

DT8016F24 DUAL TEC® Motion Sensor – Installation Instructions

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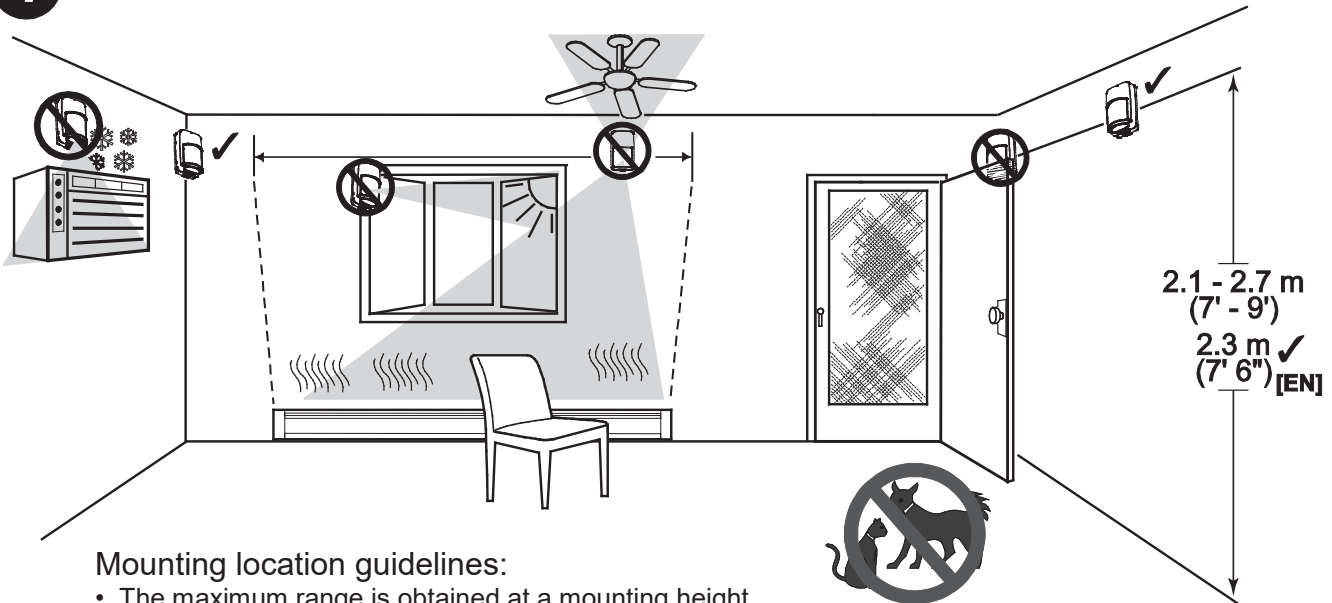
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1 SELECT THE MOUNTING LOCATION



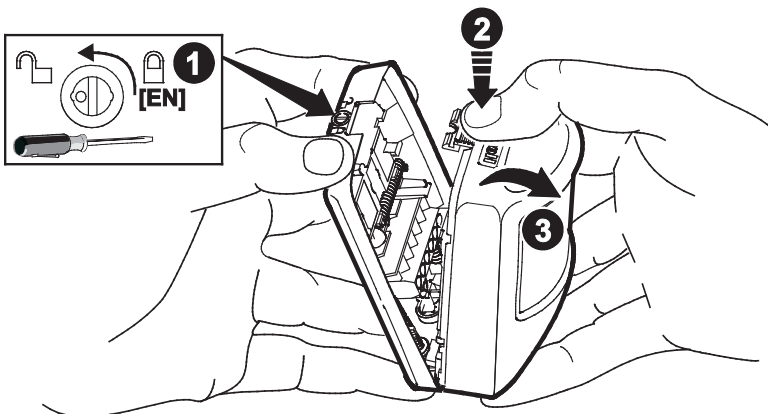
Mounting location guidelines:

- 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.
- Do not directly face windows.
- Avoid close proximity to moving machinery, fluorescent lights, and heating/cooling sources.
- Not for use in applications with pets.

[EN] = approved installation.



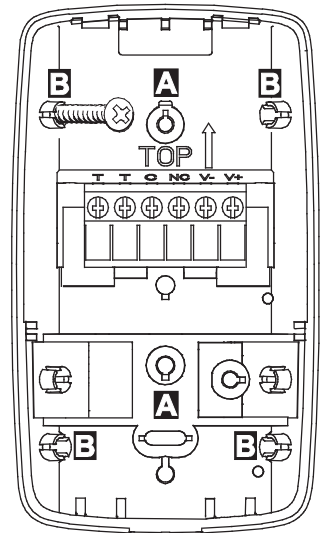
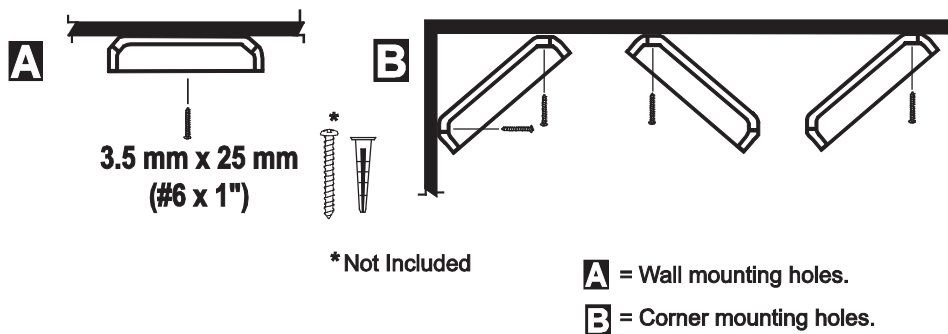
2 OPEN THE SENSOR



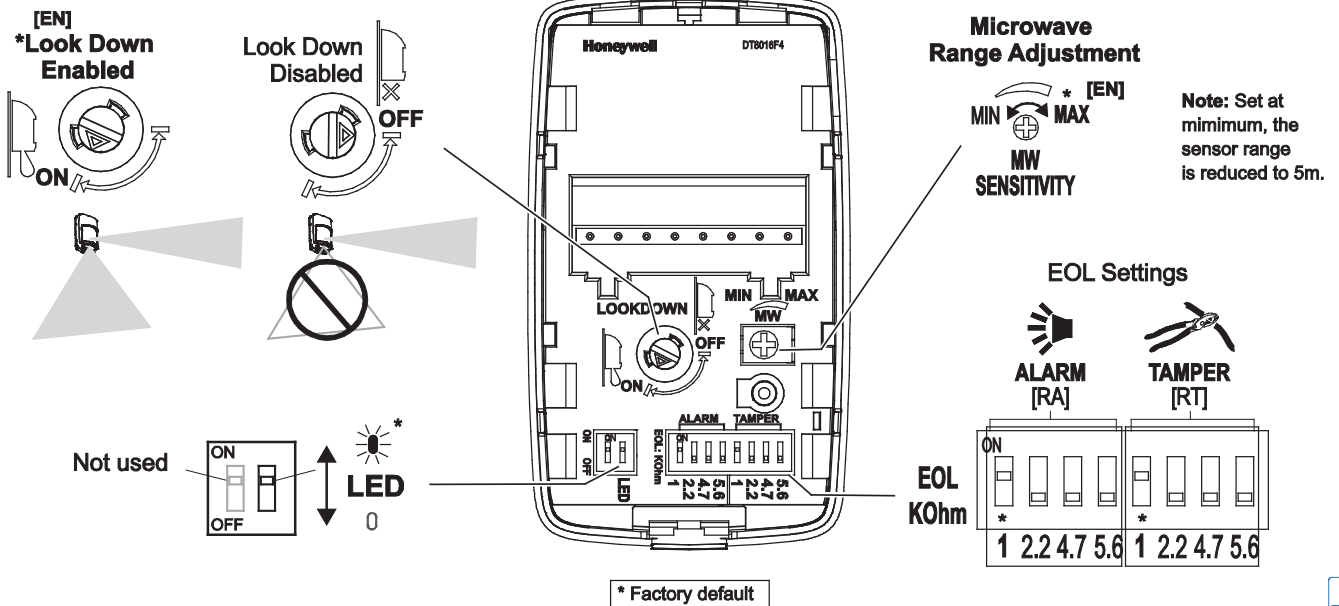
1. Turn the arrow to point to the Unlock symbol.
2. Press firmly on housing latch.
3. Gently separate the front and rear housing.



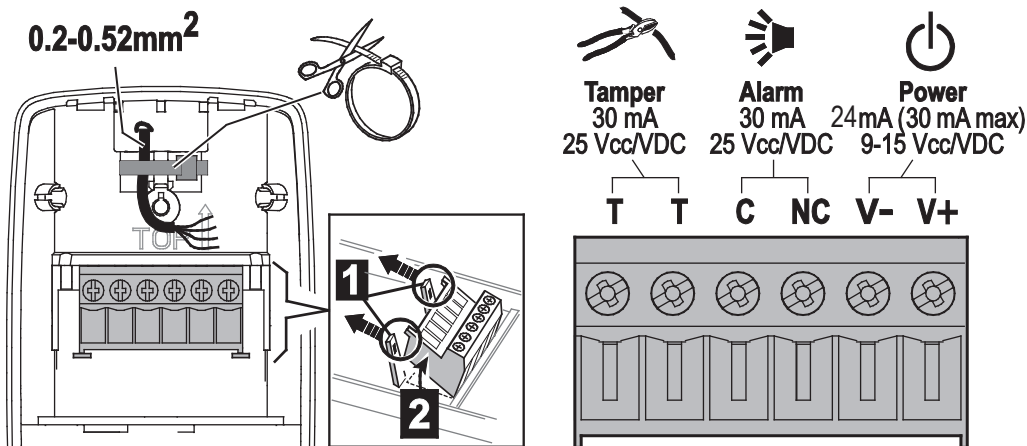
3 MOUNT THE SENSOR



4 SENSOR COMPONENTS AND SETTINGS



5 WIRE THE SENSOR



See wiring details and example on [page 3](#).

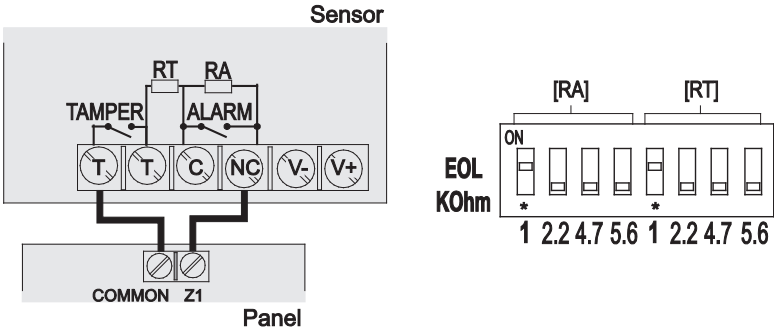
WIRING DETAILS

- 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 alarm and tamper DIP switches to ON (see Step 4 on page 2).

- Notes:
- Consult the Control Panel manual to determine proper EOL selection.
 - The Alarm and Tamper EOL settings must each only have one switch ON.
 - The EOL values should be set at the same time.

Wiring Example

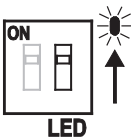
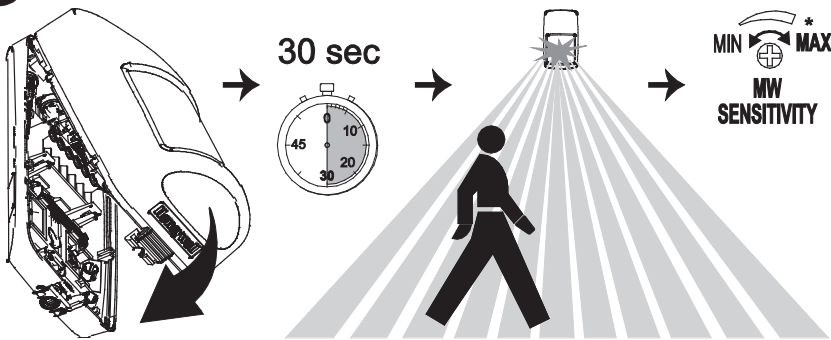
Alarm and Tamper configured to one loop.



RA = Alarm EOL resistor
RT = Tamper EOL resistor



6 WALK TEST THE SENSOR AND ADJUST AS NEEDED



LED	Power Up	Walk Test [10 min.]	Normal	Trouble
				Fault
Red	Slow Blink	ON Alarm	ON Alarm	Fast Blink
Yellow	OFF	ON Microwave	OFF	OFF
Green	OFF	ON PIR	OFF	OFF

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.
3. Adjust the microwave range as necessary to meet installation requirements.

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.

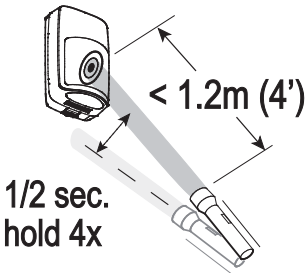
- Notes:
- During power up and walk test modes the LED is active regardless of the LED Enable/Disable DIP switch setting.
 - When the **microwave sensitivity** is set to minimum, the sensor range is reduced to 5m.



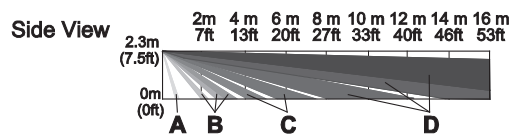
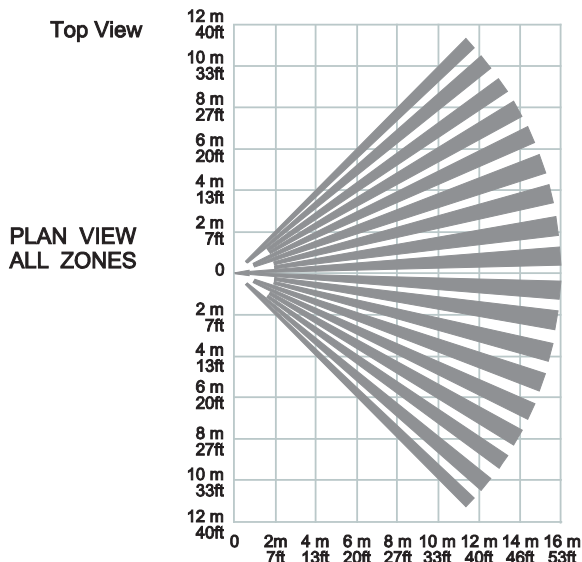
Flashlight Feature:

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

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



7 DETECTION PATTERNS



Zones

A	2 Look-down
B	18 Lower
C	20 Intermediate
D	54 Long

RELAY OPERATION

	SENSOR STATUS		
	Normal	Intrusion	Trouble ¹
Alarm Relay	Closed	Open	Open

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

TROUBLESHOOTING

	NORMAL	TROUBLE*
		Self-Test Failure ¹
Alarm Relay	Closed	Open
Red LED	Off	Flashing

*TROUBLE CONDITIONS:

¹ Self-Test Failure conditions:

- Microwave supervision failure: The sensor is operating in PIR mode only.
- 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 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; 24 mA typical, 30 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

Tamper: Cover; (NC with cover installed) Form A; 30 mA, 25 VDC; magnetic field

Microwave Frequencies: DT8016F24- 24.200 GHz

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: 9.85 cm H x 5.7 cm W x 4.4 cm D

Weight: 94.7 g / 3.34oz (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



EN50131-2-4, Security Grade 2,
Environmental Class II.
Suitable for connection to an EN 60950
Class II Limited Power Source.

Note: In EN 50131-2-4 compliant installations, mount the sensor at 2.3m, enable look down, set the microwave sensitivity to maximum 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 2 boucliers (référentiel
NF324-H58) et conforme aux
normes EN50131-2-4 et
RTCS0131-2-4; IP30 IK04
DT8016F24 - N° de certificat: XXXXXXXXXX

Organisme de certification:
CNPP Cert. : www.cnpp.com.et
AFNOR Cert. : www.marque-nf.com



DT8016F24
INCERT X-XXX-XXXX

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Please contact your local authorised Honeywell representative for product warranty information.

