

Active Identity Badge

User Guide – P/Ns: 5-PBA00433, 5-PBA00433-1, 5-PBA00433-2
5-PBA00433-3, 5-PBA00433-7 and 5-PBA00880

Elpas
Active RFID Visibility Solutions

Introduction

The Elpas Active Identity Badge is an ultra-low power, unified, long-range active Radio Frequency (RFID) and Infrared device. Designed to resemble an industry-standard photo ID badge, the device is intended primarily for protecting those staff members and lone workers most at risk from patient violence and aggression in both interior and/or exterior areas. The unique form factor of the badge makes it usable as a clip-on photo ID personnel badge. Or, when inserted into its matching card holder (sold separately) the device may be bundled with any standard credit-card size access control card; and user worn either horizontally (landscape format) or vertically (portrait format).



The badge's, dual technology transmitter continuously emits, low-power UHF (433.92MHz) long-distance beacon type omnidirectional radio frequency (RF) supervision transmissions plus optional infra-red (IR) messaging for indoor tracking to sub-room level precision.

The Active Identity Badge features two one-touch fully customizable emergency/duress signaling buttons for ensuring complete, around-the-clock staff and visitor supervision. The badge's onboard magnetic low frequency (LF) receiver (125 KHz) also adds chokepoint type area detection so whenever a badge wearer nears a protected exit/entrance covered by an Elpas LF Exciter any number of user definable alerts or alarms may be triggered. Optionally, the badge is designed for use as an electronic proximity key for doors protected by VisAccess Tag-In-A-Bag, AXS-10, AXS-100/200 systems or other third-party EM 4100 compliant or Wiegand 26-bit compatible access control solutions.

Small in size (5cm/2in x 8.3cm/3.27in x 0.9cm/0.35in) and weight (32g/1.2oz) the Active Identity Badge is housed in an epoxy potted, IP66 rated, weatherproof black thermoplastic outer casing. Powered by a single, replaceable lithium long life battery (five-year estimated usage), the badge's power efficient design ensures years of maintenance free deployments in harsh indoor and outdoor environments such as manufacturing operations, medical facilities or maximum security correctional institutions.

Supported Event Transmissions

Active Identity Badges supports LF, Battery, Motion, Motionless, Exit from LF and two discrete Button Press supervision events; designated B1 & B2:

Button Press Events

When the button is pressed, 4 IR/RF messages are transmitted (each message about 2ms in duration), 400ms apart prior to deactivation B1=1 and B2=1.

When the buttons are released, B1=0 and B2=0. An additional 4 IR/RF messages are transmitted 400ms apart prior to deactivation. In the steady state (no button press / button release) B1=0 and B2=0.

IMPORTANT: The badge does not support the ability to transmit the two button press events simultaneously.

Event Transmission Rates in LF Zones (Moving Badge)

LF Response Time: Onboard LF receiver polls every 0.6 sec to check if the badge is in a LF zone.

Transmission Rate: Bursts of 4 IR/RF supervision transmissions (each transmission about 2ms in duration), at 0.4 second intervals. If the badge stays in a LF zone, then repeated at 2 seconds intervals.

Transmitted Message Type: IR/RF Data Message includes ID code of LF Exciter. Motion bit, M=1.

Technical Specifications	
Radio Technology	RF (433.92MHz) and LF (125KHz)
RF (Motion/Stationary)	Supervision messages every 10secs/60secs
*RF: (In-motion/Stationary) Only Part #: 5-PBA00433-7	Supervision messages every 10secs/60secs (after 1 hour)
IR (Motion/Stationary)	Supervision messages every 4.5secs/60secs
RF Transmission Rate upon entry into LF area	4 IR/RF transmissions (each transmission @ 2ms in duration), 0.5 seconds apart. Then repeated at 2 seconds intervals.
RF Range	200m/656ft in open areas (360° coverage)
LF Sampling (Motion/Stationary)	Every 500ms/15 seconds
Polled RF under LF	2 secs; after 10 minutes returns to 10 secs
Polled IR under LF	10 seconds
LF Timeout	Transmits 2 non-LF messages after not hearing from LF for this amount of time
Time to Idle	10 seconds
Button Press/Release	4 IR/RF transmissions (each @ 2ms in duration), 400ms apart prior to deactivation
Power Source	3V/600mAh Lithium Battery, type: CR2450
Battery Life	5 years approximately
Low Battery Voltage	2.3 volts
Visual Indicator	Red LED specifics button press and release
Badge ID	Unique factory programmed

Proximity Specifications	
Standard/Frequency	EM 4100 compliant/ 125 kHz
Typical Working Range	Up to 30cm (11.8 inches) - Actual range depends on proximity reader type

General Specifications	
Construction	Black ABS polymer plastic
Dimensions (H x W x D)	5.0 x 8.3 x 0.9cm (2.0 x 3.27 x 0.35 inches)
Weight (assembled)	32 grams (1.128 ounces)
Temp. and Humidity	-10°-0°C (14-59°F), 100% non-condensing
Housing	IP66 water rated enclosure
Remote Management	EIRIS 4.6 or higher enterprise software
Standards	EN 60950-1, IEC 60601-1, EN60601-1 EN 300 220-1 & 2, FCC ID: 04X5-PBA00433 FCC Part 15, Sub-part B, Class B, Sub-part C
Warranty	One year limited warranty

All specifications are subject to change without notice

Ordering Information

Part #	Description
5-PBA00433	Active Identity Badge, WP, IR/RF/LF, 433MHz, 4.5/10/60
5-PBA00433-1	Active Identity Badge, WP, RF/LF, 433MHz, 10/60
5-PBA00433-2	Active Identity Badge, WP, IR/RF/LF/Prox, 433MHz, 4.5/10/60
5-PBA00433-3	Active Identity Badge, WP, RF, 433MHz, 10/60
*5-PBA00433-7	Active Identity Badge, WP, RF, 433MHz, 0.6/60
5-PBA00880	Active Identity Badge, WP, IR, 433MHz, 4.5/60
Part #	Accessories
5-PBA90001	Personnel Identity Badge - Clip Attachment (25 pcs)
5-PBA90002	Open Front Card Holder, Horizontal/Vertical, (5 pcs)
5-PBA90003	3V/600mAh Lithium Battery, CR2450 (25 pcs)
5-PBA90004	Personnel Identity Badge - Label Covers (25 pcs)



Motionless Badge

LF Response Time: Onboard LF receiver polls every 15 seconds to check if the badge is in a LF zone.

Transmission Rate: 4 IR/RF supervision transmissions (each transmission about 2ms in duration), 0.4 seconds apart: If the badge stays in a LF zone, then repeated at 15 second intervals.

Transmitted Message Type: IR/RF Data Message includes ID code of

Badge Activation Prior to Initial Usage

1. Orient the badge back-cover side up. Then press & hold down the larger of two emergency call buttons for at least 6 seconds



2. If the activation process was successful the red LED on the front of the badge will illuminate for about 6 seconds.

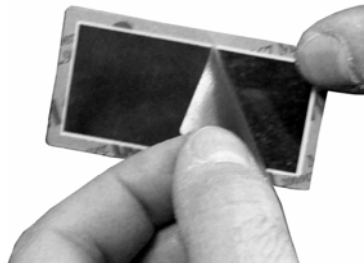


Attaching a Paper Photo ID to the Badge

1. Ensure that the photo ID paper label is trimmed properly so that it lies flatly (picture/text side up) in the recessed area on the front of the badge.



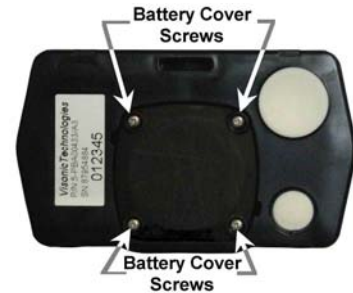
2. Peel off the clear protective layer on the front and rear of the label cover (P/T: 5-PBA90004).



3. Finally, remove the label cover's adhesive backing and carefully place it (adhesive edge down) onto the badge so that it neatly holds the paper label correctly in place.

Battery Replacement

1. Place the badge back cover side up on a clear dry level surface. Using a Phillips-type screwdriver that fits the battery cover screws, unscrew the 4 screws that holds the battery cover in place.



2. Separate the battery cover from the back of the badge by inserting a small screw driver into either of the square slots adjacent to the battery cover. Gently lever the screw driver outwards until the battery cover releases from the badge.



3. Remove the worn-out battery from the badge and dispose of it according to manufacture's instructions.
4. Insert a new battery (P/T: 5-PBA90003) into the compartment, ensuring that that the positive (+) side of the battery faces up.



5. Align the battery cover so that its flat edge fits correctly into the badge's back cover prior to seating the cover into place.



6. Once the battery cover is in place, tighten its 4 screws into place.

Standards Compliance

This device complies with Part 15 of the FCC Rules; and its operation is subject to the following two conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation.

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.

Product Warranty

Visonic Technologies Ltd. (VT or the Company), and its affiliates, warrants its products (hereinafter referred to as "the Product") to be free of defects in materials and workmanship under normal operating conditions and use for a period of one year from the date of shipment by VT. The Company's obligations shall be limited within the warranty period, at its option, to repair or to replace the defective Product or any defective component or part thereof. To exercise this warranty, the product must be returned to the manufacturer freight prepaid and insured.

This warranty does not apply to repairs or replacement caused by improper installation, Product misuse, failure to follow installation or operating instructions, alteration, abuse, accident, tampering, repair by anyone other than VT, external causes, and failure to perform required preventive maintenance. This warranty also does not apply to any products, accessories, or attachments used in conjunction with the Product, including batteries, which shall be covered solely by their own warranties, if any. VT shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, resulting from a malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Product.

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VT shall not, under any circumstances whatsoever, be liable for any inaccuracy, error of judgment, default, or negligence of VT, its employees, officers, agents, or any other party, or of the purchaser or user, arising from any assistance or communication of any kind regarding the configuration, design, installation, or creation of security system involving the Product, that being the responsibility of the purchaser or user.

If VT is unable to make such repair or replacement, VT's entire liability shall be limited to the cost of a reasonable substitute product. VT shall not be responsible for any dismantling, installation, reinstallation, purchasing, shipping, insurance, or any similar charges.

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.

Warning!

Changes or modifications to this equipment not approved by the party responsible for compliance (Visonic Technologies Ltd.) could void the user's authority to operate the equipment

VT shall have no liability for any damages, including without limitation, any direct, indirect, incidental, special, or consequential damages, expenses, costs, profits, lost savings or earnings, or other damages arising out of the use of the Product or the removal, installation, reinstallation, repair or replacement of the Product or any related events. In the event that there is any liability against VT, such liability shall be limited to the purchase price of the Product which amount shall be fixed as liquidated damages.

The purchaser and user understand that this Product may be compromised or circumvented by intentional acts; that the Product will not in all cases prevent death, personal injury, property damage, or other loss resulting from burglary, robbery, fire or other causes; and that the Product will not in all cases provide adequate warning or protection. The purchaser and user also understand that a properly installed and maintained alarm may reduce the risk of events such as burglary, robbery, and fire without warning, but it is not insurance or a guarantee that such events will not occur or that there will be no death, personal injury, property damage, or other loss as a result of such events.

By purchasing the Product, the purchaser and user shall defend, indemnify and hold VT, its officers, directors, affiliates, subsidiaries, agents, servants, employees, and authorized representatives harmless from and against any and all claims, suits, costs, damages, and judgments incurred, claimed, or sustained whether for death, personal injury, property damage, or otherwise, because of or in any way related to the configuration, design, installation, or creation of a security system involving the Product, and the use, sale, distribution, and installation of the Product, including payment of any and all attorney's fees, costs, and expenses incurred as a result of any such events.

The purchaser or user should follow the Product installation and operation instructions and test the Product and the entire system at least once each week. For various reasons, including but not limited to changes in environmental conditions, electric, electronic, or electromagnetic disruptions, and tampering, the Product may not perform as expected. The purchaser and user are advised to take all necessary precautions for the protection and safety of persons and property.

This statement provides certain legal rights. Other rights may vary by state or country. Under certain circumstances, some states or countries may not allow exclusion or limitation of incidental or consequential damages or implied warranties, so the above exclusions may not apply under those circumstances and in those states or countries.

VT reserves the right to modify this statement at any time, in its sole discretion without notice to any purchaser or user. However, this statement shall not be modified or varied except by VT in writing, and

VT does not authorize any single individual to act on its behalf to modify or vary this statement.

Any questions about this statement should be directed to VT. 3/0

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Additional information may be found at: www.visonictech.com



Manufactured Israel



W.E.E.E. Product Recycling Declaration

For information regarding the recycling of this product you must contact the company from which you originally purchased it. If you are discarding this product and not returning it for repair then you must ensure that it is returned as identified by your supplier. This product is not to be thrown away with everyday waste. Directive 2002/96/EC Waste Electrical and Electronic Equipment.