

12m x 180° DUAL-ZONE OUTDOOR PIR



# MX-12FAMD

PIR + Microwave with Anti-Masking

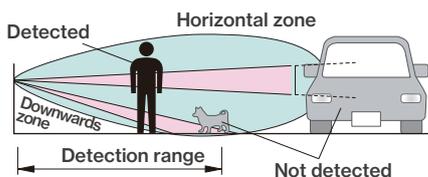
- SLIM DESIGN
- DUAL TECH
- 180° DETECTION



## Dual-zone detection system with Microwave reduces false alarms significantly for reliable outdoor protection

### TRIPLE DETECTION SYSTEM (2× PIR ZONE + MICROWAVE)

Horizontal/downward zones and MW require simultaneous detection preventing nuisance alarms caused by small animals and passing vehicles.



### 180 DEGREE WIDE ANGLE COVERAGE

Up to 180° of complete coverage, with independent 2m - 12m adjustable protection distance for left and right sides for maximum installation versatility.

### DUAL ALARM SIGNAL OUTPUTS

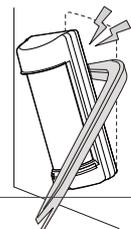
- Choose between:
- individual alarm outputs per 90 degree left and right side
  - Or a combined 180 degree output + external output for triggering CCTV or ancillary devices.

### ANTI-MASKING

Protected by sophisticated Anti-Masking technology with near-lens awareness, designed to initiate an alarm if the device is compromised.

### BACK TAMPER

Equipped with both front and back tampers to detect interference or attempted theft of the sensor any time of the day or night.



### IMPROVED AREA MASKS

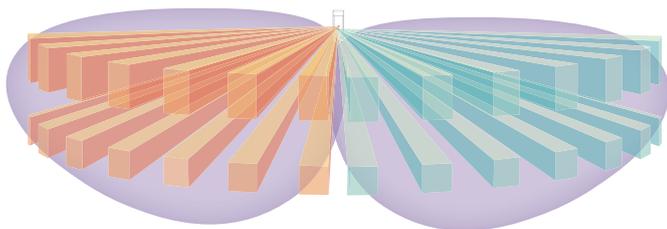
Durable area masks stored within the device allow the coverage pattern to be customised to specific site requirements.

### STABILITY IN VARIOUS ENVIRONMENTS

By combining multiple settings of the microwave sensor, pulse count and sensitivity adjustment, stable detection performance is achieved against various environments.

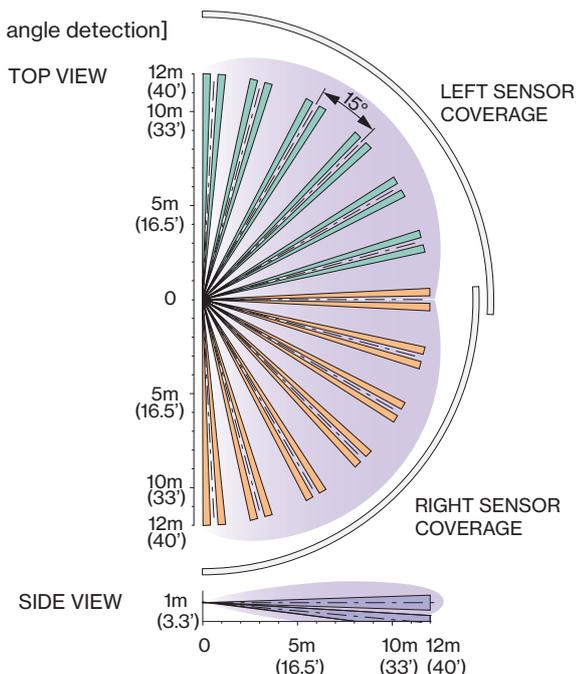
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## COVERAGE PATTERN

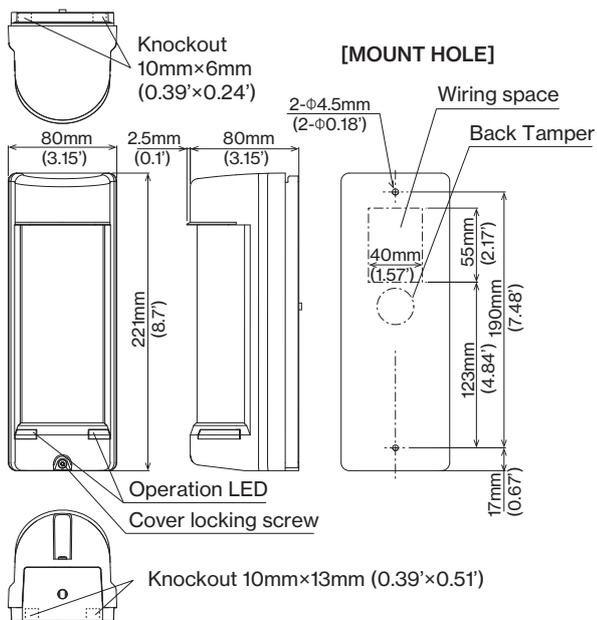


## DETECTION AREA

[Wide angle detection]



## EXTERNAL DIMENSIONS

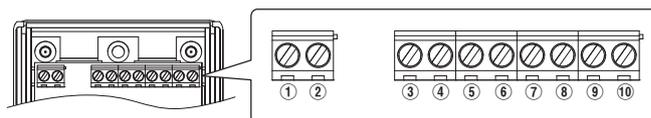


## SPECIFICATIONS

Model	MX-12FAMD	
Detection system	Passive infrared and Microwave	
Microwave transmit frequency and power	24.150 to 24.250GHz 12.7dBm e.i.r.p.	
Detection area	Horizontal detection Angle : 180°, Detection distance : 12m(40') Horizontal zone : 14 zones Downward zone : 14 zones	
PIR Area adjustment	Detection distance : 2 to 12m(10' to 40') [10 ranges] (by adjusting vertical angle of downward curtain) left and right adjustment individually possible	
Supply voltage	9 to 28V DC (non-polarity)	
Current consumption	40mA max.	
Alarm output (1)	ALARM RIGHT+LEFT	Dry contact relay output N.C./N.O. selectable • Contact capacity : 30V (AC/DC) 0.2A max. (Resistive load) • Contact operation : Detection time (+2sec.)
	ALARM RIGHT	
Alarm output (2)	ALARM LEFT	Dry contact relay output N.C./N.O. selectable • Contact capacity : 30V (AC/DC) 0.2A max. (Resistive load) • Contact operation : Detection time (+2sec.)
	EXTERNAL OUTPUT	
Trouble output	Dry contact relay output N.C. Contact capacity : 30V (AC/DC) 0.2A max. (Resistive load) (Masking detection / Low supply voltage / Self diagnosis error)	
Tamper output	Dry contact relay output N.C. Contact capacity : 30V (AC/DC) 0.1A max. (Resistive load) (Cover tamper / Back tamper (when enabled))	
Operation LED	Red LED • Warm-up (Blinking) • Alarm detection (Lights approx.2sec only for Walk test) • Low supply voltage (Blinking slowly) • Masking detection (Blinking rapidly) • Self diagnosis error (Lights continuously) • Microwave alarm detection (Lights max.2sec only for Walk test)	
Pulse count	1 / 3 times (selectable with DIP switch)	
PIR sensitivity adjustment	60/80/100/120% (selectable with DIP switch, left and right sensors individually)	
Microwave range adjustment	Short / Long (selectable with DIP switch, left and right sensors individually)	
Functions	Anti-masking, Microwave environment, Back tamper, Trouble alarm Low voltage monitoring, Anti-masking Environmental level	
Connection	Terminals	
Ambient temperature	-25°C to + 60°C (-13°F to + 140°F)	
Mounting position	Indoor / Outdoor	
Ingress protection	IP55 (Wall mount)	
Weight	400g (14.2oz)	
Appearance	Body : resin (white) / Lens : resin (white)	
Optional	Pole attachment : BP-32	

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

## TERMINAL CONFIGURATION



①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
POWER		ALARM(1)		ALARM(2)		TROUBLE		TAMPER	
ALARM RIGHT + LEFT		EXTERNAL OUTPUT		ALARM RIGHT		ALARM LEFT			
		Mode setting "A-2" ON				Mode setting "A-2" OFF			

POWER : 9 to 28V DC (non-polarity) Current consumption 30mA max.  
ALARM OUTPUT (1) : N.C./N.O. selectable, 30V (AC/DC) 0.2A max. (Resistive load)  
ALARM OUTPUT (2) : N.C./N.O. selectable, 30V (AC/DC) 0.2A max. (Resistive load)  
(For EXTERNAL OUTPUT : N.O. only)  
TROUBLE OUTPUT : N.C. 30V (AC/DC) 0.2A max. (Resistive load)  
TAMPER OUTPUT : N.C. 30V (AC/DC) 0.1A max. (Resistive load)

## OPTIONAL

● Pole attachment <BP-32>



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