When superior performance meets modern design

The BX Shield is a series of outdoor PIRs providing 12m per side curtain coverage:

Black and white models
- BXS-ST: 12 m / 40 ft side by side (total 24 m / 80 ft)
- BXS-AM: with anti-masking
- BXS-R: Battery operated 12 m / 40 ft side by side (total 24 m / 80 ft)
- BXS-RAM: with anti-masking

White models
- BXS-ST (W)
- BXS-AM (W)
- BXS-R (W)
- BXS-RAM (W)
SHIELD: the new shape of security

4 PIR SENSORS, IR DIGITAL ANTI-MASKING
AND SHIELD CONCEPT DESIGN

Reliable
Up to 12m/40ft. flexible detection areas on each side of the sensor

**4 PIR technology**
The detection range, sensitivity and alarm output can be set separately for the left and right detection areas. The sensor can differentiate between large and small objects within the detection area, reducing false activations and ensuring genuine intruder detection.

**AND logic function to reduce false alarms**
The BX SHIELD only triggers an alarm signal when both upper and lower areas detect movement.

**Individual detection area and sensitivity setting**
Both left and right detection ranges can be independently adjusted. (2.5 to 12 m in 5 steps)

**Extreme high detection mode**
For environments where the temperature difference between the human body and the background is very small, the extreme high detection mode increases the PIR sensitivity to prevent any missed alarms.

**SMDA (Super Multidimensional Analysis) logic**
All BX SHIELD models feature a digitally enhanced signal recognition logic called SMDA increasing detection reliability. By analysing the detection patterns and environmental information SMDA can differentiate between genuine intrusions and a number of noise factors such as changes in weather conditions and swaying vegetation.

**IR digital anti-mask function**
Active IR anti-masking detects when the lens surface has been covered, blocked or painted.

**Individual signal outputs (left and right)**
The BX SHIELD triggers independent alarm outputs for the left and the right detection areas which is useful when connected to PTZ cameras.
**Convenient**

90 degrees rotation mechanism
Easy to open / close cover

Blue Touch™

All the components needed for the sensor's adjustment and settings are in blue for ease of installation.

Automatic walk test mode
Walk test mode will time out after three minutes and the setting will return to “normal mode”.

**Secure**

A sense of security, designed for you

Level indicator
The BX SHIELD series features a level indicator to ease the installation process.

Back tamper
Tamper output activates when face cover or back box is removed.

**Product Features**

**Battery life for the battery-operated models**

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<tr>
<th>Model</th>
<th>BXS-R</th>
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<tr>
<td>Interval (sec.)</td>
<td>120</td>
<td>5</td>
</tr>
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<td>Approx. years</td>
<td>3</td>
<td>2</td>
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</table>

Calculations based on:
- Single type battery, no power sharing with transmitter, LED OFF and Anti-masking ON.

**EOL module socket (BXS-ST,AM only)**

Optional EOL (End of line) resistor modules are available.

**SHIELD housing**

IP55 protection
UV resistant ASA body

**Versatile design**

- Black cover / black body
- White cover / black body
- Silver cover / black body
- White cover / white body

**EOL module socket**

(BXS-ST,AM only)
Optional EOL (End of line) resistor modules are available.

**Pole mount plate (option)**

Suitable for a metal band up to 23 mm (1 inch) in width

**Wireless transmitter and battery**

- Battery box RBB-01 (option)
- Battery box (RBB-01)

*Battery not included.
CR123A x 3 (3.0 V DC)
CR2 x 3 (3.0 V DC)
1/2AA x 6 (7.2 V x 3)*
3.6 V DC 1/2 AA battery in series.

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**Back side view of the main unit**

- 65 (2.56)
- 45 (1.77)
- 35 (1.38)

**Level indicator**

The BX SHIELD series features a level indicator to ease the installation process.

**90 degrees rotation mechanism**

Easy to open / close cover

**Easy to adjust detection angle**

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Web based manual for wired models
http://navi.optex.net/manual/50157

Web based manual for battery operated models
http://navi.optex.net/manual/50157
These units are designed to detect an intruder and activate an alarm control panel. Specifications and designs are subject to change without prior notice.

### Coverage

<table>
<thead>
<tr>
<th>Top view</th>
<th>Side view</th>
<th>Unit: m (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO WALL</td>
<td>TO WALL</td>
<td>0°</td>
</tr>
<tr>
<td>AWAY WALL</td>
<td>AWAY WALL</td>
<td>3°</td>
</tr>
<tr>
<td>12.0</td>
<td>12.0</td>
<td>5.0</td>
</tr>
<tr>
<td>10.0</td>
<td>10.0</td>
<td>5.0</td>
</tr>
<tr>
<td>8.5</td>
<td>8.5</td>
<td>5.0</td>
</tr>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>3.5</td>
<td>3.5</td>
<td>5.0</td>
</tr>
<tr>
<td>2.0</td>
<td>2.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

### Options

- BXS Face cover (White / Silver / Black)
- BXS Back box (White / Black)
- BXS Back box Cap
- BXS Pole mount plate
- BATTERLY BOX (RBB-01)

### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>BXS-ST</th>
<th>BXS-AM</th>
<th>BXS-R</th>
<th>BXS-RAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection method</td>
<td>Passive infrared</td>
<td>Passive infrared</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coverage</td>
<td>24 m (80') ; 12 m (40') on each side, 4 zones ; 2 zones on each side, 180°narrow</td>
<td>24 m (80') ; 12 m (40') on each side, 4 zones ; 2 zones on each side, 180°narrow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIR distance settings</td>
<td>2,5, 3, 5, 6, 8, 12 m</td>
<td>2,5, 3, 5, 6, 8, 12 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detection angle from wall</td>
<td>TO WALL : 0° angled forward AWAY WALL : 3° angled forward</td>
<td>TO WALL : 0° angled forward AWAY WALL : 3° angled forward</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detectable speed</td>
<td>0.3 to 2.0 m/s (1' to 6'7&quot;)</td>
<td>0.3 to 2.0 m/s (1' to 6'7&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitivity</td>
<td>Normal : 2.0°C (3.6°F) at 0.6 m/s Extreme high : 1.0°C (1.8°F) at 0.6 m/s</td>
<td>Normal : 2.0°C (3.6°F) at 0.6 m/s Extreme high : 1.0°C (1.8°F) at 0.6 m/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power input</td>
<td>9.5 to 18 V DC</td>
<td>3 to 9 V DC</td>
<td>Lithium or Alkaline batteries</td>
<td></td>
</tr>
<tr>
<td>Current draw</td>
<td>31 mA max. at 12 V DC</td>
<td>34 mA max. at 12 V DC</td>
<td>15 µA stand-by / 8 mA max. at 3 V DC</td>
<td>16 µA stand-by / 8 mA max. at 3 V DC</td>
</tr>
<tr>
<td>Warm-up period</td>
<td>2.0 ±1 sec.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alarm period</td>
<td>6 sec. or less (LED blinks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alarm output (R)</td>
<td>Solidstate switch, 10 V DC 0.01 A max. [Individual;Right or General], [N.O. or N.C.] are selectable</td>
<td>Solidstate switch, 10 V DC 0.01 A max. [Individual;Right or General], [N.O. or N.C.] are selectable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alarm output (L)</td>
<td>Solidstate switch, 10 V DC 0.01 A max. [Individual;Left or General], [N.O. or N.C.] are selectable</td>
<td>Solidstate switch, 10 V DC 0.01 A max. [Individual;Left or General], [N.O. or N.C.] are selectable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamper output</td>
<td>N.C. 28 V DC 0.1 A max.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamper output open when face cover, main unit or base unit is removed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Troubleshooting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation temperature</td>
<td>-30°C to + 60°C (-22°F to + 140°F)</td>
<td>-30°C to + 60°C (-22°F to + 140°F)</td>
<td>-30°C to + 60°C (-22°F to + 140°F)</td>
<td>-30°C to + 60°C (-22°F to + 140°F)</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>95% max.</td>
<td>95% max.</td>
<td>95% max.</td>
<td>95% max.</td>
</tr>
<tr>
<td>International protection</td>
<td>IP 55</td>
<td>IP 55</td>
<td>IP 55</td>
<td>IP 55</td>
</tr>
<tr>
<td>Mounting</td>
<td>Wall, pole (outdoor/indoor)</td>
<td>Wall, pole (outdoor/indoor)</td>
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</tr>
<tr>
<td>Mounting height</td>
<td>0.8 to 1.2 m (2'7&quot; to 4')</td>
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</tr>
<tr>
<td>Weight</td>
<td>430 g (15.2 oz.)</td>
<td>550 g (19.4 oz.)</td>
<td>34 mA max.</td>
<td>16 µA stand-by / 8 mA max. at 3 V DC</td>
</tr>
<tr>
<td>Accessories</td>
<td>Screw (4 x 20 mm) x 2</td>
<td></td>
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- *These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.*