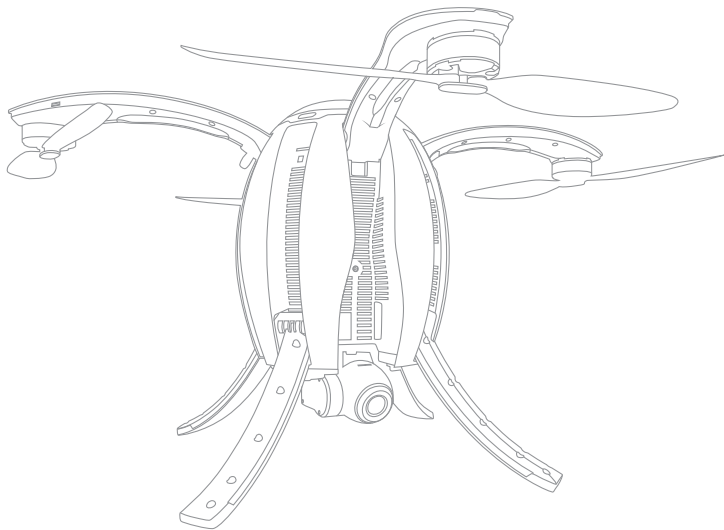


# PowerEgg

## Quick Guide



PowerVision

# 1

## Brief Intro

1. Brief intro of PowerEgg
2. Controller
  - Standard
  - Controller
  - Maestro™ Base Station
3. PowerEgg Product Specification

# 2

## Flightpr

1. Download App and then watch tutorials
2. Check the battery and charge
  - Prepare charger
  - Check battery
  - Charge
3. Prepare remote controller
4. Prepare aircraft and APP

# 3

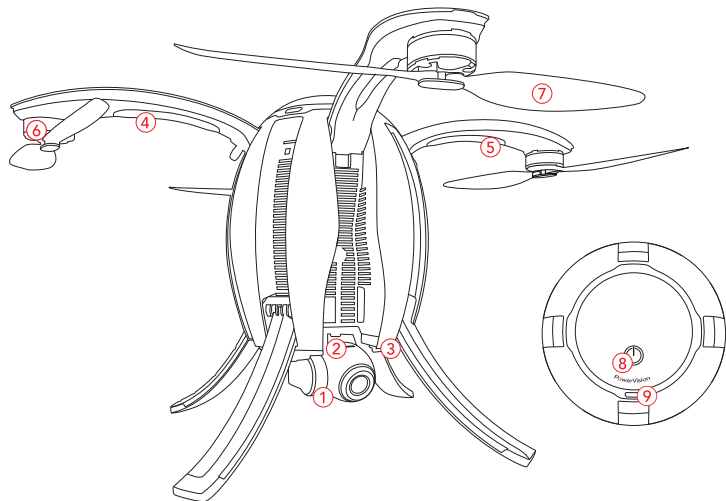
## Flight and Safety

1. Flight and shooting
  - Standard remote control flight and shooting
  - Gesture-Based control flight and shoot
2. App features
3. Flight Safety

## Brief Introduction of PowerEgg

### Aircraft

The PowerEgg™ Aerial Camera Drone is equipped with a high precision navigation control system. It is designed to perform indoor and outdoor precision hovering, flying, autonomous takeoff and landing, and Return-to-Home. It is also equipped with advanced technology to bring you functionalities such as Follow Me, Orbital Flight, Electronic Fencing, and Autonomous Flight modes. The gesture-based controller - PowerEgg Maestro™ - simplifies flight operation and gimbal control. The 3-axis gimbal camera delivers still images with over 12 million and 4K UHD 360 degree panoramic video recording. PowerEgg's maximum flight speed can reach 50 km/h (approx. 31 mph), and its maximum flight time is approximately 23 minutes.



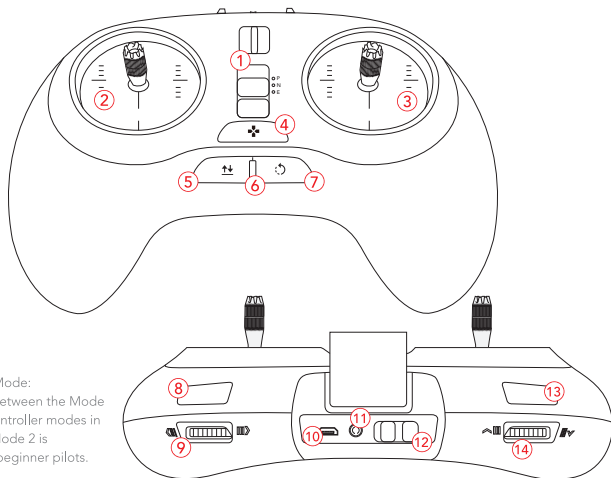
1. 4K UHD camera on 3-axis gimbal 2. Camera SD card slot 3. Optical positioning sensors and Sonar positioning system 4. Aircraft front LED indicator 5. Aircraft status LED indicator 6. Brushless, low friction motor 7. Propellers 8. Power switch/Tripod control/Frequency button 9. Battery compartment access button

## Controller

### • Standard Controller

The PowerEgg™ standard controller integrates “one-click” technology. With one click, users can manage takeoff, Return-to-Home, Follow Me, and have the camera orient toward the pilot. Meanwhile, users can easily perform other tasks by using the standard two-handed controller, including landing gear retraction, gimbal pitch control, gimbal roll control, photo taking, and video recording.

The PowerEgg™ standard controller is powered by a rechargeable battery with a capacity of 2800mAh. It can work continuously for 20 hours. Users may check battery percentage by the light indicator on the controller.



#### \* Remote Control Mode:

Users can choose between the Mode 1 and Mode 2 of controller modes in PowerEgg's App. Mode 2 is recommended for beginner pilots.

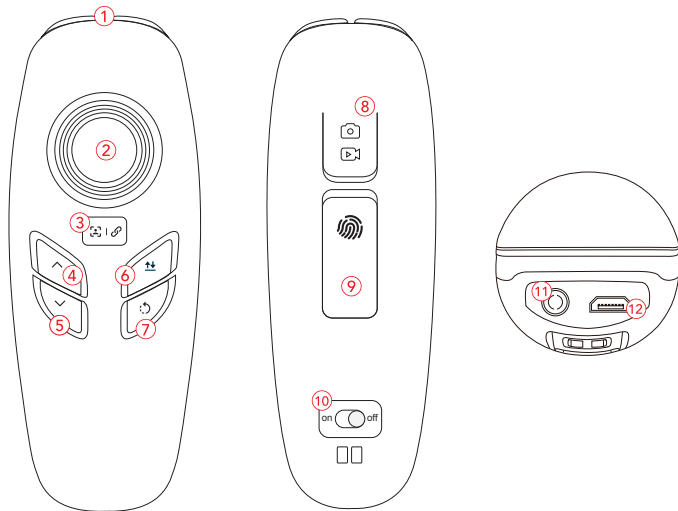
1.Mode switch 2.Left joystick 3.Right joystick 4.Custom button 5.Takeoff/land/stop landing 6.Three colors light: status/battery indicator 7.Return-to-home/stop return to home 8. Top right button: take photos/ videos 9.Right finger wheel: gimbal control 10.MicroUSB charge port 11.Port: connect to base station 12.Power Switch 13.Left top button: gimbal control 14.left finger wheel: gimbal pitch

## Controller

- PowerEgg Maestro™ Gesture-Based Controller

PowerEgg Maestro™ controller simplifies aircraft operation and navigation by allowing users to control the aircraft through body gestures. Meanwhile, it integrates "one-click" technology and allows users to perform takeoff and landing, Return-to-Home, Follow Me, and selfie taking by one click. Users can also adjust gimbal pitch, take pictures, and record videos by using the controller.

PowerEgg Maestro™ controller is powered by a rechargeable battery with a capacity of 1400mAh. It can work continuously for ~10 hours. Users may check battery percentage by light indicators.

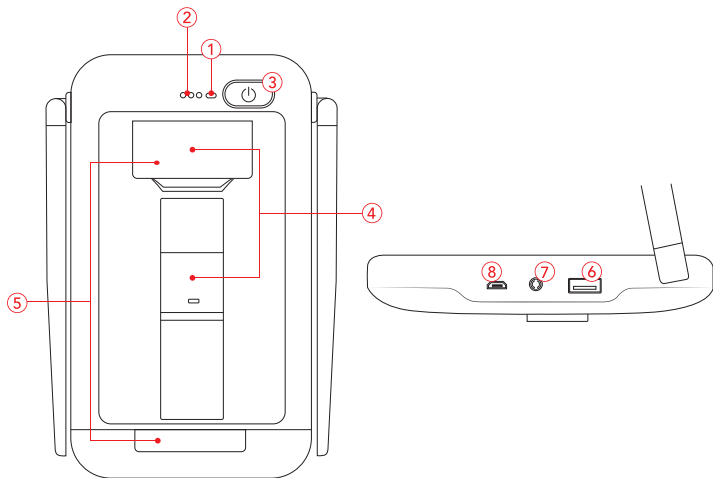


- 1.Three colors light: Status/Battery indicator 2.Joystick: gimbal control 3.Custom button 4.Ascend button 5.Descend button 6.Takeoff/land/stop landing 7.Return-to-home 8.Take photos/videos 9.Gesture activation 10.Power switch 11.Port: connect to base station 12.MicroUSB charging port

## Controller

- Base Station

PowerEgg Base Station integrated with cutting edge UHD image and data transmitting system, which can output the video and flight status to smart phone, tablet and other different device \*. The maximum distance of image/data transmission is 3.1 miles \* \*,



- 1.Three colors light: indicates battery
- 2.Three single color lights: indicates image transmitting signal
- 3.Power switch
- 4.Cell phone clipper
- 5.Tablet clipper
- 6.USB port
- 7.Port: connect to remote control
- 8.MicroUSB charging port

\* Refer to user manual or websites for supported devices \*\* Depending on the local law and environment, transmitting distance in CE zone will shorten accordingly

## PowerEgg Product

Please refer to official website for latest update of product information.

- Specifications

Weight (battery included)	4.6 lb
Diagonal Size (Excluding Propellers)	448mm
Physical Dimension	272 mm X 176 mm (Close) / 272 mm X 476 mm (Flight)
Max Ascent Speed	5 m/s (Professional mode in optimal flying condition)
Max Descent Speed	2 m/s (Professional mode in optimal flying condition)
Hover Accuracy	Vertical: +/- 0.1 m (When Vision Positioning is active, 0.2 - 4 m); +/- 1 m Horizontal: +/- 0.2 m (Surface with clear pattern and adequate lighting); +/- 1.5 m
Max Flight Speed	13 m/s (Professional mode in optimal flying condition)
Operating Frequency	2.4GHz
Propellers Size	10.5 inch
Power	265 W (Hover) 450 W (Max)
Max Flight Time	Approx. 23 min*
Max Attitude	30 degrees
Max Service Altitude	4000 m (13,123 ft)
Operating Temperature	0°C - 40°C (32° - 104°F)
GPS Mode	0°C - 40°C (32° - 104°F)
Wind Resistance	<5 level

\*Flight time is the max flying time that under the experimental environment, and it is only for reference .

## PowerEgg Product

Please refer to official website for latest update of product information.

- Camera

Sensor	1/2.3" CMOS
Lens	FOV 95° 15 mm (35 mm format equivalent) f/2.8 G
ISO Range	100—3200(Video); 100-1600(Photo)
Shutter Speed	8 s to 1/8000 s
Image Max Size	4254x3264 (1200 million pixels – 4k) 3840x2160(8 million pixels - 2.7K)2560x1920(5 million pixels - 1080p)
Still Photography	Single shot
Modes	Burst shooting: 3 / 5 / 10 frames Auto Exposure Bracketing (AEB): 3 / 5 / 7 bracketed frames Self-timer: 5 / 10 / 30 s At 0.3 EV Bias Time-lapse: 1/30, 1, 2, 5, 10, 20, 30, 60
Video Recording Modes	UHD: 3,840x2,160 30fps FHD: 1,920x1,080 30/60/120fps HD: 1,280x720 60/120/240fps
Supported SD	Micro-SD
CardTypes	Max capacity: 64 GB. Class 10 or UHS-1 rating required
Max Video Bitrate	60Mbps
Supported File	FAT32/exFAT
Formats	JPEG, DNG MP4,MOV (MPEG-4 AVC/H.264)
Operating Temperature	-10°C - 40°C (14° - 104°F)



## PowerEgg Product

Please refer to official website for latest update of product information.

- Gimbal

Controllable Pitch Range	0° —90°
Controllable Row Range	-120° — +170°
Stabilization	3-axis (Pitch, roll, yaw)
Controllable Accuracy	0.05°

- PowerEgg Maestro™ Gesture-Based Controller

Operating Temperature	0-40° C
Battery	1400mAh LiPo 1S
Operating Current/Voltage	120mA/3.7V
Operating Life	10hours

- Image/Data Transfer (Base Station)

Operating Frequency	Aircraft to Base Station 2.40 - 2.483 GHz Base Station to other devices: 5.725 GHz - 5.85GHz
Max Transmission Distance	5 km (3.1 mi) (Subject to regulation and local operating conditions). Distance will be shorter for CE.
Operating Temperature	0-40° C (32° - 104°F)
Battery	2300mAh LiPo 1S
Transmitter Power	20dbm@CE, 28dbm@FCC
Operating Current/Voltage	800mA/3.7V
Operating Life	1.5hours
Latency	300 ms (may slightly varies based on mobile devices)

## PowerEgg Product

Please refer to official website for latest update of product information.

- Smart Battery

Capacity	6.4AH
Voltage	14.8V
Battery Type	LiPo
Energy	94.8WH
Net Weight	580 g (1.3 lb)
Operating Temperature	-10 — +40°C
Charging Current	≤ 2C

- Optical Positioning

Velocity Range	≤ 4 m/s (2 m above ground)
Altitude Range	0.2 - 4 m (0.66 - 13.12 ft)
Operating Environment	Surface with clear pattern and adequate lighting (Lux > 15)

- Charger

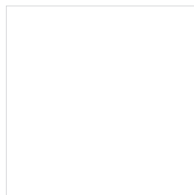
Input	AC100—240V
Frequency	50-60Hz
Output Port 1	16.8V±0.1V    Charging Current < 5A
Output Port 2	5V±0.1V    Output Current < 6 A
Operating Temperature	-10° - 45°C (14° - 113°F)
Rated Power	114W

## Flight preparation

Please download App and watch video PowerEgg tutorials

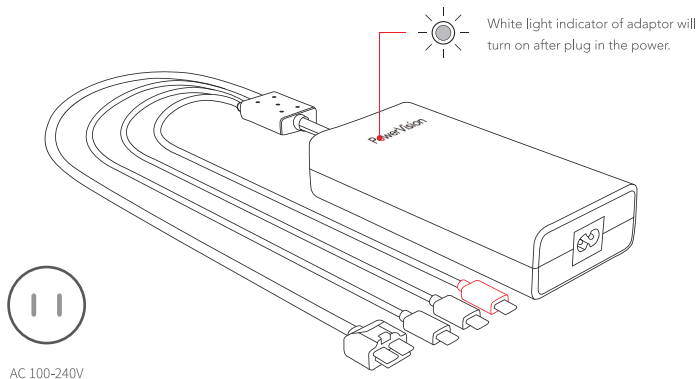
Please Scan QR code or download Vision+ App at App Store. Watch video tutorials in

Vision+ or on our official website.



### Check battery Percentage

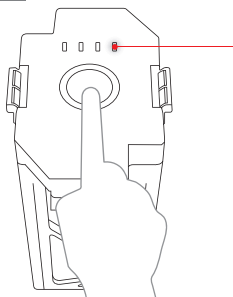
- Prepare charger



## Check the battery and charge

- Check the battery

### Aircraft Battery

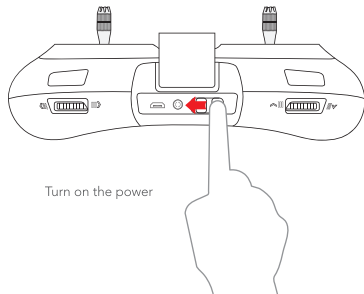


Check the battery indicator

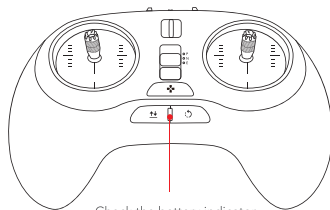
● Each lamp said 25% power

Press the button of battery, the turned on lights indicate the left battery

### Standard Controller



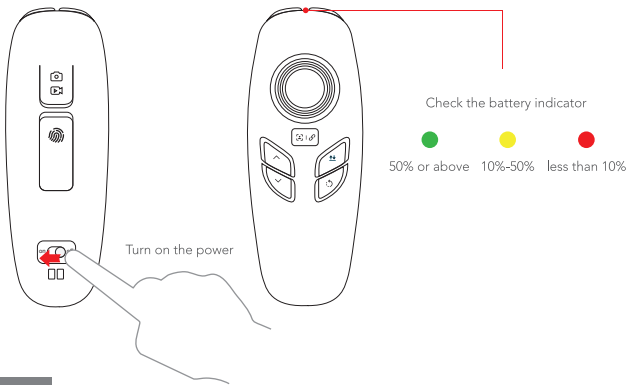
Turn on the power



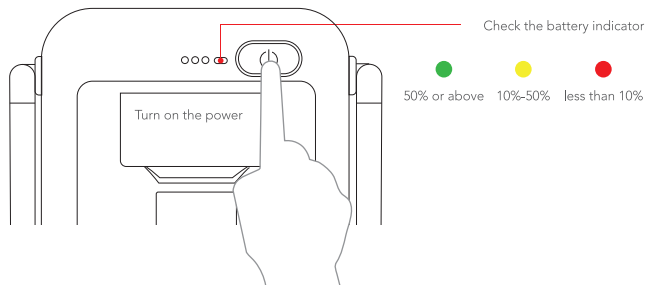
Check the battery indicator

● 50% or above    ● 10%-50%    ● less than 10%

## Maestro™



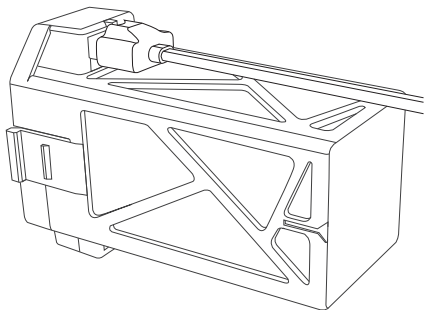
## Base Station



## Check the battery and charge

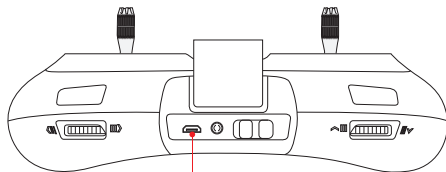
- charge

### Aircraft Battery



Need 2.5 hours to be fully charged

### Standard Controller



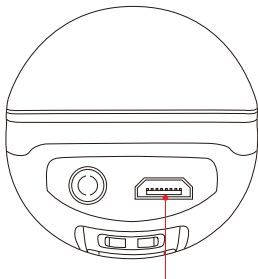
Please charge here

5V 1A Power

Charge through microUSB

Need 2.5 hours to be fully charged

## Maestro™



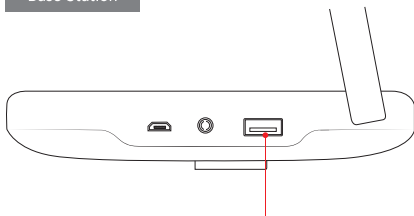
Please charge here

5V 1A Power

Charge through microUSB

Need 2 hours to be fully charged

## Base Station



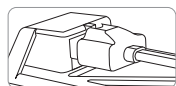
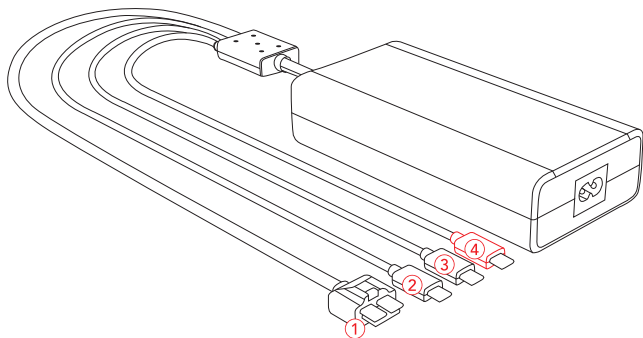
Please charge here

5V 1.8A Power

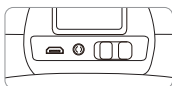
Charge through microUSB

Need 3.5 hours to be fully charged

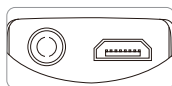
Battery, Standard Remote Controller, PowerEgg Maestro™ Controller, Data module can be charged simultaneously.



① Aircraft Battery



② Standard battery



③ Maestro™

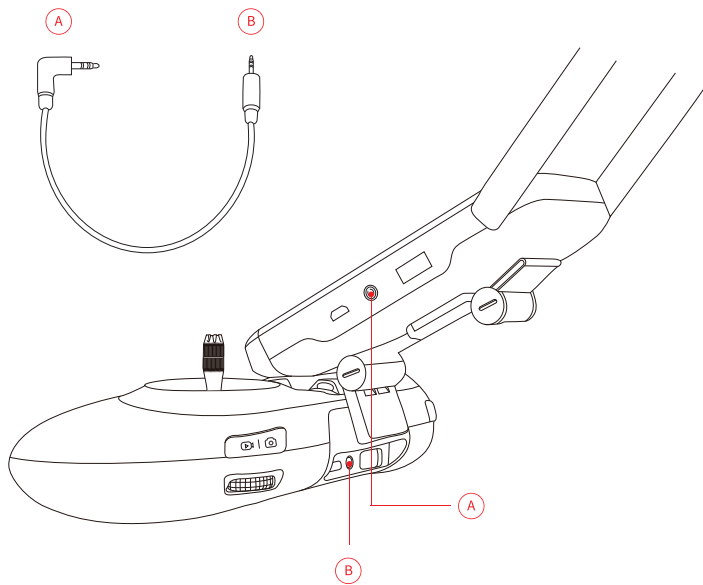


④ Base Station

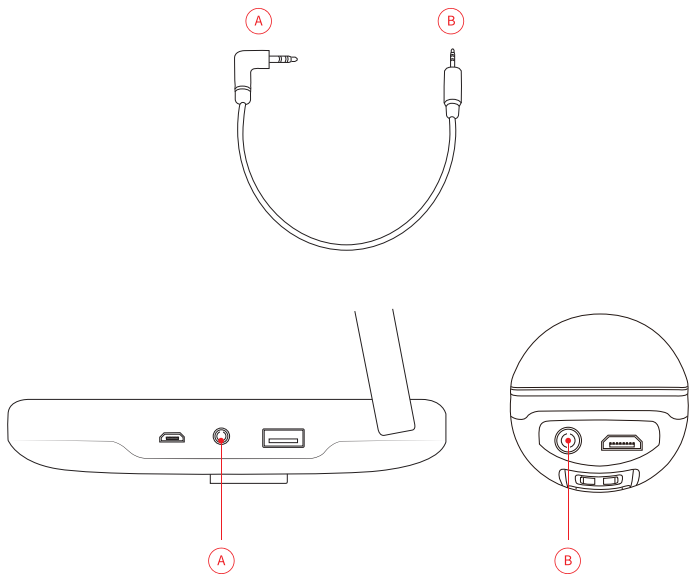


## How to use remote controller

If using the standard controller, place the base station on the rotate bracket of the standard controller and connect them through cable.

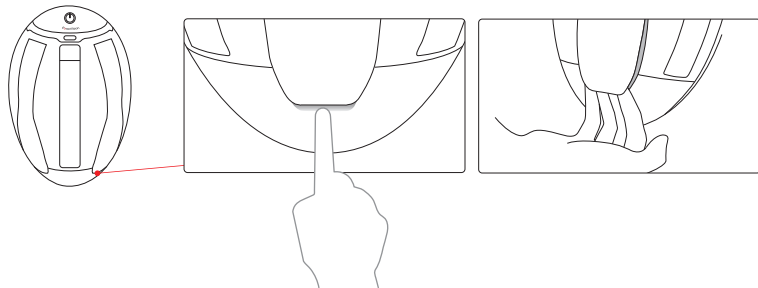


If using PowerEgg Maestro™ as controller, connect the base station and the controller through cable.

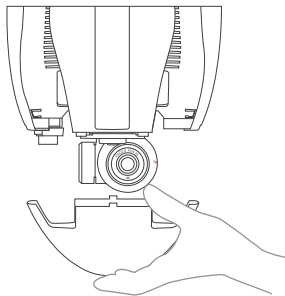


## How to prepare the aircraft

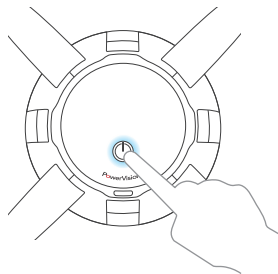
1. Open four PowerEgg's arms, using the position as shown in picture. It will have a clicking sound if they are in position



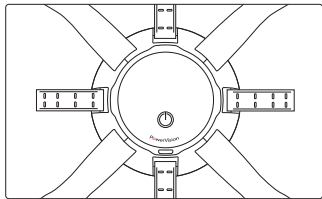
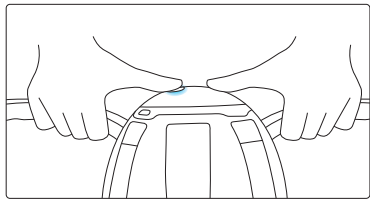
2. Take off the gimbal cover on the bottom



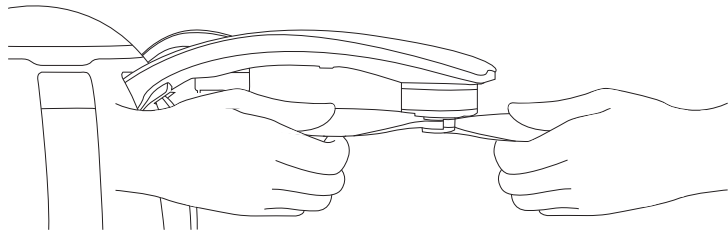
3. Press once and then long press the power button until the blue light is on to turn on the aircraft .



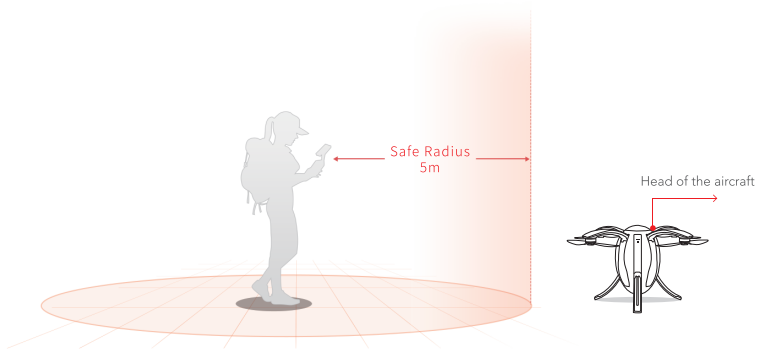
4. Press the power button 3 times in rapid succession to deploy the landing gear.



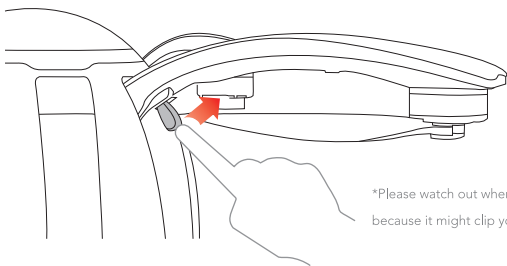
5. Open propellers.



6. Place the aircraft at a safe distance over 5 meters away from people on suitable ground. The head of the aircraft should face the direction that the pilot is facing



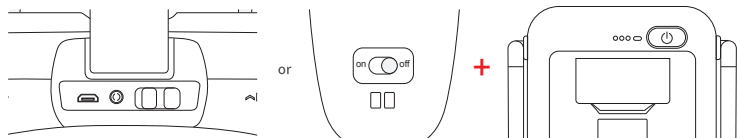
It's the reverse movement of opening. Please press the unlock switch while you closing the propellers.



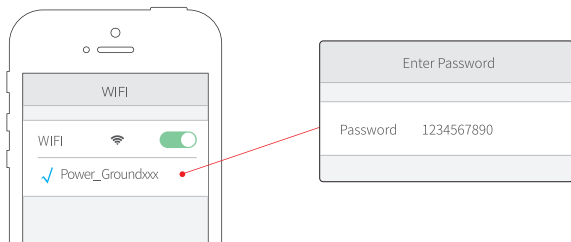
\*Please watch out when you close the propellers because it might clip your finger.

## How to use App

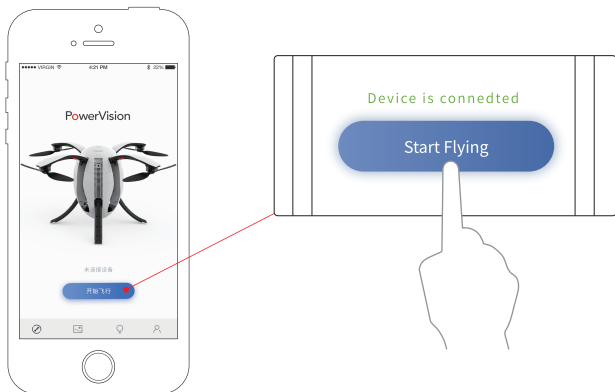
1. Turn on the standard controller or Maestro™ and base station;



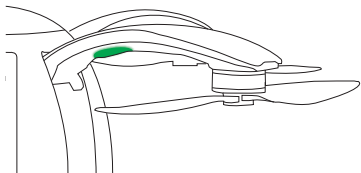
2. Turn on your mobile device and connect WIFI: Power\_Groundxxx. Password is 1234567890;



3. Open Vision+ app, After around 30 seconds, click start flying when it shows device is connected.



4. Wait until aircraft status indicator become green, and then it is on safe flight mode. Now you can use standard remote controller or Maestro™ to control aircraft.



\* The Wi-Fi communication frequency of the base station is 5G. Mobile phones that do not support 5G Wi-Fi will not be able to connect to the base station. Users may change or reset Wi-Fi password anytime.

\*\* When you go the place you never flew before, please open the app and zoom in and move the map before connect to the base station, so the data can be saved in local and flight won't be influenced.

## Flight and Safety

### Flight and shooting

Two ways of controlling aircraft::

- Using Standard controller can control the PowerEgg more precisely through joystick. It can take off and land, return to home, Follow Me, open and close landing gear, control gimbal move and return to default direction, take photo and shooting videos.
- Using Maestro™ can get your hands on it really easy. It can control the aircraft through the position change of Maestro™ and it can accomplish the same functions with buttons.

- Using standard controller controlling flight and shooting

Mode 2 is the default setting for PowerEgg's remote controller. The left stick controls Throttle and Yaw, and the right stick controls Pitch and Roll. Remote controller has mode 1 and 2 that you can set in Vision+. Recommend to use mode 2 for beginners.

---

Mode 1: right stick controls Throttle

Mode 2: left stick controls Throttle

---

#### Left joystick



Ascend / descend



Rotate to left / right

#### Right joystick



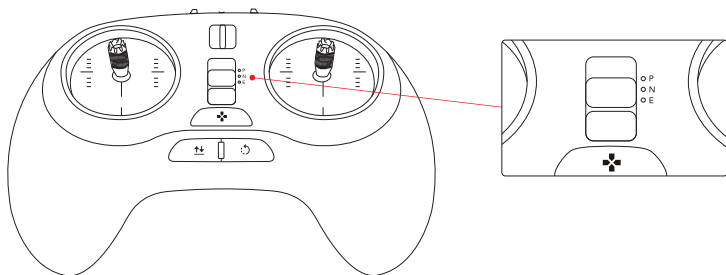
Forward / Backward



Turn left / right



1. Switch the remote controller to N Mode (Waypoint Mode), App shows "Waypoint Mode. Safe to fly."



\* P mode (Professional) : manual flight mode, aircraft maintain the height automatically and using joysticks control the direction

\*\* N mode (Normal) : fixed point flight mode, aircraft using GPS or vision positioning system to stay in a place accurately.

\*\*\*E mode (Easy Control) : Easy mode, aircraft using GPS to do positioning. User doesn't need to know where is the head. When push forward on joystick, aircraft is always flying away from user.

2.Unlock motors: Position both joysticks toward the bottom center like a "V" to unlock, as shown in the picture:

Left joystick



Rotate to left / right

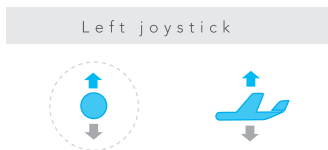
Right joystick



Turn left / right

3. Take off: Push the throttle stick slowly to let aircraft rise steadily

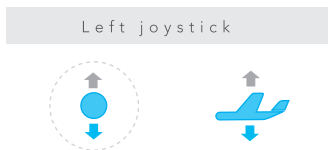
Alternative take off way: After long pressing the take off / landing button on standard remote controller until it vibrates, aircraft will rise and hover in the air. Pilots can navigate the aircraft precisely by using the controller.



4. You can control the gimbal and take photos or videos during the flight

5. Landing: Slowly pull the throttle stick to let the aircraft land smoothly. Pull the throttle stick to the very bottom for 2 seconds until motors stop spinning.

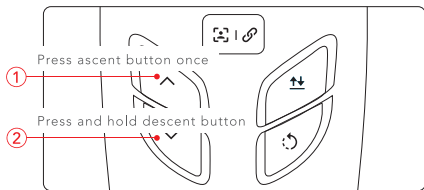
Alternative landing way: After long pressing the take off / landing button on standard remote controller until it vibrates, aircraft will release the landing gear and land (Press takeoff/landing button once to cancel autonomous landing).



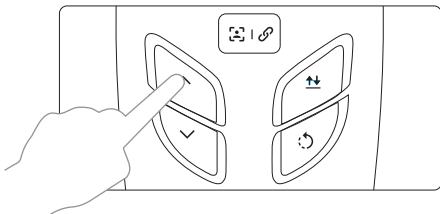
\* Attention: During any flight emergency, pilots can position two joysticks into a "V" shape to lock and stop the aircraft immediately.

- Using PowerEgg Maestro™ gesture-based controller controlling flight and shooting

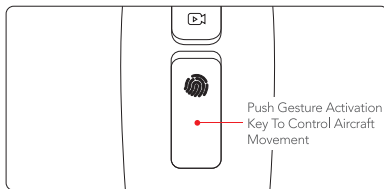
After connect to the base station, Vision+ App shows "Simple Flight Mode. Safe to fly"



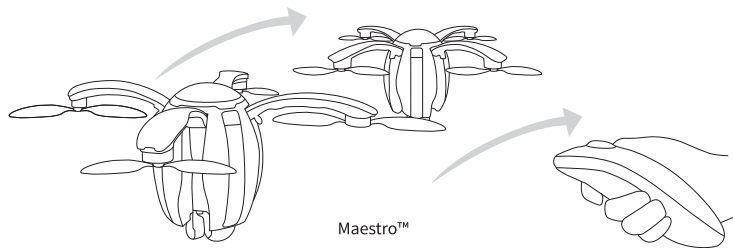
1. Press ascent button once, then press and hold descent button to unlock the aircraft.



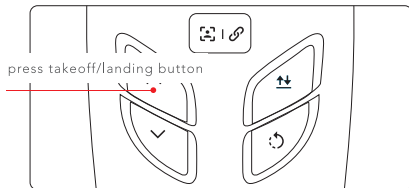
2. Take off: Press and hold takeoff/landing button until it vibrates, the aircraft will take off and hover autonomously.



3. Flight control: Press and hold ascent button to desired height, then use the gesture-based control button to navigate the aircraft by body gestures.



4. You can control the gimbal and take photos and videos during the flight.



5. To land the aircraft, press takeoff/landing button. The aircraft will release the landing gear, land and lock autonomously (Press takeoff/landing button once to cancel autonomous landing).

\*During any flight emergency, pilots can press the combination of the descent button and swipe the gesture-based control button downwards to stop and lock the aircraft immediately, as shown in the picture (Motors will stop and aircraft will free drop).

## APP features

- Functions on camera view



Photo Video Switch



Video Recording



Take a photo



Album



Camera Settings

- Functions on map view



Return-to-Home



Route Planning



Flight Mode



Return-to-Home Setting



Safety Zone



Aircraft Setting

## Flight Safety



Fly on an open space

+



Good GPS signal

+



Please fly where you can see

+



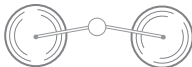
Flying height below 120m



Please stay away from crowd, electric wire, tall buildings, and airports. Transmitting tower, high voltage wire and large magnetic metal may influence the aircraft and cause safety issue.



Please do not fly in Raining, fog, snow, thunder storm and windy (wind speed above 10m/s) weather



Please do not touch spinning propellers; otherwise, it will cause serious personal and property damage



No fly zone

Please refer to following website:  
<http://knowbeforeyoufly.org/air-space-map/>

## FCC

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

## RF Exposure Statement

### For the Drone (Power Egg)

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

### For the Base station

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body

## IC

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux CNR exempts de licence d'Industrie Canada. Le fonctionnement est soumis aux deux conditions suivantes:

- (1) Ce dispositif ne peut causer des interférences; et
- (2) Cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

### RF Exposure Statement:

#### For the Drone (Power Egg)

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d' exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20cm entre le radiateur et votre corps. Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur.

#### For power station

High-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Haute puissance radars sont désignés comme utilisateurs principaux (c'est-à-dire les utilisateurs de priorité) des bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer des interférences et/ou endommager les dispositifs LAN-EL.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the ISED. These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body.

Cet équipement est conforme aux limites d' exposition aux rayonnements ISED établies pour un environnement non contrôlé. L' utilisateur final doit suivre les instructions spécifiques pour satisfaire les normes. Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur.

Le dispositif portable est conçu pour répondre aux exigences d' exposition aux ondes radio établie par le développement énergétique DURABLE. Ces exigences un SAR limite de 1,6 W/kg en moyenne pour un gramme de tissu. La valeur SAR la plus élevée signalée en vertu de cette norme lors de la certification de produit à utiliser lorsqu' il est correctement porté sur le corps.





PowerVision

[www.powervision.me](http://www.powervision.me)