

Alert Tag Instruction Manual and Spec-Sheet

FCC Compliance

The FCC Wants You to Know

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 tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician.

FCC Warning

Modifications not expressly approved by manufacturer could void the user authority to operate the equipment under FCC rules.

IR and RF Alert Tag

P/N: ALB00001 (433.92 MHz)



IR/RF Alert Tag

Description

A small light-weight, oval badge. The tag sends Infra Red signals, and in addition sends RF signals in the frequency of 433.92 MHz. Designed especially for the convenience of the elderly or persons in stressful situations (alert, panic, etc.).

General

Electrical power source	One 3-Volt lithium battery
Data rate	19,200 bits per second
Modulation	ASK (Amplitude Shift Keying of IR or RF carrier)
Message protocol	4 bytes proprietary format
Message duration	2.08 ms
Button on badge	Location dependent function. Twelve identical button messages are transmitted 0.4 sec apart on every button press. Button press transmitted with IR and RF message. Button press decoded by IR and RF Readers or Central PC.
Battery type	CR 2032 Renata
Battery life	One year, assuming movement 12 hr / day
Battery status indication	Battery status transmitted with every RF and IR message
Badge ID	Unique factory programmed (ID code, transmit rate, motion sensor activation and deactivation, etc.)
Dimensions	Pendant shape 55 x 35 x 18 mm
Weight (including battery)	25 gram
Temperature: Operating	-10 to 70°C
Temperature: Storage	-20 to 60°C
Humidity: Operating	Operating – 5 to 95% RH @ 70°C
Humidity : Storage	Non Operating (12 Hours) – 5 to 95% RH @ 85°C
Accessories	Neck strap (included)

IR Transmission

Peak optical transmitted power	500mW
Peak transmission wavelength	880nm
Peak radiant intensity	120 mW/Sr
Frequency of transmission	Carrier at 455 KHz
Transmission rate	During human movement – every 3 to 5 sec message. During rest (no movement) – every 60 sec
Transmission angle	360° badge plane. $\pm 60^\circ$ to badge perpendicular axis

EMC compliance	Refer to Appendix A and B
-----------------------	---------------------------

RF Transmission

	433.92 MHz RF
Modulation	ASK (Amplitude Shift Keying of 433.92 MHz carrier)
Average effective radiated power	In motion: less than –35 dbm. Motionless: less than –45 dbm
Stability	+/- 20ppm
Peak ERP	-15 dbm (max)
Transmission pattern	Omnidirectional

Using the Alert Tag

The following is a set of procedures to ensure proper use of the Alert Tag.

To use the Alert Tag:

1. For general use, place the strap of the Alert Tag around the person's neck.
2. In case of emergency press the large press button.

Battery Replacement

The battery is located inside the Alert Tag. In order to replace the battery, you need to open the back side of the Alert Tag with a Phillips screwdriver (preferably an electric one) with point size "0". For example, the APEX #4910. A new battery can then be inserted, after which the screw must be replaced.