

EVO

GP-PRO

USER MANUAL v1.2

3 AXIS HANDHELD GIMBAL

Compatible With:

GoPro
Be a HERO.

HERO4
BLACK + SILVER

EVO

GIMBALS.COM

IMPORTANT MESSAGE

Thank you for choosing EVO Gimbals as your camera stabilization solution! We know that buying a new product can be very exciting and we are sure that you probably can not wait to use your new gimbal! Before you start PLEASE read this manual and become familiar with your gimbal's components and operating modes.

We highly encourage everyone to also watch our great tutorial videos on our website as a supplement to this manual.

BATTERY SAFETY!

Your Gimbal includes (2) Lithium Ion Batteries that must be handled with care! Here are some simple safety precautions you can take to ensure the best performance for your batteries.

- Always handle your batteries with care.
- Always store your batteries in a cool dry and well ventilated area.
- Never mix the batteries with different brand, type or model battery.
- Always charge batteries in proper charger.
- Keep out of reach of children
- Always pack batteries securely and avoid excessive shock and vibration
- Regularly inspect batteries for exterior wear.
- Never throw your batteries in the trash! Always be sure to recycle them at the appropriate battery recycling center.

Lithium-Ion batteries should not be exposed to extreme temperatures. Heat and cold stress the batteries. Always charge and use your batteries at room temperature. If the battery has been exposed to extreme temperatures, allow the battery to return to room temperature before charging it or using it.

WARRANTY

Your new gimbal comes with a 1 Year Parts & Labor warranty. Be sure to register your warranty by registering online at EVOGimbals.com

LATEST INFORMATION

For the latest user manuals, tutorial videos, firmware and calibration instructions please visit our official webpage at EVOGimbals.com

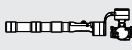

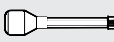


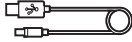



EVO

GIMBALS.COM

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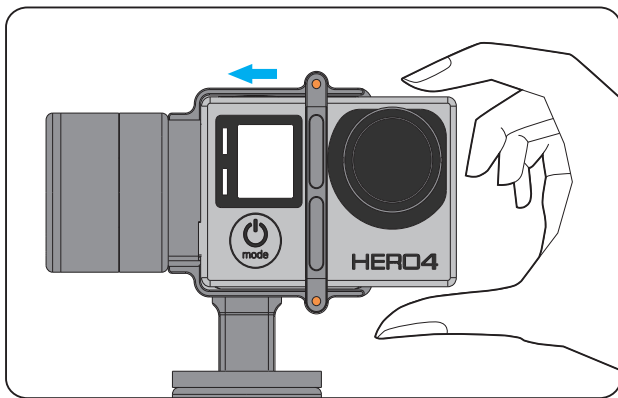


INCLUDED IN THIS BOX

	EVO GP-PRO GIMBAL	1
	Foam Protection Pad for Pan Motor	1
	GoPro Charging Cable (3 Wire)	1
	Battery Extension Tube	1
	18650 Li-Ion Battery	2
	USB Cable	1
	GoPro Video Out / Charging Cable (4 Wire)	1
	18650 Battery Charger	1
	User Manual	1

Please check that all items are included, if you are missing any items or components please contact your dealer immediately!

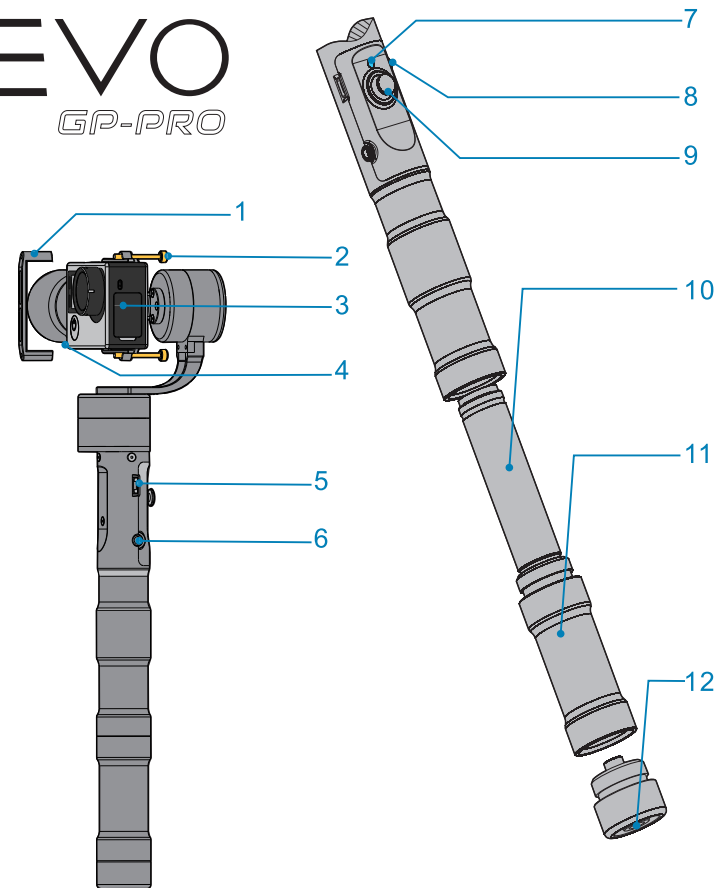
⚠ WARNING!



**ALWAYS INSTALL GOPRO
BEFORE POWERING ON MOTORS!**
FAILURE TO DO SO CAN DAMAGE THE UNIT!

OVERVIEW

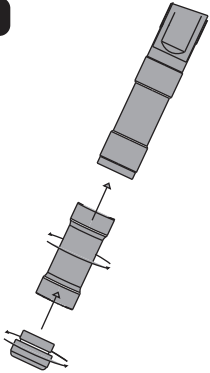
EVO
GP-PRO



- | | |
|--------------------------------|---|
| 1. Camera Mounting Bracket | 2. Thumbscrew 5 x 20mm (2) |
| 3. GoPro Camera (not included) | 4. GoPro Charging Port |
| 5. Micro USB Port | 6. 3.5mm Video Output Port |
| 7. Power Indicator Light | 8. Power Button |
| 9. 4 Way Thumbstick | 10. 18650 Li-Ion Battery |
| 11. Battery Extension Tube | 12. Battery End Cap with 1/4-20 Female Thread |

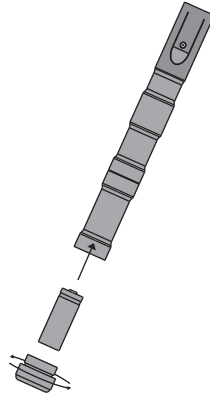
QUICKSTART GUIDE

1



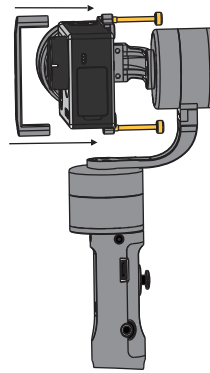
Remove battery end cap and install the battery extension tube.

2



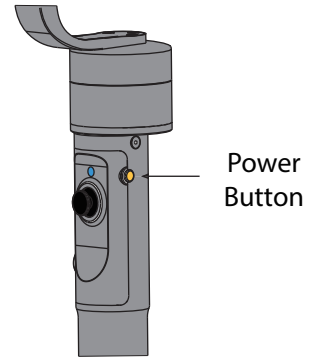
Insert both charged 18650 LiPo Batteries and screw battery end cap.

3



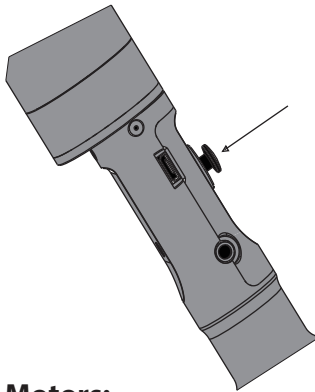
Install GoPro in camera tray and tighten the mounting bracket using top and bottom thumb-screws.

4



Initialize gimbal first by setting on flat non-moving surface. Press power button and wait 4-5 seconds for blue calibration lights to stop.

5



Press & hold thumbstick for 2 seconds to activate motors.

Activate Motors:

To activate motors, depress thumbstick for 2 seconds. Motors will initialize and stabilize the camera starting in Heading Follow Mode.

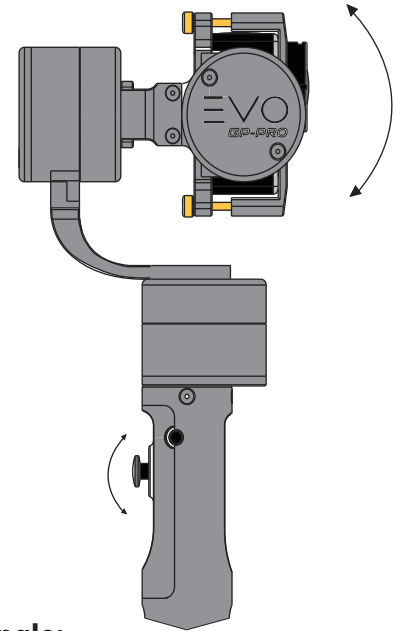
Switch Modes:

Single click thumbstick to switch between **Heading Follow Mode** and **Lock Mode**. Double click thumbstick to enter **Heading and Pitch Follow Mode**.

Standby Mode:

To power OFF motors (standby mode) simply depress thumbstick for 2 seconds.

6

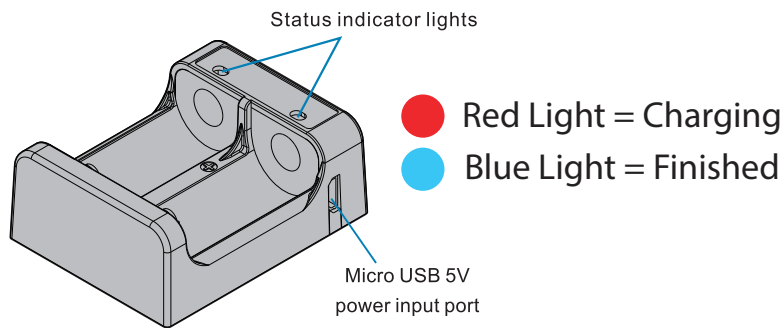


Adjust Camera Angle:

Adjust the camera tilt angle by pushing up or down on the thumbstick. Camera tilt can only be adjusted in Heading Follow Mode or Lock Mode. Camera horizon angle can be adjusted when in Heading and Pitch Followmode.

CHARGING BATTERIES

Connect charger to any standard USB outlet or phone charger using the included Micro USB cable. Batteries take approximately 2 to 3 hours to fully charge. Shorter charge times can be achieved using higher mA rating AC/DC adapter.

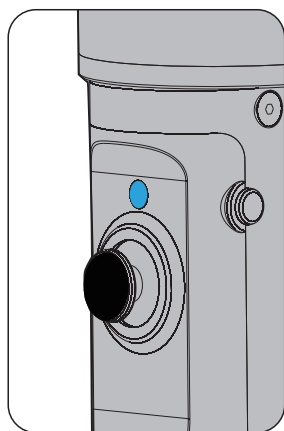
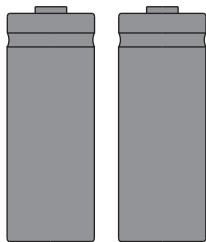


Input: DC 5V / 800mA
Output: 4.2V / 400mA x2

⚠ ALWAYS USE GENUINE 18650 OEM EVO BATTERIES!

Your gimbal must be matched with the original batteries to guarantee performance, long life and safety! Never pair different brand or different model batteries together.

Additional batteries can be purchased from your dealer or direct from EVOGimbals.com



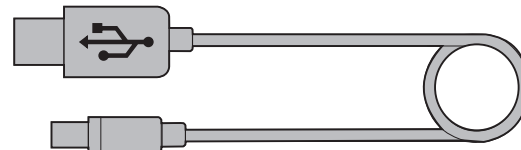
● POWER INDICATOR LIGHT

Monitor Remaining Battery Power:

- 4 Flashes = 75-100%
- 3 Flashes = 50-75%
- 2 Flashes = 25-50%
- Flashes Quickly = 0-25%

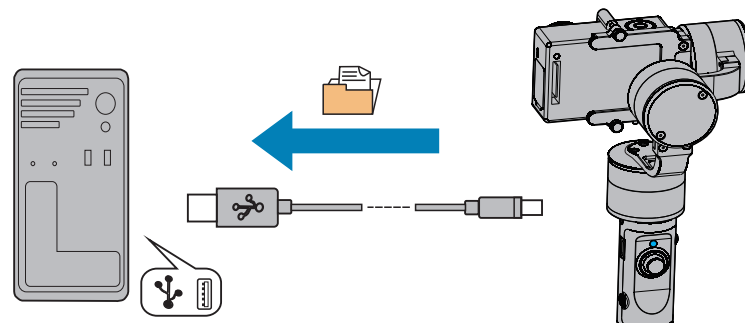
MICRO USB CONNECTION

FIRMWARE UPGRADE / SOFTWARE CALIBRATION



Connect gimbal to your computer using the included Micro USB cable to upgrade the firmware or to use the software calibration tool.

For the latest firmware upgrades, user manuals and software calibration please visit www.EVOGimbals.com and click on Downloads.

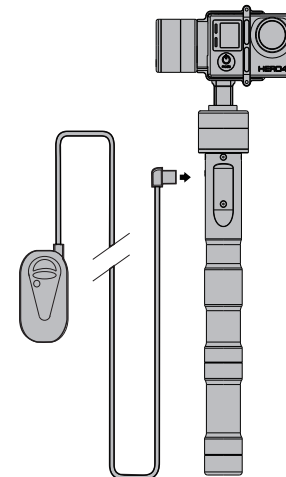


⚠ **Note:** Batteries cannot be charge through Micro USB port.

OPTIONAL REMOTE CABLE

Connect Remote Extension Cable (sold separately) to Micro USB port to remotely control operating modes and gimbal functions.

Remote extension cable can be very useful when shooting with the carbon fiber extension poles (sold separately).

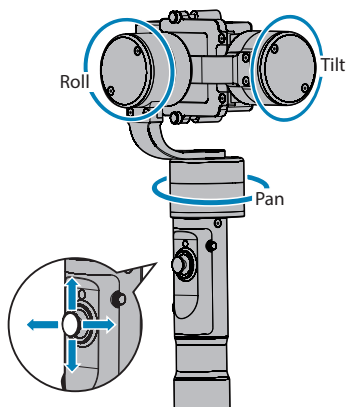


OPERATING MODES

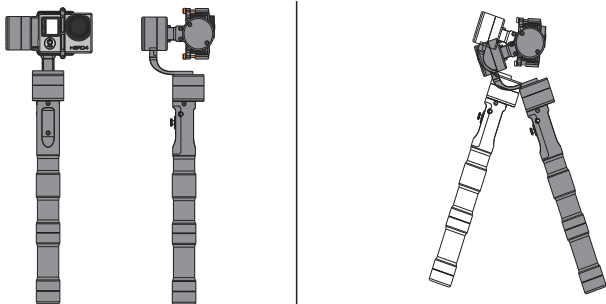
OVERVIEW

Your GP-Pro gimbal comes pre-programmed with 4 different shooting modes for ultimate creativity.

Please make note of each motor as shown in diagram to the right. You can also view our tutorial videos online to further understand the different operating modes.

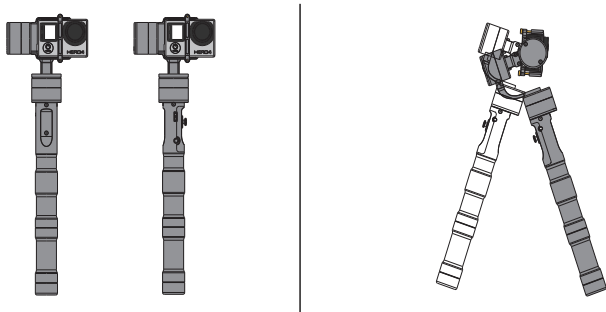


Heading Follow Mode - 1 Click



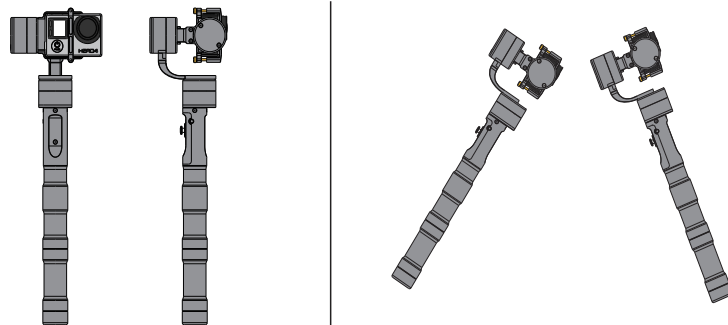
Tilt & Roll axis are locked.
Pan axis rotates smoothly with turn of wrist.
Use thumbstick up and down to control tilt of camera.

Heading Lock Mode - 1 Click



Tilt, Roll and Pan axis are locked.
Use thumbstick up and down to control tilt of camera.
Use thumbstick left and right to manually pan camera left/right

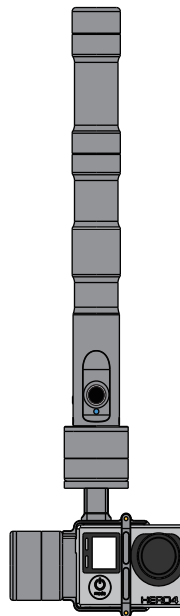
Heading & Pitch Follow Mode - 2 Clicks



Roll axis is locked. Pan and Tilt axis smoothly follow handle.
Use thumbstick left and right to adjust the pan angle.
Single click thumbstick to exit into previous mode.

Note: upon exiting this mode the camera tilt angle and horizon angle will remain locked in last position.

Inverted Mode



To use gimbal inverted enter into "Heading and Pitch Follow Mode" first (2 Clicks)

Rotate gimbal 180 degrees front ward until camera is upside down. You can now enter into the other modes with the gimbal inverted.

To return the gimbal upright enter into Heading and Pitch Follow Mode (2 Clicks) and rotate gimbal 180 degrees backward until camera is upright. You can now enter into other modes.

You can optionally mount the camera upside down so you do not have to correct the video in post production.

Filming in upside down mode is typically used for low level shooting.

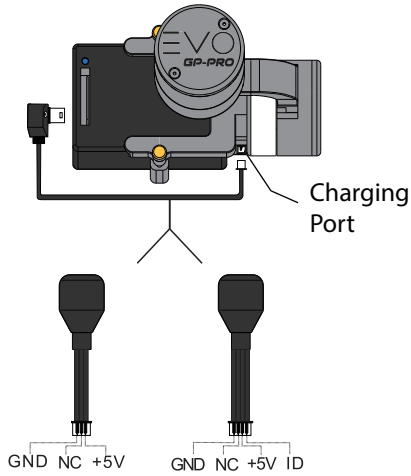
For additional information and video tutorials on switching between modes and their intended uses please go to EVOGimbals.com

GOPRO CHARGING & VIDEO OUT

There are 2 GoPro accessory cables included in the box.

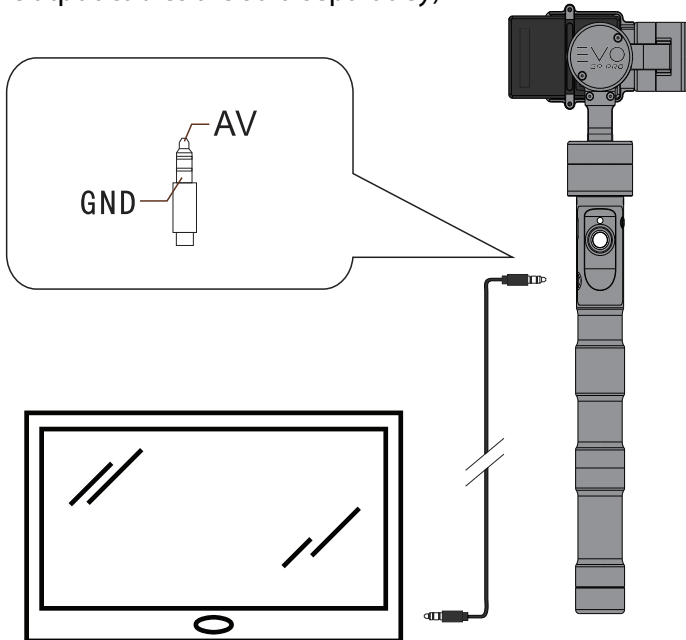
The 3 pin cable is used for charging and when using the GoPro LCD.

The 4 pin cable is used for both charging and activation of 3.5mm A/V output port so you can connect an external monitor.



Choose the appropriate cable for your application. Keep in mind that battery life will vary dependent on the overall health of your camera's batteries. Run times while charging your camera will typically be reduced to 1.5 to 2 hours total.

Please note that once the AV cable is plugged into the monitor that your LCD monitor on your GoPro will turn off automatically. (A/V Output cables are sold separately)



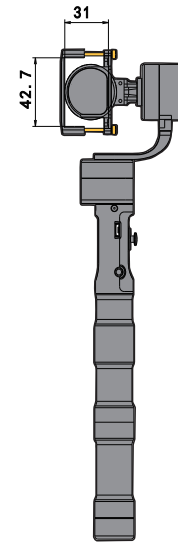
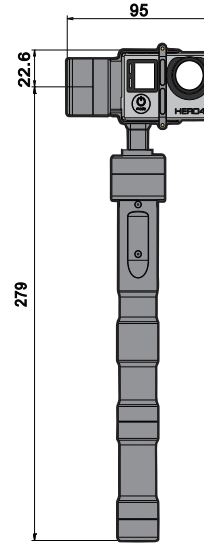
PERFORMANCE & SPECIFICATIONS

Dimensions (mm)



MAX CAMERA DIMENSIONS

Height: 42.7mm
Width: 31mm



Stabilization Accuracy:	$\pm 0.01^\circ$
Follow Accuracy:	$\pm 0.2^\circ$
Pan Axis Range:	-135° to $+135^\circ$
Tilt Axis Range:	-90° to $+180^\circ$ (Inverted)
Roll Axis Range:	-45° to $+45^\circ$
Tilt Axis Control Speed:	Min $1^\circ/s$ Max $50^\circ/s$
Pan Axis Control Speed:	Min $1^\circ/s$ Max $80^\circ/s$
Motor Type:	3x Triple Wound HT Brushless
Working Current Static Current:	6.8 mA (at 6.8 VDC)
Dynamic Current:	120mA (at 8.4 VDC)
Max Motor Current:	2A maximum (at 12.6 VDC)
Sensors:	IMU module, HD Encoders
Batteries:	IMR 18650, 2000mAh x2 (included)
Operating Temperature:	-5 to $122^\circ F$ / -15 to $50^\circ C$
Weight:	0.75 lbs / 310g (unloaded)
Supported Cameras:	GoPro Hero 3/Hero 3 GoPro Hero4 Silver / Black GoPro Hero4 Session (adapter req.) SJ4000 & Xiao Yi Cameras Garmin Virb XE (Counterweight kit required)

STARTUP & OFFLINE CALIBRATION

STARTUP CALIBRATION

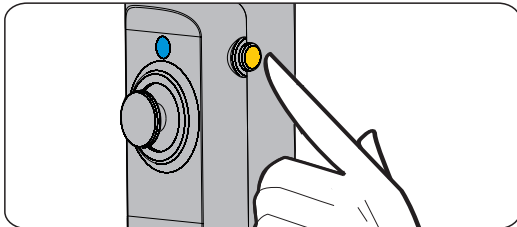
If you find during normal use that your camera's pitch or roll angle begins to drift or deviate then you need to first try restarting your gimbal. Simply power off your gimbal and set it down on a flat non-moving surface (be careful not to scratch your camera's lens!)

Power on your gimbal and **wait 5 seconds** for the startup calibration lights to stop flashing. The Startup Calibration is now complete.

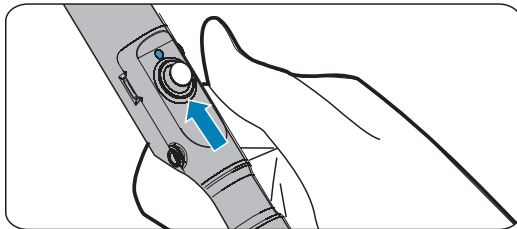
OFFLINE CALIBRATION

If the Startup Calibration does not correct the drifting or deviation of your camera then you will need to perform a 6-Point Offline Calibration. This may also be needed if your gimbal has not been used for a long period of time or if the operating temperature has changed considerably since the gimbal was last calibrated. The IMU sensors in the gimbal can be affected by extreme temperature changes.

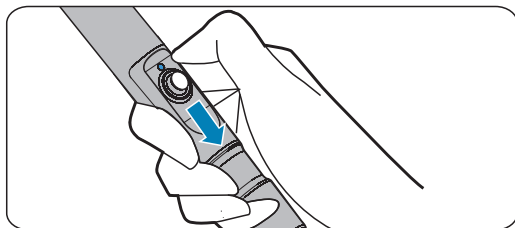
OFFLINE CALIBRATION PROCESS



Press the power button to turn the gimbal on - **wait 5 seconds** for the startup calibration to complete.



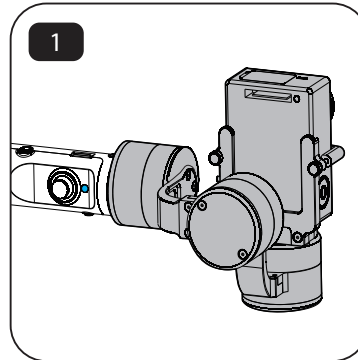
Hold the thumbstick in the up position for **2 seconds** until the indicator light remains on.



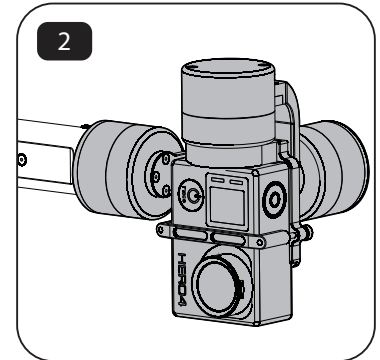
Hold the thumbstick down for **2 seconds** until the indicator light flashes once intermittently.



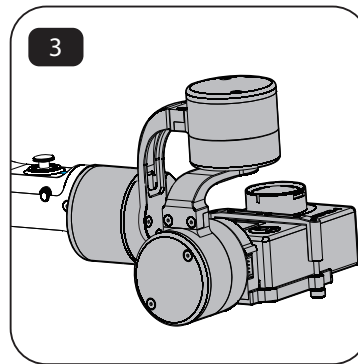
Carefully match each camera position in the diagrams below



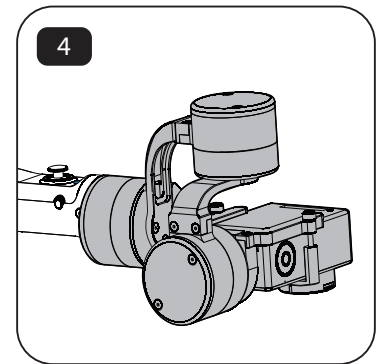
Place gimbal as shown above. The indicator light will flash **2 times** when successful.



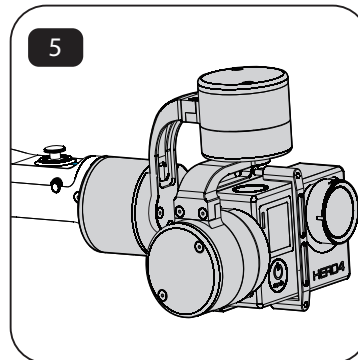
Place gimbal as shown above. The indicator light will flash **3 times** when successful.



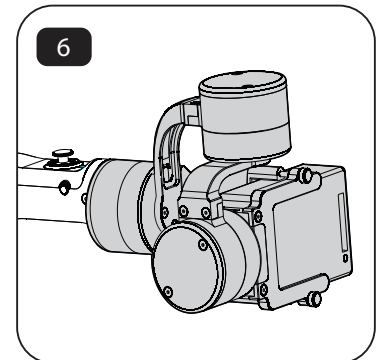
Place gimbal as shown above. The indicator light will flash **4 times** when successful.



Place gimbal as shown above. The indicator light will flash **5 times** when successful.



Place gimbal as shown above. The indicator light will flash **6 times** when successful.



Place gimbal as shown above. The indicator light will remain **solid for 5 seconds** and then the gimbal will re-enter standby mode. Calibration is now complete.

LIMITED WARRANTY

EVO Gimbals ("EVO Gimbals") warrants this product against defects in material or workmanship for the time periods and as set forth below. Pursuant to this Limited Warranty, EVO Gimbals will, at its option, (i) repair the product using new or refurbished parts or (ii) replace the product with a new or refurbished product. For purposes of this Limited Warranty, "refurbished" means a product or part that has been returned to its original specifications. In the event of a defect, these are your exclusive remedies.

Labor: For a period of one (1) year from the original date of purchase of the product ("Labor Warranty"), EVO Gimbals will, at its option, repair or replace with new or refurbished product, product determined to be defective. If EVO Gimbals elects to replace the product after this Labor Warranty has expired but while the Parts Warranty below is still in effect, it will do so for the applicable labor charge.

Parts: For a period of one (1) year from the original date of purchase of product ("Parts Warranty"), EVO Gimbals will supply new or refurbished replacement parts in exchange for parts determined to be defective.

This Limited Warranty covers only the hardware components packaged with the Product. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the Product; any such software is provided "AS IS" unless expressly provided for in any enclosed software Limited Warranty. Please refer to the End User License Agreements included with the Product for your rights and obligations with respect to the software.

Instructions: To obtain warranty service, you must deliver the product, freight prepaid, in either its original packaging or packaging affording an equal degree of protection to the EVO Gimbals authorized service facility specified. It is your responsibility to backup any data, software or other materials you may have stored or preserved on your unit. It is likely that such data, software, or other materials will be lost or reformatted during service and EVO Gimbals will not be responsible for any such damage or loss. A dated purchase receipt is required. For specific instructions on how to obtain warranty service for your product,

Visit Our Official Web Site:
www.EVOGimbals.com

Or email EVO Gimbals Customer Support
support@evogimbals.com

For an accessory or part not available from your authorized dealer please visit our website.

Repair / Replacement Warranty: This Limited Warranty shall apply to any repair, replacement part or replacement product for the remainder of the original Limited Warranty period or for ninety (90) days, whichever is longer. Any parts or product replaced under this Limited Warranty will become the property of EVO Gimbals.

This Limited Warranty only covers product issues caused by defects in material or workmanship during ordinary consumer use; it does not cover product issues caused by any other reason, including but not limited to product issues due to commercial use, acts of God, misuse, limitations of technology, or modification of or to any part of the EVO Gimbals product. This Limited Warranty does not cover EVO Gimbals products sold AS IS or WITH ALL FAULTS or consumables (such as fuses or batteries). This Limited Warranty is invalid if the factory-applied serial number has been altered or removed from the product. This Limited Warranty is valid only in the United States.

LIMITATION ON DAMAGES: EVO GIMBALS SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT.

DURATION OF IMPLIED WARRANTIES: EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This Limited Warranty gives you specific legal rights and you may have other rights which vary from state to state.

WARRANTY INFORMATION

WARRANTY PERIOD:

The warranty period is (1) Year from the original date of purchase. During this warranty period, under normal use, EVO Gimbals will at its option, repair and/or replace parts determined to be defective.

WARRANTY DOES NOT COVER:

1. Any unauthorized maintenance, misuse, collision, liquid infiltration (water damage), or modifications.
2. Incorrect Use of Product: altering software, removing serial numbers/logos, using cameras not approved by EVO.
3. Damage due to fire, flood, acts of God, misuse and related damage.
4. Any prepaid freight for warranty service.

WARRANTY SERVICE:

If any product issues arise please contact your dealer first. Many gimbal performance problems can be solved with a simple calibration sequence. Be sure to visit www.EVOGimbals.com for the latest tutorial videos.

If it is found that service on your gimbal is needed please visit our official website (www.EVOGimbals.com) or email us support@evogimbals.com to start a warranty claim.

WARRANTY REGISTRATION:

Please register your warranty so we can provide you with the latest firmware updates, user manuals and tutorial videos. **To register your warranty please and/or obtain warranty service for your gimbal,**

Visit Our Web Site:
www.EVOGimbals.com

CONTACT US:

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