Satel

IVORY

## PASSIVE INFRARED DETECTOR WITH MIRROR OPTICS

CE

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The IVORY motion detector is a dedicated device for burglary and panic alarm systems. Its optical system is based on a high-quality segmented mirror, which ensures the same sensitivity within the entire monitored area and eliminates the so-called dead zone. The use of a precision optical path and an advanced signal processor has made it possible to obtain a very high sensitivity as well as immunity to false alarms. An advanced digital temperature compensation feature enables operation within a wide range of temperatures. Other advantages of the detector include alarm memory and remote on/off switching of the LED indicator.
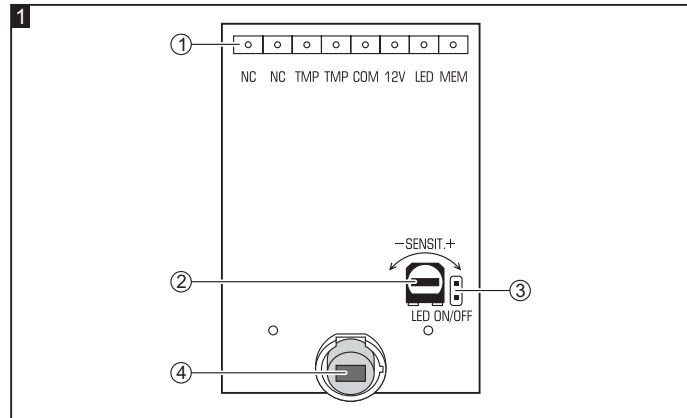
Explanations for Figure 1:

1 - fixing pins for terminal block. Description of terminals:

NC - relay (NC).

TMP - tamper switch.

COM - common ground.

12V - power input.

LED - the input enables the LED indicator to be remotely switched ON/OFF, if the jumper is removed from the LED ON/OFF pins. The LED will signal violations, when the LED input is short-circuited to the common ground. For control of the input, you can use the OC type output of the control panel, programmed e.g. as SERVICE MODE INDICATOR or BI SWITCH.

MEM - the alarm memory control input. It is required that the OC type output of the alarm control panel, programmed as ARMED STATUS INDICATOR be connected to the input. When the input is shorted to the ground and the detector registers a motion, thus triggering the alarm, the LED blinking will signal the alarm memory. The alarm memory signaling will continue until the input is shorted to the ground again. Cut-off of the input from the ground (disarming) will not erase of the alarm memory.

2 - potentiometer for detector sensitivity adjustment.

3 - LED ON/OFF pins. Setting the jumper will activate signaling by means of the LED, irrespective of the LED input status.

4 - pyroelement.

For 30 seconds after power-up, the detector remains in the **starting state**, which is signaled by alternate blinking of the indicator LED. Only after this time has elapsed, the detector will be ready to work.

Once motion has been sensed by the detector, the relay contacts will open for approx. 2 seconds. This will be accompanied by lighting of the LED, which makes it easier for the installer to check the detector for correct functioning and to roughly determine the protected area. Blinking of the LED will signal alarm memory.

The detector is monitoring power supply voltage and availability of the signal path. In case of a voltage drop below 9V (±5%), lasting longer than 2 seconds, or if a fault is found in the signal path, the detector will signal a trouble by activating the alarm relay and steady lighting of the LED. The signaling will continue as long as the trouble exists.

Installation

⚠ The mirror requires no cleaning. The sealed structure of the optical chamber ensures its dust-proofness. Disassembling the electronics board and the mirror is not recommended.
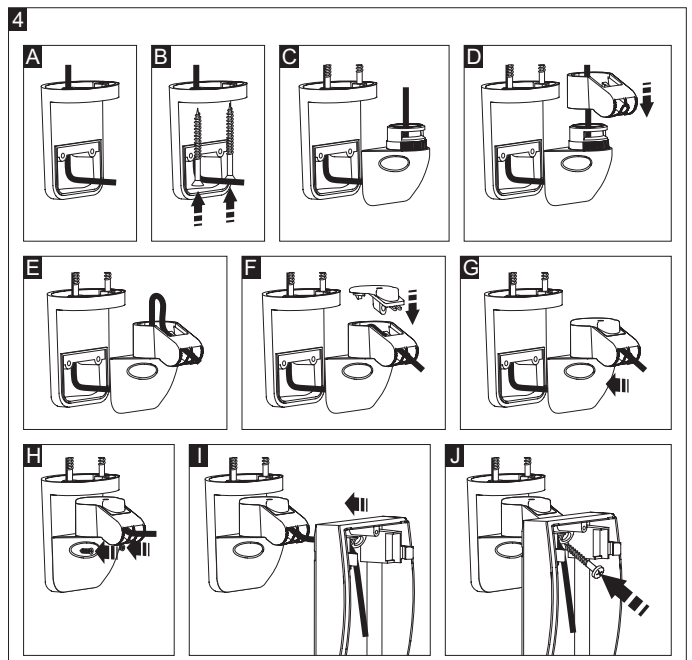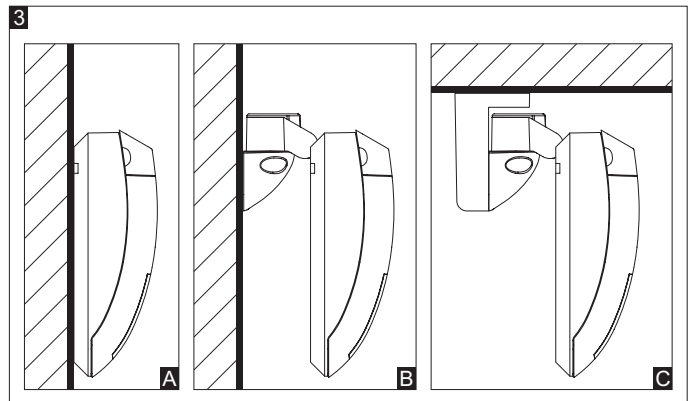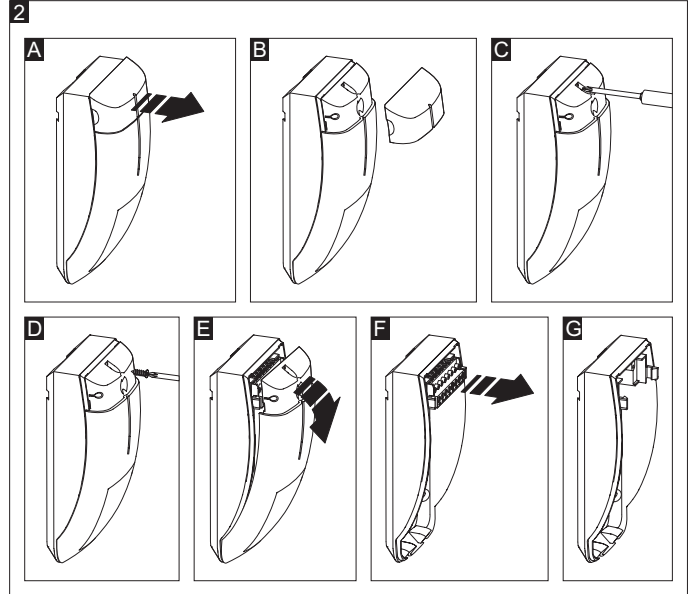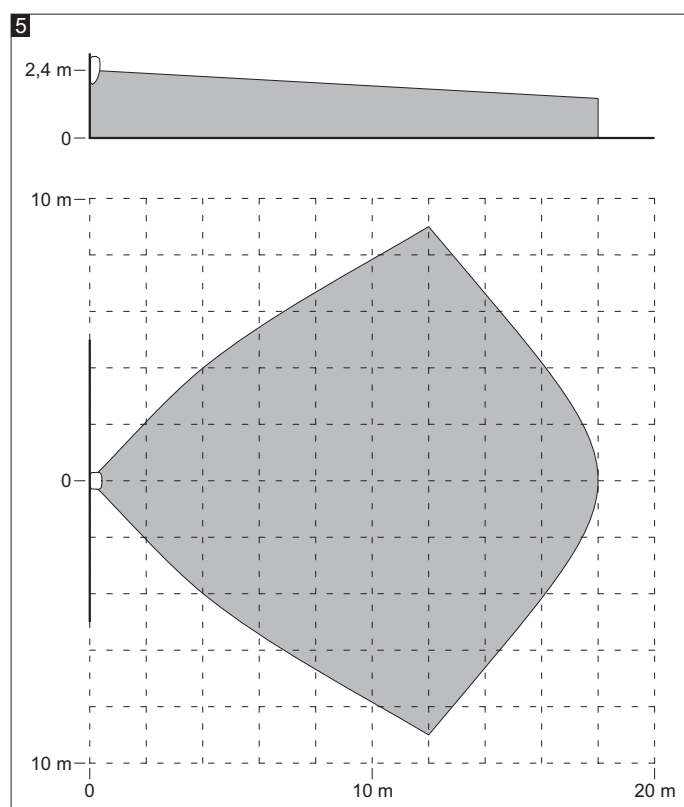
Start-up

1. Turn power supply on (the LED will start blinking, thus indicating the starting state).

2. When the detector is ready to work (the LED stops blinking), carry out a walk test, i.e. make sure that a movement within the supervised area will activate the alarm relay or cause the LED light up. During the test, the LED ON/OFF pins must be shorted, or the LED input must be shorted to the common ground.

3. If necessary, change the detector sensitivity.

Technical data

Supply voltage	12 V DC ±15%
Current consumption, ready state	12 mA
Current consumption, maximum	12 mA
Relay contacts rated load (resistive)	40 mA / 16 V DC
Detectable target velocity	0,3...3 m/s
Violation signaling time	2 s
Protection class	Grade 2
Environmental class	II
Operating temperature range	-10...+55 °C
Standards complied with	EN50131-1, EN50131-2-2
Dimensions	57 x 123 x 42 mm
Installation height	2,1...3 m
Weight	112 g