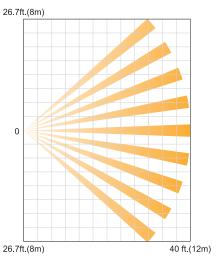
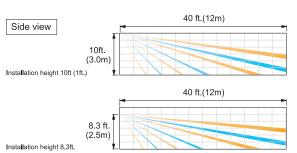
## High Mount Outdoor Detector **HX series**

## **Detection Area**

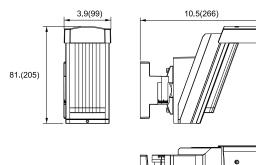
Top view





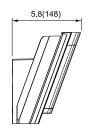
## Dimensions

### Using bracket and hood



#### Without bracket and hood







in(mm)

### **Dimensions**

Model	HX-40	HX-40AM	HX-40RAM
Detection method	Passive infrared		
PIR Coverage	40ft. (12m) 85°	wide / 94 zones	
Distance limit	13ft., 18ft., 30ft., 40ft. (4 m, 5.5 m, 9 m, 12 m)		
Detectable speed	1 - 5 ft/s (0.3-1.5 m/s)		
Sensitivity	3.6°F (2.0°C) at 0.6 m/s		
Power input	9.5-18VDC		3-7.2VDC Lithium
Current draw	35mA (max) at 12VDC	40mA (max) at 12VDC	4mA (max) at 3VDC
Alarm period	2.0±1 sec		
Warm-up period	Approx. 60 sec(LED blinks)		Approx. 90 sec(LED blinks)
Alarm output	Form C 28VDC 0.2A max		Form C-Solid State-10VDC 0.01A max
Tamper output	N.C. 28V DC, 0.1A max.N.C. open when cover removed.		Form C. 28V DC, 0.1A max.N.C. changes when cover removed.
Trouble output	-	N.C. 28V DC, 0.1A max	N.C./N.O. Selectable -Solid State Switch- 10V DC, 0.01A max
Aux input	N.C. 28V DC, 0.1A max		
LED indicator	Red:Warm-up, Alarm	Red:Warm-up, Alarm,Trouble	Disable: During Normal Operation
			Enable: During WALK TEST or LED SW on
			Red: Warm Up, Alarm, Trouble, Low Battery
RF Interference	No alarm 10 V/m		
Operating temperature	-4 -+140°F (-20 -+60°C)		
Environment humidity	95% max		
Weatherproof	IP55		
Mounting	Wall (Outdoor, Indoor)		
Mounting height	8.3 - 10 ft. (2.5 - 3 m)		
Bracket adjust angle	Vertical: ±20° Horizon: ±95°		
Weight	21.2 oz (600 g)		
Accessories	Accessories Bracket, Hood, Area masking seal, Screw kit (3×10-2, 4×20-4)		Bracket, Hood, Area masking seal, Screw kit (3×10-2, 4×20-4)
			Velcro tape x2, Alarm Cable, Battery lead x2, Dummy battery kit

NOTE:

This unit is designed to detect movement of 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. This product conforms to the category "Residential, Commercial and Light Industry" of EMC Directive 89/336.

### Accessories (These are included in package)

## 180° angle adjustable bracket

It reduces false and missed alarms by achieving the accurate installation.



#### Hood

It prevents the direct sunlight and water getting into the lens.





OPTEX INCORPORATED (USA) 13661 Benson Ave. Chino, CA 91710 TEL. 800-966-7839 FAX 909-628-5560 www.optexamerica.com



- 8.3ft to 10ft. mounting height
- High density two detection zones with unique pyro-element
- Dual signal processing circuit[ Automatic sensitivity adjustment in a hostile environment ]
- Vegetation sway analysis logic
- Ideal detection area setting
- Environment-responsive design to achieve appropriate installation
- Anti-Masking Technology (HX-40AM)
- Battery Operated, Anti-Masking version (HX-40RAM)



The HX-40 series is the newest addition to the Optex line of outdoor detectors. With it's stability and reliablity, the HX-40 series is the perfect fit for high-end applications.

The HX-40 detectors include two high density detection zones with unique pyro elements and an accurate discrimination function for spot temperature changes of moving objects. Both features drastically reduce false and missed alarms caused by severe outdoor environmental changes. In addition, the sensor features "Ideal Detection Area Setting" which allow the sensors detection area to be set at 40', 30', 18.3' or 13.3'. This allows the installer to achieve accurate installation based on the surroundings.

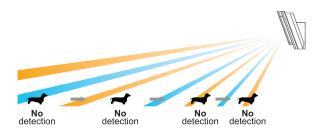
Accurate detection performance is necessary in severe outdoor environments.

The HX series meets this requirement.

## High detection performance to prevent false and missed alarms

# Intelligent AND logic with unique pyro-element

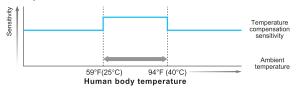
The HX employs originally developed pyro-elements which creates unique area configuration with 94 high density detection zones. By utilizing the AND detection pattern technology - upper and lower detection areas have to be activated in order to generate an alarm condition, the HX series prevents false alarms caused by pet or small animal.



## Dual signal processing circuit

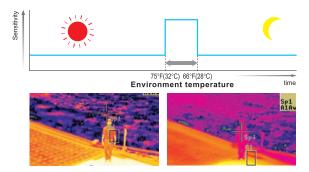
#### Advanced temperature compensation logic

It automatically increases the detector's sensitivity, especially where the background temperature ranges from approx.  $59-94^{\circ}F$  (25 to  $40^{\circ}C$ ), close to that of the human body.



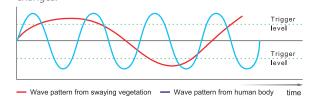
## Summer night compensation logic

It is effective for the severe environmental condition such as summer evening and nights. The HX series addresses this issue by the additional measurement of luminance levels as the environment changes and allows sensitivity to automatically sharpen as environmental conditions require.



## Vegetation sway analysis logic

The HX series monitors wave changes at all the times and automatically cancels the signal caused by swaying grass when it determines the increase of this distinctive wave changes.



## Digital anti-masking technology (patent pending) (HX-40AM)

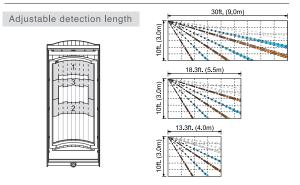
Digital processing circuit can guarantee its permanent reliability in a practical way. According to on going environmental changes the HX-40AM can regularly make automatic optimization.

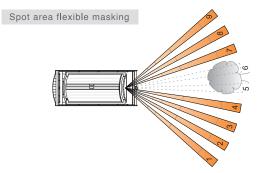
## Double conductive shielding against unwanted light disturbances

By using double shielding, the visible light disturbances such as reflected sunlight and RFI can be blocked.

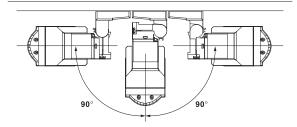
## Ideal detection area setting to achieve accurate installation

## With masking seal





#### With 180° angle adjustable bracket



## Environmental responsiveness design

 The look 20°downward design and accessory hood prevents the rain, wind, or direct sunlight direct to the lens surface.

 The original cuts done on the lens surface strengthen its durability and offers better protection against the outdoor severe environmental condition.

