



# PowerEgg Drone

## Quick Guide

PEGA-E1.0

**PowerVision** 



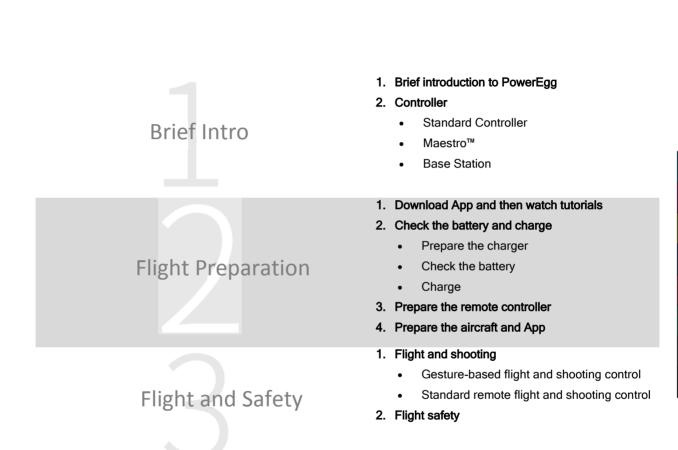
























landing gear button

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## Brief Introduction to PowerEgg

#### Aircraft

The PowerEgg<sup>™</sup> Aerial Camera Drone is equipped with a high precision navigation control system. It is designed to perform indoor and outdoor hovering, flying, autonomous take-off, landing and Return-to-Home. It is also equipped with advanced technology to provide you with functionalities such as Follow-Me, Orbital Flight, Electronic Fencing and Autonomous Flight modes. The gesturebased controller – PowerEgg Maestro<sup>™</sup> – simplifies flight operation and gimbal control. The 3-axis gimbal camera delivers still images with over 12 million pixels and 4K UHD 360-degree panoramic video recording. The 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. Micro SD card slot
- 3. Optical positioning sensors and Ultrasonic positioning system
- 4. Aircraft front LED indicator
- 5. Aircraft status LED indicator
- 6. Brushless, low-friction motor pods
- 7. Propellers
- 8. Power switch/Landing gear control/Frequency button
- 9. Battery compartment access button













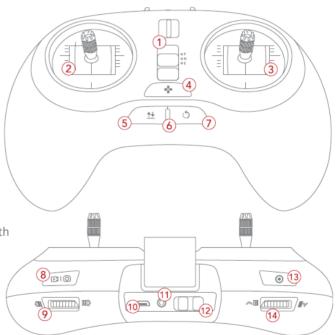
## Controller

### Standard Controller

The PowerEgg<sup>™</sup> Standard Controller is equipped with an integrated "one-click" technology. With one click the users can manage the take-off, Return-to-Home and Follow Me functions and have the camera oriented toward the pilot. 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<sup>™</sup> Standard Controller is powered by a rechargeable battery with a capacity of 2800 mAh. It can work continuously for 20 hours. Users may check battery percentage by using the light indicator on the controller.

- 1. Mode switch
- 2. Left joystick
- 3. Right joystick
- 4. landing gear button
- 5. Take-off/land/stop landing
- 6. Status/battery indicator
- 7. Return-to-Home/stop Return-to-Home
- 8. Top right button: take photos/videos
- 9. Right finger wheel: gimbal yaw
- 10. MicroUSB charging port
- 11. Port: connect to Base Station
- 12. Power switch
- 13. Top left button: gimbal back to position with short press / selfie with double press / gimbal face downward with long press
- 14. Left finger wheel: gimbal pitch



\* Remote Control Mode: Users can choose between Mode 1 and Mode 2 of the controller modes in PowerEgg's App. Mode 2 is recommended for beginners.

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## Controller

#### PowerEgg Maestro<sup>™</sup> Gesture-Based Controller

PowerEgg Maestro<sup>™</sup> controller simplifies the aircraft operation and navigation by allowing users to control the aircraft through body gestures. It has an integrated "one-click" technology that allows users to perform take-off and landing, Return-to-Home, Follow Me, and selfie taking with a single click. Users can also adjust gimbal pitch, take pictures, and record videos by using the controller. PowerEgg Maestro<sup>™</sup> controller is powered by a rechargeable battery with a capacity of 1400 mAh. It can work continuously for ~10 hours. Users may check battery percentage by using the light indicator on the controller.

- 1. Status/battery indicator
- 2. Joystick: gimbal control
- 3. Custom button
- 4. Ascend button
- 5. Descend button
- 6. Take-off/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







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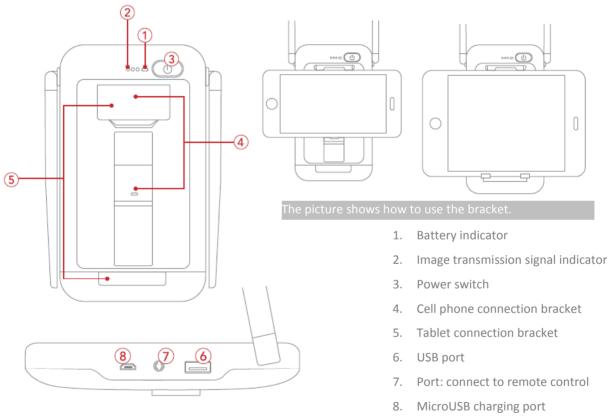
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### Controller

#### Base Station

The PowerEgg Base Station has an integrated cutting edge UHD image and data transmission system, which can transfer the video and flight status to a smartphone, tablet and other compatible devices. The maximum distance of image/data transmission in an ideal environment is 3.1 miles.



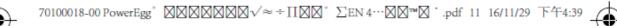
\* For supported devices please refer to the user manual or websites.













Scan the QR code on the right side to learn about our product specifications.



## **Flight preparation**

# Please download Vision+ App and watch PowerEgg tutorial videos

Please scan the QR code or download Vision+ App from the Apple App Store or Google Play. Watch video tutorials in Vision+ or on our official website.













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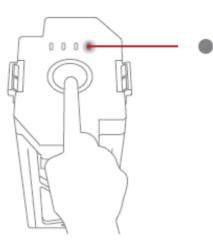
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## Check the battery and charge

• Check the battery



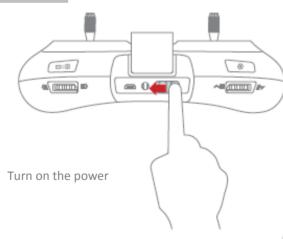


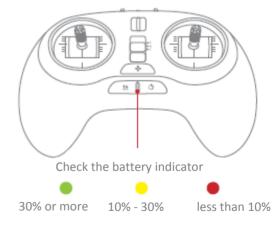
Check the battery indicator

Each light indicates 25% battery

Press the battery button; the number of lights indicates the remaining battery level

#### Standard controller





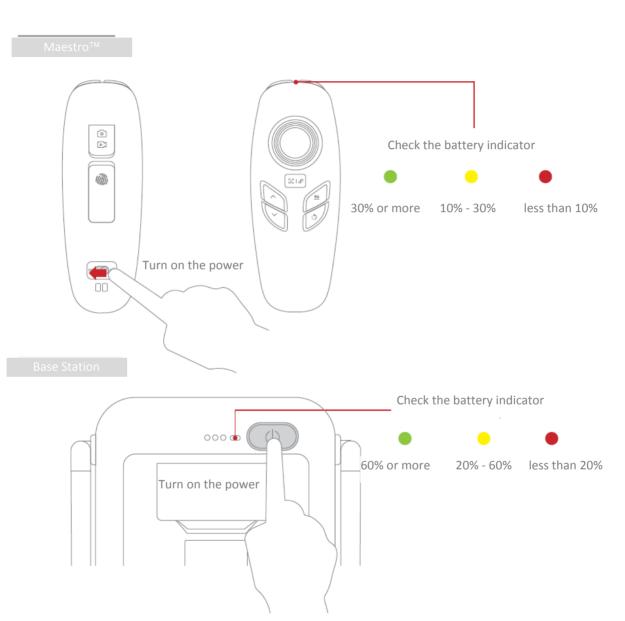
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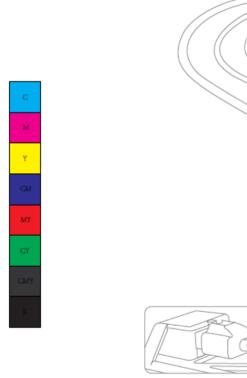


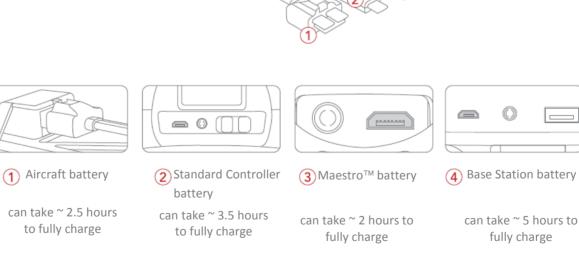




Battery, Standard Remote Controller, PowerEgg Maestro<sup>™</sup> Controller and Base Station can be charged simultaneously.















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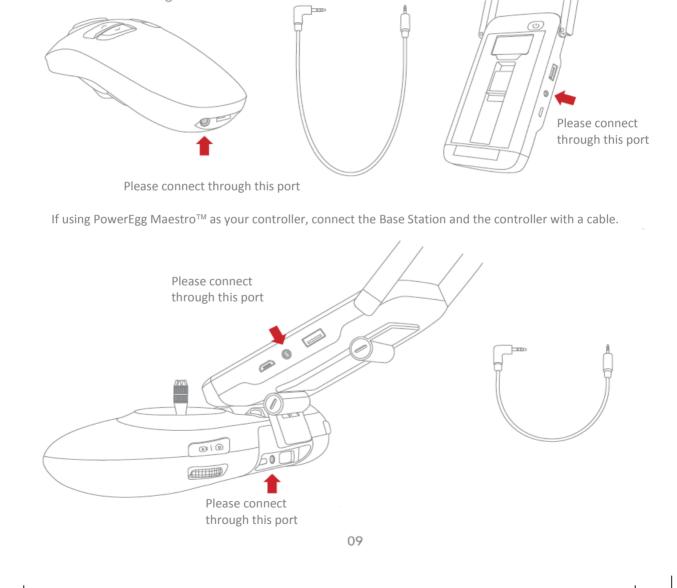
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# Prepare the remote controller

If using the Standard Controller, place the Base Station on the bracket of the Standard Controller and connect them with a cable.



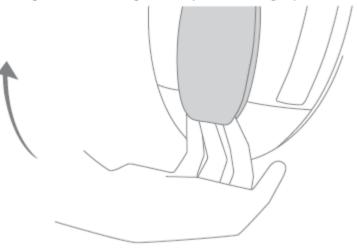






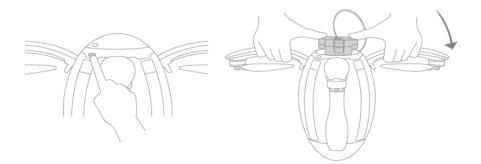
# Prepare the aircraft

1. Open the four PowerEgg's arms, following the position as shown in the picture. You will hear a clicking sound indicating that they are in the right position.



2. Open the top battery cover. Hold the aircraft's arms and press the battery into the chamber with the thumb.

Attention: Do NOT put pressure on the landing gear, as it may cause damage.











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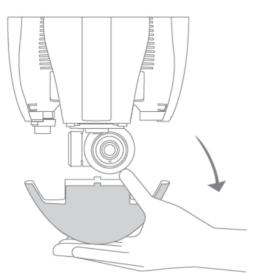
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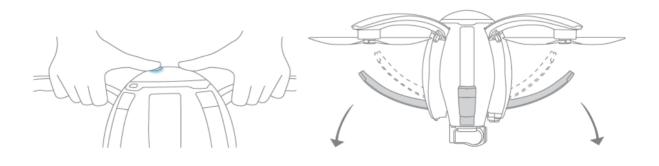
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Remove the gimbal cover at the bottom.
 Attention: Make sure to do this before turning on the aircraft in order not to damage the gimbal motor.



4. Press once and then press and hold the power button until the blue light is on. After hearing the notification sound, hold the aircraft's arms and press the power button 3 times in quick succession to deploy the landing gear.









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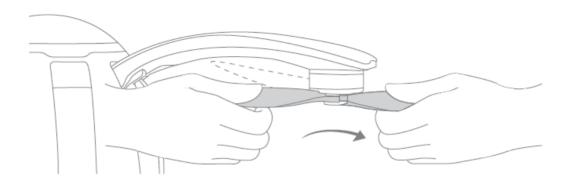
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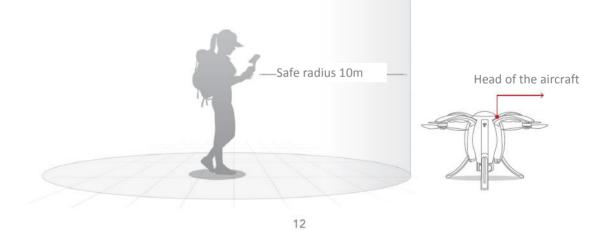
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5. Open the propellers with both hands.



6. Place the aircraft on a suitable ground at a safe distance of over 10 meters away from people. The head of the aircraft should face the direction that the pilot is facing.



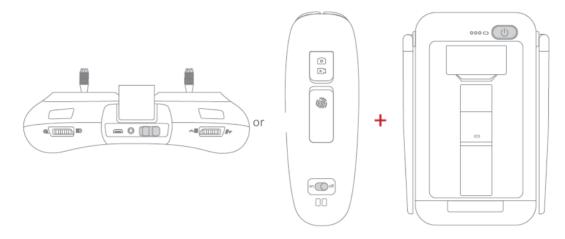






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7. Turn on the Standard Controller or Maestro<sup>™</sup> and Base Station.



8. Turn on your mobile device and connect to WiFi: Power\_Groundxxx. Password is 1234567890.



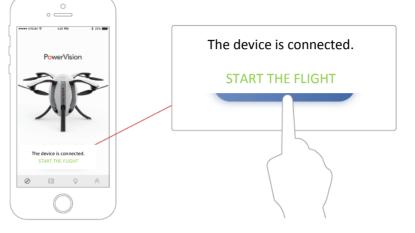




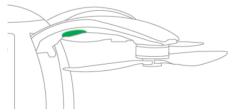


9. Open Vision+ App. After around 30 seconds, click Start the Flight when it shows that the device is connected.





10. Wait until the aircraft status indicator becomes green, and the status indicator of Standard Controller or Maestro<sup>™</sup> turns green. This indicates that the aircraft is ready for unlocking and flying.



\* The Wi-Fi communication frequency of the Base Station is 5 GHz. Mobile phones that do not support 5 GHz WiFi will not be able to connect to the Base Station. The users may change or reset WiFi password anytime using Vision+ App.

\*\* When you go to a place you have never flown before, please open the App, zoom in and move the map before connecting to the Base Station, so that the data can be saved locally and the flight will not be influenced.





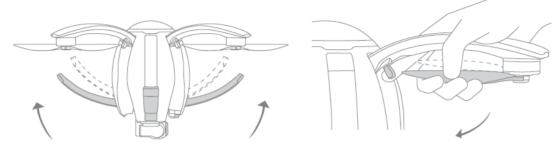




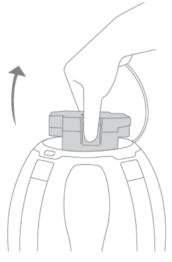


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- 11. When collapsing your PowerEgg for storage, hold the aircraft above the ground by one of its arms, press the power button three times in quick succession, and the landing gear will close automatically.

Close the arms one by one by pressing the trigger located on the underside, making sure to position the propellers so that they fit into the cavity.



12. Take out the battery. Press the battery lock with your thumb and index finger while pulling out the battery.











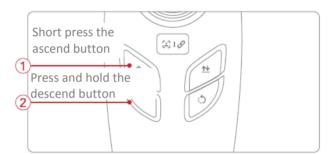


## **Flight and Safety**

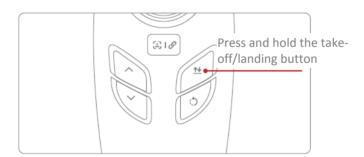
### Flight and shooting

There are two ways of controlling the aircraft:

The Standard Controller ensures precise PowerEgg control through dual joysticks. It can perform the following functions: take-off and landing, Return-to-Home, Follow Me, open and close the landing gear, control gimbal movement, reorient the aircraft, and take photos and shoot videos.
Maestro™ provides full control over the aircraft, through gestures and controller movements.
Using PowerEgg Maestro™ gesture-based controller to control the flight and shooting Having connected to the Base Station, Vision+ App shows "Simple Flight Mode. Safe to fly".



 Press the ascend button once, then press and hold the descend button to unlock the aircraft.



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



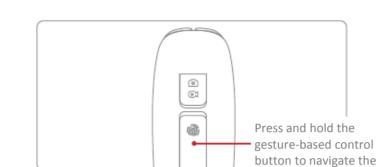




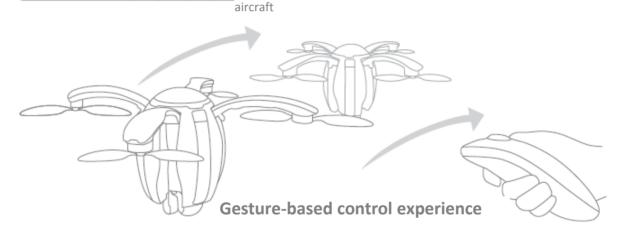




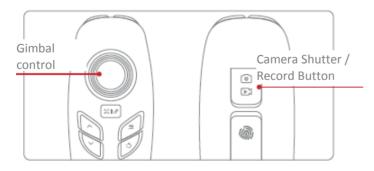




3. Flight control: Press and hold ascend button to reach the desired height, then use the gesture-based control button to navigate the aircraft by body gestures.



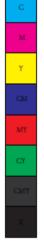
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4. You can control the gimbal and take photos and videos during the flight.













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

\*During any flight emergency, the pilots can press the combination of descend button, shooting button, and swipe the gesture-based control button upwards to stop and lock the aircraft immediately, as shown in the picture (The aircraft will cease function and fall. Be wary of your surroundings). \*\*Maestro™ is not supported for indoor flights.

#### • Using Standard Controller to control the flight and shooting

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

Mode 1: Right stick controls Throttle Mode 2: Left stick controls Throttle

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



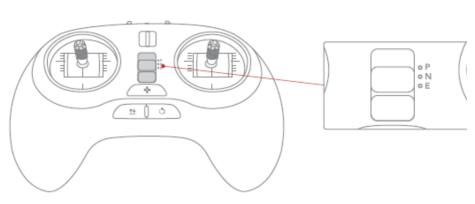




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\* P mode (Professional): manual flight mode, the aircraft maintains the height automatically and the pilot controls the direction using joysticks.

\* N mode (Normal): fixed point flight mode, the aircraft uses GPS or vision positioning system to stay in the accurate position.

\* E mode (Easy Control): easy mode, the aircraft uses GPS for positioning. Aircraft flight is relative to the pilot and not to the aircraft orientation.

2. Unlock the motor: Position both joysticks toward the bottom center like a ":V" to unlock.

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

Automated Take-Off: After pressing and holding the take-off/landing button on the standard remote controller until it vibrates, the aircraft will rise and hover in the air.

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. Then pull the throttle stick to the very bottom for 2 seconds until the motor stops spinning.

Automated Landing: After pressing and holding the take-off/landing button on the standard remote controller until it vibrates, the aircraft will release the landing gear and land (Press the take-off/landing button once to cancel the autonomous landing).

\* Attention: During any flight emergency, the pilot can control the left joystick into bottom left position, and press and hold the Return-to-Home button to lock and stop the aircraft immediately (The aircraft will cease function and fall. Be wary of your surroundings).











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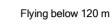
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Please stay away from crowds, electric wires, tall buildings, and airports. Transmitting towers, high voltage wires and large magnetic metal structures may influence the aircraft and cause safety issues.





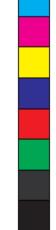
Do NOT fly in severe weather conditions such as those including snow, rain, smog, tornados and strong wind (wind speed above 10 m/s)



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

Please refer to the following website! http://knowbeforeyoufly.org/air-space-map/

No fly zone













#### 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.

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 colocated or operating in conjunction with any other antenna or transmitter.

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.

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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 interferences; et

(2) Cet appareil doit accepter toute interference, y compris les interferences qui peuvent causer un mauvais fonctionnement de l'appareil.

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 equipement est conforme aux limites d'exposition aux rayonnements ISED etablies pour un environnement non controle. L'utilisateur final doit suivre les instructions specifiques poursatisfaire les normes. Cet emetteur ne doit pas etre co-implante ou fonctionner en conjonction avec toute autre antenne ou transmetteur.

Le dispositif portatif est congu pour repondre aux exigences d'exposition aux ondes radio etablie par le developpement energetique DURABLE. Ces exigences un SAR limite de 1,6 W/kg en moyenne pour un gramme de tissu. La valeur SAR la plus elevee signalee en vertu de cette norme lors de la certification de produit a utiliser lorsqu'il est correctement porte sur le corps.

















www.powervision.me



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