

The ARD-100 wireless reorientation detector is designed for operation as part of the ABAX two-way wireless system. The detector is supported by the ACU-100 controller with firmware version 2.01 or later and by the INTEGRA 128-WRL control panel with firmware version 1.07 or later.

Employed in the detector is an accelerometer, which analyzes acceleration and gravitation. The detector remembers position at the moment of being switched into active state or entering the test mode. Changing the position against the remembered one is interpreted as violation.

Explanations for Fig.1:

- 1 - screen.
- 2 - indicator LED. It only lights red in the test mode, when signaling communication with the controller (during polling), violation and tamper.
- 3 - tamper contact which reacts to opening and/or tearing off the housing from its mounting surface.
- 5 - CR123A 3 V lithium battery, ensuring operation for approx. 3-year period. The detector monitors the battery status. When the voltage drops to 2.6 V, a low battery message is sent to the controller. Indication of the low battery status will continue until the battery is replaced.

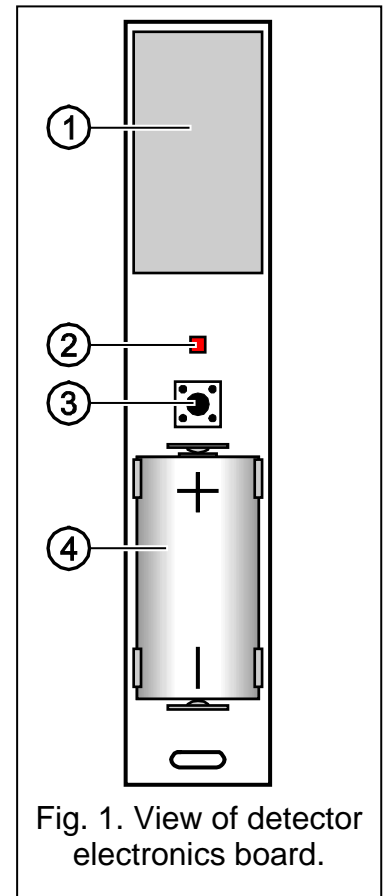


Fig. 1. View of detector electronics board.

## 1. Installation

The detector is designed for indoor installation.



**Before you mount the detector permanently, check the level of signal received from the detector by the ACU-100 controller and, if necessary, change the place of installation so that the location is optimal in terms of communication.**

**Install the battery inside the detector just before registering it in the controller. If unregistered or having no communication with the controller, the detector will consume more energy, which will reduce the battery life.**

1. Open the housing.
2. Install the battery and add the detector to the wireless system (see the ACU-100 controller user manual). A label with 7-digit serial number that should be entered during registration of the detector in the system is provided on the screen on the electronics board.
3. Select the place where the detector is to be installed and attach it there temporarily.
4. Check the level of signal reaching the controller from the detector. If necessary, select another place for installation.
5. Fix the rear panel of housing to the mounting surface.
6. Close the detector housing.
7. Set the detector sensitivity and configure the remaining working parameters of the detector as required. For detailed information regarding configuration, please refer to the

ACU-100 controller user manual and the INTEGRA and VERSA control panel programming manuals.

8. Start the test mode and make sure that the detector responds to reorientation.
9. Exit the test mode. The detector is now ready for work.

## 2. Specifications


Operating frequency band..... 868.0 MHz ÷ 868.6 MHz  
 Radio communication range (in open area) ..... up to 500 m  
 Power supply ..... lithium battery, CR123A 3 V  
 Battery lifetime ..... approx. 3 years  
 Environmental class according to EN50130-5 ..... II  
 Operating temperature range..... -10 °C ...+55 °C  
 Housing dimensions..... 24 x 110 x 27 mm  
 Weight..... 48 g



**Always use the CR123A 3V lithium batteries.**

**Be particularly careful when replacing the battery. If inappropriately done, replacement of the battery may lead to a risk of explosion. The Manufacturer bears no responsibility for any consequences of incorrect replacement of the battery.**

**The used batteries must not be discarded, but should be disposed of in accordance with the existing rules for environment protection.**

DECLARATION OF CONFORMITY		CE1471
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<b>Product description:</b> Accelerometer based reorientation detector intended for use with ABAX wireless alarm system components in intruder alarm systems.		
<b>The product is in conformity with the following EU Directives:</b> R&TTE 1999/5/EC		
<b>The product meets the requirements of harmonized standards:</b> ETSI EN 300 220-1: v.2.1.1; ETSI EN 300 220-2: v.2.1.2 ETSI EN 301 489-1: v.1.6.1.; EN 301 489-3: v.1.4.1 EN60950-1:2006		
<b>Notified entity participating in the conformity assessment:</b> Identification No.: 1471		
Gdańsk, Poland 2009-05-09	<b>Head of Test Laboratory:</b> Michał Konarski 	
The latest EC declaration of conformity and product approval certificates are available for downloading on website <b>www.satel.pl</b>		