

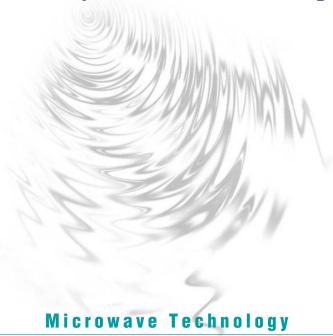
PASSIVE INFRARED &
MICROWAVE COMBINATION DETECTOR
W / IMMUNITY

# **MX-40PI**



Optex Now Provides
Unprecedented Reliability in
Detection Performance by
Integrating New Microwave
Technology and Our Stateof-the-Art PIR Technology

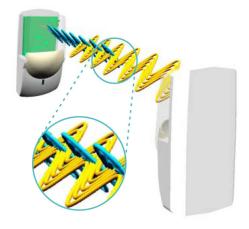
## High-Grade Sensing Performance from a Combination of Microwave and Easy Installation and Compact, Attractive Design - The MX-40PI Satisfies



### **Anti-Crosstalk System (Patent Pending)**

Optex utilizes a unique microwave technology in designing the antenna settings for the MX-40PI. The result is a non-conventional "Anti-Crosstalk System" which prevents interference from other microwaves. Reducing interference enables the MX-40PI to prevent false alarms typically caused by numerous matching frequencies in one single area. Complete with a "Noise Reduction Circuit" the MX-40PI is able to cancel noise that enters the antennas, thus eliminating microwave interference.

The high quality, highly reliable MX-40PI is the solution for false alarms caused by outside microwave interference.



## **OPTEX** Design and

Quick and Easy Installation w

Cover

- Easy installation and wiring are engineered into this compact housing.
- Easy Microwave Area Adjustment:
- Long or Short Distance Selector Switch





## Improved Performance with and Passive Infr

**Optex Design and Innovation Provide High** 

## 1 High Reliability

#### Ideal Detection Area

The MX-40PI creates an integrated detection area. This enables the microwave detection area to synchronise to the PIR detection area, achieving higher detection performance and preventing errors and false alarms.

#### Spherical Lens Design

With uniform distance between each lens segment and the pyroelectric elements, the spherical lens provides a precise focal length to each of the multiple lens segments. This enables each lens segment to precisely face its detection area

and creates detection zones without distortion, achieving a new level in lens design precision. The lens has a unique spherical design which makes it highly resistant to damage and outside disturbances.



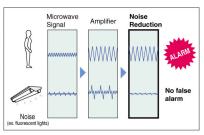


MX-40PI Simulated Optics (

Ordinary Simulated Optics

#### Noise Reduction Function

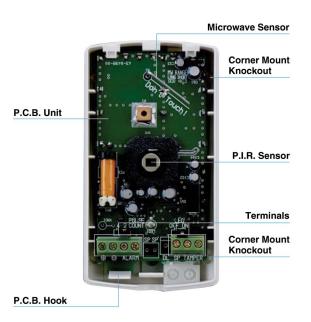
The Noise Reduction Circuit provides reliable performance against outside noise such as electromagnetic interference and noise caused from fluorescent lights. As a result, the possibility of false alarms is greatly reduced.



## d PIR Technology. All of Of Your Detection Needs

## **Modern Technology**

ith Unique Compact Housing



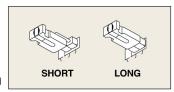
## Reliability from Microwave ared Integration

**Reliability using Combination Technology** 

## 2 Easy Installation

#### Easy Microwave Range Selector

The MX-40Pl allows for a simple two step adjustment. Setting the range selector to short or long range detection, according to the room size, makes adjustment during installation much easier and less time consuming.



#### Easy Wiring Knockouts

The PC board is removable for simple wiring. With the simple use of a screwdriver, a firm tap will easily remove the knockout.



## 3 Compact, Stylish Design

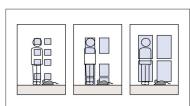
The compact and stylish body matches any interior design without disturbing the decor.

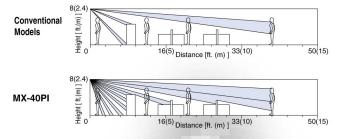
## Passive Infrared Technology

#### **Quad Zone Logic (Patent Listed)**

The highly accurate and reliable detection pattern will maintain its sensitivity through the entire detection area, even in high temperature or low contrast environments. Quad Zone Logic creates an extremely high vertical zone density, two or three times the size of conventional PIRs. These taller zones capture the entire body mass and enable detection of even the smallest temperature contrast against the background. In addition, the vertical detection density has been improved to take into

account dead zones created by furniture or partitions.







## **TOP VIEW** 20 25 25 ft. 20 15 10 5 0 10 15 20 25 ft. 3 SIDE VIEW 5 ft. \_ 8 ft.

\*Specifications and design are subject to change without prior notice.

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 EMC Directive 89/336 EEC.

### **OPTIONAL BRACKETS**

#### FA-3

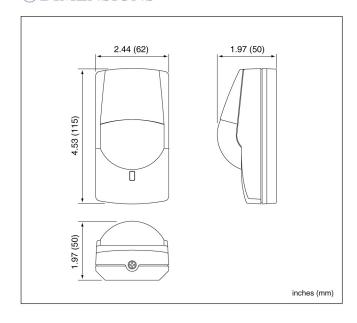
Compact Wall & Ceiling Mount Bracket Adjustable ±45° Horizontally, 0-10° Vertically Downwards



### **OSPECIFICATIONS**

MODEL	MX-40PI
Detection method Passi	ve Infrared and Microwave
Coverage 40ft. x	40ft. (12m x 12m) 85° wide
Detection zones	78 zones (PIR)
Mounting height	5 - 8ft. (1.5 - 2.4m)
Sensitivity 3.6° F (	2° C) at 2ft./sec. (0.6m/sec.)
Detectable speed 1 - 5	5ft./sec. (0.3 - 1.5m/sec.)
LED alarm indicator	Switchable ON/OFF
Alarm period	Approx. 2.5 sec.
Alarm output N.0	C., 28V DC== 0.2A max.
Pulse count	Approx. 20 sec. 2 or 4
Warm up period	Approx. 1 min.
Power input	9.5 - 16V DC==
Current draw 18	mA (max.) at 12V DC==
Weight	3.9oz. (110g)
Operating temperature 14° F	- 131° F (-10° C - +55° C)
Environmental humidity	95% max.
Microwave frequency 2.45GHz (I	FCC, IC, ETS300-440 approval)
RF interference	No Alarm 20V/m

### **ODIMENSIONS**





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