

DECT ULE-GBD

WIRELESS GLASS BREAK DETECTOR

CR-DU-GBD-EU



ELECTRONIC ENGINEERING LTD.

INSTALLATION INSTRUCTIONS

P/N 7101220 REV. A (O.Z.)

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OPERATION

This DECT ULE GBD transmits the following events data:

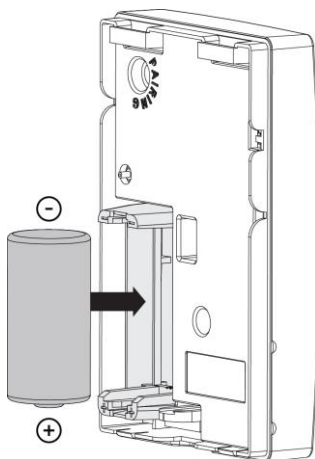
KEEP ALIVE – A periodical transmission (configurable) indicating detector's presence.

ALARM – Alarm transmission triggered by the device indicating Shock & Glass Break detection. The Red LED will blink once.

LOW BAT – Whenever the battery reaches the low level (2.5V), a Battery Low signal will be sent. When Battery level drops below Cut Off level (2.3V) the device will stop functioning and the Red LED will blink for 10 seconds and then turned Off.

TAMPER – Whenever the detector unit is removed from its base or the device is tear off from the wall, a "Tamper" signal will be transmitted to the control panel.

FIGURE 2 - BATTERY PLACEMENT



MOUNTING THE DETECTOR

1. Unscrew the holding screw and separate the device from the Bracket by tilting the front cover as shown in Figure 1.
2. Mount the Bracket to the wall:
 - a. Using screws – Place 3 screws and make sure you tighten the tamper screw - the middle screw as shown in Figure 4.
 - b. Using adhesive tape – Peel one side of the adhesive tape and adjust the sticker to the bracket. Then peel the other side of the adhesive tape and then press the bracket against the installation location surface – wall / ceiling – see Figure 5.
3. Initiate the Pairing process.
4. Place the device in the Bracket by inserting it back into appropriate position.
5. Fasten the holding screw.

INTRODUCTION

This DECT ULE GBD is an advanced, fully supervised, low-current Shock & Glass Break wireless detector including a DECT ULE transceiver for reliable system operation.

The DECT ULE GBD provides detection coverage of 360° measured from the sensor to the point on the glass farthest from the sensor.

The DECT ULE GBD transmits series of messages for full communication administration - Alert, Keep Alive, Tamper & Battery status, etc.

- DECT ULE RF protocol
- Frequency Band: All DECT Standard Bands
- Low current Technology
- Powered by a 3 Volt Lithium battery
- Battery life : up to 4 years
- Back Tamper (removal protection)
- Keep Alive & Battery status transmissions
- Configurable over-the-air
- Bi-Color LED indications for monitoring & Pairing.
- Range up to 500m on open space.

PAIRING PROCESS

1. Unscrew the holding screw and separate the detector from the Bracket by tilting the front cover from the base as shown in Figure 1.
2. Place a battery according to polarity as instructed in Figure 2 and wait until the Red LED stops blinking.
3. Initiate the Base Station pairing process.
4. Initiate the GBD pairing process by pressing the pairing button for 5 seconds – the pairing button is shown in Figure 3. The Green LED will constantly turn On. When the Green LED starts blinking release the pairing button.
5. The device should register to the Base Station.
6. When registration process is successfully completed the Green LED will constantly light On for 3 seconds and then turn Off.
7. If registration process failed the Red LED will blink (remove the battery, wait for 10 seconds and run the pairing process again).

FIGURE 3 - PAIRING

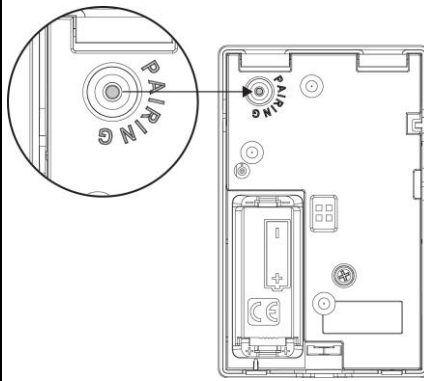
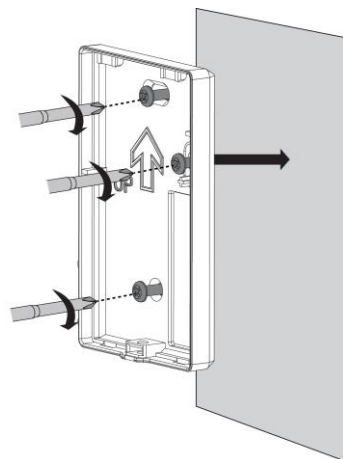


FIGURE 4 - INSTALLATION (OPTION A)



PRODUCT VIEW

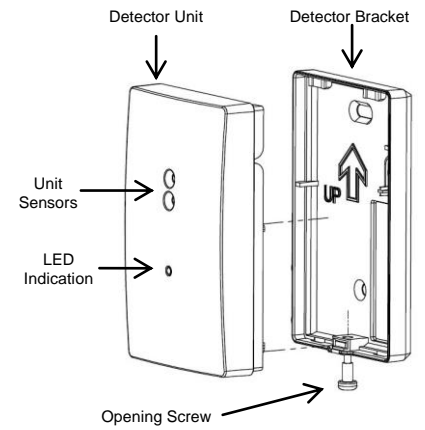
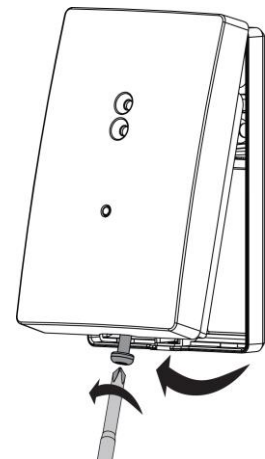


FIGURE 1 - SEPARATE FROM BRACKET



SELECT MOUNTING LOCATION

The best location for mounting the detector is on the opposite wall to the glass to be protected. Mounting the detector on adjoining (side) walls or on the ceiling is also possible. The detector must always be in direct line of sight with all protected glasses and in rang. It can't consistently detect glass breaking around corners, in other rooms, etc. For best false alarm immunity the detector should be located at least 1.2m away from noise sources (televisions, speakers, sinks, doors, etc.).

FIGURE 5 - INSTALLATION (OPTION B)

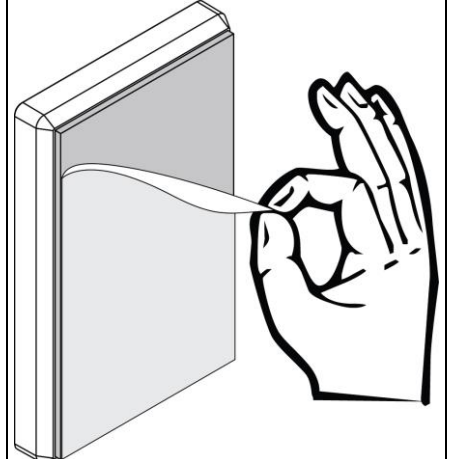
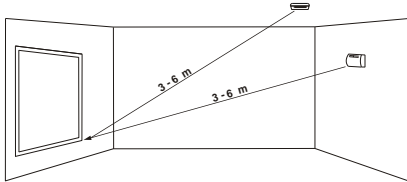


FIGURE 6 – INSTALLATION DISTANCE**Installation Distance**

Coverage is measured from the detector to the protected glass farthest corner – as shown in Figure 6 above. The detector's minimum installation distance is 1m and maximum:

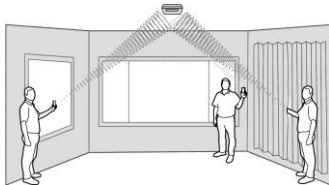
1. Mounted on opposite or adjoining wall or on ceiling, for plate, tempered, laminated and wired glass it is – 6m.
2. For armor-coated glass it is – 3.65m.

TRANSMISSION TESTS**Glass break tester**

You can use a shock & glass break tester to check the functioning of the detector and the conformity of the installation.

When the Red LED on the detector goes solid momentarily while the tester is triggered, the glass is within detection range.

If the LED does not go solid, but simply continues blinking, re-position the detector closer to the protected windows and retest. This may require adding additional detector(s) in order to achieve adequate coverage.

**REGULATORY APPROVALS**

This DECT ULE PIR detector conforms to the essential requirements set out by:

- RTTE directive: 1999/5/EC
- EMC directive: 2004/108/EC
- Low Voltage directive: 2006/95/EC
- RoHS directive: 2011/65/EU

Harmonized Standards applicable to this products are:

- EN301406
- EN301489-6
- EN301489-1
- EN 50130-4
- EN61000-6-1/3
- EN60950-1
- EN50581

**CROW ELECTRONIC ENGINEERING LTD. ("Crow") - WARRANTY POLICY CERTIFICATE**

This Warranty Certificate is given in favor of the purchaser (hereunder the "Purchaser") purchasing the products directly from Crow or from its authorized distributor.

Crow warrants these products to be free from defects in materials and workmanship under normal use and service for a period of 24 months from the last day of the week and year whose numbers are printed on the printed circuit board inside these products (hereunder the "Warranty Period"). Subject to the provisions of this Warranty Certificate, during the Warranty Period, Crow undertakes, at its sole discretion and subject to Crow's procedures, as such procedures are from time to time, to repair or replace, free of charge for materials and/or labor, products proved to be defective in materials or workmanship under normal use and service. Repaired products shall be warranted for the remainder of the original Warranty Period. All transportation costs and in-transit risk of loss or damage related, directly or indirectly, to products returned to Crow for repair or replacement shall be borne solely by the Purchaser.

Crow's warranty under this Warranty Certificate does not cover products that is defective (or shall become defective) due to: (a) alteration of the products (or any part thereof) by anyone other than Crow; (b) accident, abuse, negligence, or improper maintenance; (c) failure caused by a product which Crow did not provide; (d) failure caused by software or hardware which Crow did not provide; (e) use or storage other than in accordance with Crow's specified operating and storage instructions.

There are no warranties, expressed or implied, of merchantability or fitness of the products for a particular purpose or otherwise, which extend beyond the description on the face hereof.

This limited Warranty Certificate is the Purchaser's sole and exclusive remedy against Crow and Crow's sole and exclusive liability toward the Purchaser in connection with the products, including without limitation - for defects or malfunctions of the products. This Warranty Certificate replaces all other warranties and liabilities, whether oral, written, (non-mandatory) statutory, contractual, in tort or otherwise.

In no case shall Crow be liable to anyone for any consequential or incidental damages (inclusive of loss of profit, and whether occasioned by negligence of the Crow or any third party on its behalf) for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever. Crow does not represent that these products can not be compromised or circumvented; that these products will prevent any person injury or property loss or damage by burglary, robbery, fire or otherwise; or that these products will in all cases provide adequate warning or protection.

Purchaser understands that a properly installed and maintained product may in some cases reduce the risk of burglary, fire, robbery or other events occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss or damage as a result.

Consequently, Crow shall have no liability for any personal injury, property damage or any other loss based on claim that these products failed to give any warning.

If Crow is held liable, whether directly or indirectly, for any loss or damage with regards to these products, regardless of cause or origin, Crow's maximum liability shall not in any case exceed the purchase price of these products, which shall be the complete and exclusive remedy against Crow.

INSTALLATION TIPS

The DECT ULE GBD is designed to detect the shattering of framed glass mounted in an outside wall and it may not consistently detect cracks in glass or bullets went through the glass. Testing the detector with unframed glass, broken bottles, etc. may not trip the detector. The detector typically does not trip to glass break tests in the middle of a room as such breaks are false alarms.

False alarms are most likely to occur when installed in glass airlocks and glass vestibule areas, when mounted above sinks, when used in residential car garages and in other small, acoustically live rooms and rooms where multiple sounds can reflect and eventually duplicate the glass break frequency pattern.

Also, avoid installation in - lined, insulated or drapery rooms, in rooms with closed wooden shutters inside, in small utility rooms, stairwells, small bathrooms and on corners of a room.

TRANSMISSION TESTS (continue)**Tamper transmission test –**

Changing the tamper switch state (by attaching / removing the device to / from the Bracket) will cause tamper transmissions. Verify receiving the indication on your Application / Base Station.

Identification transmission test –

Use your Application / Base Station and send Identification Request to the device. The device will start blinking the Green & Red LEDs alternately – 5 times each LED starting with the Green LED.

THE PROTECTED GLASSES

The detector is designed to detect the breaking of framed glass mounted in an outside wall. Testing the detector with unframed glass may fail.

NOTE: The detector may not consistently detect cracks in glass, or bullets went through the glass.

Glasses Size & Thickness

Minimum	0.3m x 0.6m or larger
Glass thickness	
Plate	2.4mm to 6.4mm
Tempered	3.2mm to 6.4mm
Wired	6.4mm
Laminated	3.2mm to 6.4mm

BATTERY REPLACEMENT

1. Unscrew the holding screw and separate the device from the Bracket by tilting the front cover as shown in Figure 1.
2. Remove the in use battery from the device.
3. Install the new battery in the correct polarity marking – as shown in Figure 2.
4. Wait until the Red LED stops blinking.
5. In case the device was paired to a Base Station the device should automatically register again to the same Base Station.
6. Place the device in the Bracket by inserting it back into appropriate position.
7. Fasten the holding screw.

The battery must be replaced by 3V Lithium battery CR123A only - models such as:

1. VARTA CR123A
2. GP CR123A

WARNING!!!

CHANGES OR MODIFICATIONS TO THIS EQUIPMENT NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE (CROW ELECTRONIC ENGINEERING LTD.) COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

CAUTION !!!

RISK OF EXPLOSION IF BATTERY IS REPLACED BY DIFFERENT TYPE / MODEL. DISPOSE USED BATTERIES ACCORDING TO ITS INSTRUCTIONS

ATTENTION !!!

RISQUE D'EXPLOSION SI LA PILE EST REMPLACÉE PAR UN TYPE INCORRECT.

TECHNICAL SPECIFICATIONS

RF Protocol	DECT ULE
Modulation Type	GFSK
Frequency	1880–1900 MHz - Europe 1920–1930 MHz - USA/Canada
Event Transmission	Alarm, Tamper, Keep Alive, Battery status.
Detection Method	Omni-directional Shock & Glass Break
Range in open space	>500m
Battery	Lithium. 3V Type: CR123A Size: 2/3A
Battery life	3 years
Current Consumptions:	
Standby	11µA
Average	26µA
Maximum (TX)	250mA
Low Battery	2.5VDC
Cut Off Battery	2.3VDC
Transmit Power (Typ.):	23dBm (EURO), 20dBm (USA)
Tamper Switch	Back Tamper
Operating temperature	-10°C to +55°C
Dimensions	85mm x 54mm x 23mm
Weight	95 gr.
Weight (inc. battery)	110 gr.

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