

3-Axis Gimbal for Mirrorless Camera

#### Note

1. Please do not remove the holder screws fully to avoid wrong installation.

2. For detachable camera lens, please intall it with the thumb screw for fixing lens to avoid vibiration.

# 1. Product Overview

MG is one kind of 3-axis handheld gimbal especially for mirroless cameras. Simple and clean design integrated strong operation function, easy to switch among more using ways. The easiest operation experience. Pan/Tilt/Roll 3-axis 360 degrees coverage, Giving you ultimate experience while using the MG for shooting.



#### 2. Installation Attention: Please complete the installation before power on the gimbal



## Insert the batteries

Remove the handle, insert 2 pcs 18650 batteries and tighten the screw



#### 5 Installation of handle

Power on / off

Start the gimbal

MG combined with the connector and handle can be used to achieve a variety of ways, choose the installation method according to your need.

Adjusting clamping plate

Installation of the camera

ng motor, fixing the adjusting

Correctly place the camera to the

adjusting clamping, fixing it by the

thumb screw [14] trough the screw

clamping by the thumb screw [14].

Warm tip: if the first time to use or

the camera position, weight, size,

appearance, it is only fixed, without

replace the camera / lens, or change

clamping. Adjust the adjusting

holes on the bottom of the adjusting

Adant

2 Installation of adjusting clamping plate

Adjusting clamping plate light slip along the slideway to the

suitable position. If use a long lens, please install the thumb

screw for fixing lens[9] after installing the adjusting clamping.

4 Camera balance

adjustment

first use or replace the

Balance adjustment

the balance.

In order to achieve the desired

effect of the MG gimbal, the

camera / lens, or change the

annearance need to adjust

camera position, weight, size,

procedures, please refer to the

'Balance Adjustment" section.

Fhumh scra for fixing lens



Off: Press the bottom switch again to turn off.

If the power is too low, the gimbal will turn off. After replacing the batteries, click the function button to restart the gimbal.

## 3. Balance Adjustment

In order to achieve the desired effect of the MG gimbal, the first use or replace the camera / lens, or change the camera position, weight, size, appearance, need to adjust the balance.

#### Warm tip

- 1. Please mount the adjusting clamping plate, camera lens, memory card, etc. and then remove the lens cover before the balance adjustment.
- 2. In order to prevent the gimbal damage from improper mounting. Please don't fully unscrew the screws that secure the motor while adjust the balance. Unscrew till loose is advisable.

B

Tips: Please don't fully unscrew

the screws that secure the motor

Unscrew till loose is advisable.

Screw

В

Thumb screw

while adjust the balance.

3. To help you remember the position after adjustment, we remain a 20mm scale.

## STEP 1

Balance adjustment of the tilting axis

(1) Adjust center of gravity of the camera vertical position in tilting axis

- a. Mount the camera on the adjusting clamping plate, fix the tilting, rolling position, and keep it at the horizon level and turn the lens down Observe the camera status.
- b. If camera leans to front or back, then loosen 4 screws on the adapter, and adjust the camera to the opposite position, until the camera can mount properly.

#### As shown, if the camera is tilted toward A, the fixed plate live A direction, if tilted toward B, the fixed plate should be live B direction

c. Make sure to tighten the screws after the fixing plate is adjusted.

(2) Adjust center of gravity of the camera horizon position in tilting axis.

Adjust center of gravity of the camera horizon position in tilting axis, after the adjustment of the center of gravity in vertical position.

- a. The screws on the bottom of the adjusting clamping. in a relaxed state Fix the tilting, rolling position, and keep it at the horizon level. Make the camera lens forward. And observe the camera status.
- b. If camera leans to front or back, then move the camera to the opposite position , until the camera can mount properly.

As shown, if the camera is tilted toward A, the camera live A direction, if tilted toward B, the camera should be live B direction

of adapter c. After the adjustment tighten the screws on the MG plate (Clamping pla and the lens retaining ring

#### **STEP 2** Balance adjustment of the rolling axis

Adjust center of gravity of the camera horizon position in rolling

- axis, after the adjustment of the center of gravity in tilting axis.
- a. Fix rolling position manually and keep the camera at the horizon level, leave hold of it and observe the camera status

The bottom

b. If camera leans to left or rihgt, then loosen 4 screws on the scale, and adjust the cross arm to the opposite position of the cross arm, until the camera keep the current position after adjustment.

#### As shown, if the camera is tilted toward A, move the cross arm to A direction, if tilted toward B, move the cross arm to B direction.

C. After the adjustment tighten the screws on cross arm.





tightening the middle screw too tight in order to facilitate the balance after adjustment.

#### **STEP 3** Balance adjustment of the panning axis

Adjust balance of the panning after the balance adjustment of the tilting and rolling.

- a. Keep the socket connector of the gimbal parallel to the ground, refer the right picture leave hold of it and observe the camera status.
- b. If the camera leaning left or right, use the mini spanner unscrew the 4 screws on the vertical arm Sockot connocto adjust the vertical arm to leaning opposite direction until the camera keep the current position after adjustment \_\_\_\_\_

c. After the adjustment tighten the screws on cross arm.



#### **STEP 4** Camera adaptation parameter adjustment

After finishing the stabilizer balance adjustment, turn on the gimbal for a testing, please refer to point 6 in "install" chapter. If there is a slight vibration happen when turn on the gimbal, it means the adaptation parameter needs to be adjusted.

Weak

(1) Long press the function button for 1 second to enter the standby mode.

- (2) Five tap the function button during the standby mode for a parameter switching. Parameter switching cycle "Strong - Middle - Weak - Strong" . Default setting: Strong
- (3) Finish the parameter setting, single tap to awake the gimbal. For more adjustment, please repeat the step above.



Horizonta

Note: weight include the weight of camera, lens and Middle the other components.

4. Used Method

MG gimbal supports the pitch axis left or right installed, please select one of the methods according to the convenience of device operations.

For most cameras equipment, highly recommended pitch axis right way installed.

(\* The relative position about the pitch axis with the lens facing the user as a reference.)



For most video cameras equipment, highly recommended pitch axis left way installed. (\* The relative position about the pitch axis with the lens facing the user as a reference. )



## 5. Operation



### Explanation of LED indicator status

LED status	Mode / Status
Single flash	Panning mode
Double flashes	Panning and Tilting mode
Three flashes	Standby
Always on	Lock mode / Initialize the gimbal
Flash quickly	Rolling angle adjustment / Initialization failure / Malfunction

#### **Operating Instructions of Function Button**

Operation	Function	Explanation
Single tap	Panning mode / Lock mode	Single tap to switch between panning mode and lock mode
Double tap	Panning and Tilting mode	Under panning and tilting mode, single tap to switch to lock mode
Triple tap	Rotation 180° in horizontal	Make the camera lens precision rotation 180 $^{\circ}$
Quadruple tap	Reset	Reset the tilting axis of the gimbal to initial orientation and initial mode
Long press for 1 second	Standby	Single tap again to awake the gimbal, or triple tap to initialize the gimbal

#### Working Modes

#### Panning Mode

The camera is allowed to pan left or right. Vertical tilts or rolls are restricted.

Panning and Tilting Mode

The camera is allowed to pan left or right and tilt up and down. Rolls are restricted.

#### Lock Mode

The camera stays in its current orientation. All panning, tilting and rolls are restricted.

#### Other Functions

#### Reset

Reset the tilting axis of the gimbal to initial orientation and initial mode.

#### Standb

In standby model, keep the gimbal in power-up state, the motor stops working, the indicator light flashes for three times, and single tap again to wake the gimbal.

## 6. Firmware Upgrade



#### Upgrade steps

- (1) Download and install the USB driver and the software for updating and the latest firmware from www.feiyu-tech.com
- (2) Install the batteries and turn on the gimbal.
- (3) Connect the USB cable to mini port as the diagram. Attention please use the USB connector.
- (4) Please update the firmware as the manual.

## 7. Gimbal Horizontal Angle Adjustment

#### STEP 1 Initialize the gimbal

Down

Up

Left

Right

Joystick up

lovstick down

(1) After powering the gimbal on, hold down the function button for one second to enter standby mode, and the LED indicator shall flash for three times

The horizontal angle needs to be adjusted whenever the following situations happen to the

gimbal, user can adjust the horizontal angle by gimbal initialization and joystick.

(1) The tilt angle is not leveled with the horizontal surface.

(2) The roll angle is not parallel to the horizontal surface.

Please install

properly before

FIJ

Receiver

for wireless

remote control

the receiver

power on

(3) Under lock mode, the panning angle drifts.

(2) Consecutively tap the function button for three times, LED indicator shall be always on, place the gimbal on a flat surface and keep it stationary.

- (3) When the initialization is completed, the LED indicator will flash for three times
- When the initialization failed, the LED indicator will flash quickly, repeat step (2) & (3) to reinitialize.

After finishing the STEP1, the rolling angle still not paralles to the horizontal surface, you can use the joystick to adjust the rolling angle according to STEP 2.

#### STEP 2 Rolling angle adjustment

Tap button for six times for rolling angle adjustment, the tilt and roll angle restore to the horizontal status. Under the rolling angle adjustment state, move the joystick to the left or to the right to adjust the rolling angle, single tap again to save the setting and exit after adjusting.



Remote Control Distance 15 meters in an open environment

Match Code Keep the gimbal powered on, restart the remote control and connect the receiver of RC to the gimbal, press the remote control function button for 7 times in 5 seconds, if the indicator on the RC flashes 5 times it means the receiver and the transmitter of RC match successfully. then customer can control the gimbal by the RC

RC needs to be matched code whenever the following situations: (1) Connecting properly, but still fail to control. (2) Change the receiver or wireless remote control

## 9. Parameters

Tilting / Rolling / Panning	360°
Tilting Increments	2° /s ~ 75° /s
Panning Increments	3° /s ~ 150° /s
Usage Time	6 Hours
Adaption	Sony NEX-5NNEX-7 and other N-series, SONY A7RII / ILCE-7R / ILCE-5100, Panasonic LUMIX 6H4 and other cameras with similar dimensions with weight less 1070g (The camera weight including the accessories of lens and ed.)
Weight	821g(not including the accessories of batteries, camera,camera lens and ect.

#### Pakcage List

Product model Qu	antity	Product model Quan	itity
MG gimbal	1	Batteries (type:18650)	4
Handle	1	Charger	1
Adjusting clamping pla	te 1	Wireless RC (2.4G)	1
Connector	1	Wireless RC receiver	1
Corss bar	2	USB cable (mini port, 70cm)	1
Hand grip	2	USB cable (micro port, 50cm)	1
Mini allen key	1	USB connector	1
Thumb screw	3	Thumb screw for fixing lens	1



Function

Interface

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#### DISCLAIMER

Prohibit any user for any illegal purpose Users will be responsible for all behaviors of purchase and use products.

The Company assumes no liability for any risks related to or resulting from the debug and use of this product (including the direct, indirect or third-party losses). For any unknown sources of using, we will not be at any services

Feivu Tech reserves the right to amend this manual and the terms and conditions of use the gimbal at any time.



Please charge the battery with the standard charger.

When the gimbal is not in use or placed on the table, please ensure it is powered off.



Please visit the official website of Feivu Tech to get related information: www.feiyu-tech.com Support email: service@feivu-tech.com



Handheld







Dual Handheld Dual Portable