Outdoor Boundary Detector

OPT-BXS-ST
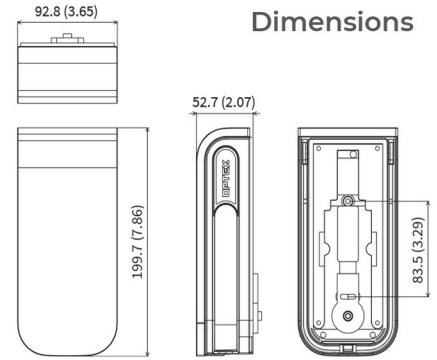
Flexible permformance meets modern design

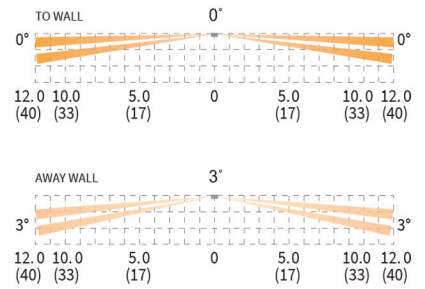**EliteControl**

555

Features

- Quad PIR sensors (2 on each side)

- Up to 40ft detection per side (80ft total)

- Passive infrared detection

- Outdoor ready IP55

- Extreme high detection mode

- SMDA logic (Super multidimensional analysis)

Detection with **OPTEX** | 2 Year **Warranty**

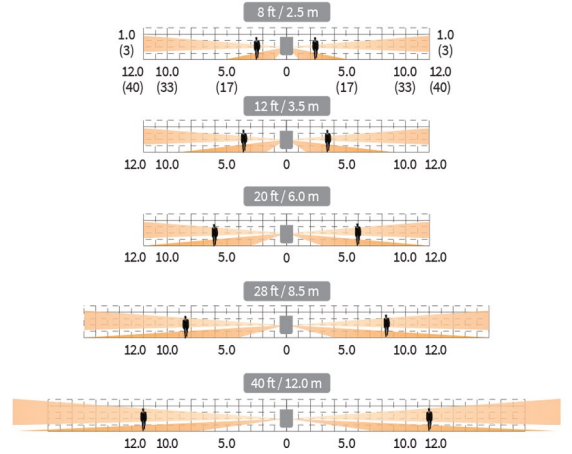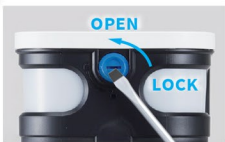| Model	BXS-ST
Detection method	Passive infrared
Coverage	24 m (80') ; 12 m (40') on each side, 4 zones ; 2 zones on each side, 180°narrow
PIR distance limit	list the possible range 2.5, 3.5, 6, 8.5, 12 m
Detection angle from wall	TO WALL：0° angled forward AWAY WALL : 3° angled forward selectable
Detectable speed	0.3 to 2.0 m/s (1' to 6'7"/s)
Sensitivity	Normal ; 2.0℃ (3.6°F) at 0.6 m/s Extreme high : 1.0℃ (1.8°F) at 0.6 m/s selectable for each side individually
Power input	9.5 to 18 V DC
Current draw (except walk test)	31 mA max. at 12 V DC
Alarm period	2.0 ±1 sec.
Warm-up period	60 sec. or less (LED blinks)
Alarm output (R)	28 V DC 0.1 A max. [Individual;Right or General], [N.O. or N.C.] are selectable
Alarm output (L)	28 VDC 0.1 A max. [Individual;Left or General], [N.O. or N.C.] are selectable
Trouble output	-
Tamper output	N.C. 28 V DC 0.1 A max. open when face cover, main unit or base unit is removed
LED indicator	Red LED ; 1. Warm-up 2. Alarm (DIP switch ON or Walk test)
Operation temperature	-30℃ to + 60℃ (-22°F to +140°F)
Environment humidity	95% max.
International protection	IP 55
Mounting	Wall, pole (outdoor,indoor)
Mounting height	0.8 to 1.2 m (2'7" to 4')
Weight	430 g (15.2 oz.)
Accessories	Screw (4 x 20 mm) x 2

Dimensions

92.8 (3.65)
52.7 (2.07)
199.7 (7.86)
83.5 (3.29)

Coverage

Top view

TO WALL   0°
0°   0°
12.0 10.0   5.0   0   5.0   10.0 12.0
(40) (33)   (17)   (17)   (33) (40)

AWAY WALL   3°
3°   3°
12.0 10.0   5.0   0   5.0   10.0 12.0
(40) (33)   (17)   (17)   (33) (40)

Side view

Unit: ft / m

8 ft / 2.5 m
1.0   1.0
(3)   (3)
12.0 10.0   5.0   0   5.0   10.0 12.0
(40) (33)   (17)   (17)   (33) (40)

12 ft / 3.5 m
12.0 10.0   5.0   0   5.0   10.0 12.0

20 ft / 6.0 m
12.0 10.0   5.0   0   5.0   10.0 12.0

28 ft / 8.5 m
12.0 10.0   5.0   0   5.0   10.0 12.0

40 ft / 12.0 m
12.0 10.0   5.0   0   5.0   10.0 12.0

SHIELD Convenient

OPEN
LOCK

90 degrees rotation open
Easy to open / close cover

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

Blue Touch™
All accessible parts are colored in blue, making installation a friendlier procedure.

BXS-ST
Power input
9.5 to 18 V DC ⎓ 12VDC ⎓ 26mA max.
Output
N.C. / N.O. Selectable-Solid State Switch
28V DC 0.14 max.
PIR SENS.(L)   PIR SENS.(R)

All components for the sensor's adjustment & settings are in blue.

Easy to adjust the detection area

Automatic Walk Test Mode
Walk test mode will time out after three minutes and the setting will return to "normal mode".

Detection   No detection
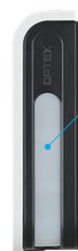
SHIELD Secure

A Sense Of Security, Designed For You

Flat profile supported by an internal honeycomb structure ensures durability.
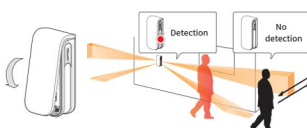
Optional color variations for a face cover can make installations less obvious.

Optical lens units are sealed and re-enforced to add extra strength.
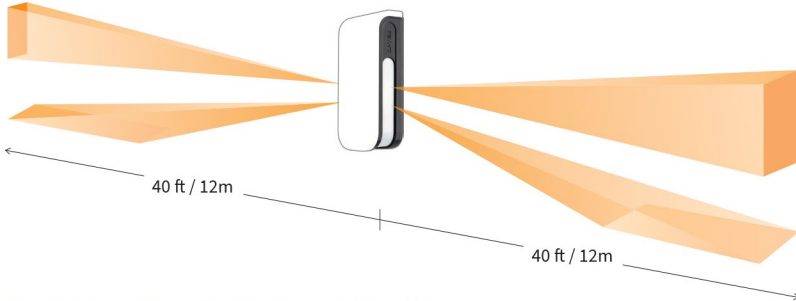
Back Tamper
Trouble output activates when face cover, chassis as well as back box is removed.

Reliable

40 ft / 12m on each side, long & narrow high sensitivity detection area

40 ft / 12m

40 ft / 12m

Quad-PIR Technology

The detection range, sensitivity, 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.
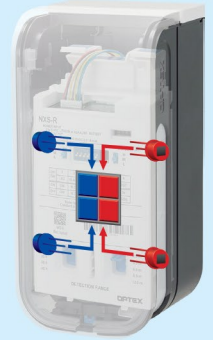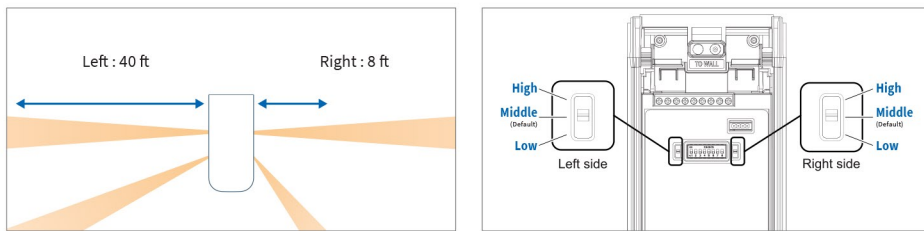
AND Logic Function to Reduce False Alarms

The BX SHIELD only triggers an alarm signal when both upper and lower detection areas detect movement.

No detection

No detection
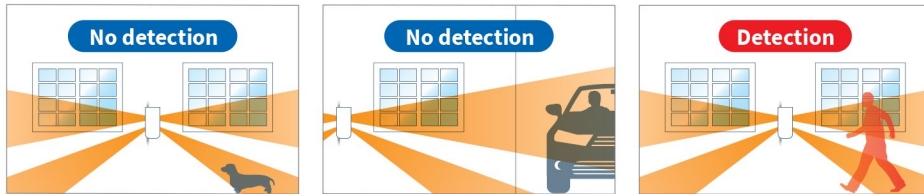
Detection

Individual Detection Area & Sensitivity Setting

Left and right detection ranges can be independently adjusted. (2.5 to 12 m in 5 steps)
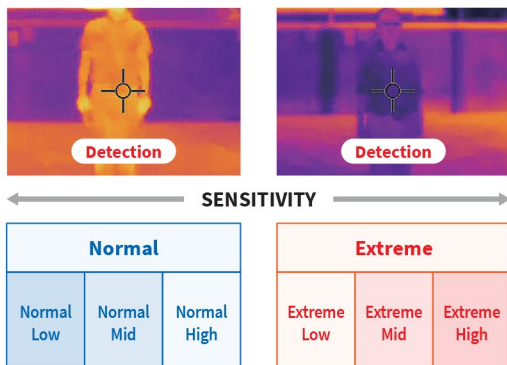
Left : 40 ft

Right : 8 ft

High
Middle
(Default)
Low
Left side

High
Middle
(Default)
Low
Right side

IR Digital Anti-Masking Function

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

**Sabotaged**

Trouble out

Trouble
signal
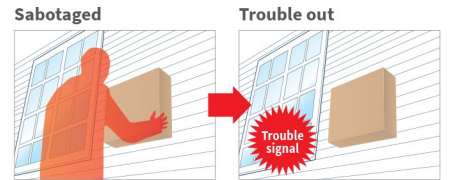
Extreme High Detection Mode

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 avoid any missed alarm.

Detection

Detection

SENSITIVITY

Normal		
Normal Low	Normal Mid	Normal High

Extreme		
Extreme Low	Extreme Mid	Extreme High

SMDA (Super Multidimensional Analysis) Logic

All BX SHIELD models feature a digitally enhanced signal recognition logic called SMDA. By analyzing the detection patterns and environmental information SMDA can differentiate between a number of noise factors such as changes in weather conditions and vegetation sways; and genuine intrusions. This intelligent processing makes the sensors very reliable.

Detection

No detection

etc.
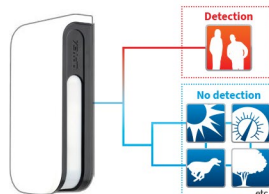
Individual Signal Outputs (Right & Left)

The BX SHIELD triggers independent alarm signals for the left and the right detection areas which is useful when connected to PTZ cameras.