranty term may not apply to you.

## **This warranty does not apply to the followings**

1. Products subjected to unauthorized repair, misuse, collision, neglect, mishandling, soaking, accident, and unauthorized alteration.
2. Products subjected to improper use or whose labels or security tags have been torn off or altered.
3. Products whose warranty has expired.
4. Products damaged due to force majeure, such as fire, flood, lightening, etc.

## Warranty Claim Procedure

- 1.If failure or any problem occurs to your product after purchase, please contact a local agent for assistant, or you can always contact ZHIYUN's customer service through email at [service@zhiyun-tech.com](mailto:service@zhiyun-tech.com) or website at [www.zhiyun-tech.com](http://www.zhiyun-tech.com).
- 2.Your local agent or ZHIYUN's customer service will guide you through the whole service procedure regarding any product issue or problem you have encountered. ZHIYUN reserves the right to reexamine damaged or returned products.

## Customer information

Customer Name :

Contact No :

Address :

## Sales Information

Sales Date :

Prod. Serial No :

Dealer :

Contact No :

## #1 Maintenance Record

Service Date :

Signature of Repairman :

Cause of Problem :

Service Result :  Solved

Unsolved

Refunded(Replaced)



Website



Weibo



Vimeo



Google+



Facebook



Wechat



Youku



Youtube

Tel: +86 (0) 773-3561275

USA Hotline: +1 808-319-6137,9:00-18:00 GMT-7,Mon-Fri

Europe Hotline: 0031-297303057,10:00-17:00 GMT+1,Mon-Fri

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E-mail: [service@zhiyun-tech.com](mailto:service@zhiyun-tech.com)

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