1

DECT ULE-TMP

TEMPERATURE DETECTOR

CR-DU-TMP-IL
CR-DU-TMP-EU

ELECTRONIC ENGINEERING LTD.

INSTALLATION INSTRUCTIONS P/N 7105195 REV. B (D.Z.)

2

INTRODUCTION

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

3

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.
- Temperature reporting transmissions.
- Keep Alive transmission.
- Battery status transmission.
- Bi-Color LED indications for monitoring & Pairing.
- Range up to 500m on open space.
- Back tamper.
- 2 sensors – Internal & External (optional).
- Remotely configurable.
- Friendly Pairing and Installation processes.

4

OPERATION

The DECT ULE TMP detector transmits the following events data:

KEEP ALIVE – A periodical transmission indicating detector's presence. The time interval is configurable – the minimum value is 1 minute.

ALARM – Alarm transmission triggered by the device indicating intrusion detection.

LOW BAT – Whenever the battery reaches a pre-set low level (~2.5V) 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 constantly light On.

TAMPER – Whenever the cover is removed from Bracket or the device is tear off from the wall, a message will be transmitted with "Tamper ON" signal. When cover will be returned a "Tamper OFF" signal will be transmitted.

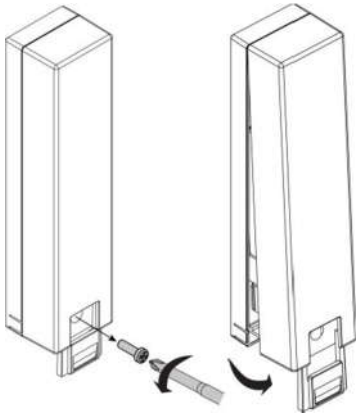
5

PREPARE THE DEVICE FOR INSTALLATION

1. Open the screw cover and unscrew the holding screw as shown in Figure 1.
2. Separate the device from the Bracket by tilting the front cover as shown in Figure 1.
3. Break one piece of the Bracket corners, as shown in Figure 2, according to the device installation orientation (Horizontal/Vertical) as shown in Figure 3.
4. Genteelly connect the External Temperature sensor cable to its location as shown in Figure 4. Be aware that the connector can be inserted in only one direction.
5. Continue with the pairing process.

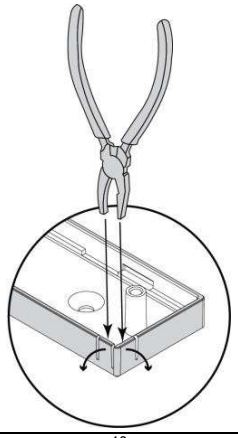
6

FIGURE 1 – SEPARATE FROM BRACKET



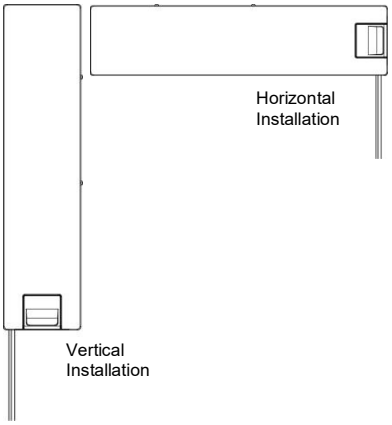
7

FIGURE 2 – BREAK THE BARACKET



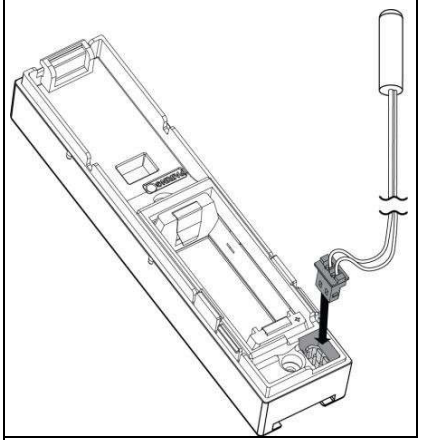
8

FIGURE 3 – DEVICE ORIENTATION



9

FIGURE 4 – INSTALL THE CABLE



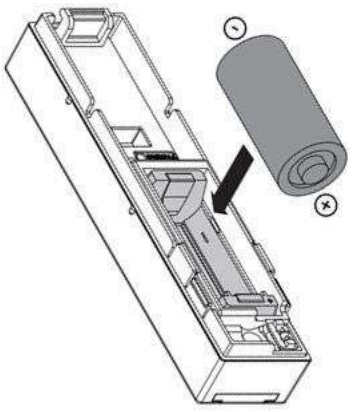
10

PAIRING PROCESS

1. Place a battery as instructed in Figure 5 and wait until the Red LED stops blinking.
2. Initiate the Base Station pairing process.
3. Initiate the device pairing process by pressing the pairing button for 5 seconds – the pairing button is shown in Figure 6. The Green LED will constantly turn On. When the Green LED starts blinking release the pairing button.
4. 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.
6. If registration process failed the Red LED will blink (remove the battery and run the pairing process again).

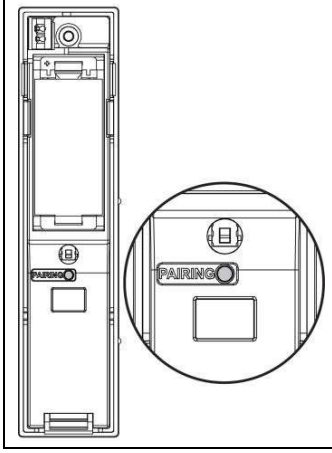
11

FIGURE 5 – BATTERY INSERTION



12

FIGURE 6 – PAIRING BUTTON



13

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 LED.

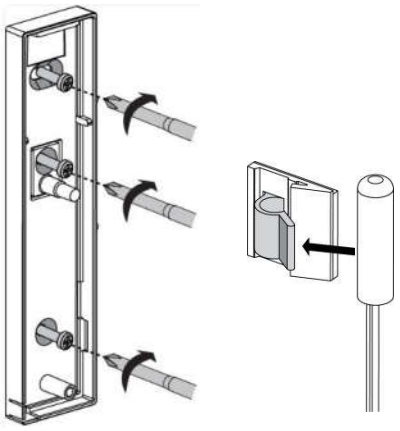
14

MOUNTING THE DETECTOR

1. Open the screw cover and unscrew the holding screw as shown in Figure 1.
2. Separate the device from the Bracket by tilting the front cover as shown in Figure 1.
3. Mount the Bracket to the wall: place 3 screws and make sure you tighten the tamper screw - the middle screw – as seen on Figure 7.
4. Perform the Pairing process as described above in this document.
5. Place the device in the Bracket by inserting it back into its appropriate position and validate receiving the Tamper Alert Off indication on your Application / Base Station.
6. Fasten the holding screw and close the screw cover.
7. Mount the External sensor snap in its location by removing the paper from the adhesive tape and glue the snap to its location.
8. Insert the External sensor into the snap as seen in Figure 7 (on the right).

15

FIGURE 7 – MOUNTING THE DEVICE



16

BATTERY REPLACEMENT

1. Open the screw cover and unscrew the holding screw as shown in Figure 1.
2. 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 5.
5. Wait until the Red LED stops blinking.
6. In case the device was paired to a Base Station the device should automatically register again to the same Base Station and the Green LED shall constantly light On for 3 seconds.
7. Create Tamper transmission, and validate receiving it on your Application / Base Station.
8. Place the device in the Bracket by inserting it back into appropriate position.
9. Fasten the holding screw and close the screw cover.

17

18

19

REGULATORY APPROVALS

This DECT ULE 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
- EN61000-6-3
- EN60950-1
- EN50581

20

TECHNICAL SPECIFICATIONS

RF Protocol	DECT ULE
Modulation Type	GFSK
Frequency	1880–1900 MHz
Bandwidth:	1400 KHz
Max Frequency offset:	±50 KHz
Max output power	(E.I.R.P)r: 20dBm/100mW
Max Input Power:	15dBm/31mW
Current	Max Tx 480mA - Max Rx 135mA
Event Transmission	Temperature, Tamper, Keep Alive, Battery status.
Detection Method	Internal & External sensors.
Range in open space	>500m
Battery	Lithium. 3V Type: CR123A Size: 2/3A
Battery life expectancy	>4 years (10 activation per day)
Current Consumptions:	Standby 4μA Average 19μA Maximum (TX) 250mA
Low Battery	2.5VDC
Cut Off Battery	2.3VDC
Transmit Power (Typ.):	23dBm
Tamper Switch	Back Tamper
Operating temperature	-10°C to +55°C
Dimensions	105mm x 25mm x 22mm
Weight	50 gr. (inc. battery): 65gr.
Maximum Cable Length	1m

21

CAUTION !!!

RISK OF EXPLOSION IF BATTERY IS REPLACED BY DIFFERENT TYPE / MODEL.

DISPOSE USED BATTERIES ACCORDING TO ITS INSTRUCTIONS

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

1. VARTA CR123A
2. GP CR123A

22

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 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.

23

CROW ELECTRONIC ENGINEERING LTD.

12 Kineret St.
Airport City, 70100 Israel
Tel. +972 3 9726000
Fax. +972 3 9726001
sales@crow.co.il
support@crow.co.il
www.thecrowgroup.com

CROW LATIN AMERICA USA INC.

7200 NW 19 st.
Suite 307
Miami Fl 33126, USA
Tel. +305 513 4001
Fax. +305 513 4005
rejane@crowlatinamerica.com
www.crowlatinamerica.com