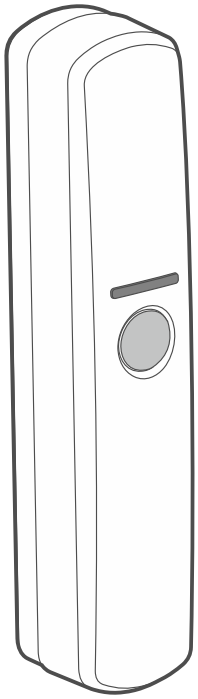
CD-2

Curtain detector



EN

Firmware version 1.00

cd-2_en 10/21

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IMPORTANT

The device should be installed by qualified personnel.

Prior to installation, please read carefully this manual.

Changes, modifications or repairs not authorized by the manufacturer shall void your rights under the warranty.

The rating plate of the device is located on the enclosure base.

SATEL aims to continually improve the quality of its products, which may result in changes in their technical specifications and software. Current information about the changes being introduced is available on our website.
Please visit us at:
https://support.satel.eu

The declaration of conformity may be consulted at www.satel.eu/ce

The following symbols may be used in this manual:

 - note,

 - caution.

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The CD-2 detector detects motion in the protected area. Its coverage area is shaped like a curtain which makes it suitable as a component of parameter protection. This manual applies to the detector with electronics version 1.0.

1 Features

- Motion detection with passive infrared sensor (PIR).
- Adjustable detection sensitivity.
- Digital motion detection algorithm.
- Digital temperature compensation.
- Custom-designed lens for SATEL's short-range curtain detectors.
- LED indicator.
- Supervision of motion detection system and supply voltage.
- Tamper protection against enclosure opening and removal from mounting surface.

2 Specifications

Supply voltage ..... 12 VDC ±15%
Standby current consumption ..... 5 mA
Maximum current consumption ..... 7 mA
Outputs
NC alarm (NC relay, resistive load) ..... 40 mA / 24 VDC
tamper (NC) ..... 40 mA / 24 VDC
Relay contact resistance (NC alarm output) ..... 26 Ω
Detectable speed ..... 0.3...1 m/s
Alarm signaling period ..... 2 s
Warm-up period ..... 30 s
Coverage area ..... 5 m x 1 m, 15°
Standards complied with ..... EN 50130-4, EN 50130-5
Environmental class according to EN 50130-5 II
Operating temperature range ..... -10°C...+55°C
Maximum humidity ..... 93±3%
Dimensions ..... 20 x 102 x 25 mm
Weight ..... 27 g

3 Description

When the detector detects motion, the alarm output will turn on for 2 seconds.

Supervision features

In the event of the voltage drop below 9 V (± 5%) for more than 2 seconds or the motion detection system failure, the detector will signal a trouble. The trouble is indicated by the alarm output turning on and the LED lighting up red. Signaling will continue as long as the trouble exists.

LED

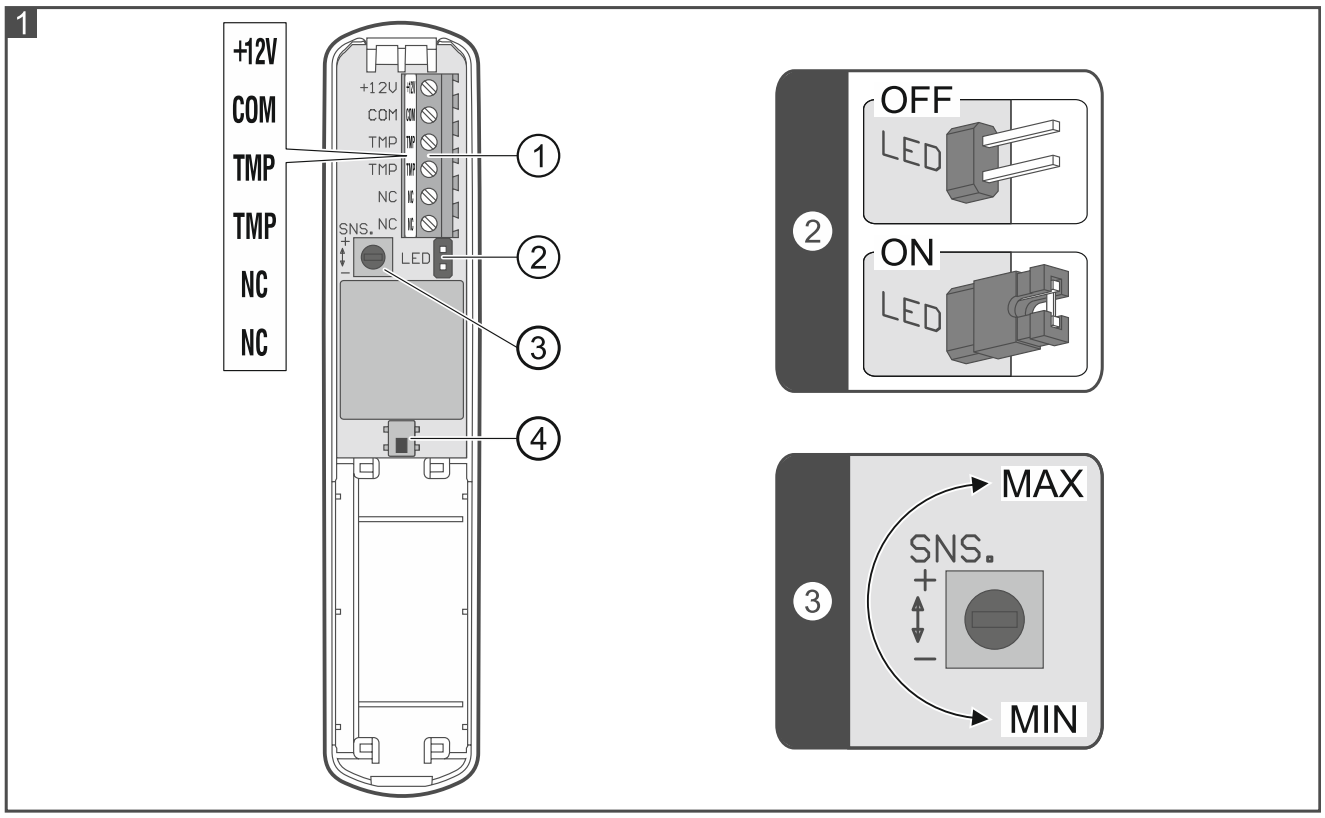
The red LED indicates:

- warm-up – flashing for about 30 seconds;
- alarm – ON for 2 seconds;
- trouble – ON for entire duration of the trouble.

You can enable / disable the alarm indication by using the LED pins (Fig. 1). Put a jumper across the pins to enable the alarm indication.

4 Electronics board

Do not remove the electronics board from the enclosure to avoid damage to the components on the board.



(1) terminals:

+12V - power input.
COM - common ground.
TMP - tamper output (NC).
NC - alarm output (NC relay).

(2) pins to enable / disable the LED indicator.

(3) potentiometer for adjustment of PIR sensor sensitivity.

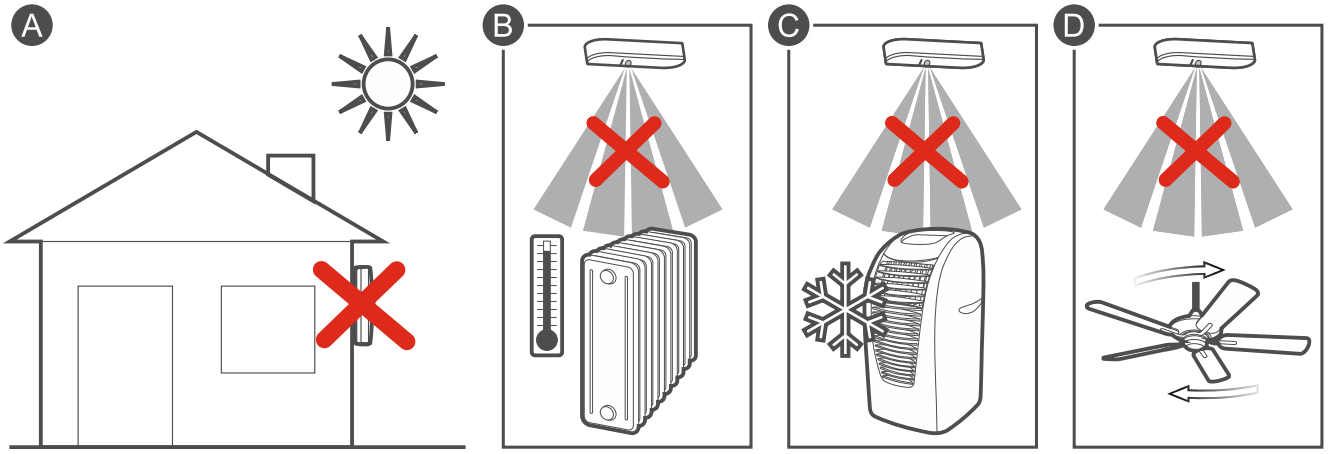
The potentiometer has a limited lifetime. Do not turn it unless you have a justified reason.

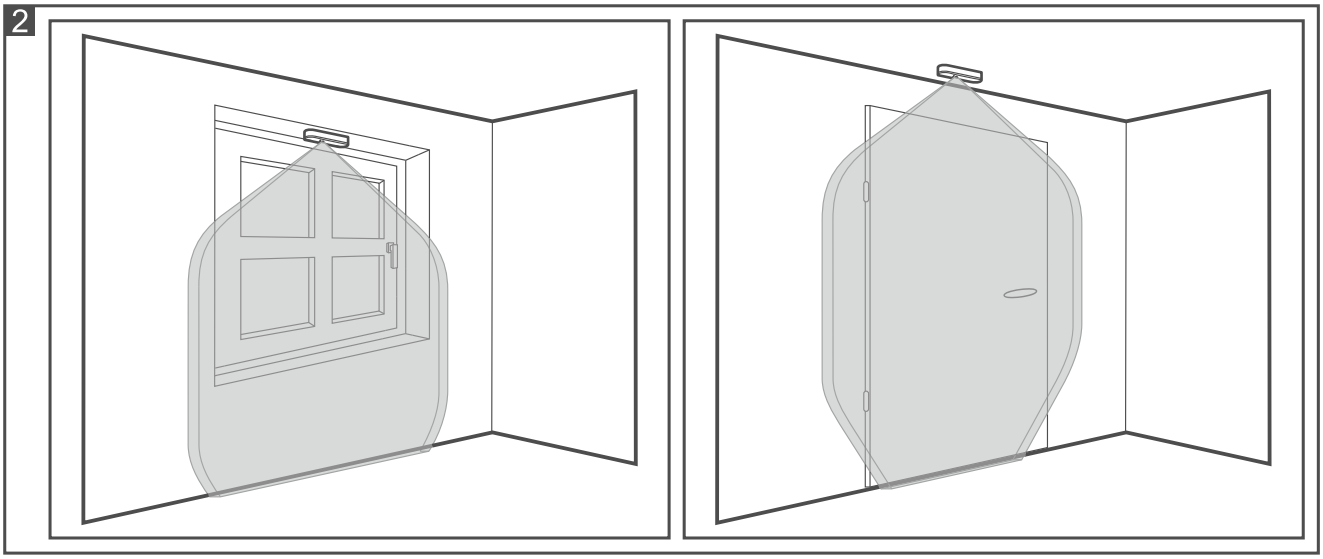
(4) tamper switch activated by cover removal and removal from mounting surface.

The PIR sensor (dual element pyrosensor) and the LED are placed on the other side of the electronics board.

5 Selecting a mounting location

- Do not install the detector outdoors (A).
- Do not point the detector towards heat sources (B), air conditioners (C) or fans (D).
- Install the detector in a place where the expected direction of the intruder movement will be across the coverage pattern (Fig. 2).



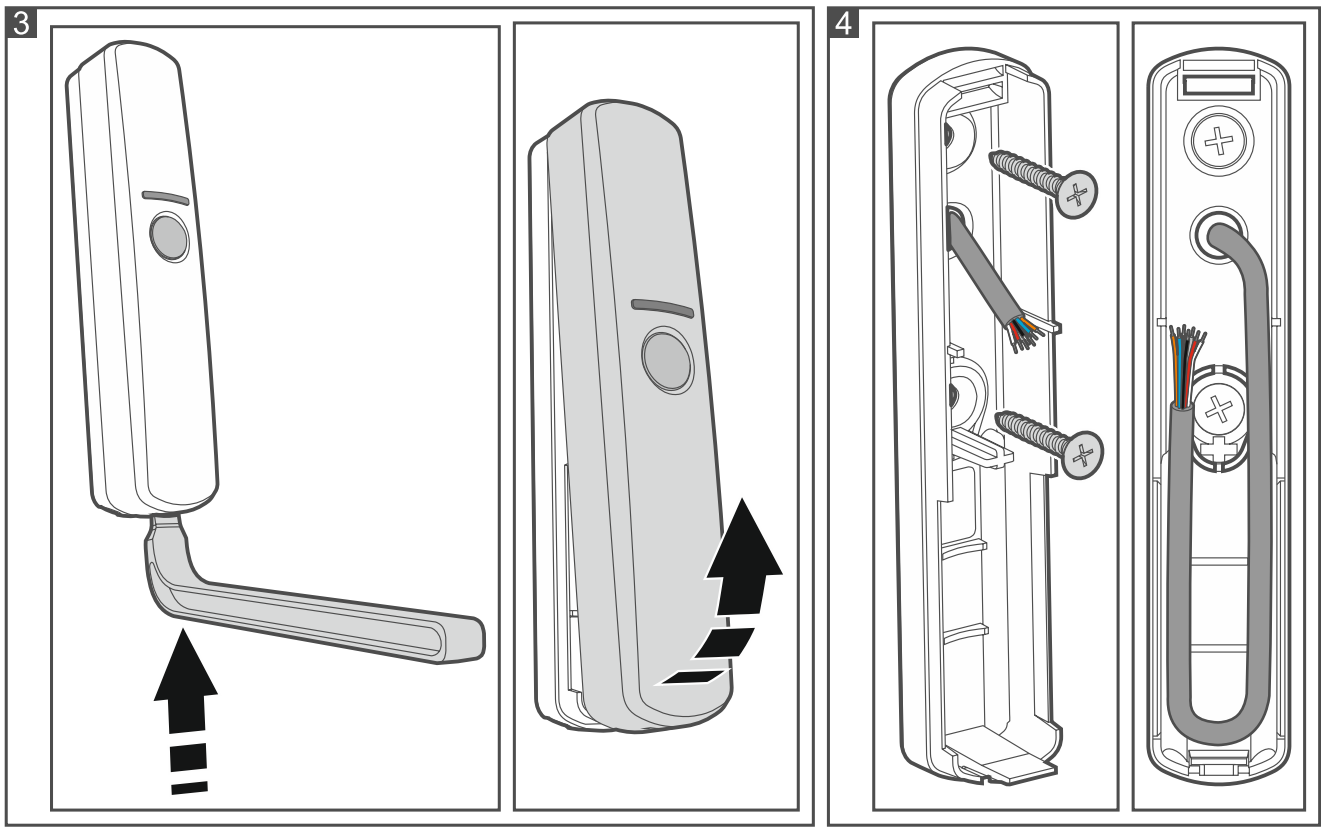


6 Installation

Disconnect power before making any electrical connections.

The detector is designed for indoor installation. You will need the following tools to mount the detector:

- blade screwdriver 1.8 mm,
- Phillips screwdriver,
- precision pliers,
- drill with a set of drill bits.



1. Remove the detector cover (Fig. 3). The enclosure opening tool, shown in the illustration, is included in the detector delivery set.
2. Make a screw hole in the enclosure base.
3. Pass the cable through the prepared hole (Fig. 4).
4. Use wall plugs (anchors) and screws to mount the enclosure base to the surface (Fig. 4). The wall plugs delivered with the device are intended for concrete, brick, etc. For other types of surface (drywall, styrofoam), use the appropriately selected wall plugs.
5. Place the cable in the enclosure base as shown in Fig. 4.
6. Connect the wires to the appropriate terminals.
7. Replace the detector cover.

7 Start-up and walk test

The LED indicator should be enabled during the walk test (Fig. 1).

1. Power on the detector. The LED will flash for 30 seconds to indicate warm-up of the detector.
2. When the LED stops flashing, check if moving within the detector coverage area will make the LED light up. Fig. 5 shows the maximum coverage area of the detector.
3. If necessary, change the sensitivity (Fig. 1) and check again.

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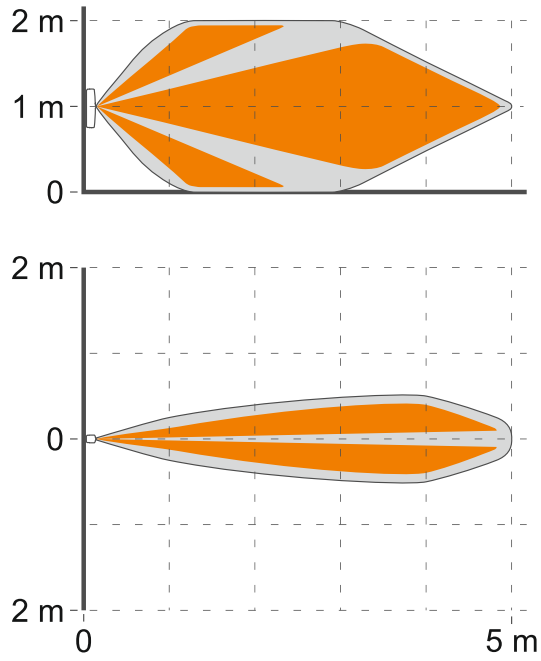

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