Honeywell

IS3016A Passive Infrared Motion Sensor with Anti-Mask - Installation Instructions

1 SELECT THE MOUNTING LOCATION

30 cm
(12")

2.1 - 2.7 m
(7' - 9')

2.3 m ✔
(7' 6") [EN]

*Keep
Clear

[EN] = approved installation.
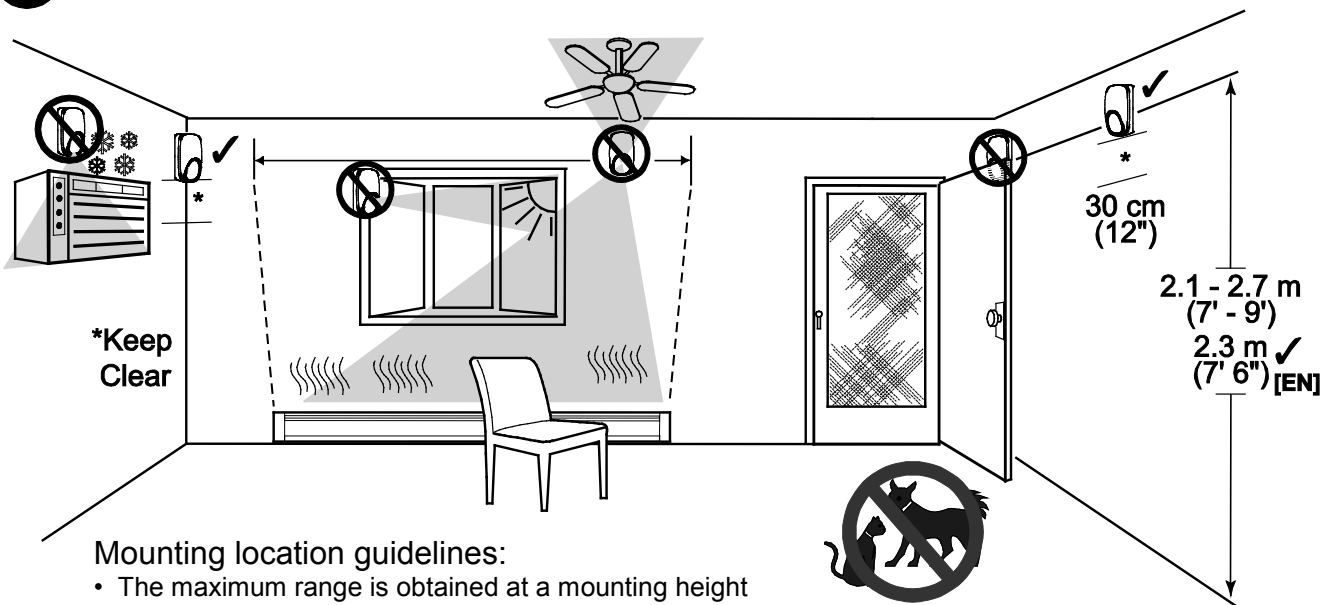
Mounting location guidelines:
• The maximum range is obtained at a mounting height
  of 2.3m (7' 6").
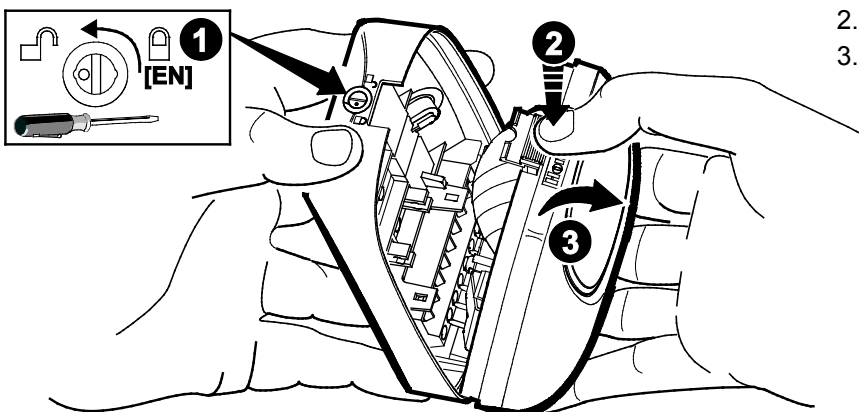• Allow a clear line-of-sight to all areas to protect.
• Avoid mounting anything within 30cm (12") in front of the sensor.
• Do not directly face windows.
• Avoid close proximity to moving machinery, fluorescent lights, and
  heating/cooling sources.
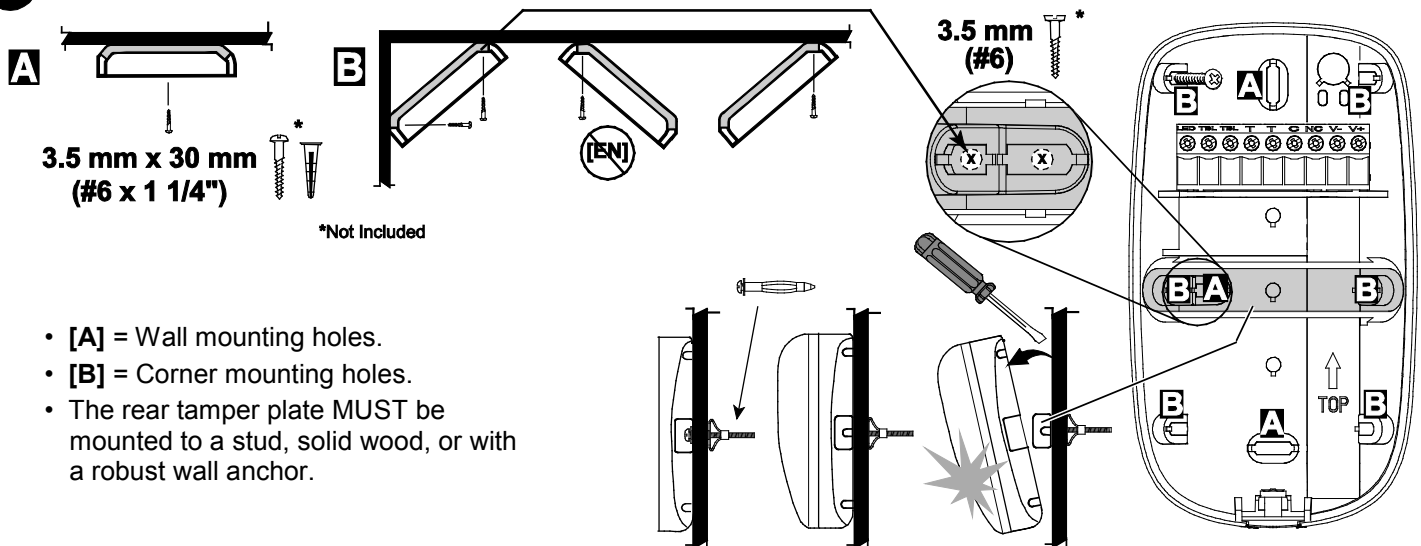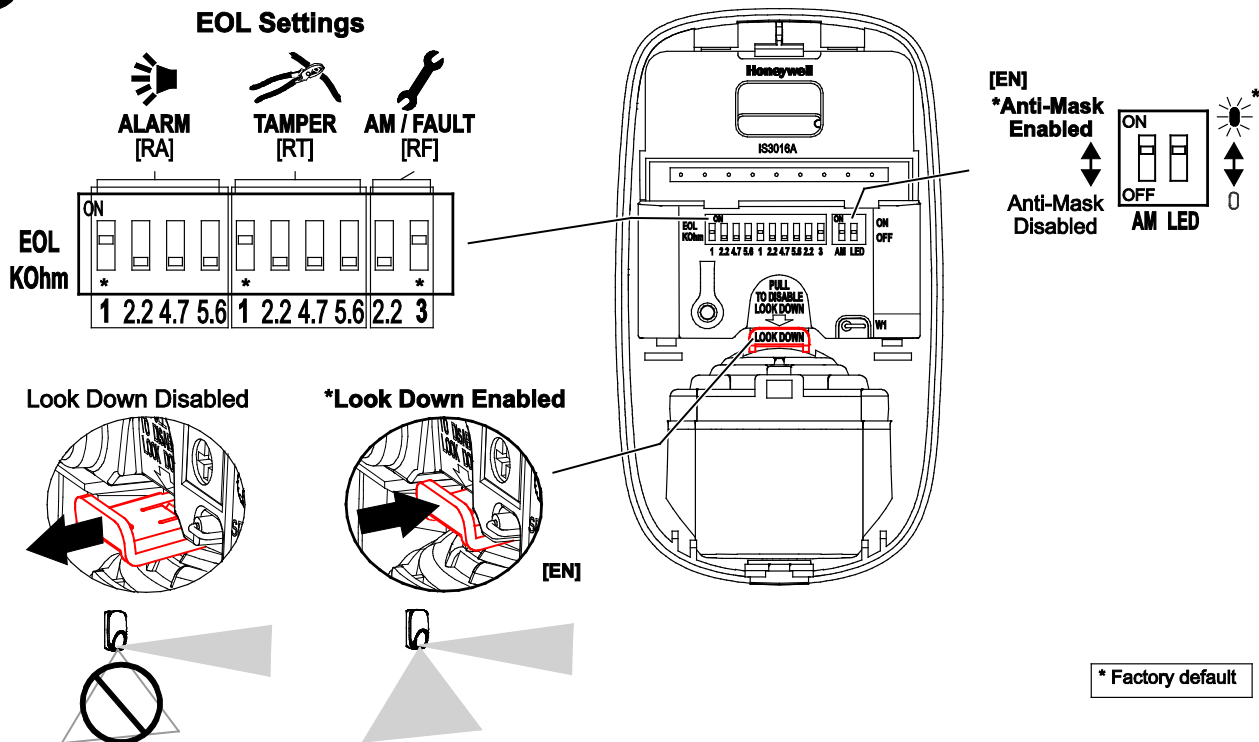• Not for use in applications with pets.

2 OPEN THE SENSOR

[EN]

1. Turn the arrow to point to the Unlock symbol.
2. Press firmly on housing latch.
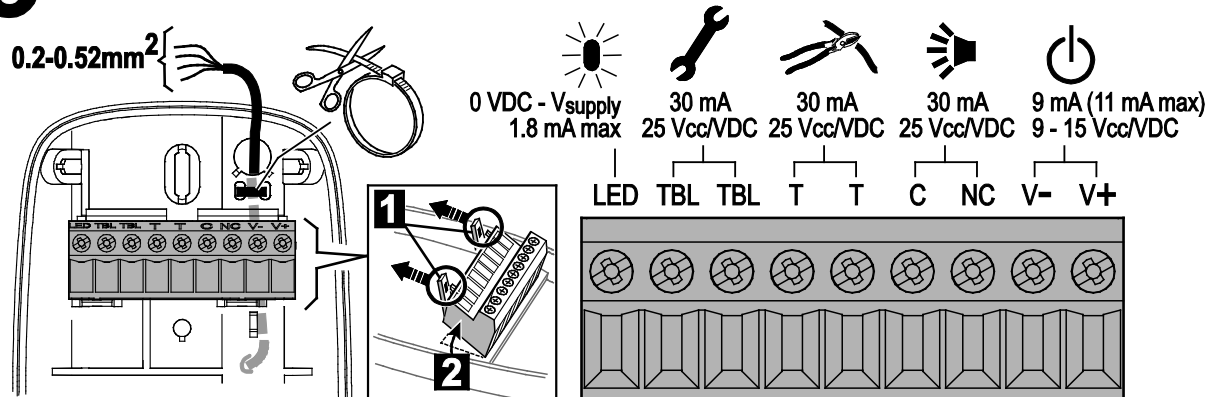3. Gently separate the front and rear housing.

3 MOUNT THE SENSOR

A

3.5 mm x 30 mm (#6 x 1 1/4")

*Not Included

B

[EN]

3.5 mm (#6) *

B **A** **B**

B A **B**

B **A** **B** TOP

- **[A]** = Wall mounting holes.
- **[B]** = Corner mounting holes.
- The rear tamper plate MUST be mounted to a stud, solid wood, or with a robust wall anchor.

4 SENSOR COMPONENTS AND SETTINGS

EOL Settings

ALARM [RA] **TAMPER [RT]** **AM / FAULT [RF]**

ON

EOL KOhm

*

| 1 | 2.2 | 4.7 | 5.6 | 1 | 2.2 | 4.7 | 5.6 | 2.2 | 3 |

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IS3016A

EOL KOhm: ON 1 2.2 4.7 5.6 1 2.2 4.7 5.6 2.2 3 AM LED ON OFF

PULL TO DISABLE LOOK DOWN
LOOK DOWN

W1

[EN] *Anti-Mask Enabled

ON

OFF

Anti-Mask Disabled

AM LED

*

0

Look Down Disabled

***Look Down Enabled**

[EN]

* Factory default

5 WIRE THE SENSOR

0.2-0.52mm²

|	0 VDC - V$_{supply}$ 1.8 mA max	30 mA 25 Vcc/VDC	30 mA 25 Vcc/VDC	30 mA 25 Vcc/VDC	9 mA (11 mA max) 9 - 15 Vcc/VDC
	LED	TBL TBL	T T	C NC	V− V+

1

2

WIRING DETAILS

- Observe proper polarity.
- If not using the integrated EOL resistors, set all switches to OFF.
- If using the integrated EOL resistors:
  1. Connect the sensor to the panel (see wiring diagrams below).
  2. Set the appropriate tamper, alarm and Anti-mask/ [RF] DIP switches to ON (see Step 4 on page 2).

Notes:
- Consult the Control Panel manual to determine proper EOL selection.
- The Alarm, Tamper and Trouble/anti-mask EOL settings must each only have one switch ON.
- The EOL values should be set at the same time.
- If not using the internal EOL resistors, set all switches to OFF.

Wiring Examples

Alarm, Tamper and Trouble/Anti-Mask configured to one loop.
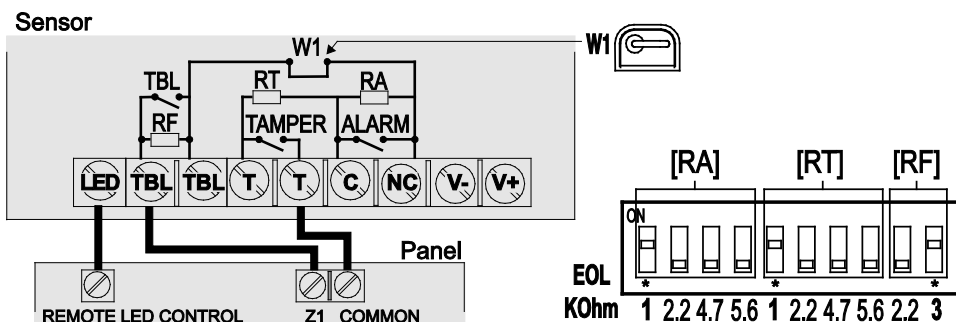
Alarm, Tamper and Trouble/Anti-Mask configured to two loops.
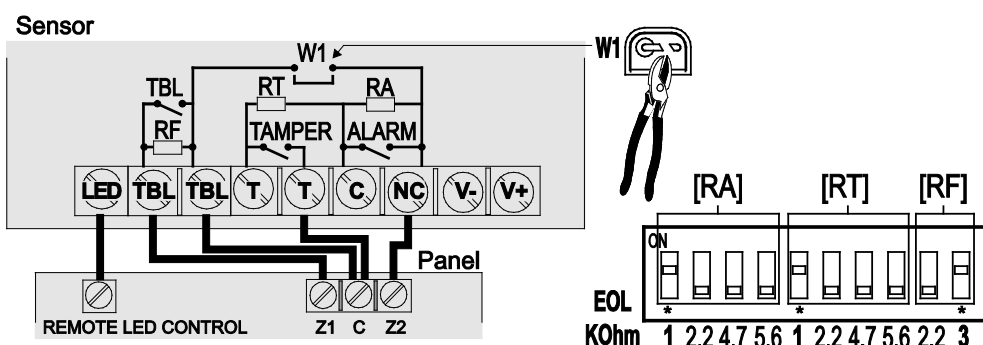
RA = Alarm EOL resistor	**RF** = Anti-Mask EOL resistor
RT = Tamper EOL resistor	**W1** = 1 and 2 loop connection resistor.

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6 WALK TEST THE SENSOR AND ADJUST AS NEEDED.

20 sec

| LED	Power Up	Walk Test [10 min.]	Normal	Trouble	
				Fault	**Anti-Mask**
Red	Slow Blink	ON Alarm	ON Alarm	Fast Blink	OFF
Yellow	OFF	OFF	OFF	OFF	Fast Blink

1. Close the sensor and apply power to the sensor. Initialization is complete when the LED stops flashing slowly (about 30 seconds).
2. Walk through the detection area and observe the LED.

Walk test mode is active for 10 minutes, then automatically exits test mode, disables the LED and enters normal operation mode. For an additional 10 minute walk test, enable Walk Test mode again with the Flashlight feature (see the following page.

Note: During power up and walk test modes the LED is active regardless of the LED Enable/Disable DIP switch setting.

Flashlight Feature:

1. Use a flashlight with a bright light beam, and stand within 1.2 m (4') of the sensor.
2. Swing past the lights beam across the sensor IR window 3-5 times, holding the beam on the window for 0.5 second each pass.

The flashlight feature is only available for the first 24 hours after the first power up.

< 1,2m

**1/2 sec. hold 4x**

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7 DETECTION PATTERNS

Top View

PLAN VIEW ALL ZONES

Side View
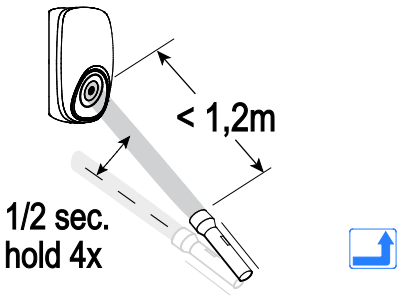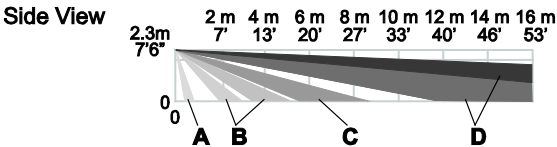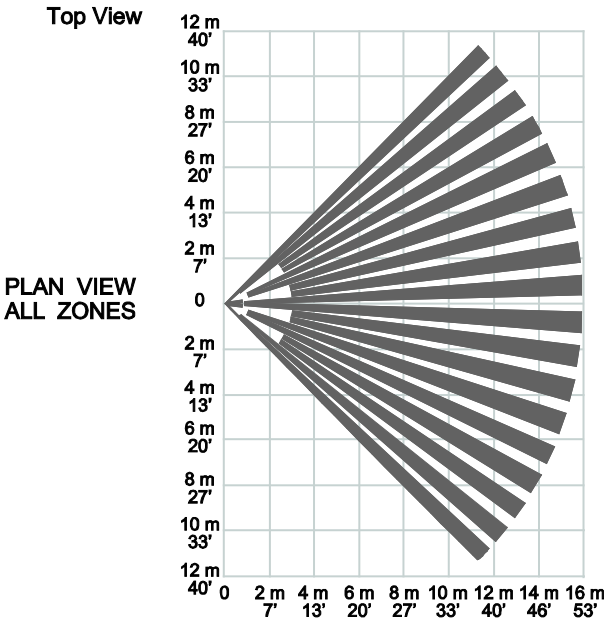
Zones

A	2	Look-down
B	12	Lower
C	10	Intermediate
D	36	Long

REMOTE LED ENABLE (LED INPUT)

The LED input terminal allows the LED to be remotely enabled. To use this feature, the LED DIP switch (switch 2) must be OFF, allowing the LED to operate based on the voltage level connected to the LED Input (see Wiring Details).
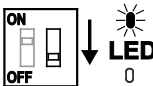
Switch 2	LED Input	LED Operation
OFF	High (+12 V)	Enabled
OFF	Low (0 V)	Disabled
ON	Low (0 V) or High (+12 V)	Enabled

RELAY OPERATION

	SENSOR STATUS			
	Normal	Intrusion	Trouble[1]	Mask[2]
Alarm Relay	Closed	Open	Closed	Open
Trouble Relay [3]	Closed	Closed	Open	Open

[1] For information on Trouble conditions, see the Troubleshooting section.

[2] In a Mask condition, the Alarm and Trouble relays will activate simultaneously, and remain open until the condition has been cleared.

[3] In a Trouble condition, the Trouble relay will latch open until the Trouble condition has been cleared.

MASK CONDITION

Normal Anti-Mask Condition

The sensor uses Active Infrared (AIR) technology to detect masking. The sensor signals a mask condition when a variety of materials and reflective objects are placed within 50mm (2 inches) in front of the sensor. To avoid false mask alarms, follow the mounting guidelines shown in Step 1.

Clearing an Anti-Mask Condition

When most masking materials or objects are removed, the anti-mask condition will be cleared after several seconds. When the cause of the anti-mask condition is any type of spray or paint coating applied to the window, the window must be replaced before the anti-mask condition can be cleared. After replacing the window, perform a walk test on the sensor.

TROUBLESHOOTING

	NORMAL	TROUBLE*		
		Mask[1]	Low Voltage[2]	Self-Test Failure[3]
Alarm Relay	Closed	Open	Closed	Closed
Trouble Relay	Closed	Open	Open	Open
Red LED	Off	Off	Off	Flashing
Yellow LED	Off	Flashing	Off	Off

***TROUBLE CONDITIONS:**

[1] Mask condition: Sensor IR window is blocked or masked.

[2] Low Voltage: The sensor is disabled. [Note: If voltage drops below 5V, both Alarm and Trouble relays open.]

[3] Self-Test Failure conditions:
• PIR self-test failure: The sensor is disabled.
• Temperature compensation failure: The temperature compensation is disabled.

Depending on the Trouble condition, take the following corrective actions:
• Verify the sensor is not blocked or masked.
• Verify the power supply is sufficient (at least 9V at the sensor).
• Cycle power to the sensor.
• Walk test the sensor.

If the Trouble condition does not clear, replace the sensor.

SPECIFICATIONS

Range: 16 m x 22 m

Power: 9.0 - 15 VDC; 9 mA typical, 11 mA maximum, 12 VDC; AC Ripple: 3 V peak-to-peak at nominal 12 VDC

Alarm Relay: Energized Form A; 30 mA, 25 VDC, 22 Ohms resistance maximum. Alarm Relay Duration: 3 seconds

Trouble Relay: Energized Form B; (NC) 30 mA, 25 VDC; 22 Ohms resistance maximum

Tampers: Cover & Wall; (NC with cover installed) Form A; 30 mA, 25 VDC; Magnetic field

RFI Immunity: 15 V/m, 80 MHz – 2.7 GHz

PIR White Light Immunity: 10,000 Lux typical

Fluorescent light filter: 50 Hz / 60 Hz.

Operating Temperature: -10° to 55° C

Relative Humidity: 5 to 95%; non-condensing

Temperature Compensation: Advanced Dual Slope

Dimensions: 11.6 cm H x 7.0 cm W x 4.3 cm D

Weight: 118 g (net weight)

ACCESSORIES

SMB-10 (P/N 0-000-110-01)	Swivel Mount Bracket
SMB-10C (P/N 0-000-111-01)	Swivel Mount Ceiling Bracket
SMB-10T (P/N 0-000-155-01)	Swivel Mount Bracket w/Tamper

Note : The accessories are not covered by certifications.

APPROVAL LISTINGS

EN50131-2-2:2008, Security Grade 3, Environmental Class II.

Suitable for connection to an EN 60950 Class II Limited Power Source.

PD6662:2010

Note: In EN 50131-2-2 compliant installations, mount the sensor at 2.3m, do not use only the right side corner mounting holes, enable look down and lock the sensor housing with the cover lock (see "[EN]" where noted in Steps 1-4).

Important: The sensor should be tested **at least once each year**

NF&A2P 3 boucliers (référentiel NF324-H58) et conforme aux normes EN50131-2-2 et RTC50131-2-2 IP30 IK04 – N° de certificat: 2631420016 Organisme de certification: CNPP Cert. : www.cnpp.com et AFNOR Cert.: www.marque-nf.com

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For any additional information, please refer to our Website:
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Please contact your local authorised Honeywell representative for product warranty information.

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