BY-ALARM PLUS

01741

By-alarm Plus passive infrared detector for the protection of building exteriors, independent 12-metre curtain-effect detection on each side (left and right), with anti-masking, PET immune, IP55, 2 NO and NC 28 VDC 0.1 A relay outputs per output, 9.5-18 VDC 34 mA 12 V power supply, surface mounting, for outdoor use.

The device features an anti-masking function and four PIR, i.e. two on each side. They can be set independently from one another for total control of the left and right detection zones. The detection range, sensitivity and alarm output can be configured completely independently for the left and right side. The detection distance can be set to 2.5 m, 3.5 m, 6 m, 8.5 m and 12 metres on each side. Sensitivity can be set to between low and extremely high, with the possibility of detecting only a temperature difference of 1 degree °C.

CHARACTERISTICS

- Power supply: 9.5-18 VDC
- Absorption: 34 mA a 12 VDC
- Detection mode: passive infrared
- Cover: 24 m and 4 zones on two independent sides:
  - 12 m per side
  - 2 zones on each side, 180° narrow
- Detection range from the wall (selectable):
  - 0° near the wall
  - 3° away from the wall
- Detection length limit: from 2.5 to 12 m (5 levels: 2.5-3.5-6-8.5-12)
- Alarm output (R): 28 VDC 0.1 A (max); [Individual: Right or General], [NO or NC] selectable
- Alarm output (L): 28 VDC 0.1 A (max); [Individual: Left or General], [NO or NC] selectable
- Fault output: NC 28 VDC 0.1 A (max)
- Tamper output: NC 28 VDC 0.1 A (max), open when the front cover or the fixing base are removed
- Detectable speed: from 0.3 to 2 m/s
- Sensitivity individually settable for each side:
  - Normal, 2 °C (at 0.6 m/s)
  - High, 1 °C at 0.6 m/s
- Initialisation time: approximately 60 s
- Alarm duration: 2 ± 1 s
- Operating temperature: - 30..+ 60 °C
- Ambient humidity: 95%
- Protection degree: IP55

LED SIGNALLING

Red side LED:
- permanently lit -> Alarm
- flashing -> Masking detection and initialisation phase

INSTALLATION RULES

- Installation must be carried out by qualified persons in compliance with the current regulations regarding the installation of electrical equipment in the country where the products are installed.
- Install the detector in a place where no cause for false alarms is present, such as:
  - sunlight and reflections;
  - heat sources;
  - moving objects or objects which the wind may move.
- The ideal installation height is between 0.8 to 1.2 m with the base of the detector always parallel with the wall.
- The detector can be mounted using mounting frame art. 01741.S which increases its thickness in the event of specific installation requirements.

REGULATORY COMPLIANCE

Directive EMC. Directive RoHS.
Standards EN 50130-4, EN 55032, EN IEC 63000.

REACH (EU) Regulation no. 1907/2006 – Art.33. The product may contain traces of lead.

WEEE - User information
The crossed out bin symbol indicates that the product must be sent to separate collection facilities for recovery and recycling, in compliance with the national laws of EU Countries that implement the WEEE Directive. The objective is to prevent any harmful effects on the environment and on human health by ensuring that products are disposed of correctly, avoiding illegal disposal sanctioned by law.
To dispose of the product correctly, please check local dispositions in your country.

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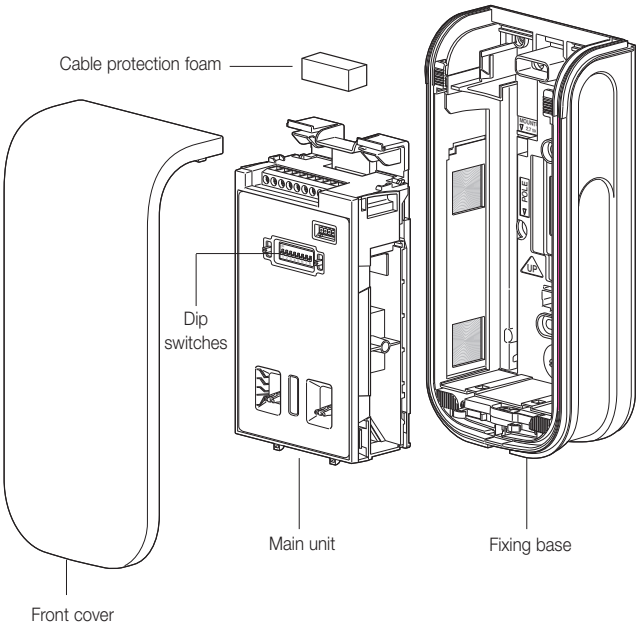
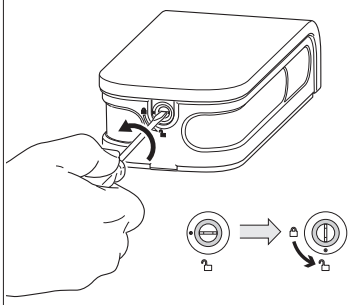
THE DETECTOR



INSTALLATION

❶



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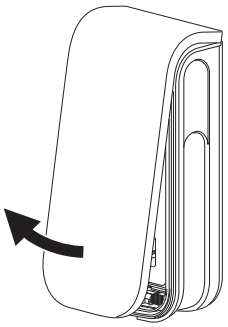

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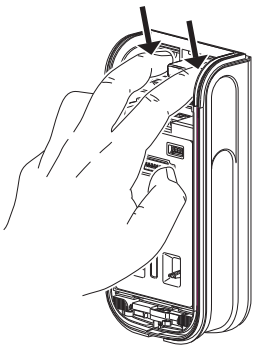

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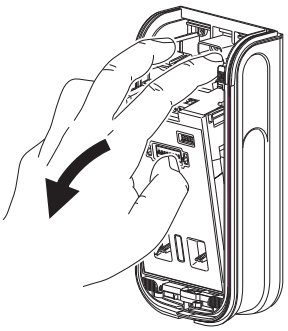

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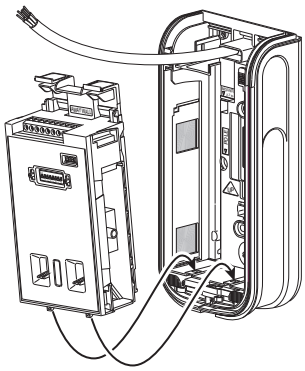

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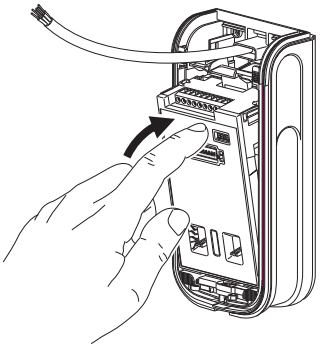

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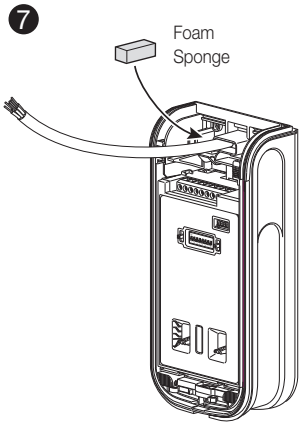
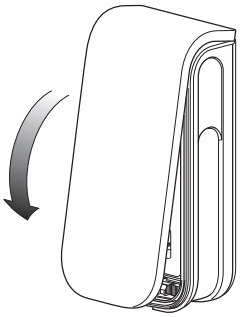


❽ Set the dip switches, make the connections and close the detector.



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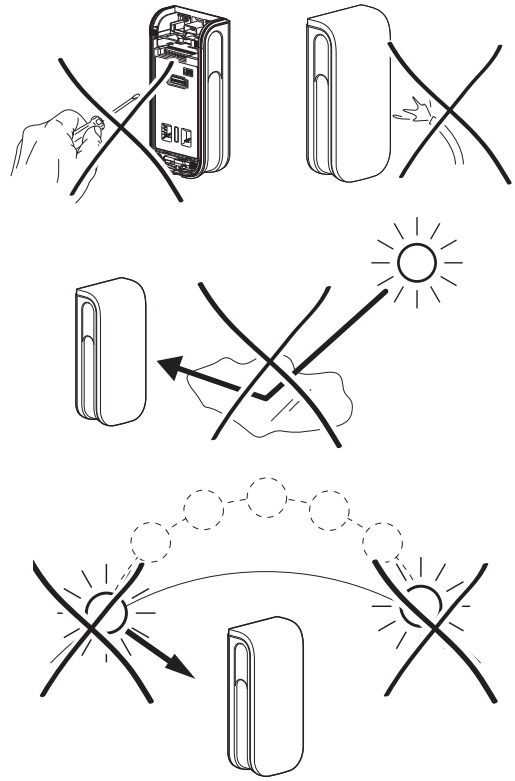
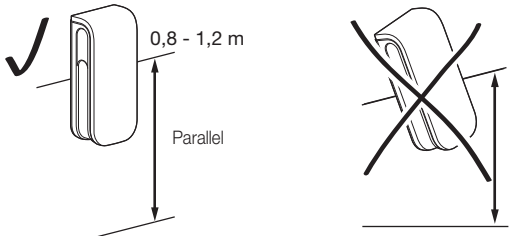
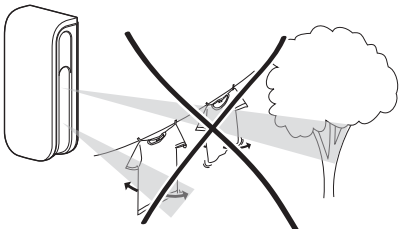
WARNINGS

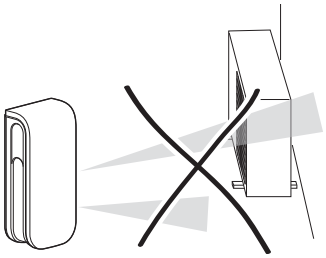
NO

OK

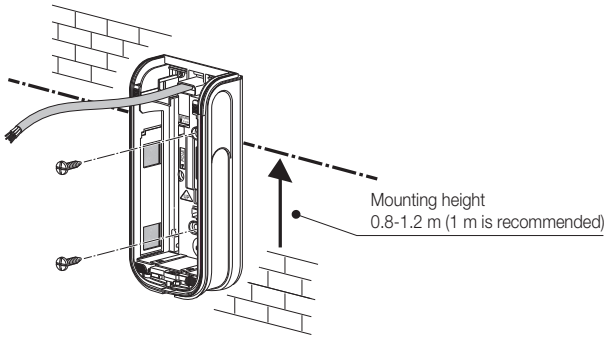




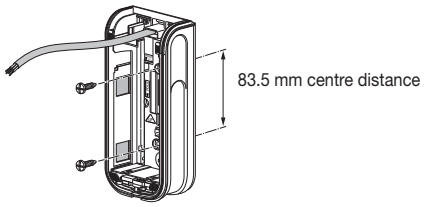




ASSEMBLY

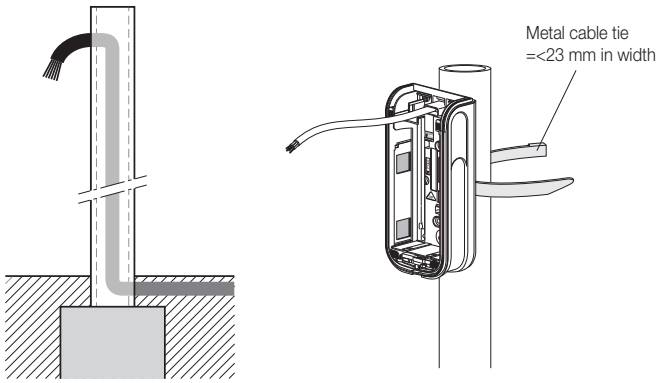


Mounting on electrical junction box

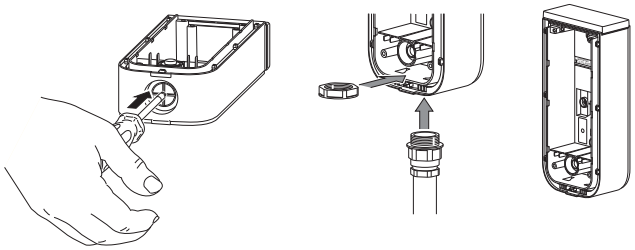


Mounting with optional components:

Pole mounting



Conductor installation on mounting frame art. 01741.S



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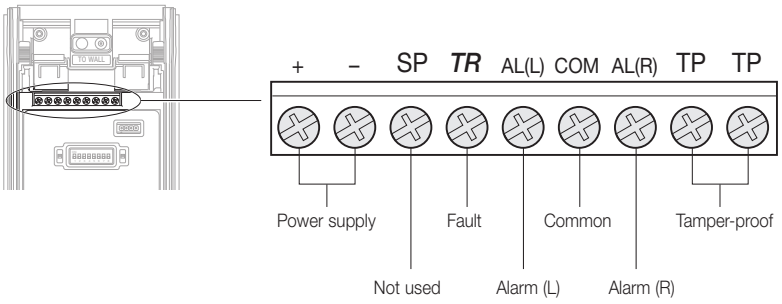
CONNECTIONS

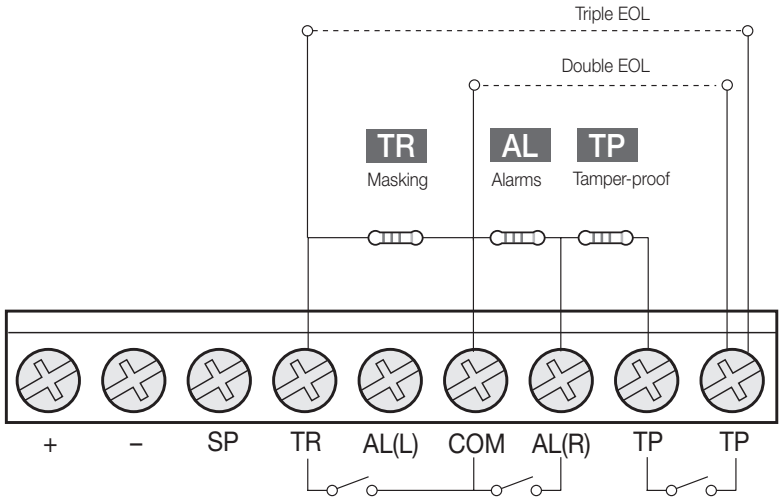


Power supply cable

Section	Max. length
0.5 mm²	270 m

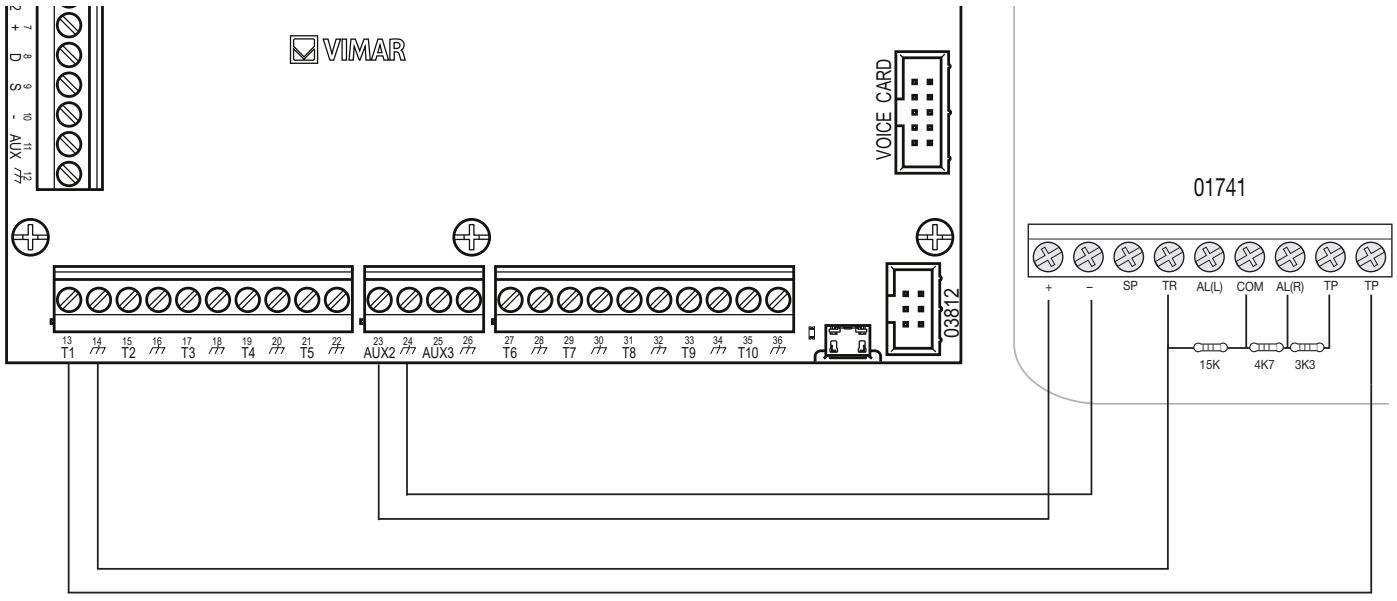
The detector is designed to send the alarm for the left or right side independently (2 independent zones) or to use a single zone for both sides.

Double and triple balancing



Connection to the By-alarm Plus control unit (triple balancing example)

The AUX2 output must be suitably configured to supply power



IMPORTANT: If using expansions 03808 and 03819 the connections to make are the same.

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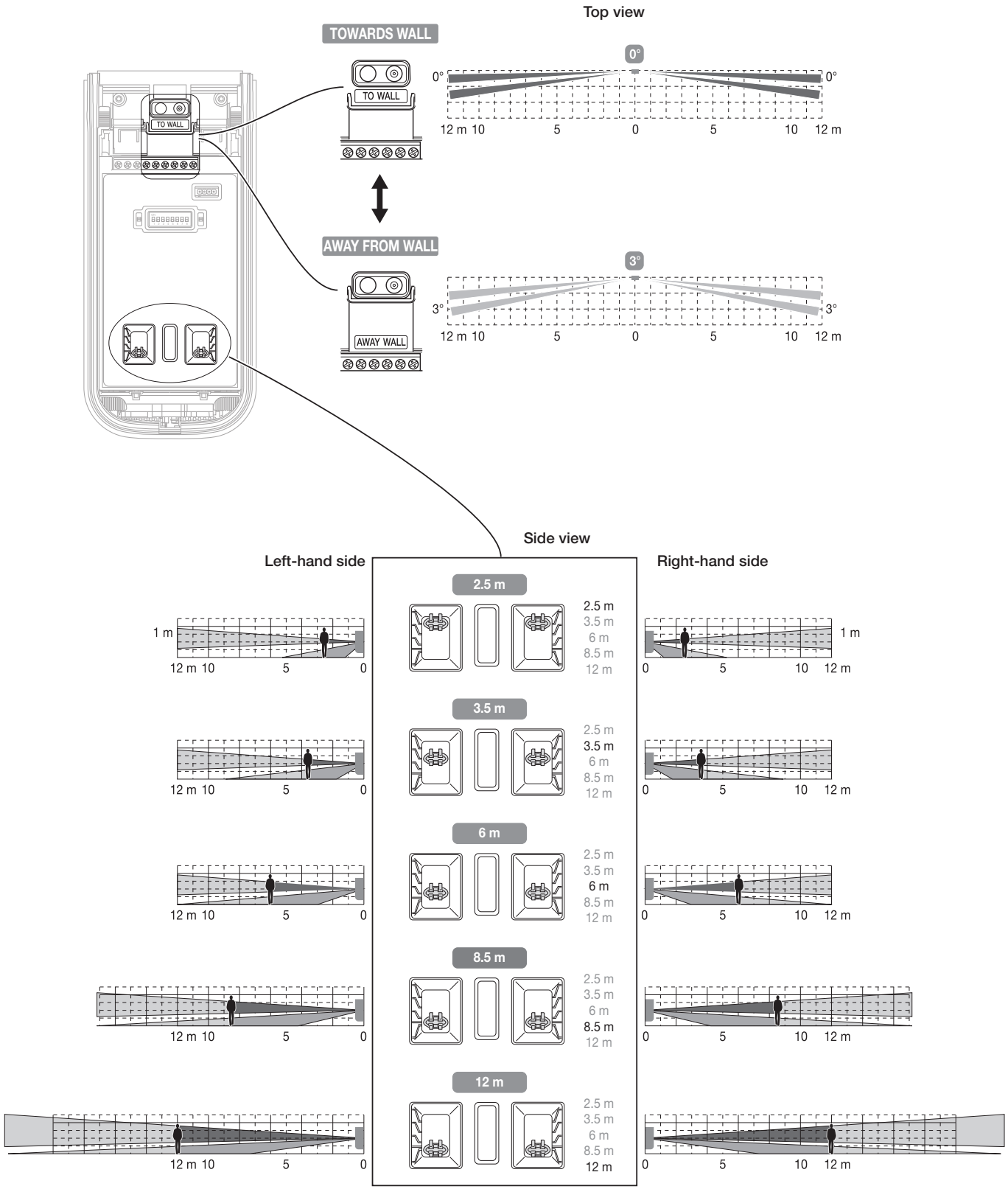
SETTINGS

1. Detection area



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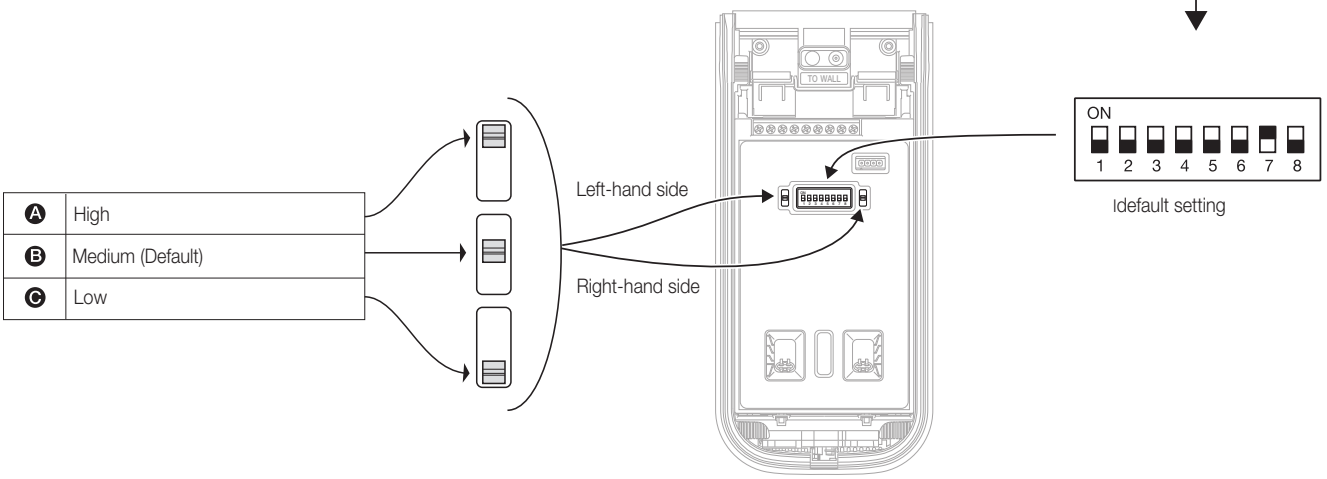
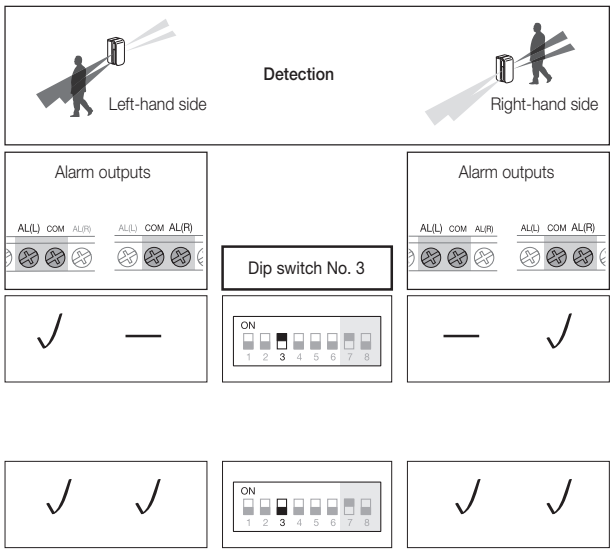
2. Dip switches

1	2	3	4	5	6	7	8
LED	Alarm output type	* Individual outputs	** Extremely High PIR		Future use	Anti-masking	Future use
			Left	Right			
ON	N.O.	ON	ON	ON	N/A	ON	N/A
OFF	N.C.	OFF	OFF	OFF		OFF	

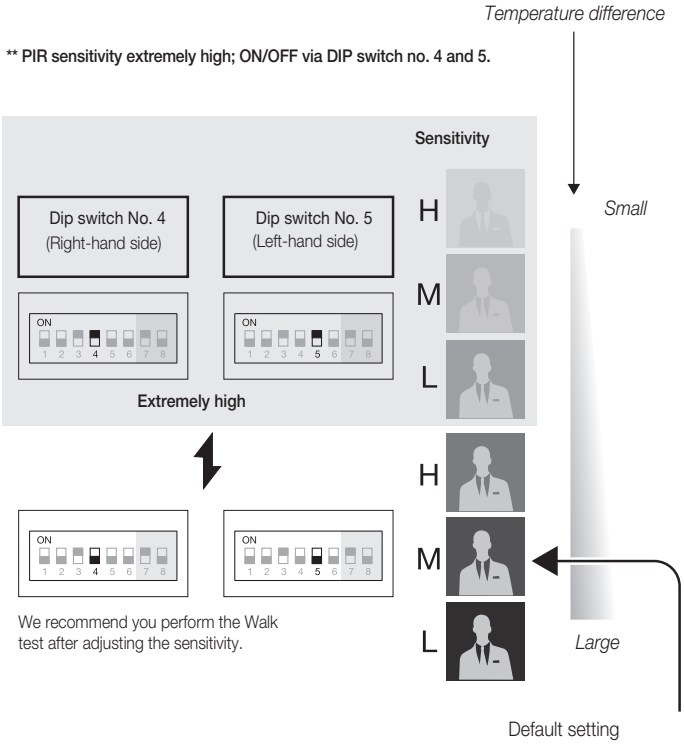
A	High
B	Medium (Default)
C	Low



*** Alarm outputs; ON/OFF of individual outputs via DIP switch No.3**



**** PIR sensitivity extremely high; ON/OFF via DIP switch no. 4 and 5.**



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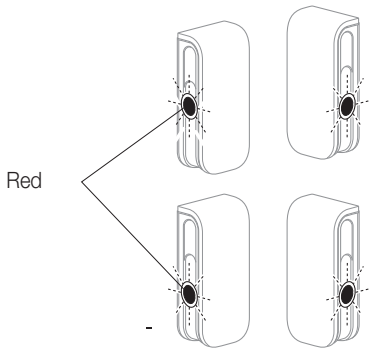
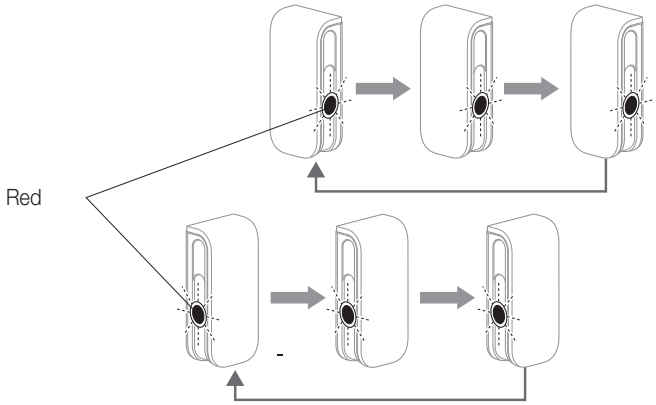
OPERATION

1. LED signalling

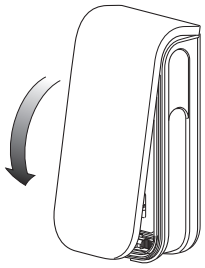


Heating Flashes for 60 sec. or less



Masking Flashes 3 times and then repeats the cycle

2. Walk test



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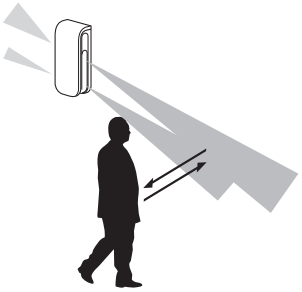
Close the front cover; the Walk test is automatically launched



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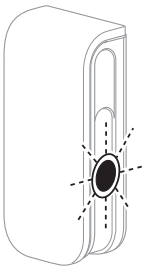
Check whether the LED flashes for 2 seconds when the desired object is detected



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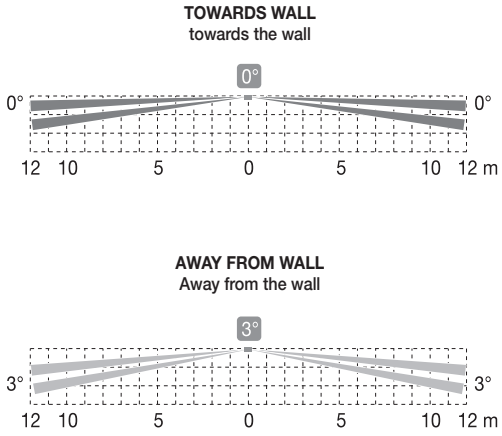
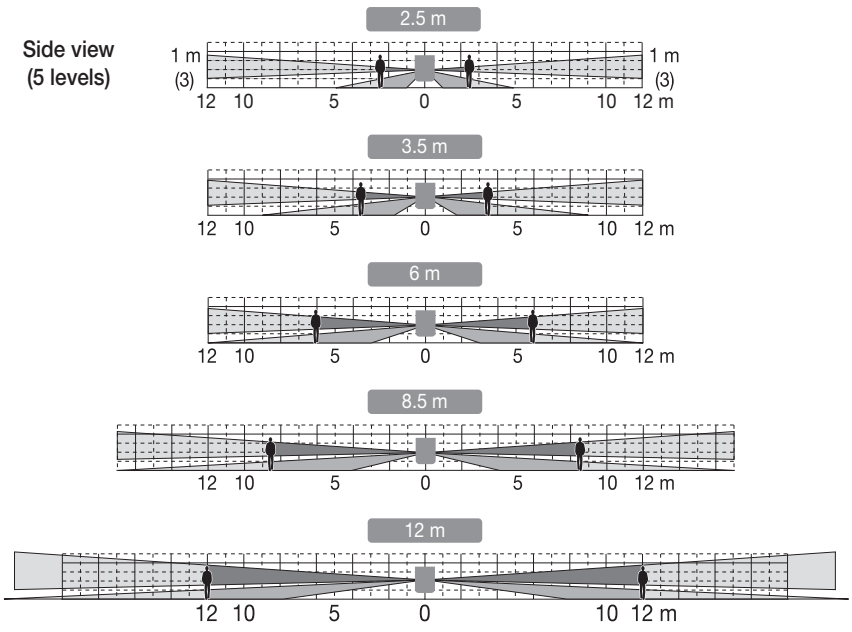
The Walk test takes 3 minutes after closing the front cover and ends with the LED flashing for 5 seconds

COVER DIAGRAMS

Top view



Side view (5 levels)



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