DUAL ZONE OUTDOOR PIR

BATTERY OPERATED

MX-12FRAM
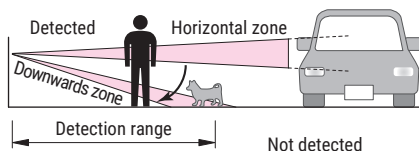
up to 12m x 180° + Anti-Masking

wireless ready | Grade 2 EN 50131 | CE

Dual zone detection system reduces false alarms for reliable outdoor protection

DUAL ZONE DETECTION SYSTEM

Horizontal and downward zones require simultaneous detection preventing nuisance alarms from small animals and passing vehicles.

Detected | Horizontal zone
Downwards zone
Detection range
Not detected

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.
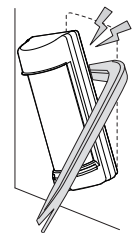
LONG BATTERY LIFE

• Enjoy long-term peace of mind with 5 years battery life using a single CR123A.
• Economical and environmentally friendly.

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.
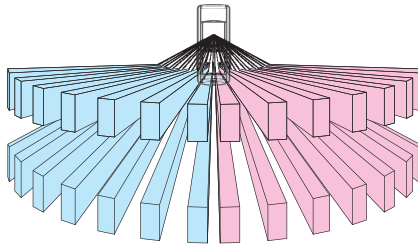

IMPROVED AREA MASKS

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

PULSE COUNT & SENSITIVITY ADJUSTMENT

The pulse count can be changed between 1 & 3, and the sensitivity adjusted between 60 & 120% to maintain operational stability in difficult conditions.
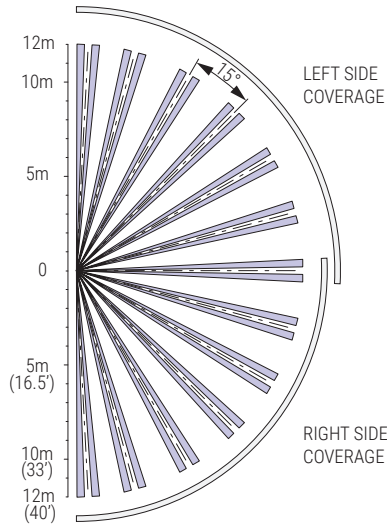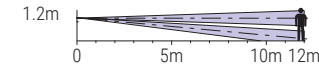
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COVERAGE PATTERN

DETECTION AREA

[Wide angle detection]

[TOP VIEW]

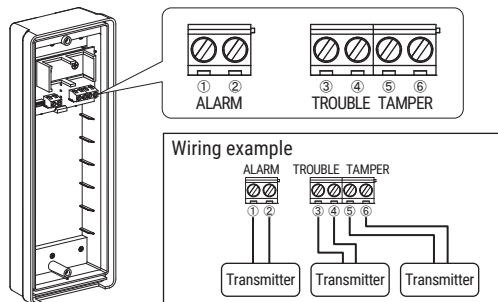LEFT SIDE COVERAGE

15°

RIGHT SIDE COVERAGE

12m
10m
5m
0
5m (16.5')
10m (33')
12m (40')

[SIDE VIEW] 1.2m

0   5m   10m 12m

*12m range setting is EN compliant.

SPECIFICATIONS

Model	MX-12FRAM
Detection system	Passive infrared
Coverage	Horizontal detection Angle : 180°, Detection distance : 12m(40') Horizontal zone : 14 zones Downward zone : 14 zones
Coverage adjustment	Detection distance : 2 to 12m(10 to 40') [10 ranges] (by adjusting vertical angle of downward curtain)
Supply voltage	Nominal voltage 3V DC (CR123A×1 [Approx. 1400mAh])
Battery life	Approx.5 years (at normal temperature, excluding wireless transmitter)
Low battery	2.6V DC
Current consumption	Standby 30µA , max. 5.5mA
Alarm output	Solid state switch N.C./N.O. selectable · Contact capacity : 3V DC 0.01A max. (Resistive load) · Contact operation : Detection time (+2 sec.) (Alarm detection / Masking detection)
Trouble output	Solid state switch N.C. · Contact capacity : 3V DC 0.01A max. (Resistive load) (Masking detection / Low supply voltage / Self-diagnosis error)
Tamper output	Solid state switch N.C. · Contact capacity : 3V DC 0.01A max. (Resistive load) (Cover tamper / Back tamper(when enabled))
Operation LED	Red LED • Warm-up (Blinking) • Alarm detection (Lights approx.1sec only Walk test) • Masking detection (Blinking rapidly) • Self-diagnosis error (Blinking slowly) • Low battery (Blinking slowly)
Pulse count	1 / 3 times (selectable with mode setting)
Sensitivity adjustment	60% / 80% / 100% / 120% (selectable with mode setting)
Anti-masking	OFF / LV.0 / LV.1 / LV.2 (selectable with mode setting)
Alarm prohibition timer	3s / 180s (selectable with mode setting)
Functions	Anti-masking, Back tamper, Trouble alarm, Low battery monitoring
Ambient temperature	−25°C to ＋60°C (−13° F to ＋140° F)
Ambient humidity	93% max.
Mounting position	Indoor / Outdoor
Mounting height	1.2m
Ingress protection	IP55 (Wall mount)
Weight	470g (16.5oz)
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
ALARM   TROUBLE TAMPER

Wiring example

ALARM   TROUBLE TAMPER
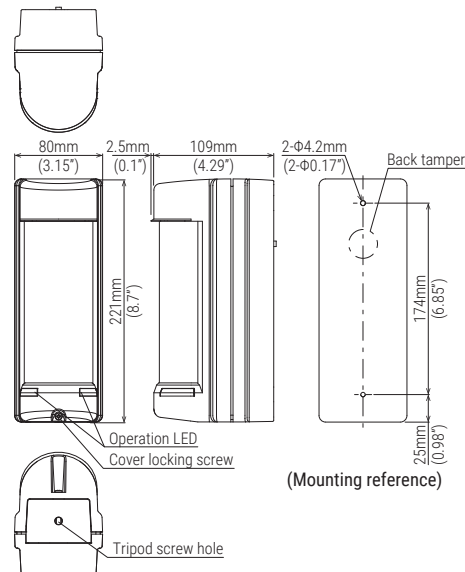① ②   ③ ④ ⑤ ⑥

Transmitter   Transmitter   Transmitter

ALARM OUTPUT   : Solid state switch N.C./N.O. selectable
· Contact capacity : 3V DC 0.01A max. (Resistive load)
· Contact operation : Detection time (+2 sec.)
TROUBLE OUTPUT : Solid state switch N.C.
· Contact capacity : 3V DC 0.01A max. (Resistive load)
TAMPER OUTPUT : Solid state switch N.C.
· Contact capacity : 3V DC 0.01A max. (Resistive load)

OPTIONAL

● Pole attachment 〈BP-32〉

EXTERNAL DIMENSIONS

80mm (3.15")
2.5mm (0.1")
109mm (4.29")
2-Φ4.2mm (2-Φ0.17")
Back tamper

221mm (8.7")
174mm (6.85")
25mm (0.98")

Operation LED
Cover locking screw

(Mounting reference)

Tripod screw hole

REGULATORY APPROVALS

• Security Grade 2
• Environmental Class IV
• Power supply Type C
• Applied Standards;
  EN 50131-1
  EN 50131-2-2
  EN 50131-6

TAKEX TAKENAKA ENGINEERING CO., LTD.