# DECT ULE-FLD

#### **FLOOD DETECTOR**

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



ELECTRONIC ENGINEERING LTD.

## **INSTALLATION INSTRUCTIONS P/N 7105193 REV. B** (O.Z.) Issue Date: July 6<sup>th</sup>, 2015

#### INTRODUCTION

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

A dedicated cable is supplied with this device.

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

This DECT ULE FLD 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 a single 3V Lithium battery.
- Battery life: up to 4 years.
- Frequency Band: All DECT Standard Bands.
- Tamper Open/Close transmission.
- Keep Alive transmission.
- Battery status transmission.
- Bi-Color LED indications for monitoring & Pairing.
- Range up to 500m on open space.
- Back tamper.
- Alarm triggered by the sensor on the edge of the cable.
  - Remotely configurable.
- Friendly Pairing and Installation processes.

#### **OPERATION**

The DECT ULE FLD 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.

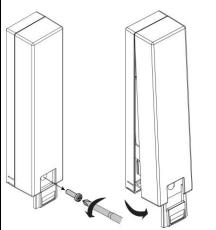
LOW BAT - Whenever the battery reaches a preset low level (~2.5V) Battery Low signal will be sent. When the Battery level drops below Cut Off level (~2.3V) the device will stop functioning and the Red LED will constantly light On.

TAMPER – Whenever the DECT ULE FLD cover is removed or tore off the wall, a message will be transmitted with "Tamper" signal.

#### PREPARE THE DEVICE FOR INSTALLATION

- Open the screw cover and unscrew the holding screw as shown in Figure 1.
- Separate the device from the Bracket by tilting the front cover as shown in Figure 1.
- Break one piece of the Bracket corners according to the device installation orientation (Horizontal/Vertical) as shown in Figure 2.
- Genteelly connect the Flood sensor cable to its place as shown in Figure 3. Be aware that the connector can be inserted in only one direction.
- In case you wish to install the device using the adhesive strips then attached them to the device and to the Flood sensor.
- 6. Continue with the pairing process.





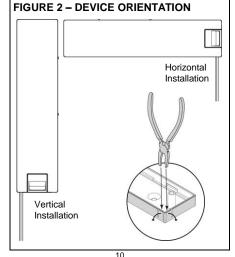
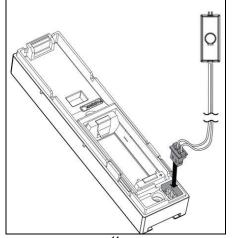


FIGURE 3 - INSERT THE CABLE



**PAIRING PROCESS** 

- Place a battery as instructed in Figure 4 and wait until the Red LED stops blinking.
- Initiate the Base Station pairing process.
- Initiate the device pairing process by pressing the pairing button for 5 seconds the pairing button is shown in Figure 5. 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.
- 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).

FIGURE 4 - BATTERY INSERTION

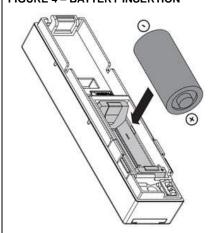
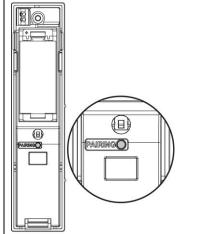


FIGURE 5 - PAIRING BUTTON



**SELECT MOUNTING LOCATION** 

It is recommended to mount the device vertically on a flat area to get maximum range. 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.

#### TRANSMISSION TESTS

#### 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 LFD

#### MOUNTING THE FLOOD SENSOR

Mounting using adhesive tape:

- Reveal first side of the smaller adhesive tape strip and attach it to the flood sensor (B).
- 2. Reveal the adhesive tape second side and attach the flood sensor to the wall.



Mounting using screws:

- Remove the screw cover (A) from the Flood sensor
- 2. Mount the Flood sensor using the screw (C).



#### In both cases:

Mount the sensor at the desired fluid detection height from the floor (D). The fluid has to reach the two exposed Golden contacts (E) in order to give an alarm.

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#### MOUNTING THE DETECTOR

Mounting using screws:

- Separate the device from its bracket by unscrewing the holding screw and tilting the front cover as shown in Figure 1.
- Mount the Bracket to the wall using the 3 screws and make sure the tamper screw (the middle screw) is tightened as seen on Figure 7.
- Perform the Pairing process as described above in this document.
- Place the device in the Bracket by inserting it back into appropriate position and validate receiving the Tamper Alert Off indication.
- Fasten holding screw and close screw cover. Mounting using adhesive tape:
- Remove the first protective paper of the adhesive tape strip and attach it to the back side of the device bracket as seen on Figure 7.
- Remove the second protective paper of the adhesive tape strip and attach the bracket to the
- Continue steps 3-5 above.

#### **BATTERY REPLACEMENT**

- Open the screw cover and unscrew the holding screw as shown in Figure 1.
- Separate the device from the Bracket by tilting the front cover as shown in Figure 1.
- 3. Remove the in used battery from the device.
- 4 Install the new battery in the correct polarity marking - as seen in Figure 4.
- Wait until the Red LED stops blinking. 5
- In case the device was paired to a Base 6. Station the device should automatically register again to the same Base Station and the Green LED shall constantly light On for 3 seconds.
- Place the device in the Bracket by inserting it back into appropriate position and validate receiving the Tamper Alert Off indication on your Application / Base Station.
- 8 Fasten the holding screw and close the screw cover.

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**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.

Canada: 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.

#### 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

#### **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
- EN50581 UL 2017
- C22.2 No.205-12



authorized distributor.





# TECHNICAL SPECIFICATIONS

RF Protocol DECT ULF Modulation Type

Signaling Type Non - Emergency signaling

Type (NM) 1880-1900 MHz - Europe Frequency

1920–1930 MHz - USA/Canada Event Transmission Flood Alert, Tamper, Keep Alive,

Battery status. Detection Method

External sensor >500m Range in open space

Lithium. 3V Type: CR123A

Size: 2/3A Battery life expectancy >4 years (10 activation per day)

Standby Current Consumptions: 4μΑ Average

Maximum (TX) 250mA

2.5VDC Low Battery

Cut Off Battery 2.3VDC

Transmit Power (Typ.): 23dBm (EURO), 20dBm (USA) Tamper Switch Back Tamper

-10°C to +55°C Operating temperature Dimensions 104mm x 24mm x 22mm

Weight 50 gr. (inc. battery 65 gr.)

Maximum Cable Length

#### 23 **CROW ELECTRONIC** ENGINEERING LTD.

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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

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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 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

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.

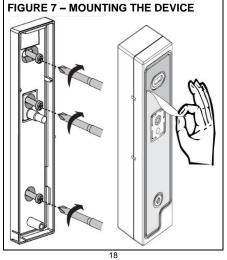
If Crow is held liable, whether directly or indirectly, for any loss or damage with regards to these products, regardless of cause or origin, Crow's maximum liability shall not in any case exceed the purchase price of these products, which shall be the complete and exclusive remedy against Crow.

# CROW LATIN AMERICA USA INC.

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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

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### **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.

> The battery must be replaced by 3V Lithium battery Size 2/3A Models such as:

> > 1. VARTA CR123A 2. GP CR123A