

## ! WARNING !

1. GoPro camera must be installed before supplying power to the Gimbal. Failure to do so will result in damage to the gimbal motors.
2. Make sure that the connection to the computer is done by the **USB Connector**

## 1 Introduction

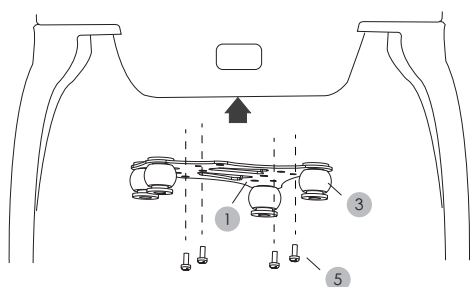
Mini 2D 2-Axis Brushless Gimbal ( For aircraft ) suitable for GoPro4,GoPro3+ / 3 or cameras with similar size. Can be easily mounted in fixed wing, multicopter, helicopter for aerial photography, and can work independently only need power supply.

You can assemble the gimbal properly according to the drawing, and then install the video camera on it.

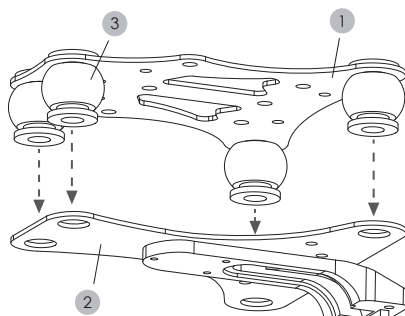
There is no need to set up and adjust the parameter. For the first use, power on the Gimbal, and then keep it static for a while, after its reset, the gimbal will be in a level position automatically. Then you can use it normally.

## 2 Install Step

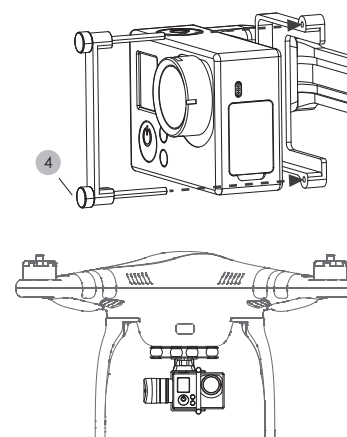
**I** Install the damping ball to the adapter (Up), then install the adapter (Up) to the aircraft. V hanger is optional part to use if necessary.



**II** Install the damping ball to the Adapter(Down)



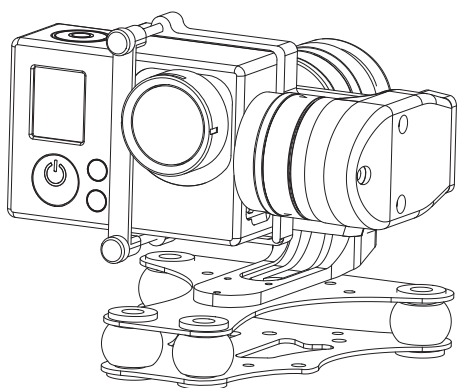
**III** Install the camera



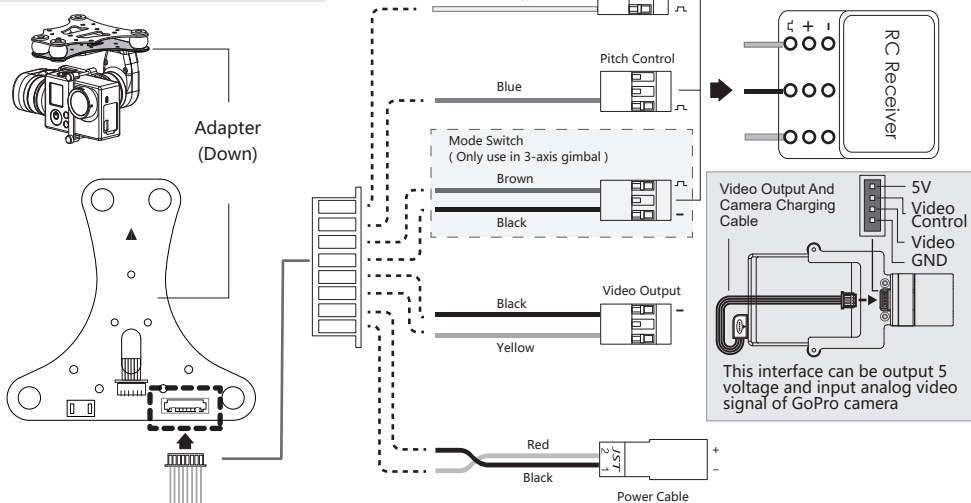
<b>1</b>  Adapter (Up)	<b>2</b>  Adapter (Down)	<b>3</b>  Damping Ball	<b>4</b>  M2x25mm Knurled Thumb Screw	<b>5</b>  Screw (Not Included)	<b>V Hanger</b>  Hexagonal Socket Head Cap Screw V Hanger
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## 3 Install Mode

### Vertical Installation Diagram

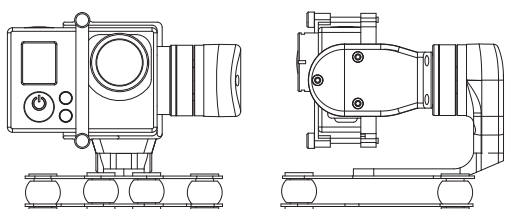


### Gimbal Connection Diagram

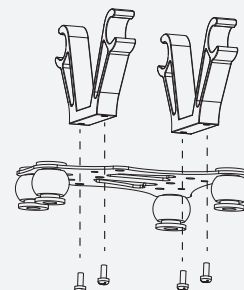


### Inverted Installation Diagram

Default

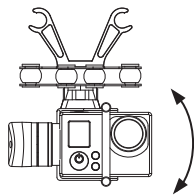


### Install "V" Hanger

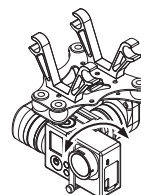


## 4 Mode Selection Instructions

The gimbal can be control pitching and roll by connecting to RC receiver.

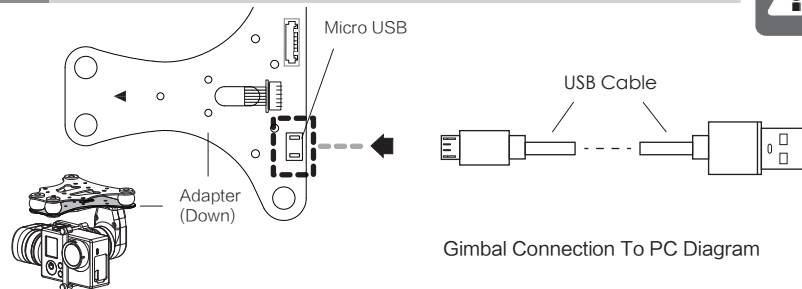


The angle of the roll depends on the position of the joystick on the remote control.



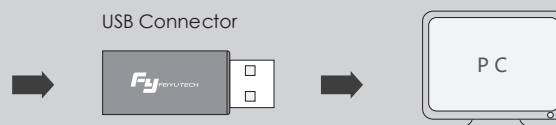
The angle of the pitching depends on the position of the joystick on the remote control.

## 5 Firmware Upgrade



**Attention:** 1. Make sure that the connection to the computer is done by the **USB Connector** !

2. Please do not connect other devices when upgrading.



The Gimbal supports firmware upgrade: You can download the upgrade software and the latest firmware from [www.feiyu-tech.com](http://www.feiyu-tech.com)

## 6 Initialize The Gimbal

### MiNi 2D Gimbal Initialization Instructions:

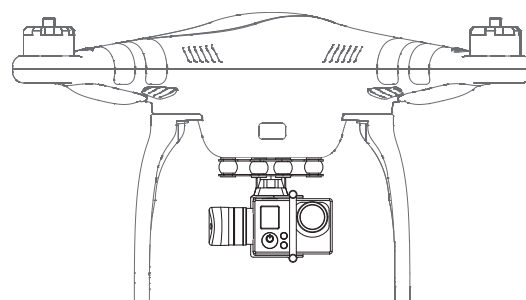
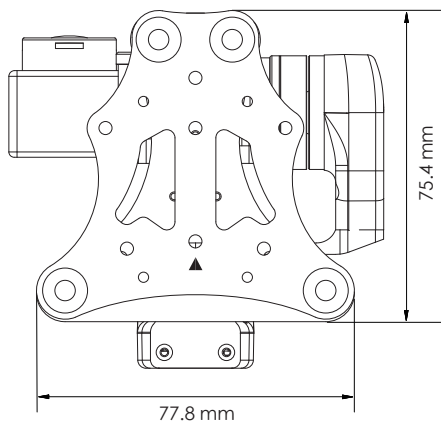
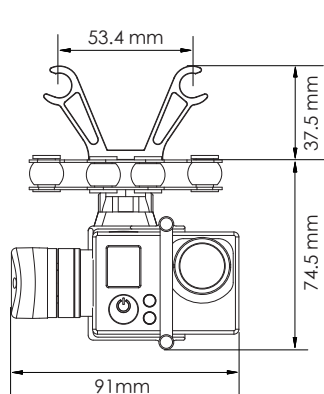
Keep the gimbal motionless, then power on, keep the gimbal steady and it will initialize automatically.

Once complete the camera will be level with the horizon in pitch and roll angles and it will be in Heading Follow Mode.

In addition to initial power on, the Gimbal needs to be initialized whenever the following situations appear:

1. After power on, the angle of pitch is not level with the horizon line.
2. After power on, the angle of roll is not parallel with the horizon line.
3. When the gimbal is in heading lock, the angle of heading moves frequently (heading is not stationary)

## 7 Diagram



## Specification

Items	Min	Standard	Max	Remarks
Working Voltage	7.0V	8.4V	17.0V	
Static Attitude Tracking Accuracy	0.01	0.02	0.05	Gimbal in static mode
Motion Attitude Tracking Accuracy	0.1	0.2	0.5	Motor overload < 2G
Overload Current Protection		800mA		
Pitch Angle	-90° ( Down )	0° ( Horizontal )	+45° ( Up )	
Roll Angle	-45°	0° ( Horizontal )	+45°	
Weight		110g		Without camera