

DT-900 Series DUAL TEC® Motion Sensor for Commercial and Light Industrial Applications - Installation Instructions

<div><div>Step 1</div><div>Select mounting height.</div><div><div><div><div></div><div>30' cm (12") minimum</div><div>4 m (12')</div><div>Optimal Mounting Height</div><div>2 m (6')</div></div></div></div><div><div>Mounting Location Guidelines</div><div><div><div>• Avoid direct or reflected sunlight, infrared light.</div><div>• Aim sensor away from windows, heating/cooling devices or large moving objects.</div><div>• Sensor must have a clear line-of-sight to protected area.</div><div>• Keep at least 1 meter (3') of space in front of sensor clear.</div></div></div></div></div>	<div><div>Step 2</div><div>Carefully push screwdriver into slots to disengage latches and open top cover.</div><div><div><div></div></div></div></div>	<div><div>Step 3</div><div>Firmly insert screwdriver into slot in arrow and rotate PIR Mirror Selector to the correct range.</div><div><div><div><div><div></div><div>DT-906</div><div>200'</div><div>120'</div></div><div><div></div><div>DT-900</div><div>90'</div><div>50'</div></div></div></div></div></div>	<div><div>Step 4</div><div>Set switch S4 to establish microwave range.</div><div><div><div><div></div><div>S4</div><div>MW RANGE</div><div>CLOSED=SHORT</div></div></div></div><div><table><tr><th>MODEL</th><th>RANGE</th><th>Switch S4</th><th>MIRROR Selector</th></tr><tr><td>DT-906</td><td>61 m (200')</td><td>OPEN*</td><td>200' *</td></tr><tr><td>DT-906</td><td>37 m (120')</td><td>CLOSED</td><td>120'</td></tr><tr><td>DT-900</td><td>27 m (90')</td><td>OPEN*</td><td>90' *</td></tr><tr><td>DT-900</td><td>15 m (50')</td><td>CLOSED</td><td>50'</td></tr></table></div></div>	MODEL	RANGE	Switch S4	MIRROR Selector	DT-906	61 m (200')	OPEN*	200' *	DT-906	37 m (120')	CLOSED	120'	DT-900	27 m (90')	OPEN*	90' *	DT-900	15 m (50')	CLOSED	50'
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<div><div>Step 5</div><div>Locate correct sensor range scale and rotate Vertical Adjustment Screw until the diamond corresponds to the sensor mounting height (coarse adjust).</div><div><div><div><div></div><div>120'</div><div>90'</div><div>50'</div><div>200'</div><div>VERTICAL ADJUST</div></div></div></div><div><div>NOTE: Fine adjust may be needed during walk-test. See Supplemental Information.</div></div></div>	<div><div>Step 6</div><div>Set switch S3 to establish the sensitivity best suited to your application.</div><div><div><div><div></div><div>S3</div><div>L</div><div>N</div><div>H</div></div></div><div><table><tr><th>SENSITIVITY</th><th>S3</th></tr><tr><td>HIGH</td><td>H</td></tr><tr><td>NORMAL</td><td>N*</td></tr><tr><td>LOW</td><td>L**</td></tr></table></div><div><div>*Factory default setting. **Not connected</div><div>**Not recommended for DT-906</div></div></div></div>	SENSITIVITY	S3	HIGH	H	NORMAL	N*	LOW	L**	<div><div>Step 7</div><div>Select INFORMER® mode with switch S2 if desired. (See Supplemental Information).</div><div><div><div><div></div><div>S2</div><div>OFF</div><div>1</div><div>2</div><div>INFORMER MODE</div></div></div></div></div>	<div><div>Step 8</div><div>Carefully push screwdriver into slot to disengage latch and remove bottom cover.</div><div><div><div></div></div></div></div>												
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<div><div>Step 9</div><div>Unfasten screws and remove mounting plate from sensor.</div><div><div><div></div></div></div></div>	<div><div>Step 10</div><div>Attach mounting plate to wall at desired height, using four fasteners (not supplied).</div><div><div><div></div></div></div></div>	<div><div>Step 11</div><div>Install M5 (#10) screw in wall 1.9 cm (3/4") below mounting screw, as shown, for tamper activation.</div><div><div><div><div></div><div>1.9 cm</div></div></div></div></div>	<div><div>Step 12</div><div>Pull about 30 cm (12") of wire from wall through the opening in the mounting plate and route wire to the terminal strip.</div><div><div><div></div></div></div></div>																				
<div><div>Step 13</div><div>Hang the sensor on the mounting plate hooks and fasten with the two mounting plate screws.</div><div><div><div></div></div></div></div>	<div><div>Step 14</div><div>Wire the unit as shown.</div><div><div><div>Use 2.0 - 0.3 mm² (14 – 22 AWG)</div><div><div>NOTE: Secure wires to mounting plate with tie wraps.</div></div></div><div><div><div><div>INPUTS 1 & 2</div><div>Standard or Cenelec mode</div><div>MASK DETECT (NC)</div><div>30 VDC, 25 mA</div><div>TROUBLE (NC)</div><div>30 VDC, 25 mA</div><div>TAMPER (NC)</div><div>30 VDC, 25 mA</div><div>END-OF- LINE</div><div>Connect terminating resistors on last unit</div><div>ALARM OUTPUTS</div><div>(NO, NC, COM)</div><div>25 VDC, 125 mA</div><div>Form C relay</div><div>POWER</div><div>10 - 15 VDC</div><div>50 mA (max) at 12 VDC</div></div></div></div></div></div>	<div><div>Step 15</div><div>Loosen horizontal locking screw in sensor support base.</div><div><div><div></div></div></div></div>	<div><div>Step 16</div><div>Grasp housing and rotate it to the desired position (coarse adjust). If fine adjust is needed see Steps 20 - 22.</div><div><div><div><div></div></div></div><div><div>NOTE: Reference marks = 5° change.</div></div></div></div>																				
<div><div>Step 17</div><div>Apply power to sensor and prepare for walk-test.</div><div><div><div>• Wait 90 seconds for power-up self-test to run. All LEDs will flash.</div></div><div><div><div><div>PIR ALARM MW</div><div>(Green) (Red) (Yellow)</div><div><div><div></div><div></div><div></div></div></div></div></div><div><div>NOTE: LEDs flashing after 90 sec. = defective</div></div></div></div></div>	<div><div>Step 18</div><div>Turn the microwave potentiometer counterclockwise to decrease the microwave range to minimum.</div><div><div><div>During walk-test, gradually turn the potentiometer clockwise increasing microwave sensitivity until the desired range is obtained.</div></div><div><div><div><div>RANGE</div><div></div><div>100%</div></div></div></div></div></div>	<div><div>Step 19</div><div>Walk-test the sensor to check for adequate detection coverage and to verify the sensor is fully functional. Two to four normal steps should make the LEDs light and trigger an alarm.</div><div><div><div>NOTE: If an on-going self-test problem, mask condition or an INFORMER condition occurs, the LEDs display a pattern that identifies the trouble. See Supplemental Information (Table 3).</div><div>NOTE: When there is no motion in the detection area, all three LEDs should be off.</div></div></div></div>	<div><div>Step 20</div><div>For finer horizontal adjustments, loosen the PIR horizontal fine locking screw on PCB.</div><div><div><div><div></div><div>HORIZONTAL FINE ADJUST LOCKING SCREW</div><div>200°</div><div>120°</div><div>FINE ADJUST</div><div>90°</div><div>50°</div><div>HORIZONTAL FINE ADJUST (LOOSEN LOCKING SCREW BEFORE ADJUSTING, TIGHTEN AFTER ADJUSTMENT.)</div></div></div></div></div>																				
<div><div>Step 21</div><div>Rotate horizontal fine adjust knob to the desired position.</div><div><div><div>NOTE: Fine adjustment allows for small changes (3 degrees right or left) between coarse settings.</div></div><div><div><div><div></div><div>HORIZONTAL FINE ADJUST LOCKING SCREW</div><div>200°</div><div>120°</div><div>FINE ADJUST</div><div>90°</div><div>50°</div><div>HORIZONTAL FINE ADJUST (LOOSEN LOCKING SCREW BEFORE ADJUSTING, TIGHTEN AFTER ADJUSTMENT.)</div></div></div></div></div></div>	<div><div>Step 22</div><div>Tighten horizontal fine locking screw on PCB.</div><div><div><div><div></div><div>HORIZONTAL FINE ADJUST LOCKING SCREW</div><div>200°</div><div>120°</div><div>FINE ADJUST</div><div>90°</div><div>50°</div><div>HORIZONTAL FINE ADJUST (LOOSEN LOCKING SCREW BEFORE ADJUSTING, TIGHTEN AFTER ADJUSTMENT.)</div></div></div></div></div>	<div><div>Step 23</div><div>Tighten horizontal locking screw in sensor support base.</div><div><div><div></div></div></div></div>	<div><div>Step 24</div><div>Remove jumper at J5, on the PCB, to disable the LEDs after walk-testing.</div><div><div><div></div></div></div></div> <div><div>Step 25</div><div>Complete installation by closing top cover and replacing bottom cover.</div><div><div><div></div></div></div></div>																				

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