1 INSTALLATION AND WIRING

Please disconnect power completely and read the entire instruction manual carefully before installation.

3.1 Proper Location

3.1.1 It is recommended to install at the height of 2.5m to gain the optimal detection pattern. The detection range can reach up to 7m diameter with a 360° detection angle (See FIG.2).

3.1.2 Pay attention to the walking direction during the test. Mounting the detector near heat sources, such as heating vents, air conditioning, vents as dryers, lights, etc. The detector aiming toward the objects which may be swayed in the wind, such as curtain, tall plants, miniature garden, etc. Mounting the detector near heat sources, such as heat lamps, ventilation, fans, etc. is not acceptable.

3.2 Wiring

3.2.1 Push button function

The load can be manually switched ON by using an external push button switch (N.C. 16A type. (See FIG.5 - FIG.6) When the load is off, it can be switched on by a short press (2 sec) on push button switch and Lux is disabled. After the load is switched on manually, the load can be auto-switched OFF when no movement is detected and the decay time has expired.

3.2.2 SAE-UE-MS-CSAWE for standard application (See FIG.5).

3.2.3 One load is controlled by two detectors to enlarge detection range. (See FIG.6).

3.3 Installation Procedure

3.3.1 Flush-mount

NOTE

When detector is flush-mounted with spring clip, protection cap of terminals must be used.

To install detector, please drill a hole with diameter of 65mm on ceiling board and keep the power cable outside. Please strip off 6 wires of cable sheathing for wiring. (See FIG.8).

3.3.2 Flush mount with European standard junction box

NOTE

The protection cap of terminals and spring clip are not needed to be used when the detector is flush mounted.

Take off detector’s two spring clips with tool before installation.

3.3.3 Flush mount with European standard junction box

NOTE

The protection cap of terminals and spring clip are not needed to be used when the detector is flush mounted.

Take off detector’s two spring clips with tool before installation.
4 OPERATION

4.1 Lux, Time knob

Follow the marked values to adjust Lux & Time knobs according user's requirement (See FIG. 20).

4.1.1 Lux knob setting

Lux value is adjustable from approx. 10lux to 2000Lux. In test mode, if Lux knob is turned to the position of 10Lux, detector can work at dark status only. Turn Lux knob at the position of 2000Lux, detector can be triggered almost at any light level.

4.1.2 Time knob setting

Time: Adjustable from 5secs to 20mins. Test: walk test operation (2secs on / 2secs off).

4.2 Text mode (Uncontrolled by Lux)

4.2.1 LED function & reaction

The red LED of SAE-UE-MS-CSAWE is behind the lens (See FIG.21) for test mode indication. In walk test, LED will turn on for approx. 2secs indicating the movement has been detected (See FIG.22). Repeat step 4 to conduct walk test until the detection pattern meets user's demands.

5 TROUBLE SHOOTING

When SAE-UE-MS-CSAWE works abnormally, please check assume problems and suggested solutions in following table that will hopefully to solve your problems.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SUGGESTED SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Power does not turn on.</td>
<td>1. Switch off the power.</td>
<td>1. Replace the disabled load with a new one.</td>
</tr>
<tr>
<td>2.Wired incorrectly.</td>
<td>2. Refer to wiring diagrams (FIG.5 - FIG.7).</td>
<td>2. Keep away from disturbance.</td>
</tr>
<tr>
<td>3. Wired incorrectly.</td>
<td>3. Refer to wiring diagrams (FIG.5 - FIG.7).</td>
<td>3. Refer to wiring diagrams (FIG.5 - FIG.7).</td>
</tr>
<tr>
<td>4.Multifunctioned load.</td>
<td>4. Refer to wiring diagrams (FIG.5 - FIG.7).</td>
<td>4. Refer to wiring diagrams (FIG.5 - FIG.7).</td>
</tr>
</tbody>
</table>

4.3 Usage of Lens Shield

4.3.1 SAE-UE-MS-CSAWE has provided 2 lens shields for masking the undesired detection area. Each lens shield has 2 layers, each layer includes 6 small pieces shield and each small piece shield can cover 0.1 diameter area. For more than 2400Lux, the detection range can reach up to 31m diameter if the complete lens shields has been used, and up to 3m diameter if only the A layer of lens shield has been used (See FIG.23-A & FIG.23-B).

4.3.2 After choosing the desired detection area, the (redundant) lens shield should be eliminated.

4.3.3 Fixing lens shield: There is a circular groove on the back of the decorative frame and the lens shield is designed with a circular hook. The lens shield can be fitted by inserting the hook of lens shield into its correspondent circular groove on the decorative frame (See FIG.24 & FIG.25).

4.4 Malfunctioned load

There are heat sources, highly reflective objects or any objects which can cause the load to be triggered. LED does not turn off.

4.4.1 Time knob is set to "Test".

1. Turn Time knob to "OFF". 2. Refer to wiring diagrams (FIG.5 - FIG.7). 3. Refer to wiring diagrams (FIG.5 - FIG.7).

4.4.2 Non-dropping screw

There are heat sources, highly reflective objects or any objects which can cause the load to be triggered. LED does not turn off.

1. Turn the decorative frame of detector anti-clockwise with proper strength, then insert two screws into the knock-outs on top cover and screw the detector on the housing of SAE-UE-MS-CSAWE and the decorative frame respectively for position verified convenience. Keep the "LED does not turn off" and make sure the load and wiring correctly.

4.4.3 Surface mount

The protection cap of terminals and spring clip are not needed to be used when the detector is surface mounted.

There are 7 pairs of knock-outs with various distances from 4mm to 85mm on the bottom cover of the combined junction box. After step these pairs of knock-outs can be selected for different mounting applications (See FIG.15-A). Select the two same figures (A, B, C, D) on both sides (A & B).

NOTE

The distance between A and B

<table>
<thead>
<tr>
<th>NO.</th>
<th>A (mm)</th>
<th>B (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>2</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>3</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>5</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>6</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>7</td>
<td>85</td>
<td>85</td>
</tr>
</tbody>
</table>

5.1 Refer to wiring diagrams (FIG.5 - FIG.7).

5.2 Refer to wiring diagrams (FIG.5 - FIG.7).

5.3 The ambient light level is too high.

1. Turn the decorative frame of detector anti-clockwise with proper strength, then insert two screws into the knock-outs on top cover and screw the detector on the housing of SAE-UE-MS-CSAWE and the decorative frame respectively for position verified convenience. Keep the "LED does not turn off" and make sure the load and wiring correctly.

4.4.4 Assembly completed

Part of the lens shield is used.