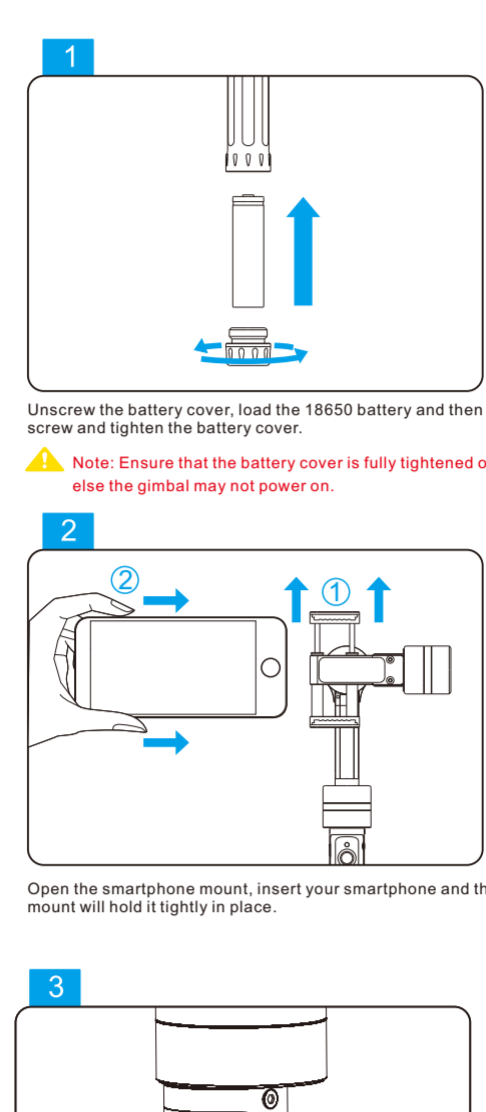


# Smooth II User Manual 1.0

## 1 Gimbal Structure



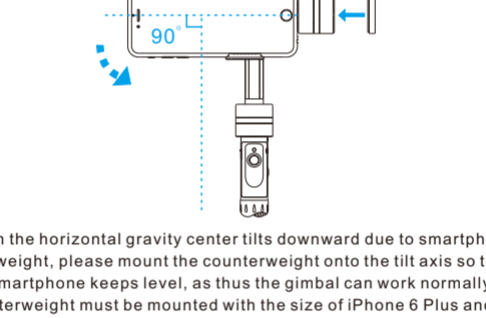
⚠️ All the figures of the manual are for reference only, please make the object as the standard.

- |                           |                          |
|---------------------------|--------------------------|
| 1. Smartphone mount       | 2. Roll axis             |
| 3. Tilt axis              | 4. Pan axis              |
| 5. ON/OFF                 | 6. Shifter Lever         |
| 7. Power indicator        | 8. USB port              |
| 9. Joystick               | 10. 18650 Li-ion battery |
| 11. 1/4 inch screw thread | 12. Charging indicator   |

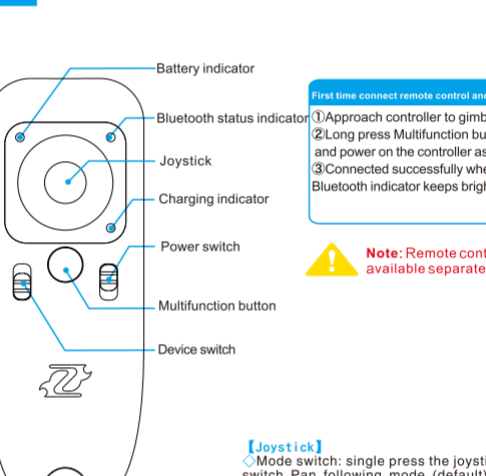
## 2 Packing List

	Camera protection sticker for pan axis motor	1
	Smooth II gimbal	1
	Counterweight	1
	Micro USB cable	1
	18650 Li-ion battery	1
	User Manual	1

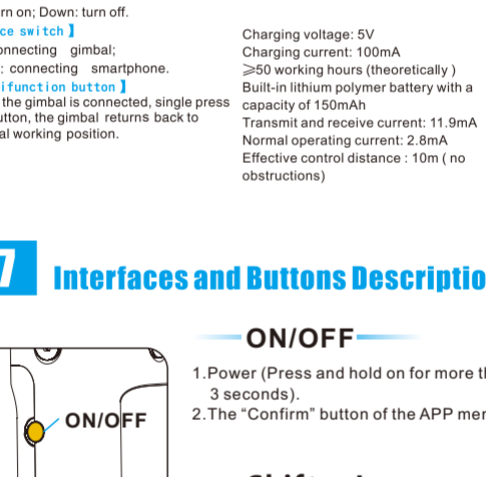
## 3 Quick Guide Start



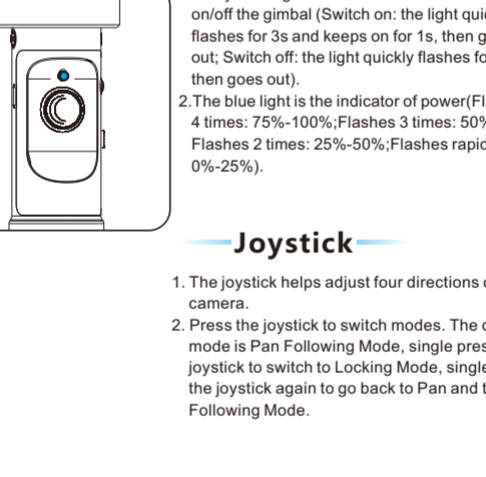
Unscrew the battery cover, load the 18650 battery and then screw and tighten the battery cover.  
 ⚠️ Note: Ensure that the battery cover is fully tightened or else the gimbal may not power on.



Open the smartphone mount, insert your smartphone and the mount will hold it tightly in place.

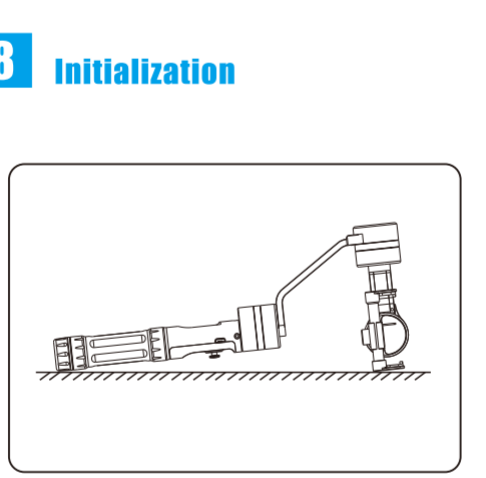


Press and hold on the ON/OFF Power button for more than 3 seconds and the gimbal starts to work.



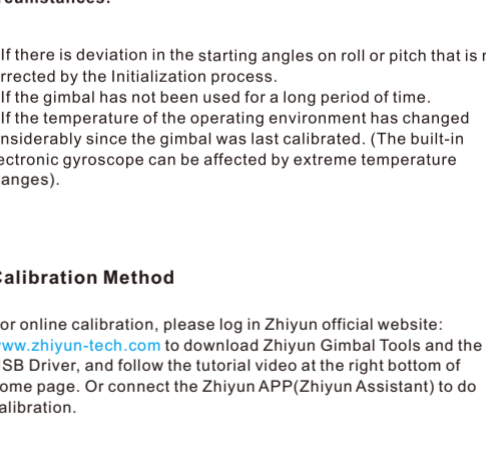
Press and hold on the joystick for more than 3 seconds and the gimbal enters standby mode, press the joystick for 1 second to turn on the gimbal.

## 4 Charger and Batteries



⚠️ Please load the 18650 Li-ion battery before upgrading.

Connect the gimbal to a computer with the Micro USB cable to do upgrade or calibration. The USB cable can be used for direct charge without removing the battery.

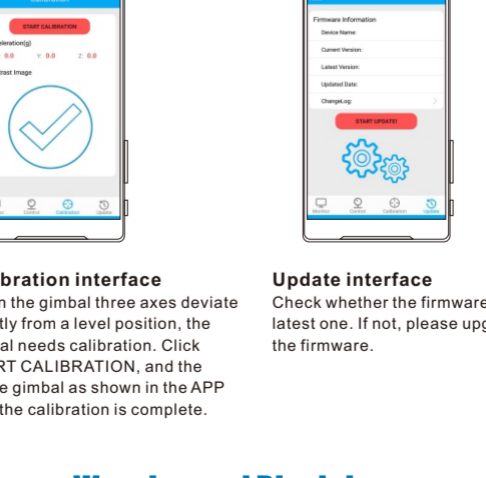


⚠️ The gimbal must be matched with the original batteries; if not, the performance and safety will not be guaranteed. Zhiyun assumes no liability for damages or injuries under this circumstance.

## 5 Adjustment of Gravity Center



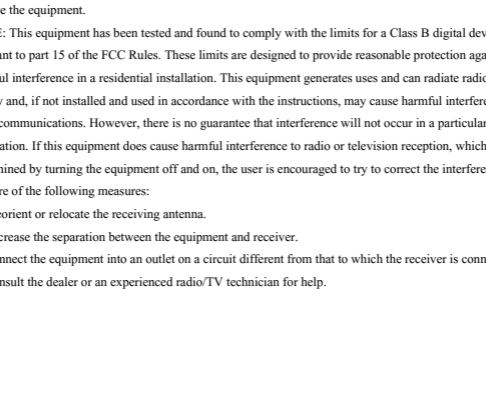
When the smartphone's vertical gravity center tilts forward and backward, please loosen the thumbscrew at the back of smartphone mount, adjust the smartphone mount to vertical status until it won't shake even the gimbal swings at all directions (The smartphone mount can be directly adjust to the bottom when using an iPhone 6 Plus).



When the horizontal gravity center tilts downward due to smartphone's overweight, please mount the counterweight onto the tilt axis so that the gimbal keeps level, as thus the gimbal can work normally (the counterweight must be mounted with the size of iPhone 6 Plus and above or the gimbal cannot work normally).

⚠️ Adjusting the gravity center makes the gimbal works more efficiently. When the gravity center is not in balance, the gimbal still works, but the motors consume excessive power and, meanwhile, the motors' torque for stabilizing will be lessened.

## 6 Wireless Remote Control



**First time connect remote control and gimbal:**  
 1. Approach controller to gimbal.  
 2. Long press Multifunction button and power on the controller as while.  
 3. Connected successfully when Bluetooth indicator keeps bright.

⚠️ Note: Remote control is available separately.

**[Joystick]**  
 ◦ Mode switch: single press the joystick to switch Pan following mode (default) and Locking mode. Double press the joystick to enter Pan and Pitch following mode. Single press the joystick again under this mode to return back previous mode.  
 ◦ Pan following mode: pitch and roll are locked. Pan rotates smoothly following the pedestal or handle. Push up or down the joystick to adjust pan angle.  
 ◦ Locking mode: pan, pitch and roll are locked. Push up or down the joystick to adjust pitch angle. Push left or right to adjust pan angle.  
 ◦ Pan and Pitch following mode: roll is locked. Pitch and pan rotate smoothly following the pedestal or handle. Push left or right to adjust roll angle.  
 Note: All the operations are based on gimbal's function.

**[Battery indicator]**  
 ① 90%-100%: flashes 4 times  
 ② 75%-90%: flashes 3 times  
 ③ 55%-75%: flashes 2 times  
 ④ 30%-55%: flashes 1 times  
 ⑤ 0%-30%: flashes frequently.

**[Bluetooth status indicator]**  
 ① Before connecting device: continuously flash;  
 ② Connected: continuously bright;  
 ③ Device switching: flash 1 time.

**[Charging indicator]**  
 Charging: red light; Charging completed: green light.

**[Power switch]**  
 Up: turn on; Down: turn off.

**[Device switch]**  
 Up: connecting gimbal;  
 Down: connecting smartphone.

**[Multifunction button]**  
 While the gimbal is connected, single press this button, the gimbal returns back to original working position.

Charging voltage: 5V  
 Charging current: 100mA  
 >=50 working hours (theoretically)  
 Built-in lithium polymer battery with a capacity of 150mAh  
 Transmit and receive current: 11.9mA  
 Normal operating current: 2.8mA  
 Effective control distance: 10m (no obstructions)

## 7 Interfaces and Buttons Descriptions



**ON/OFF**  
 1. Power (Press and hold on for more than 3 seconds).  
 2. The "Confirm" button of the APP menu.

**Shifter Lever**  
 1. Help focus when taking a photo by APP.  
 2. The "UP/DOWN" button of the APP menu.



**Power Indicator Light**  
 1. The yellow light is the indicator of switching on/off the gimbal (Switch on: the light quickly flashes for 3s and keeps on for 1s, then goes out; Switch off: the light quickly flashes for 3s then goes out).  
 2. The blue light is the indicator of power (Flashes 4 times: 75%-100%; Flashes 3 times: 50%-75%; Flashes 2 times: 25%-50%; Flashes rapidly: 0%-25%).



**Joystick**  
 1. The joystick helps adjust four directions of the camera.  
 2. Press the joystick to switch modes. The default mode is Pan following mode, single press the joystick to switch to Locking Mode, single press the joystick again to go back to Pan and tilt Following Mode.



**Mode switch:** Pan following mode is default mode, single press the joystick to switch Pan following mode and Locking mode. Double press the joystick to enter Pan and pitch following mode. In this mode, single press the joystick again to go back to previous mode.

**Pan following mode (default):** Pan axis (rotation left and right) follows the movement of the gimbal, while the camera remains locked in tilt (up and down) and roll (level) to remain upright. In this mode, move the Joystick UP/DOWN to adjust tilt angle.

**Locking mode:** All three axes (pan, tilt and roll) are locked and the gimbal faces in one direction only. In this mode, move the Joystick UP/DOWN to adjust tilt angle. Move the Joystick LEFT/RIGHT to adjust roll angle.

**Pan and tilt following mode:** Roll axis is locked, tilt and pan axis rotate to follow the movement of the gimbal. In this mode, move the Joystick LEFT/RIGHT to adjust roll angle.

## 8 Initialization



**Initialization may be required if the following behavior is observed:**  
 1. After the gimbal starts, the tilt angle of the camera deviates slightly from a level position.  
 2. After the gimbal starts, the roll angle of the camera deviates slightly from a level position.  
 3. When remaining still, the pan axis makes frequent small angle corrections.

**Initialization process:**  
 1. Install the camera and batteries correctly.  
 2. Press and hold on the power button for more than 3 second and the gimbal starts to work.  
 3. Press the joystick and the gimbal enters standby mode.  
 4. Place the gimbal on a level surface in any position where the gimbal will stay stationary, keep it still for more than 30 seconds and the initialization will complete automatically.

## 9 On-line Calibration

**Gimbal calibration may be required in the following circumstances:**  
 1. If there is deviation in the starting angles on roll or pitch that is not corrected by the Initialization process.  
 2. If the gimbal has not been used for a long period of time.  
 3. If the temperature of the operating environment has changed considerably since the gimbal was last calibrated. (The built-in electronic gyroscope can be affected by extreme temperature changes).

**Calibration Method**  
 For online calibration, please log in Zhiyun official website: [www.zhiyun-tech.com](http://www.zhiyun-tech.com) to download Zhiyun Gimbal Tools and the USB Driver, and follow the tutorial video at the right bottom of home page. Or connect the Zhiyun APP (Zhiyun Assistant) to do calibration.



## 10 APP

### 1 Connect the gimbal with smartphone



Turn on the gimbal power. Open the Bluetooth in phone settings.



Place the smartphone nearby the gimbal, and then the waiting page shows the gimbal name. click the name to connect.

### 2 Download APP

First, please download APP from our official website: [www.zhiyun-tech.com](http://www.zhiyun-tech.com). Android users also can scan the left QR Codes to download. For iOS users, please search and download APP (ZhiYun Assistant) from APP Store.

⚠️ Attention: Please refer to the latest APP version. More fun waiting for you to experience.

### 3 Main Functions Introduction



**Monitor interface**  
 To check whether there is deviation in three axes in case for calibration.

**Control interface**  
 Directly switch operating mode and all functions corresponding to the joystick.



**Calibration interface**  
 When the gimbal three axes deviate slightly from a level position, the gimbal needs calibration. Click START CALIBRATION, and the place gimbal as shown in the APP until the calibration is complete.

**Update interface**  
 Check whether the firmware is the latest one. If not, please upgrade the firmware.

## Warning and Disclaimer

**To ensure proper use of the batteries, please read the following information carefully prior use.**

- Do not expose to, dispose of the battery in fire.
- Do not put the battery in a charger or equipment with wrong terminals connected.
- Avoid shorting the battery
- Avoid excessive physical shock or vibration.
- Do not disassemble or deform the battery.
- Do not immerse in water.
- Do not use the battery mixed with other different make, type, or model batteries.
- Keep out of the reach of children.

**Charge and discharge**  
 ● Battery must be charged in appropriate charger only.  
 ● Never use a modified or damaged charger.  
 ● Do not leave battery in charger over 24 hours.

**storage**  
 ● Store the battery in a cool, dry and well-ventilated area.

▶ Any illegal use of this product is forbidden. Users are responsible for using this product correctly and in accordance with the instructions provided: either in the manual or any online revisions.

▶ The company is not responsible for any damage caused while using this product; including direct, indirect or third party loss.

▶ Due to the company's policy of continuing improvement: firmware upgrades and changes to the software program may lead to changes in the product's functions to those described in the User Manual. Therefore please read the upgrade instructions carefully before upgrading the firmware and operate the product in accordance with any revised instructions.

▶ For the latest User Manual, firmware upgrades and online calibration program: please download from our official website: [www.zhiyun-tech.com](http://www.zhiyun-tech.com)

▶ The company (Guilin Zhishen Information Technology Co., Ltd) reserves the rights to amend details or specifications at any time.



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 Address: Creative Industrial Park, GuiMo Road, QiXing District, Guilin 541004, Guangxi, China.

Federal Communication Commission (FCC) Radiation Exposure Statement  
 When using the product, maintain a distance of 20cm from the body to ensure compliance with RF exposure requirements.

FCC statements:  
 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.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes 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 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.