WATER LEAKAGE DETECTOR

CR-DU-FLD EURO CR-DU-FLD USA



ELECTRONIC ENGINEERING LTD.

INSTALLATION INSTRUCTIONS **P/N 7101103 REV. A** (O.Z.) Issue Date: Nov. 30th, 2015

INTRODUCTION

This DECT ULE FLD BUG detector is an advanced, fully supervised low-current wireless detector that includes a DECT ULE transceiver for reliable system operation

A dedicated Adhesive tape is supplied with this

This DECT ULE FLD BUG uses smart message control, which verifies that all messages are successfully transmitted, so that no event will be uninformed to the system.

This DECT ULE FLD BUG detector includes series of messages for full communication administration (Keep Alive, Tamper Status, Battery Status, Alert, Configuration, etc.) as well as test transmission signals.

FEATURES

- DECT ULE RF protocol.
- Low current Technology.
- Powered by 2 AA 1.5V Alkaline batteries.
- Battery life: up to 4 years with Alkaline batteries. Frequency Band: All DECT Standard Bands.
- Water leak Detection transmission.
- Tamper Open/Close transmission. Battery status transmission.
- Keep Alive transmission.
- Bi-Color LED indications for monitoring & Pairing.
- Range up to 500m on open space.
- Alarm triggered by the sensor.
- Remotely configurable.
- Friendly Pairing and Installation processes.

OPERATION

The DECT ULE FLD BUG detector transmits the following events data:

KEEP ALIVE – A periodical transmission indicating detector's presence. The time interval is configurable - the minimum value is 3 seconds.

ALARM - Alarm transmission triggered by the Flood indicating on water leakage detection. The Red LED will blink once.

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

TAMPER - Whenever the DECT ULE FLD BUG is removed from its bracket, a message will be transmitted with "Tamper" signal.

PACKAGE CONTENTS

- Flood Sensor.
- Surface Mount,
- Installation Guide (this document).

PREPARE FOR INSTALLATION

- Pull the device from the surface mount by holding it by the Pull-Out sockets (Fig. 3) and pulling it out.
- Pull out the plastic strip pops out from the device's battery compartment and wait until the Red LED stops blinking.
- Insert the device into its surface mount. Match the device insertion guide on the sensor (Fig 2) with the insertion guide on the surface mount (Fig 3).
- Continue with the pairing process.

FIGURE 1 - DETECTOR'S FRONT (TOP) SIDE



FIGURE 2 - DETECTOR'S BACK (TOP) SIDE

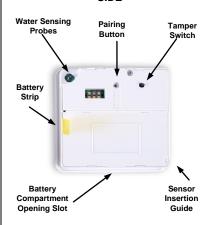


FIGURE 3 - SURFACE MOUNT FRONT SIDE

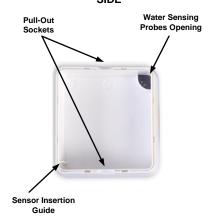
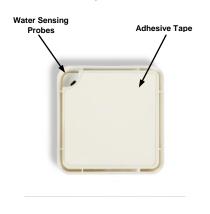


FIGURE 4 - SURFACE MOUNT BACK SIDE



PAIRING PROCESS

- 1. Pull the device from the surface mount by holding it by the Pull-Out sockets (Fig. 3) and pulling it
- 2. Initiate the Base Station pairing process.
- 3. Initiate the device pairing process by pressing the pairing button (Fig. 2) for 5 seconds. The Green LED will constantly turn On. When the Green LED starts blinking release the pairing button.
- The device should register to the Base Station.
- 5. When registration process is successfully completed the Green LED will constantly light On for 3 seconds and then turn Off.

 ** If the registration process failed the Red LED
 - will blink (remove the battery and run the pairing process again - repeat this process starting from
- 6. Insert the device into its surface mount. Match the device insertion guide on the sensor (Fig 2) with the insertion guide on the surface mount (Fig 3).

BATTERY REPLACEMENT

- Pull the device from its surface mount by holding it by the Pull-Out sockets (Fig. 3) and pulling it out.
- Open the battery compartment by pressing it outwards via the Battery Compartment Opening Slot (Fig. 2).
- Note the polarity of the batteries. Replace the batteries with new batteries.
- Close the battery compartment.
- Insert the device into its surface mount. Match the device insertion guide on the sensor (Fig 2) with the insertion guide on the surface mount (Fig 3).

SELECT MOUNTING LOCATION

As the detector is a wireless transceiver, and in order to take full advantage of its sophisticated operation, do not install the detector in areas where large metal objects could interfere with the transmission of signals.

This Water Leak sensor is designed in a way that there is no special mounting required. The sensor has to be put on the floor or surface, in close proximity to potential water leakage points and in a way that when there is a leak, water will not drop directly on the sensor.

MOUNTING THE DETECTOR

In order to avoid unintended misplacements of the device throughout the years, it is recommended to use the double sided adhesive tape that is attached to the device surface mount's back side in order to fix the device to the floor / surface.

In order to do so:

- 1. Make sure that the device's mounting location is clean and dry.
- 2. Pull the device from its surface mount by holding it by the Pull-Out sockets (Fig. 3) and pulling it out.
- 3. Peel off the upper cover of the adhesive tape placed on the back side of the surface mount.
- 4. Mount the surface mount at the selected location by firmly pressing it towards the floor / mounted surface with the adhesive tape facing the floor / mounted surface.
- Insert the device into its surface mount.
- Match the device insertion guide on the sensor (Fig 2) with the insertion guide on the surface mount (Fig 3).

TRANSMISSION TESTS

TAMPER transmission test -

Changing the tamper switch state (by pulling / inserting the device to / from its surface mount) will cause Tamper transmissions. Verify receiving the indications 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.

EMPTY

FCC & IC STATEMENT

FCC ID: NFC-CRDU 8164A- CRDU

This device complies with FCC Rules Part 15 and with Industry Canada license-exempt RSS standard(s). Operation is subject to two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may be received or that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

Canada: Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication. This device complies with Industry Canada licence-exempt RSS standard(s).

FCC & IC STATEMENT (Continue)

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

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante. 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.

FCC & IC STATEMENT (Continue)

Note: The digital circuit of this device 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
- -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

REGULATORY APPROVALS

This DECT ULE detector conforms to the essential

- requirements set out by: RTTF directive:1999/5/FC
- 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 EN61000-6-3
- EN60950-1
- UL 2017 C22.2 No.205-12







TECHNICAL SPECIFICATIONS

RF Protocol DECT ULF

Modulation Type

Signaling Type

1880-1900 MHz - Europe Frequency 1920–1930 MHz - USA/Canada

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Event Transmission Flood Alert, Tamper, Keep Alive, Battery status. Detection Method

>500m Range in open space Battery Alkaline 1.5V Type: AA >4 years (10 activation per day) Battery life expectancy

Current Consumptions: Average 2.5VDC

Low Battery Cut Off Battery 2.3VDC Transmit Power (Typ.):

Operating temperature Dimensions

Weight

Non – Emergency signaling Type (NM)

Internal sensor

Standby 19uA Maximum (TX) 250mA

23dBm (EURO), 20dBm (USA)

Tamper -10°C to +55°C 68mm x 68mm x 20mm 45 gr. (inc. batteries 92 gr.) **CAUTION !!!**

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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.

The battery must be replaced by 1.5V Alkaline battery Size AA

WARNINGIII

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.

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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 form 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 her 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 brong solely by the Purchaser.

All transportation costs and in-transit risk of loss or damage related, directly or indirectly, to products returned to Crow for repair or replacement 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 p 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 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 or the free bearing.

There are no warranties, expressed or implied, of merchantability or titness of the products for a particular purpose or currented. 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 ornalezion.

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.

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