

BaseCam Electronics Handy

3-Axis Handheld Gimbal Smartphone Stabilizer

User Manual

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1. Introduction

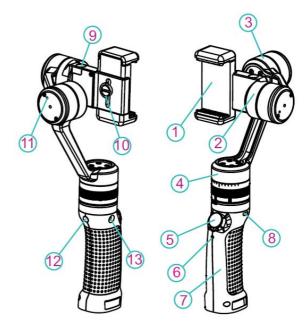
1. Introduction

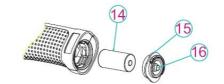
BaseCam Electronics Handy Gimbal Stabilizer is a handheld gyro-stabilized 3-axis gimbal system. With its assistance, everyone can shoot steady and professional-level videos with a smartphone; it is widely used in various circumstances such as sports games, parties, outdoor events, interviews, microfilms, etc. It's portable and easy to use, the latest 32-bit controller with encoder technology makes it more precise and accurate.

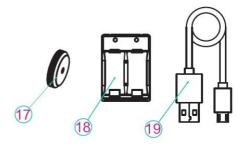
This product applies to most mainstream smartphones on the market.

At a Glance:

- 1. Smartphone Holder
- 2. Tilt/Pitch Motor
- 3. Roll Motor
- 4. Pan/Yaw Motor
- 5. Joystick
- 6. Battery Status LED
- 7. Handle
- 8. Micro USB Port
- 9. Mini Spirit Level
- 10. CG (Center of Gravity) Adjusting Screw
- 11. System Status LED
- 12. Function Button
- 13. External Holder Mounting Hole
- 14. 18350 Battery (900mAh*2)
- 15. Battery Compartment Cap
- 16. Power Switch
- 17. Counterweight
- 18. Charger
- 19. USB Cable





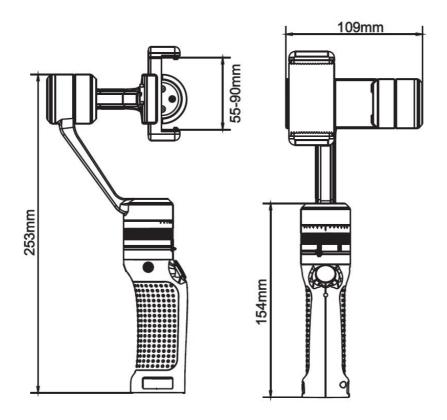


1. Introduction

What's inside the box

Name	Quantity
3-Axis Handheld Stabilizer	1
Charger	1
USB Cable	1
18350 Battery	2
Counterweight	1

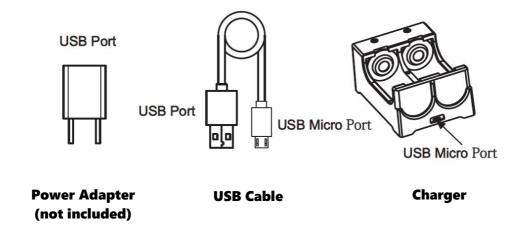
Dimensions



2. Charging

2. Charging

- 1. Charge batteries before using the gimbal.
- 2. Connect a power adapter and charger with the USB cable, put batteries in the charger respecting the polarity, then plug in.
- 3. The LED indicator is red when charging, it turns green when the battery is charged.
- 4. It takes approximately 120 minutes to fully charge the batteries.

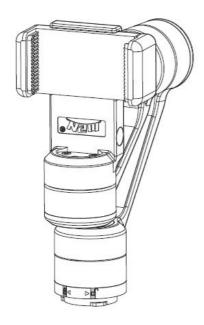


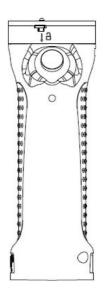
- 1. Charger: Input: DC5V 800mA; Output: DC4.2V 400mA*2
- 2. Battery: 18350 rechargeable lithium battery 3.7V 900mA
- 3. Power Adapter (recommended): Input: AC100-240V; Output: DC5V 1000mA



3. Assembling and Disassembling

The gimbal consists of the two parts: gimbal head and handle. By default, it goes fully assembled. If your stabilizer is disassembled, assemble it according to the following instruction:

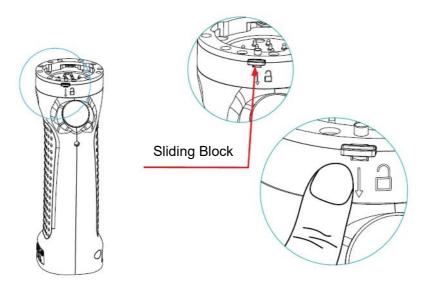




Gimbal head

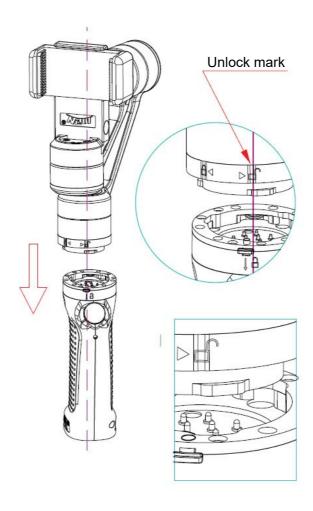
Assembling

1. Press and hold the sliding block down.

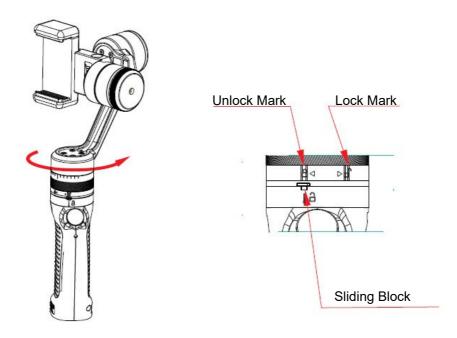




2. Install the gimbal head onto handle until the sliding block reaches the unlock mark.



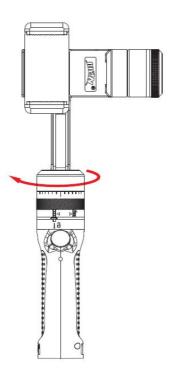
3. Turn the handle until the sliding block reaches the lock mark.



3. Assembling and Disassembling

Disassembling

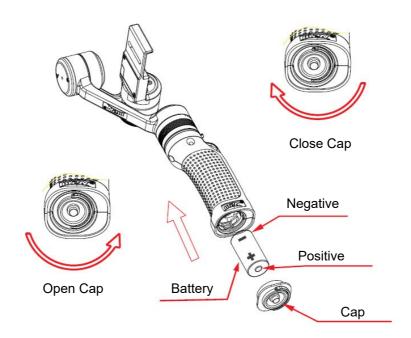
To disassemble the gimbal, hold and press the sliding block down, and turn the handle until the sliding block reaches the unlock mark.



4. Inserting the Batteries

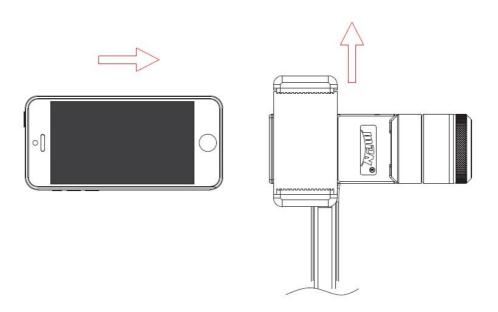
4. Inserting the Batteries

Unscrew the battery cap to have access to the battery compartment. Insert the negative (-) terminal of the batteries into the compartment first. Screw the battery cap.



5. Mount and balance the Mobile Phone

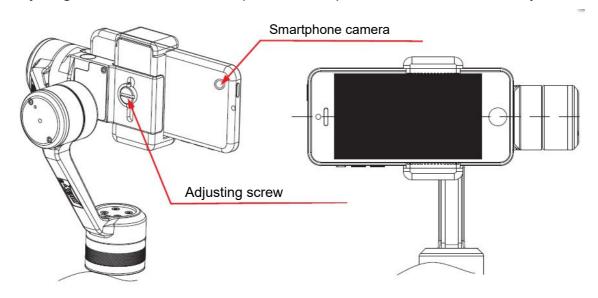
1. With the gimbal powered off, lift up the smartphone holder, and place the smartphone in the smartphone holder.



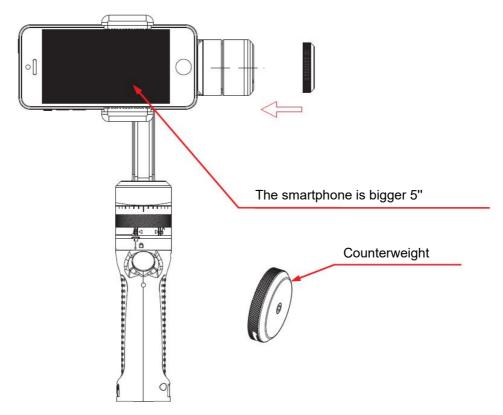


2. It is very important that the system with the smartphone mounted was balanced. The system is balanced if the smartphone remains level when released.

To balance the system horizontally (ROLL axis) move the smartphone left or right as needed. Then, loose adjusting screw, and move the smartphone holder up or down to achieve balance by PITCH axis.



For smartphones bigger 5", use the counterweight. The counterweight should be attached to the roll motor.

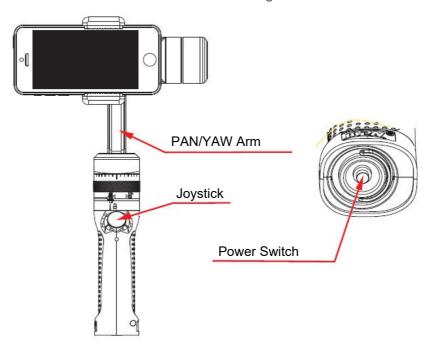


6. Using the gimbal

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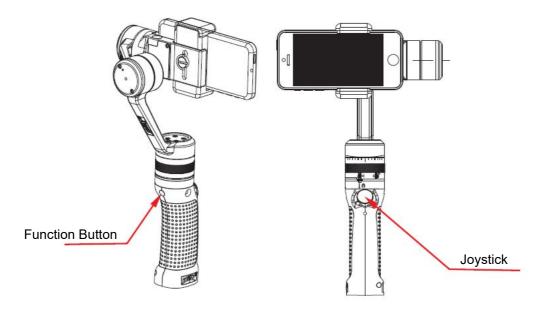
Before turning power on, make sure that the smartphone is mounted securely and balanced.

There are buttons on the handle that intended to control the gimbal. All of them are described below.



Power Switch

To power on/off press Power Switch button.



Joystick

Vertical movements tilt the smartphone. Horizontal movements pans the smartphone.

Function Button

The function button switches operation modes.

6. Using the gimbal

Operation modes

The gimbal has 5 operation modes. To set the operation mode, press the function button as many times as necessary to select the appropriate mode. To select mode 1, press the function button 1 time. To select mode 5, press the function button 5 times.

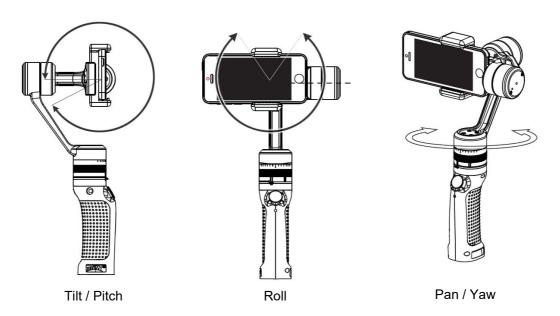
Follow mode

The follow mode allows you to move the smartphone by rotating the gimbal handle without having to use a joystick.

Lock mode

In lock mode, locked axis remains in the initial position despite the handle movements.

Gimbal Axes



Mode 1: Follow for YAW and PITCH axes, lock for ROLL axis.

Mode 2: Follow only for YAW axis.

Mode 3: Lock mode for all axes.

Mode 4: Switch Portrait / Landscape mode.

Mode 5: Set-up and start time-lapse.

Long press: Temporary switch lock mode for all axes.

Adjusting shooting position

There are two ways to adjust shooting position:

Use joystick: Left-Right - pan, Up-Down - tilt.

Set position manually: rotate camera platform by hands and fix it for about 1-2 seconds - motors will resist for a while, then the camera will stay in new position. The same way you can adjust the level of the horizon.

6. Using the gimbal

Time-lapse function

Firmly fix the gimbal on a tripod or other way. Move the camera to the final position by the joystick or hands and set the desired framing. Press button five times in series to activate the "time-lapse" function. You have 10 seconds to move the camera to the initial position and set the initial framing. Do not forget to start recording on your smartphone. Then, the gimbal slowly rotates from the initial position to the final position. The duration depends on the currently selected profile: 5min, 15min, or 30min for Profile1, Profile2, Profile3 respectively.

7. Calibration

This product might become slightly imbalanced due to the environment or temperature changes. If the level is not perfect and slowly floats, most probably you need to update the calibration of the gyroscope. To do that, put gimbal on a rigid surface and power gimbal ON - calibration starts automatically. Don't touch gimbal for 3-4 seconds.

8. Specifications

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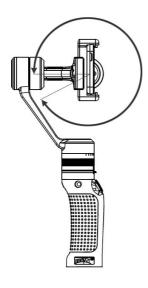
	Min	Standard	Max	Note
Operating Voltage	6V	7. 4V	8. 4V	
Operating Current	40mA	80mA	1300mA	
Static Tracking Accuracy	±0.01°	±0.04		
Dynamic Tracking Accuracy	±0.1°	±0. 2°	±0.5°	
Tilt/Pitch Range	-90°		+230°	Vertically Hold
Roll Range	-45°		+225°	
Pan/Yaw Range	-160°		+160°	Vertically Hold
	-50°		+50°	Horizontally Hold
Pitch Following Speed	1°/s		50°/s	
Yaw Following Speed	1°/s		80°/s	
Battery Life	3h	5h	6h	900mAh*2
Working Temperature	-10°C	25°C	40°C	
Net Weight	420g			without smartphone & batteries

Battery Low Warning

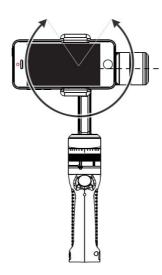
- When the Battery Status LED is green, batteries have enough power, the gimbal can work normally.
- When the battery is low, the Battery Status LED turns red, please stop using the stabilizer.

9. Rotation Range

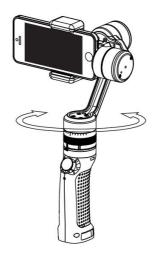
9. Rotation Range



Tilt/Pitch Rotation range: 320°



Roll Rotation range: 270°



Pan/Yaw Rotation range: 320°