



## **Gimbal™ Series 21 Proximity Beacon**

### *User Manual*

360-0001-000 Revision A

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## Revision History

Revision	Date	Description
A	August 2014	Initial Release

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# Intended Use

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## What is the Gimbal Series 21 Proximity Beacon?

The Gimbal™ Series 21 Proximity Beacon (the ‘Beacon’) is a small, battery-powered device which transmits a Bluetooth Smart/low-energy signal that can be detected by other devices (e.g., smartphones or other devices capable of receiving the signal). This signal provides the identity of the beacon as well as other telemetry information to the receiving device (e.g., battery level and temperature).

The Beacon works by periodically waking up, transmitting this signal via short-range radio (Bluetooth Smart/LE) and then returning to a low-power state. The Beacon has no user interface (UI), cellular or GPS capabilities. The beacon’s identity is encoded within the signal it transmits and includes a sub-segment device type.

## Important safety instructions for your Beacon



**WARNING - CHOKING HAZARD:** Small parts. Not for children under 3 years of age. This product comes with AA alkaline batteries.



**CAUTION** – Do not connect improperly, charge or dispose of in fire. Battery may explode or leak. Please visit <http://gimbal.com/legal/regulatory> for more information.

If the battery leaks:

- Do not allow the leaking fluid to come in contact with skin or clothing. If contact has already occurred, flush the affected area immediately with clean water and seek medical advice.
- Do not allow the leaking fluid to come in contact with eyes. If contact has already occurred, DO NOT rub; rinse with clean water immediately and seek medical advice.  
Take extra precautions to keep a leaking battery away from fire, as there is a danger of ignition or explosion.
- Vapor generated from burning batteries may irritate eyes, skin, and throat. If inhalation occurs, move to a well-ventilated area immediately and seek medical advice.

# Using Your Beacon

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## Powering on your Beacon

Open the Beacon by pressing the two latches on opposite sides of the beacon at the same time with one hand and while holding the front part of the beacon with the other hand. Once the Beacon has been opened, move the small power switch located between the two sets of batteries from the 'Off' position to the 'On' position.

## Replacing the batteries in your Beacon

The Beacon four (4) AA alkaline batteries which will typically power the Beacon for approximately 16 months but depends on configuration and environment. To replace the batteries:

1. Switch the power switch to the 'Off' position.
2. Remove and properly dispose of the old batteries.
3. Install four (4) new AA alkaline batteries.
4. Switch the power switch to the 'On' position.

## Activating your Beacon

1. Locate your Beacon's ID (of the format XXXX-XXXX or similar)
  - On the exterior label of the Beacon's box, or
  - On the Beacon's inside label between the two sets of batteries
2. Visit <https://manager.gimbal.com/> and create a Gimbal Developer Account if necessary
3. Login to your account and follow the links to Activate a Beacon
4. Enter your Beacon's ID in the field provided
5. The beacon is now associated with your account and can be viewed from your application or via the Gimbal Beacon Manager application available for download.

# Troubleshooting Tips

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For troubleshooting tips and Frequently Asked Questions, please visit  
<https://manager.gimbal.com> , login with your Gimbal Developer Account and click on Support.

# Regulatory Information

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## **Safety and wireless devices**

Scientific research on wireless devices and radio frequency (“RF”) energy has been conducted worldwide for many years, and continues. In the United States, the Food and Drug Administration (FDA) and the Federal Communications Commission (FCC) set policies and procedures for wireless devices. The FDA issued a website publication on health issues related to usage of cell phones where it states, “The scientific community at large believes that the weight of the scientific evidence does not show an association between exposure to RF from cell phones and adverse health outcomes.” Still, the scientific community does recommend conducting additional research to address gaps in knowledge. That research is being conducted around the world, and the FDA continues to monitor developments in this field. You can access the FDA website at <http://www.fda.gov> (Under “C” in the subject index, select Cell Phones > Research.). You can also contact the FDA toll free at (888) 463-6332 or (888) INFO-FDA. The FCC issued its own website publication stating that “there is no scientific evidence that proves that wireless telephone usage can lead to cancer or other problems, including headaches, dizziness, or memory loss.” The publication is available at <http://www.fcc.gov/cgb/cellular.html> or through the FCC at (888) 225-5322 or (888) CALL-FCC. The National Cancer Institute (NCI) states that concerns about the potential health effects of using cellular phones – “and specifically the suggestion that using a cell phone may increase a person’s risk of developing brain cancer – are not supported by a growing body of research on the subject.” You can access NCI’s review of the research at <http://www.cancer.gov/ncicancerbulletin/archive/2008/092308/page7> .

## **Can I minimize my RF exposure?**

If you are concerned about RF, there are several simple steps you can take to minimize your RF exposure. You can minimize usage of the device near the body. You can also place more distance between your body and the source of the RF, as the exposure level drops off dramatically with distance. Wireless devices marketed in the United States are required to meet safety requirements regardless of whether they are used against the head or against the body.

## **Where can I obtain further information?**

For further information, see the following additional resources:

U.S. Food and Drug Administration  
10903 New Hampshire Avenue  
Silver Spring, MD 20993  
1-888-INFO-FDA (1-888-463-6332)  
<http://www.fda.gov/>

Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20554  
<http://www.fcc.gov/>

American National Standards Institute  
1899 L Street NW, 11<sup>th</sup> Floor  
Washington D.C., 20036  
1-202-293-8020  
<http://www.ansi.org/>

### **FCC information**

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 Gimbal Series 21 Proximity Beacon has been tested to the limits for a Class B digital device, according to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The Beacon uses and radiates radio frequency energy and if not installed and used according to instructions, may cause harmful interference to radio communications or be interfered with. There is no guarantee that interference will not occur in a particular installation.

If the Beacon does cause harmful interference to radio or television reception, which can be determined switching the Beacon's power switch to the 'off' position, try to correct the interference by taking one or more of the following actions:

- Increase the distance between the Beacon and radio or television receiver, or
- Consult the dealer where you bought your radio/TV or an experienced radio/TV technician.

If the Beacon is being interfered with try to correct the interference by taking the following actions:

- Make sure that the Beacon is no closer than 10 ft. (3 m) of a wireless access point, microwave oven, or 2.4 GHz cordless phone, and/or
- Increase the distance between the Beacon and any other electronic equipment by moving the Beacon.

**CAUTION** - The Beacon should not be used in airplanes, hospitals, or locations where cellular telephones and other electronic devices are prohibited.

### **Industry of Canada information**

This device complies with Industry Canada license-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### **Japan, Ministry of Internal Affairs and Communications information**

The Gimbal Series 21 Proximity Beacon has been approved for operation in Japan by the Ministry of Internal Affairs and Communications (MIC). The MIC Type Certification number for the Gimbal Series 21 Proximity Beacon is 007-XX00000.

### **Taiwan, National Communication Commission information**

The Gimbal Series 21 Proximity Beacon has been approved for operation in Taiwan by the National Communication Commission (NCC). The NCC Type Certification number for the Gimbal Proximity Beacon is CCXXxxYYyyZzW.

#### **NCC Warning Statement:**

低功率電波輻射性電機管理辦法

第十二條經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信規定作業之無線電信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

在5.25G ~5.35G頻帶內操作之無線資訊傳輸設備僅適於室內使用

(b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

**Note:** 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.
- Consult the dealer or an experienced radio/TV technician for help.

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.