



## QUICK INSTALLATION GUIDE

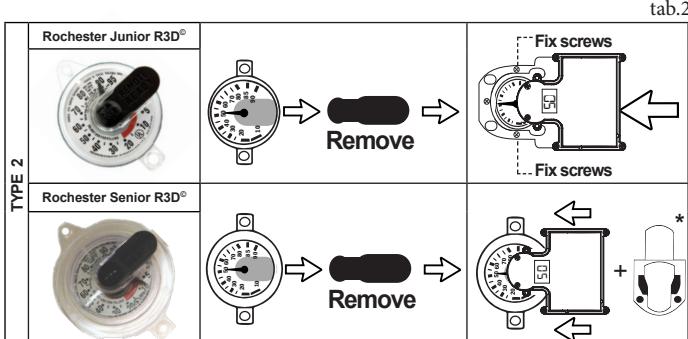
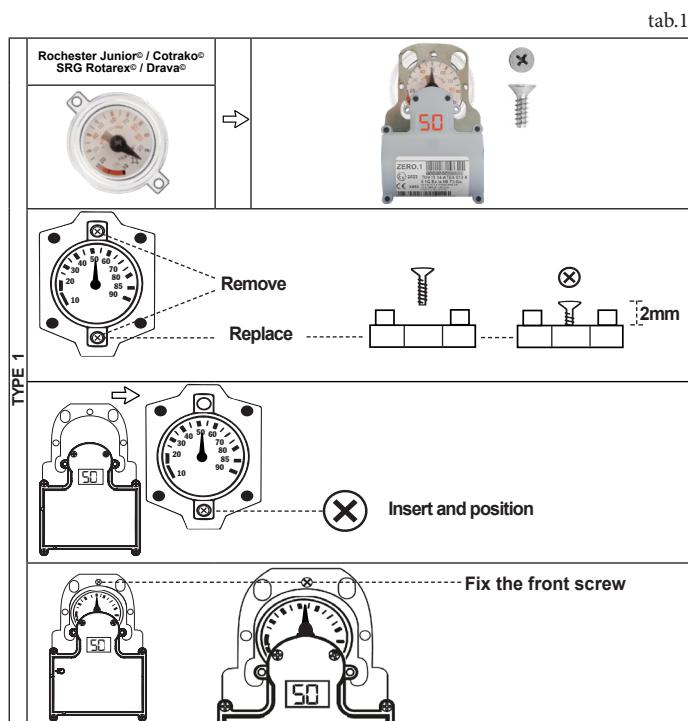
### 1. CONTENTS OF THE BASE KIT

- Device for remote reading Zero.1
- Quick installation guide
- External antenna (depending on the ordered model)

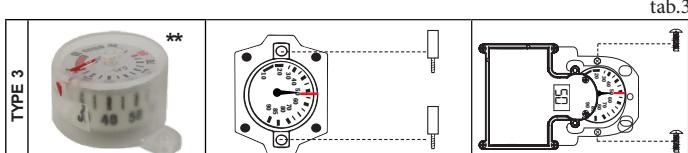


### 2. INSTALLATION AND PLACEMENT

The device can be installed on both horizontal and vertical tanks (please check for any accessories based on the type of level dial as shown in table 1)



\*SC-020/02 Remote Ready Adapter



\*\*SC-020/02.05 Cotrako® DIAL kit for ZERO.1 Horizontal tank, double reading

\*\*SC-020/02.05 Cotrako® DIAL kit for ZERO.1 Vertical tank, double reading

### ZERO.1

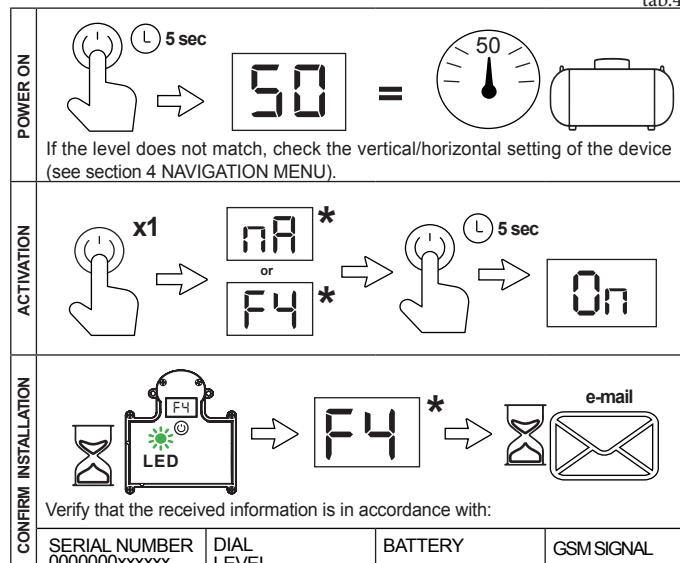


### 3. POWER-ON AND ACTIVATION PROCEDURE

Zero.1 is delivered in a NON-ACTIVE state and does not send any data until the first activation

Place the device on the tank and proceed as follows.

tab.4

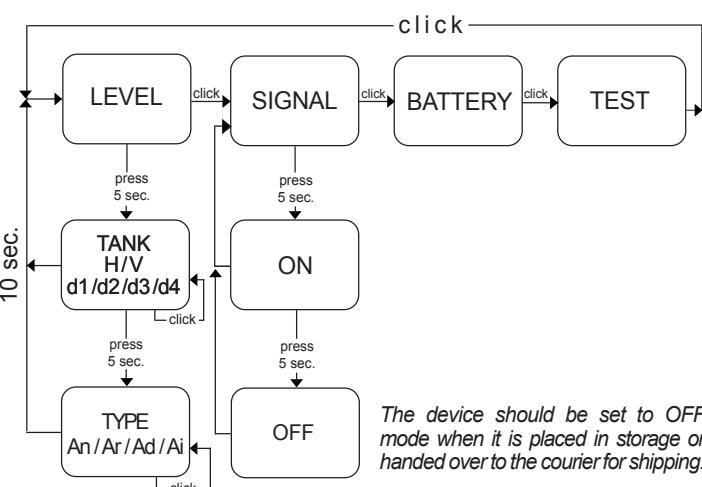


\*Check the value reported in table 5

Note: In case you do not receive the email with the installation report, repeat the activation procedure.  
The activation procedure can be repeated multiple times.

The display allows you to view the measured level, GSM signal strength, and battery charge.

The button allows you to scroll through the various pages, set the tank type (vertical or horizontal), and activate the device, see legend.



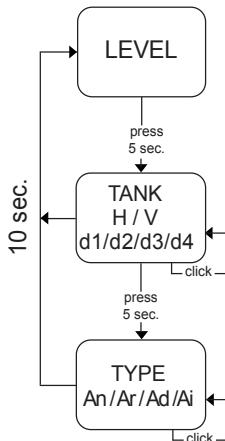
Note: To calculate the tank level, ZERO.1 measures the angle of the magnetic field provided by the indicator.

SIGNAL = Er means that the device is not correctly installed in contact with the level indicator or that the quality of the magnetic field is MDQ < 100.

It is advisable to replace the tank level indicator as there is no certainty about the quality of the magnet in an old level indicator. The manufacturer is not responsible for the quality and/or measurement error if the technical conditions do not comply with the requirements.

## 4. NAVIGATION MENU

### LEVEL:



H = Horizontal  
 V = Vertical  
 d1 = Drava® P-125  
 d2 = Drava® P-190  
 d1 = Drava® P-500 Horizontal  
 d2 = Drava® P-500 Vertical

An = Type1  
 Ar = Type2  
 Ad = Type3  
 Al = Reverse Type1

### SIGNAL:

The 'SIGNAL' screen indicates the GSM signal strength according to the following table:

tab.5

| DISPLAY INDICATION | GSM SIGNAL     | NOTE                            |      |
|--------------------|----------------|---------------------------------|------|
| nR                 | Not active     | Not active                      | 🚫    |
| F0                 | Not registered | No GSM signal*                  | 🚫    |
| F1                 | GSM<8          | Very weak GSM signal*           | ⚠️   |
| F2                 | 8<=GSM<=10     | Sufficient GSM signal           | ⚠️⚠️ |
| F3                 | 11<=GSM<=13    | More than sufficient GSM signal | 😊⚠️  |
| F4                 | 14<=GSM<=16    | Good GSM signal                 | 😊    |
| F5                 | 17<=GSM<=31    | Excellent GSM signal            | 😊😊   |

\*if the GSM signal corresponds to F0 - F1 - F2, it is recommended to install Zero.1 with an external antenna (if the signal is absent, weak, or just sufficient).

note: If the signal is still not sufficient to ensure proper transmission, it is recommended to use an external antenna with higher gain (see optional order codes).

**Attention:** on underground tanks with an iron cover, the GSM signal strength may decrease when the cover is closed. If the display indicates F0, F1, F2, F3 when the cover is open, it is recommended to install Zero.1 with an external antenna.

### BATTERY:

The 'BATTERY' screen indicates the battery status according to the following table:

tab.5

| DISPLAY | BATTERY STATUS            |          |
|---------|---------------------------|----------|
| b0      | Battery fully discharged  | ████████ |
| b1      | Low battery               | ███████  |
| b2      | Partially charged battery | ██████   |
| b3      | Fully charged battery     | ███████  |
| b4      | Fully charged battery     | ███████  |
| b5      | Battery new               | ███████  |

**Attention:** Ambient temperature and the number of power-on attempts can affect the temporary state of the battery. For accurate verification, it is necessary to check the battery status during the first power-on and at an ambient temperature of approximately 20°C.

From the 'BATTERY' screen, a short press will switch to the 'TEST' screen.

### TEST:

The 'TEST' screen is used to verify the correct functioning of the display. From the 'TEST' screen, a short press will switch to the 'LEVEL' screen.

## 5. INSTALLATION RECOMMENDATIONS AND SAFETY PRECAUTIONS

The manufacturer assumes no responsibility for incorrect or improper use of the device and/or failure to comply with the safety instructions provided.

**For no reason should you attempt to drill holes or remove non-indicated parts from the tank.**

The device must be installed in conditions where it cannot be covered by snow or water.

Zero.1 is suitable for operation in a hazardous area (Zone 0) according to the marking:

**II 1 G Ex ia IIB T3 Ga**  
 Uo=4.1V Io=4.1mA Po=17mW Co=999uF Lo=1mH  
 Ui=4.1V Ii=4.1mA Pi=17mW Ci=1uF Li=1uH

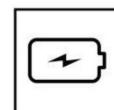
Operating ambient temperature range:  $-40^{\circ}\text{C} \leq \text{Ta} \leq +70^{\circ}\text{C}$ .

With reference to the above-mentioned ATEX marking:

- Belongs to Group II (electrical equipment of Group II is intended for use in locations with explosive atmospheres due to the presence of gases other than mines with possible presence of firedamp)
- Category 1 (suitable for ATEX Zone 0)
- EPL Equipment Protection Level is Ga (dual failure)
- Gas Group IIB
- The temperature range is T3 (200°C).
- Atex parameter for digital/analog inputs  
 Uo Io Po Co Lo Ui li Li Ci Li



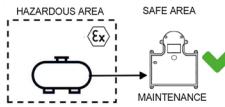
Do not rub or scratch the plastic casing of the device to prevent the buildup of electrostatic charges (see label on the casing of Zero.1)



Use only approved batteries provided by the manufacturer.  
 Install and/or replace the battery in a safe area after removing Zero.1 from its mounting and taking it to a safe area at least 2 meters away from the Hazardous Area.



Adhere to ESD precautions.  
 Do not place the device without its enclosure on conductive surfaces; it could be irreparably damaged even if the battery is not connected.



Interventions in Hazardous Areas must be carried out by qualified and authorized personnel. The manufacturer reserves the right to verify that the personnel assigned to this function are adequately trained through specific audits that may be planned in accordance with the management.

In case of shipment be sure to comply with the provisions for products classified Dangerous Goods in compliance with the latest edition of IATA air and road ADR regulations, with reference to hazard class 9 - UN3091 P.I. 970. P.S.: The above regulations refer to batteries contained in the device.

Disposal and recycling of the device, packaging, and manual:

|  |                   |  |               |
|--|-------------------|--|---------------|
|  | Electronic device | Dispose of as electronic waste at a facility authorized for RAEE treatment |               |
|  | Packaging         |  | Manual /Guide |

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