### FEATURES

- Intelligent PIR Detection System
  - Detection of ambient temperature and illuminance for automatic sensitivity management
  - Advanced detection algorithm
  - Three dual pyro-elements with patented Double Conductive Shielding
- Anti-vandalism functions
  - Anti-rotation function with 3-axis accelerometer
  - Anti-masking function with photo-beam
  - Reinforced polycarbonate housing
  - Max. 4 m (13 ft.) installation height
- Independent sensitivity selector for near/far areas
- Detection logic selector
- Detection range selector
- Independent N.C. and N.O. outputs
- Adjustable alarm interval time

- SIP-3020CAM DN (EU), SIP-3020CAM DN (US)
  - High-quality camera image: Day (colour)/Night (B/W)
  - 480 TV lines
  - Varifocal lens 3-9 mm
  - Minimum illumination: Day (colour) 0.5 lx, Night (B/W): 0.03 lx

### INSTALLATION AND MAINTENANCE NOTES

<table>
<thead>
<tr>
<th>Warning</th>
<th>Caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold the main unit securely when you install or service it. If you remove your hands from the main unit when cables are connected to it, the main unit may fall and the connector cables may break or the circuit board may be damaged.</td>
<td></td>
</tr>
</tbody>
</table>

### INSTALLATION HINTS

- Mount the detector so that the majority of traffic flow is across the detection pattern.

- Never repair or modify product.

- Verify that the power is off before connecting the wiring.

- When servicing, the sensor can be hooked onto the base using the nylon wire loop.

---

**PARTS IDENTIFICATION**

- **Redwall-V**
  - Synthesized Intelligent PIR
    - SIP-3020
    - SIP-4010
    - SIP-404
- **Redwatch-V**
  - Synthesized Intelligent PIR with D/N camera
    - SIP-3020CAM DN (EU)
    - SIP-3020CAM DN (US)
3 INSTALLATION AND ANGLE ADJUSTMENT

3-1 Wall Mounting

1. Attach the paper template (an accessory) onto the wall, and drill a 6-mm dia. mounting hole and a cabling hole. Insert the anchor bolt (an accessory) into the board mount hole.

Distance from the ground to the bottom of the template must be between 2.3 m (7.6 ft.) and 4 m (13 ft.).

2. Using an allen key, remove the main unit from the base.

3. Drill through the bushing of the wiring hole, pass the cable through the hole, and secure the base to the wall.

4. Connect the cable to the terminal block (see Step 3-3).

5. Mount the main unit onto the base.

Cautions>
When mounting the main unit, take care not to trap the nylon wire loop. Also, take care not to get your fingers caught.

Caution>>
When the red LED flashes after the power turns on, this signifies that the system is warming up. Wait for approximately 60 seconds.

3-2 Inside View of the Base

3-3 WIRING

*1: TAMPER terminals to be connected to a 24 hour supervisory loop.

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>TROUBLE OUTPUT</td>
<td>Trouble out is used for anti-masking signal. When an object is placed close to the lens surface, for a period of more than 20 seconds (approx.), the IR anti-masking circuit will activate and generate a trouble signal.</td>
</tr>
<tr>
<td>TAMPER OUTPUT</td>
<td>It is detected when the cover is opened.</td>
</tr>
<tr>
<td>ALARM OUTPUT (N.C.)</td>
<td>It is detected when the main unit is removed from its base.</td>
</tr>
<tr>
<td>ALARM OUTPUT (N.O.)</td>
<td>Anti-Rotation: Damage sustained by the main unit is detected. When the system power switch is turned on while the cover is closed, the mounting position of the main unit itself will be determined and stored in memory after approximately 10 seconds. Then, if the main unit is impacted in a horizontal or vertical direction and if the position of the main unit has changed, damage sustained by the main unit will be detected. However, if you remove the cover while keeping the system power turned on, and if you close the cover again after correcting the position of the main unit, the new position of the main unit will be stored in memory after approximately 10 seconds.</td>
</tr>
</tbody>
</table>
4 DETECTION AREA SETTING

You can adjust the detection area by 90 degrees in a horizontal direction and by 10 degrees in a vertical direction. Correct the vertical detection angle according to the mounting height of the sensor unit.

<table>
<thead>
<tr>
<th>WIRE SIZE</th>
<th>SIP-3020/SIP-4010/SIP-404</th>
<th>SIP-3020CAM DN (EU)</th>
<th>SIP-3020CAM DN (US)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12V DC</td>
<td>14V DC</td>
<td>24V DC</td>
</tr>
<tr>
<td>0.33 mm² (AWG22)</td>
<td>580</td>
<td>770</td>
<td>1370</td>
</tr>
<tr>
<td>0.52 mm² (AWG20)</td>
<td>910</td>
<td>1210</td>
<td>2160</td>
</tr>
<tr>
<td>0.83 mm² (AWG18)</td>
<td>1450</td>
<td>1930</td>
<td>3450</td>
</tr>
</tbody>
</table>

Power wires should not exceed the following lengths.

- **Cautions>>**
  - To rotate the main unit counterclockwise, loosen the RH-side adjustment screw. To rotate the main unit clockwise, loosen the LH-side adjustment screw. Otherwise, you may find it difficult to tighten or you may find that you cannot tighten the adjustment screw when you are securing the main unit.
  - To rotate the unit counterclockwise
  - To rotate the unit clockwise

- **Cautions>>**
  - The cover is linked to the main unit by nylon wire loop so that the cover does not fall. Do not pull the cover using excessive force.

- **Cautions>>**
  - If the mounting wall is at an angle, the arrow of the main unit may exceed the top or bottom limit of "Angle adjustment guide". Always check this using the area viewfinder or the walk tester. If the detection area is too high or too low, an object outside the detection area may be detected or incorrect object detection may occur.
(4) Mount the area viewfinder.

Mounting tips>>

- Engage the convex section of the area viewfinder fixing arms with the notches of the main unit, and insert and mount the arms.

- Mount the area plate so that an arrow of the plate center section faces upward and the letter surface can be seen.

- Insert the area plate into the top and bottom grooves of the area viewfinder until the plate is stopped by the ribs.

(5) Fine adjust the main unit angle in vertical and horizontal direction by observing the target area through the area viewfinder.

- Put the red string round the main unit.

- Insert and mount to the main unit.

- Insert the area plate into the slot.

- Determine the detection direction (see Step 6-1).

- Peel off the protection seal from both faces of the area plate.

- The sensor area is extended over the street where a person walks or a car drives.

- Branches of a tree and grass move when the wind blows.

Adjusting tips>>

If you experience any of the following, see Step 10.

1. To change the direction of the inspection window, rotate the area viewfinder in a horizontal direction until it clicks and stops.

2. Move your face close to the viewfinder so that your eye comes within 5 mm of the inspection window (lens surface).

3. Locate the center circle of the area plate on the center circle of the lens of the area viewfinder, and check the detection area pattern on the area plate and the background image.

- Each letter on the area plate corresponds to each mirror number (see Step 8-2).

- You cannot observe mirror numbers B1 to F1 and B6 to F6 (shown at right) of the SIP-3020 area plate through the inspection window. Check them using the walk tester.

4. Fine adjust the main unit angle in vertical and horizontal direction by observing the target area through the area viewfinder.

Securely tighten the adjustment screw that you have loosened.

(7) Connect the walk tester (optional) to the sensor unit, and check that the detection area is correct.

- Use at "REDWALL" position.

- Use at "REDWALL" position.

When the power selector switch is turned to "POWER SUPPLY FROM SENSOR" position after plugging the cable into the walk tester connector, a continuous beeping sound will be heard.

When a pedestrian first enters the detection area, the strong and weak beeps will sound alternately.

When the entirety of a pedestrian's body is detected, the strong beep will sound continuously.

Cautions>>

- The area viewfinder is a supporting tool for detection area adjustment.

- After you have adjusted the detection area using the area viewfinder, always check the area using the walk tester.

- Never look directly into the sun through the area viewfinder.

- After you have used the area viewfinder, store it away from direct sunlight.

- Peel off the protection seal from both faces of the area plate.
Cautions>>
When you are checking the detection area, take care not to cover the shaded area of the window with the walk tester or its cable. If infrared beams to the sensor are partially shielded, the detection sensitivity will drop and the detection operation may fail.

If it is difficult to detect an object>>
1. Set the detection logic switch to the "OR" position (see Step 5-2).
2. Adjust the sensor sensitivity switch (see Step 5-1).

To mask the detection area>>

<table>
<thead>
<tr>
<th>Detection area</th>
<th>How to mask the area</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Far area</td>
<td>Use the switch.</td>
<td>5-3</td>
</tr>
<tr>
<td></td>
<td>Use the masking plate (mounted in the main unit).</td>
<td></td>
</tr>
<tr>
<td>Near area</td>
<td>Use the masking plate (mounted in the main unit).</td>
<td>8-1</td>
</tr>
<tr>
<td></td>
<td>Attach the masking seal (an accessory) to the area mirror surface.</td>
<td></td>
</tr>
</tbody>
</table>

5-1 Sensitivity Selector Switch for Near and Far Area

<table>
<thead>
<tr>
<th>SELECTOR POSITION</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SH</td>
<td>Suitable for sites requiring a level of sensitivity higher than &quot;H&quot;</td>
</tr>
<tr>
<td>H</td>
<td>Suitable for sites requiring a level of sensitivity higher than &quot;M&quot;</td>
</tr>
<tr>
<td>M (Factory default)</td>
<td>Suitable for standard applications</td>
</tr>
<tr>
<td>L</td>
<td>Suitable for hostile and narrow area</td>
</tr>
</tbody>
</table>

5-2 Detection Logic Selector Switch

<table>
<thead>
<tr>
<th>SELECTOR POSITION</th>
<th>STATUS</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>OR (Factory default)</td>
<td></td>
</tr>
<tr>
<td>DWN</td>
<td>AND</td>
<td></td>
</tr>
</tbody>
</table>

A sensor signal is output when an object is detected in either of the two detection areas.
* Use this mode when you adjust the detection area. Switch to AND mode after you have finished the detection area adjustment.

Cautions>>
If you cancel the far area detection, the detection distance is limited to approximately 20 meters (65ft.). Be sure to readjust and check the detection area using the area viewfinder and the walk tester.

If it is difficult to detect an object>>
1. Set the detection logic switch to the "OR" position (see Step 5-2).

When you are checking the detection area, take care not to cover the shaded area of the window with the walk tester or its cable. If infrared beams to the sensor are partially shielded, the detection sensitivity will drop and the detection operation may fail.

If it is difficult to detect an object>>
1. Set the detection logic switch to the "OR" position (see Step 5-2).
2. Adjust the sensor sensitivity switch (see Step 5-1).

To mask the detection area>>

<table>
<thead>
<tr>
<th>SELECTOR POSITION</th>
<th>STATUS</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>OFF</td>
<td></td>
</tr>
<tr>
<td>DWN</td>
<td>ON (Factory default)</td>
<td></td>
</tr>
</tbody>
</table>

Cancels the far area detection. The detection area is reduced as shown below.

Enables the far area detection.

Cautions>>
If you cancel the far area detection, the detection distance is limited to approximately 20 meters (65ft.). Be sure to readjust and check the detection area using the area viewfinder and the walk tester.

5-3 Detection Range Selector Switch

<table>
<thead>
<tr>
<th>SELECTOR POSITION</th>
<th>STATUS</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>OFF</td>
<td></td>
</tr>
<tr>
<td>DWN</td>
<td>ON (Factory default)</td>
<td></td>
</tr>
</tbody>
</table>

Cancels the far area detection. The detection area is reduced as shown below.

Enables the far area detection.

Cautions>>
If you cancel the far area detection, the detection distance is limited to approximately 20 meters (65ft.). Be sure to readjust and check the detection area using the area viewfinder and the walk tester.

5-4 Alarm Interval Switch

<table>
<thead>
<tr>
<th>SELECTOR POSITION</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 sec (Factory default)</td>
<td></td>
</tr>
<tr>
<td>15 sec</td>
<td></td>
</tr>
<tr>
<td>30 sec</td>
<td></td>
</tr>
<tr>
<td>60 sec</td>
<td></td>
</tr>
</tbody>
</table>

You can set an interval (4 different times) to suspend the alarm signal output.
For example, if you set this interval to 30 seconds, no more alarm signals will be output for 30 seconds after the output of the first alarm signal. If no pedestrians are detected for more than 30 seconds, the system returns to the standby mode. Then, when a pedestrian is detected, the alarm signal will be output.
Masking the Far Area Sensor

The far area mirror mounted in the main unit has 2 far masking plates; one at the right side of this mirror and the other at the left side of this mirror. You can mask the detection area by changing the position of these masking plates.

Cautions>>
- You can only mask the detection area from its outside to its inside using the masking plates. You cannot mask only the inside detection area.
- However, if you need to mask the inside detection area only, use the white space (margin) of the near area masking seal (an accessory) for the masking. Attach the seal and mask all mirrors that you need to shield.

Cautions>>
- The window is linked to the main unit by nylon wire loop so that the window does not fall. Do not pull the window using excessive force.
- After you have masked the detection areas, mount the window and place the excessive nylon wire loop inside the main unit.

How to remove the window>>

Applicable models
SIP-3020 | SIP-4010 | SIP-404 | SIP-3020CAM DN

1. Remove the masking plate from the storage, and check the detection area and the mirror you use by referring to the area chart.
2. Attach the masking plate to the mirror, and secure it to the ribs.
3. Insert the fixing rubber form to secure the knob of the masking plate.
4. Press the left bottom hole with your finger, and pull the window up.

If tree branches or other moving objects are in the path of the detection beam.
8 MASKING THE NEAR AREA SENSOR

8-1 Masking the Detection Areas using Masking Plates

The near area mirror mounted in the main unit has 2 near masking plates; one at the right side of this mirror and another at the left side of this mirror. You can mask the detection area by changing the position of these masking plates.

Cautions>>

You can mask the outside detection areas only; they are areas 1 and 6. Use the area masking seals (an accessory) to mask the other detection areas (see Step 8-2).

Applicable models
SIP-3020 SIP-4010 SIP-404 SIP-3020CAM DN

If tree branches or other moving objects are in the path of the detection beam.

1 Remove the masking plate from the storage, and check the detection area and the mirror you use by referring to the area chart.

2 Attach the masking plate to the mirror, and secure it to the ribs.

3 Insert the fixing rubber form to secure the knob of the masking plate.

4 Remove the masking plate from the storage, and check the detection area and the mirror you use by referring to the area chart.

5 Attach the masking plate to the mirror, and secure it to the ribs.

6 Insert the fixing rubber form to secure the knob of the masking plate.
9 ADJUSTMENT OF CAMERA

9-1 Adjustment of Camera

(1) Open the camera cover, and connect the monitor unit cable to the camera unit.

(2) Adjust the vertical angle and the angle of view of the camera.

(3) Close the camera cover, and tighten two fixing screws.

(4) Check the image viewed by the camera, using the monitor unit or another monitoring device.

Cautions>>
The vertical camera angle adjustment mechanism is separated from the detection area control mechanism. To satisfy the BS8418 Standard, make sure that the vertical angle and the angle of view of the camera match the detection area correctly.

Points>>
If you are using the SIP-3020, SIP-4010, or SIP-404 sensor unit when you have completed Step 8, proceed to Step 9-2.

Masking the Detection Areas using Masking Seals

Using the tweezers (an accessory), carefully attach the area masking seals (an accessory) to the near area mirror.

Caution>>
Remove the transportation protection cardboard(s).

Caution>>
Peel off the protection seal(s) off the window.

Cautions>>

Points>>
10 OPERATION TEST

10-1 If There is a Public Street Where a People Walk or Cars Drive by the Detection Area

**Points>>**
Reduce the size of the detection area so that it does not include any public streets.

1. Check to see that the arrow of the main unit is within the width of “Angle adjustment guide” on the adjustment screw.

2. Using the area viewfinder, check to see that the detection area does not include any public streets.

3. If the detection area goes beyond a public street, correct the vertical angle of the main unit. However, exercise care so that the arrow does not move away significantly from the “Angle adjustment guide” position.

4. If the arrow does move away significantly from the “Angle adjustment guide” position:
   - Mask the far area detection area using the masking plate or by using the far area masking switch. You may be required to also mask the near area detection area under specific sensor installation conditions (see Steps 5 and 8).

5. When a person walks along the street or a car drives along it, check the detection area using the walk tester.

**Points>>**
You cannot mount and use both the area viewfinder and walk tester simultaneously.

**Cautions>>**
- The detection area may increase if there is a large difference in temperature between the moving object and the background.

**Cautions>>**
A heat source beyond the detection area may cause a false alarm due to the reflection of heat off the ground. Examples of types of surfaces that reflect include water (puddles), wet roads, smooth concrete surfaces, and asphalt roads. If the source of the heat is strong and/or the reflection rate is high, the detection distance will be longer than required and may detect unnecessary objects beyond the target area. Therefore, select the detection range position according to the ground conditions of the installation site.

---

9-2 Termination Procedure

**Applicable models** SIP-3020 | SIP-4010 | SIP-404 | SIP-3020CAM DN

(1) After you have adjusted all sensor items, secure tighten all adjustment screws that you have loosened. Finally, securely tighten the bottom fixing screws.

![Diagram](image1)

**Cautions>>**
- If you need to adjust the detection area again, be sure to loosen the fixing screw. If you try to move the main unit without loosening the fixing screw, the unit may be damaged.
- When you mount the cover, place the excessive nylon wire loop in the main unit. If the wire has been pinched by the window and the cover, raindrops may be able to enter into the main unit.

(2) Mount the cover.

![Diagram](image2)
**10-2** If Tree Branches or Grass are Detected When They Move Within the Detection Area

**Points>>**
Adjust the detection area so that it does not cover tree branches or grass that move when the wind blows.

1. Check to see that the arrow of the main unit is within the width of "Angle adjustment guide" on the adjustment screw.

2. Using the area viewfinder, check to see that the detection area does not cover tree branches or grass that may move when the wind blows.

3. Use the walk tester to listen for sound level changes when there is no apparent activity in the detection area. Adjust the detection area so that it does not detect unwanted areas.

   If the sound level changes, some part of the detection area must be active (i.e.: an object is moving).

4. Use the walk tester and locate the part of the detection area that is active. Change the walk tester selector switch position and determine whether the active part of the detection area is far or near.

5. Using the area viewfinder again, locate the active detection area.

6. Mask the active detection area. To do this, mask the area using the masking plate or the masking seal. Otherwise mask the area using the far area masking switch (see Steps 5, 7, and 8).

7. Using the walk tester again, check that the sound level changes. If the sound level does not change excessively, you can finish the adjustment.

**Points>>**
You cannot mount and use both the area viewfinder and the walk tester simultaneously.

**11 LED FUNCTIONS**

**Cautions>>**
If the red LED keeps blinking for approx. 60 seconds after turning the power on, turn the power off and then on again.

**DETECTOR STATUS**

<table>
<thead>
<tr>
<th>If the cover is removed</th>
<th>If the cover is removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>During power ON</td>
<td>Blinks</td>
</tr>
<tr>
<td>During standby</td>
<td>Turns OFF</td>
</tr>
<tr>
<td>When detected (in far near area)</td>
<td>Lights</td>
</tr>
</tbody>
</table>

**12 SPECIFICATIONS**

### 12-1 Specifications of the Main Unit

<table>
<thead>
<tr>
<th>Model</th>
<th>SLP-3020</th>
<th>SLP-4010</th>
<th>SLP-404</th>
<th>SLP-3020CAM DN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>30 x 20m (100 x 65ft.)</td>
<td>40 x 10m (130 x 33ft.)</td>
<td>40 x 4m (130 x 13ft.)</td>
<td>30 x 20m (100 x 65ft.)</td>
</tr>
<tr>
<td>Number of detection zones</td>
<td>74 zones</td>
<td>48 zones</td>
<td>24 zones</td>
<td>74 zones</td>
</tr>
<tr>
<td>Mounting height</td>
<td>2.3 to 4m (7.6 to 13ft.)</td>
<td>2.3 to 4m (7.6 to 13ft.)</td>
<td>2.3 to 4m (7.6 to 13ft.)</td>
<td>2.3 to 4m (7.6 to 13ft.)</td>
</tr>
<tr>
<td>Power input</td>
<td>11 - 16V DC</td>
<td>22 - 28V AC</td>
<td>12V DC</td>
<td>Can not use with optional heating unit</td>
</tr>
<tr>
<td>With optional heating unit</td>
<td>180mA max. (12V DC)</td>
<td>180mA max. (12V AC)</td>
<td>180mA max. (24V AC)</td>
<td>180mA max. (24V DC)</td>
</tr>
<tr>
<td>Operation indicator</td>
<td>RED ALARM</td>
<td>RED ALARM</td>
<td>RED ALARM</td>
<td>RED ALARM</td>
</tr>
<tr>
<td>Warm-up period</td>
<td>Approx. 60 sec.</td>
<td>Approx. 60 sec.</td>
<td>Approx. 60 sec.</td>
<td>Approx. 60 sec.</td>
</tr>
<tr>
<td>Detection range selector</td>
<td>Far area: ON / OFF</td>
<td>Far area: ON / OFF</td>
<td>Far area: ON / OFF</td>
<td>Far area: ON / OFF</td>
</tr>
<tr>
<td>Alarm interval period</td>
<td>0 / 15 / 30 / 60 sec.</td>
<td>0 / 15 / 30 / 60 sec.</td>
<td>0 / 15 / 30 / 60 sec.</td>
<td>0 / 15 / 30 / 60 sec.</td>
</tr>
<tr>
<td>Tamper output</td>
<td>N.C. 28V DC, 0.1A max.</td>
<td>N.C. 28V DC, 0.1A max.</td>
<td>N.C. 28V DC, 0.1A max.</td>
<td>N.C. 28V DC, 0.1A max.</td>
</tr>
<tr>
<td>Trouble output</td>
<td>N.C. 28V DC, 0.2A max.</td>
<td>N.C. 28V DC, 0.2A max.</td>
<td>N.O. 28V DC, 0.2A max.</td>
<td>N.O. 28V DC, 0.2A max.</td>
</tr>
<tr>
<td>Alarm output</td>
<td>N.C. 28V DC, 0.2A max.</td>
<td>N.O. 28V DC, 0.2A max.</td>
<td>N.O. 28V DC, 0.2A max.</td>
<td>N.O. 28V DC, 0.2A max.</td>
</tr>
<tr>
<td>Sensitivity selector</td>
<td>Far: SH/H/M/L Near: SH/H/M/L</td>
<td>Far: SH/H/M/L Near: SH/H/M/L</td>
<td>Far: SH/H/M/L Near: SH/H/M/L</td>
<td>Far: SH/H/M/L Near: SH/H/M/L</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-25 to +60°C, -40 to +60°C with optional heating unit (-13 to +140°F, -40 to +140°F with optional heating unit)</td>
<td>-25 to +60°C, -40 to +60°C with optional heating unit (-13 to +140°F, -40 to +140°F with optional heating unit)</td>
<td>-25 to +60°C, -40 to +60°C with optional heating unit (-13 to +140°F, -40 to +140°F with optional heating unit)</td>
<td>-25 to +60°C, -40 to +60°C with optional heating unit (-13 to +140°F, -40 to +140°F with optional heating unit)</td>
</tr>
<tr>
<td>Dimensions (H x W x D)</td>
<td>227 x 102 x 266mm (9.0 x 4.0 x 10.5 in.)</td>
<td>252 x 102 x 317 mm (9.9 x 4.0 x 12.5 in.)</td>
<td>252 x 102 x 317 mm (9.9 x 4.0 x 12.5 in.)</td>
<td>252 x 102 x 317 mm (9.9 x 4.0 x 12.5 in.)</td>
</tr>
<tr>
<td>Weight</td>
<td>1.2kg (42 oz.)</td>
<td>1.5kg (52 oz.)</td>
<td>1.5kg (52 oz.)</td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>Screws, paper template, allen key, area masking seal, tweezers, instruction manual, area plate, fixing rubber form</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Specifications of the Main Unit**

- **Applicable models:** SLP-3020 | SLP-4010 | SLP-404 | SLP-3020CAM DN
- **Model:** SLP-3020 | SLP-4010 | SLP-404 | SLP-3020CAM DN

**10-2** If Tree Branches or Grass are Detected When They Move Within the Detection Area

**Points>>**
Adjust the detection area so that it does not cover tree branches or grass that move when the wind blows.

1. Check to see that the arrow of the main unit is within the width of "Angle adjustment guide" on the adjustment screw.

2. Using the area viewfinder, check to see that the detection area does not cover tree branches or grass that may move when the wind blows.

3. Use the walk tester to listen for sound level changes when there is no apparent activity in the detection area. Adjust the detection area so that it does not detect unwanted areas.

   If the sound level changes, some part of the detection area must be active (i.e.: an object is moving).

4. Use the walk tester and locate the part of the detection area that is active. Change the walk tester selector switch position and determine whether the active part of the detection area is far or near.

5. Using the area viewfinder again, locate the active detection area.

6. Mask the active detection area. To do this, mask the area using the masking plate or the masking seal. Otherwise mask the area using the far area masking switch (see Steps 5, 7, and 8).

7. Using the walk tester again, check that the sound level changes. If the sound level does not change excessively, you can finish the adjustment.

**Points>>**
You cannot mount and use both the area viewfinder and the walk tester simultaneously.
Camera Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>SIP-3020CAM DN (EU)</th>
<th>SIP-3020CAM DN (US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor</td>
<td>1/3&quot; CCD (PAL)</td>
<td>1/3&quot; CCD (NTSC)</td>
</tr>
<tr>
<td>TV line</td>
<td>480TVL (at wide position)</td>
<td>NTSC 768 H x 494 V</td>
</tr>
<tr>
<td>Resolution</td>
<td>PAL 752 H x 582 V</td>
<td>NTSC 768 H x 494 V</td>
</tr>
<tr>
<td>Lens</td>
<td>f = 3 to 9mm, varifocal, DC auto iris lens F1.2</td>
<td></td>
</tr>
<tr>
<td>Minimum illumination</td>
<td>Day (colour): 0.5 lx (F1.2)</td>
<td>Night (B/W): 0.03 lx (F1.2)</td>
</tr>
<tr>
<td>Video output</td>
<td>1.0Vp-p/75 Ω BNC connector, PAL</td>
<td>1.0Vp-p/75 Ω BNC connector, NTSC</td>
</tr>
</tbody>
</table>

DIP switch

<table>
<thead>
<tr>
<th>No.</th>
<th>NAME</th>
<th>Function</th>
<th>Factory default setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ELC/ALC</td>
<td>Exposure control method setting</td>
<td>OFF (ALC)</td>
</tr>
<tr>
<td>2</td>
<td>AGC</td>
<td>Automatic sensitivity setting</td>
<td>ON</td>
</tr>
<tr>
<td>3</td>
<td>BLC</td>
<td>Backlight correction</td>
<td>ON</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>Leave this switch OFF (factory default).</td>
</tr>
</tbody>
</table>

Cautions>

When SIP-HU is used, the power for SIP unit should be 22 - 26V AC. SIP-3020CAM DN can not use SIP-HU.

These units are designed to detect movement to activate CCTV system. Being only part of a complete surveillance system, we cannot accept responsibility for any damage or other consequences resulting form the activation of the unit.

This product confirms the EMC Directive 2004/108/EC. Specifications and design are subject to change without prior notice.

OPTEX CO., LTD. (JAPAN)
(ISO 9001 Certified) (ISO 14001 Certified)
5-8-12 Ogoto Otto Shiga 520-0101 JAPAN
TEL:+81-77-579-8670  FAX:+81-77-579-8190
URL:http://www.optex.co.jp/jp/

OPTEX INCORPORATED (USA)
TEL:+1-960-993-5770  Tch:(800)966-7839
URL:http://www.optexasia.com/

OPTEX (EUROPE) LTD. (UK)
TEL:+44-1628-831000
URL:http://www.optex EUROPE.com/

OPTEX SECURITY SAS (FRANCE)
TEL:+33-437-55-50-50
URL:http://www.optex-security.com/

OPTEX SECURITY Sp. z o. o.
(POLAND)
TEL:+48-22-598-06-55
URL:http://www.optex.com.pl/