

Radioos TAG User Guide Version 1.0 Nov 2004

Table Of Contents

1. Introduction
2. Hardware Specification
3. TAG Features
4. Operation & Indications
5. TAG Indications.
6. Notices

1.Introduction

The TAG is a wireless device based on Bluetooth technology .It is use for indoor location system and wireless panic button .The TAG is a highly integrated Bluetooth device that includes radio receiver transmitter and a baseband processor. The TAG is part of Tadlys Bluetooth Networks that includes Bluetooth server and spreading Bluetooth Access Points.

The TAG can send several wireless messages to the Tadlys Bluetooth Networks like (panic button pressed, TAG strip open or remove, men down).

The TAG can receive several wireless messages from the Tadlys Bluetooth Networks like transmit audio alert or Ir.

2.Hardware Specification

Standard: Compliant with Bluetooth version 1.1

Approval: CE

Operation Power: Li-ion re-charge Battery 4.2V 600mA/h.

Operation temperature: -10 – +60 C

Operation Time: 30 days

Low Battery Indication: Left working time of minimum 3 hours.

Frequency Band:2402MHz ~ 2480MHz.

Frequency Error: +/- 5KHz

TX Max Power: +3dbm.

TX Min Power –6dbm.

Rx Sensitivity: -75dbm.

Rx BER (Bit Error Rate): 0.1%(max).

Charge Current: 250mA. (0.4 C)

Charge temperature:0 ~ 45 C

Charge Time: about 3 hours.

Average current consumption: 500uA.

Audio: 8Ω Speaker out 600mV rms 1KHz

Infra Red transmitter: 950nm frequency 38Khz modulation 1/10 interval maximum

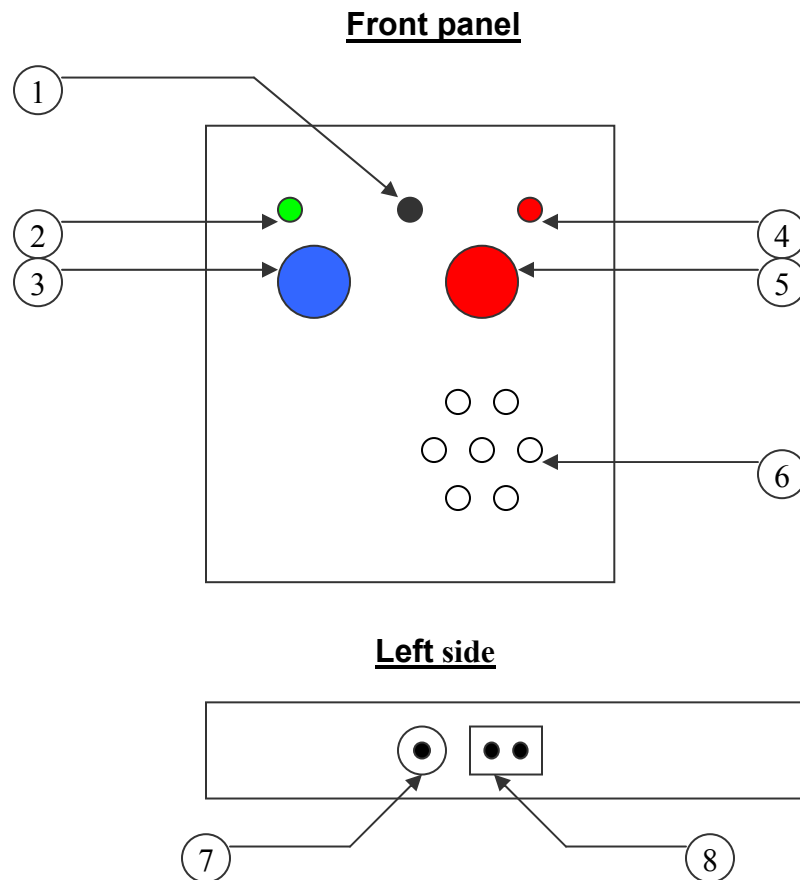
Infra Red transmit interval: 10msec on 220msec off.

Infra Red transmit time: 10sec Max.

Dimensions: 56x36x16 mm (L x W x H).

Weight: 33grames.

3.TAG Features



1. Infra Red LED – The Ir LED is used for Ir location system. The TAG transmits Ir signals.

2. Green LED – Blinking alone when in “On” state and together with the Red LED when the TAG sends a message.

3. Blue button – “On/Off button”- Pressing the blue button for about 2 seconds would turn the Tag on state. The green LED will start blinking and sends a power on message.

Pressing the blue button for about 6 seconds turn the Tag off. Before turn off the TAG sends a power off message.

4.Red LED – Continues light Indicates a low battery. Blinking light together with the green LED when the TAG sends a message.

5.Red button – Pressing the red button the TAG would send a Panic message.

6. Speaker – Internal speaker for audio indication and audio location system.

7.Battery charger connector -1.2mm power connector for external charger.

8.External indication –2-pin input connector for TAG strip open or remove.

Options – Internal men down sensor, movement's sensor.

Power - Internal Li-Ion battery.

4.Operation & Indications

Charging and battery time

Before use the TAG, you need to fully charge the battery.

Plug the charger connector into charging port of the TAG.

Charging time is about 3 hours.

TAG Transmitting Message

Every time the TAG sends a message the green and red LEDS blinks together and a short audio beep would be heard. If the TAG got an acknowledgment to the message 2 short audio beeps would be heard. If it failed the TAG retries up to 4 times to send the message if all the 4 retries failed one short audio beep would be heard.

Turning TAG ON

To switch the TAG on, press and blue button for about 2 seconds till the green LED starts blinking. The green LED would start blinking once every 6 seconds.

The TAG sends a power on message.

Turning TAG OFF

To switch the TAG off, press the blue button for 6 seconds until the red LED is blinking.

The TAG sends a power off message and then shut down the TAG.

Sending Punic button Message

Using The TAG as a wireless Punic button. Press the red button the TAG sends a panic message.

Low battery warning

The TAG checks the battery level every 1-second. When the battery level is under the desired level (the level can be configured) the TAG sends a low battery message and the red LED indicator will Continues light.

5.TAG Indications.

TAG Mode	Green LED	Red LED	Audio beep
OFF	-	-	-
ON	Blinking	-	-
Transmit message	Blinking	Blinking	1
Receive acknowledgment	-	-	2
Transmit failed	-	-	1
Low Battery	-	Continues	-

6. Notices

Please read this entire page carefully. By using any TBAN or Radioos product you agree to be bound by the terms included in the notices.

Trademarks

The Bluetooth trademarks are owned by Bluetooth SIG, Inc. and licensed to Tadlys Ltd. All other product and company names mentioned herein may be trademarks of their respective companies.

Copyright

This document contains Tadlys Ltd. proprietary information. This document shall not be used for any purpose other than the purpose for which it has been submitted and shall not be transferred to any third party, nor shall it be duplicated, partially or in whole, without the prior written consent of Tadlys Ltd.

Disclaimers

Tadlys Ltd. shall not be liable for technical or editorial errors or omissions contained herein; Nor for incidental or consequential damages, direct or indirect resulting from the furnishing, performance, use of, installation and operation of the system described in this document. Tadlys Ltd. assumes no responsibility or liability for the use of the products described in this document and conveys no license or title under any patent or copyright to these products. The information in this document is provided “as is” without warranty of any kind and is subject to change without any prior notice.

Regulatory

The product referred to in this document makes use of Radio Transmitters at 2.4 GHz, which are qualified by the Bluetooth SIG and comply with the implied national regulations. In some environments, the use of wireless devices may be restricted. Such restrictions may apply aboard airplanes, in hospitals, near explosives, in hazardous locations etc. If you are uncertain of the policy that applies to the use of this product, please ask for authorization to use it prior to turning it on.

Battery & Charger

* This TAG is equipped with a lithium polymer rechargeable battery.

***Battery Charger: Use only Tadlys Charger.**

*Caution: Risk of explosion if battery is replaced by an incorrect type.

*Dispose of used batteries according to the instructions.

Handling

* Avoid storage at high temperatures (above 60 C/134 F) such as in a hot vehicle or in direct sunlight. (Storage at high temperature can degrade performance and reduce battery life.)

*Do not expose the TAG to rain or other liquids.

*Users are not permitted to make changes or modify the device in any way. Changes or modifications not expressly approved by your distributor will void the users' authority to operate the equipment.

FCC

*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.

Technical Support

Technical support for the product described in this document may be obtained from Tadlys website www.tadlys.com or by e-mail contact: raanan@tadlys.com