



SH-PIRCAM-OUT-AM

TWO WAY WIRELESS OUTDOOR PIRCAM DETECTOR With ANTI-MASKING

INSTALLATION INSTRUCTIONS P/N 7103550 Rev A

Cover for rain and sun

Pyro IR motion

CMOS Camera

IR LED illumination

Top Cover

2 Magnets

For Tamper

Back cover

Wall Mounting

Bracket

Red LED For Alarm & Trouble

& Anti-Masking

protection

FIG. 1- PRODUCT OVERVIEW

INTRODUCTION

The SH-PIRCAM-OUT-AM is a two-way wireless outdoor dual PIR motion detectors with active Anti-Mask feature

The SH-PIRCAM-OUT-AM is designed for outdoor usage in most severe and extreme environment.

Its high reliability is achieved by combining both adjustable mirror based dual quad sensors with highly sophisticated software analyzing reducing false alarms, adaptive coverage area and pet immunity feature.

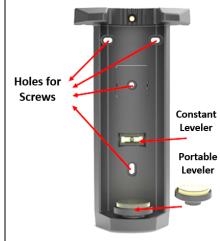
The SH-PIRCAM-OUT-AM is designed to protect large areas and can easily be installed on walls in order to provide a solid protection of outdoor areas.

PIRCAM OUTDOOR FEATURES

- Dual PIR Motion Sensors with mirrors & CMOS
- Adjustable mirrors to limit detection area.
- Max detection range up to 15m.
- IR LED for operating in low light conditions.
- Anti-Masking
- FOTA support
- Freewave2 advanced & secured RF protocol
- Communication range up to 500m open space
- GFSK modulation type with 5 frequencies and LBT
- Supervision transmission
- Pet immunity up to 35kgs
- Tamper protection against opening & wall removal
- 4 x AA size batteries at configuration of 1+1 & 1+1 nominal 3.3V 6600mAh.
- Batteries and Wall bracket supplied.
- Battery status sent on every transmission.
- Led indication for Alarm and Trouble state.
- Operating Temperature -40°C to +55°C
- IP65 Rating protection
- Easy/Fast installation

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OPERATION

Events transmission:

- SUPERVISION A periodical transmission indicating detector's presence
- ALARM Alarm transmission triggered by the device indicating motion detection.
- LOW BAT A low battery signal will be sent when the battery reaches 2.9V level. When Battery level drops below Cut Off level (2.5V), the device will stop functioning.
- **TAMPER** when the cover is opened or detector removed from the wall, a "Tamper alarm" signal is transmitted. When detector is closed or fixed back to the wall "Tamper restore" signal is transmitted.
- ANTI-MASKING Upon an attempt to mask the lens, a trouble alert will show as Zone Tamper event within 2 minutes after the masking event.

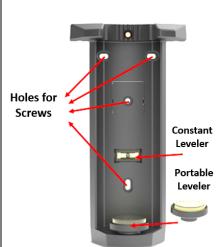
LEARNING THE DETECTOR

To pair your device, please proceed as follows:

I. Enter into installer mode via the "Installer

- Webpage" (https://installer.crowcloud.com)
- Go to "Zones" and select the zone # you want to learn.
- Add Zone (Reminder: 1.insert Link Type "ISM", 2. device's ID number, 3. Device Type "Camera PIR on CT2035".)
- 4. Set the camera configuration, and save configuration.
- Remove the batteries plastic protector to start power-up and learning process
- Make sure that the LEDs flash Green and Red alternately for about 1 min, and at the end of learning process the led will turn on steady green for 3 sec. and turn off, this is indication that the learning was successful.
- If the LED continues to flash red for more than 5 minutes and stops, the learning has failed, please check the PIRCAM settings details, remove batteries and repeat step 5 and 6.

FIG.1.1 – PRODUCT OVERVIEW (CONT.)



RSSI - RF SIGNAL INDICATION

Range

Adjustment

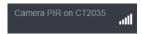
Verify the RSSI level before installing the detector.

The RSSI level is displayed in:

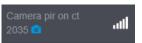
Area Angle Adjustment

Main unit

ZONE menu (see ex. Below)



Or Overview menu (see ex. Below)



SELECT MOUNTING LOCATION

The SH-PIRCAM-OUT-AM should be mounted between 0.8 to 1.2m heigh from ground surface

See detection pattern (see section 12 in this manual).

The detector detects motion crossing the beam; it is more sensitive detecting motion crossing the beams then moving towards the detector.

AVOID THE FOLLOWING LOCATIONS to assure a better performance in a constant and stable environment:

- Facing direct sunlight
- Facing areas subject to rapid temperature changes
- Facing metal doors
- Close to direct source of heat or air gust
- Clear all physical obstacles from the detection area Clear all light reflecting surfaces from the detection

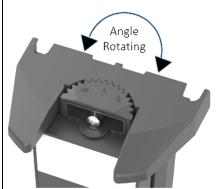
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- area, as well as water puddles
- Avoid installation on the following types of ground:

Thick vegetation, un-mown Grass, Water, Sand and Metal

FIG. 2 - DETECTION ANGLE

Unscrew the screw, rotate the detector to face the area to protect and screw back to fix it. (see detection pattern Fia 3)



TRANSMISSION TESTS

Tampe<u>r transmission test</u>

Changing the tamper switch state will cause tamper transmissions to be indicated on the control panel.

Communication signal test

Follow RSSI section above to verify the RF Communication level.

Walk test

Make sure that the protected area is cleared of all people for at least 3 minutes before starting the walk test

Initialize "Start Walk test" mode in "Overview menu.

Start walking across the detection zone. (the Red LED turns ON when motion is detected). Allow 5 sec. between each test for the detector to stabilize.

Three different thickness Wall spacers are supplied for

easy installation on surfaces that aren't perfectly

straight. Serrated spacers that lock together in the

WALL BRACKET SPACERS

desired thicknesses.

DETECTION RANGE ADJUSTMENT

The PIRCAM-OUT-AM has a 90° top view, Double PIR detection pattern up to 15m (when installed at 1.2m above the ground surface)



The protected area of SH-PIRCAM-OUT-AM can be adjusted by adjusting internal mirrors horizontally, so its 90° coverage may vary between 0° and 180°, See figure 4.

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4 x 1.5V AA 3400mAh (Li-FeSx) Approved brands SURIKATA EXTREME PRO

1 5V AA

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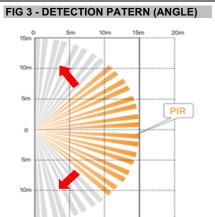
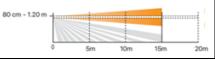


FIG 4 - DETECTION PATERN (SIDE)

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SIDE VIEW (Detection Distance by Positions)



Energizer L91

BATTERIES REPLACEMENT

RISK OF EXPLOSION IF BATTERIES ARE REPLACED BY DIFFERENT TYPES / MODELS

!!!CAUTION!!!

DISPOSE USED BATTERIES ACCORDING TO THEIR INSTRUCTIONS

REGULATORY APPROVALS

The PIRCAM-OUT conforms to the essential requirements set out by:

- RED directive:2014/53/EU
- EMC directive: 2014/30/EU Low Voltage directive (LVD): 2014/35/EU

Harmonized Standards applicable to this product are:

- EN 61000-6-3 EN 301 489-1
- EN 301 489-3
- EN 301 469-3 EN 300 220-1 EN 300 220-2 EN 62368-1
- onal Standards and Directives applicable to this product are:
- EN 50131-1 EN 50131-2-2
- EN 50131-6
- EN 50131-5-3 EN 50130-5

Certification body: Telefication B.V. Security Grade2, Environmental Class IVA Power supply Type C





Detection Method	Dual PIR detection mirror based with anti-mask and VGA camera
Communication Protocol	Freewave2™ Two Way ISM GFSK with 5 frequencies & LBT
Frequency Band	868-869MHz or 902-928MHZ
PIR Coverage	Up to 15 m 96° wide / 16 zones
PIR distance limit	0 to 15 m (9 levels)
Detectable speed	0.2 to 3.0 m/s
Sensitivity	1.8°C at 0.5 m/s
Identification	Unique ID serial number (24 bit)
Event Transmission	Alarm, Tamper, Anti-Mask, Picture(s) Verification, Supervision, Low Bat
LED Indication	Red LED during Alarm and Trouble
Tamper Switch	Detector Opening and Wall Removal
Communication Range in open space	500m
Transmit Power	Up to 14 dBm

TECHNICAL SPECIFICATIONS

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TECHNICAL SPECIFICATIONS (CONT)

Camera	CMOS camera with VGA or QVGA resolution
Picture Range	Up to 15m
CMOS Sensitivity	16VLux/sec
Picture Mode	Configurable B&W / Color
Resolution	Configurable VGA / QVGA
Current Draw	140uA
Warm-up period	45 sec.
Environment humidity	95% max
Power	4 x 1.5V AA 3400mAh (Li-FeSx)
Mounting height	0.8 to 1.2m
Battery life	Up to 5 years
Low Battery	2.5V (Cut Off at 2.3V)
Operating Temperature	-40°C to +55°C
Dimensions	218mm x 75mm x 87mm
Weight	400 grs
IP rate	IP65

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CROW ELECTRONIC ENGINEERING LTD. ("Crow") - WARRANTY POLICY CERTIFICATE

This Warranty Certificate is given in favor of the purchaser (hereunder the "Purchaser") purchasing the products directly from Crow or from its authorized distributor. Crow warrants these products to be free from defects in materials and workmanship under normal use and service for a period of 12 months from the last day of the week and year whose numbers are printed on the printed circuit board inside these products (hereunder the "Warranty Period"). Subject to the provisions of this Warranty Certificate, during the Warranty Period, Crow undertakes, at its sole discretion and subject to Crow's procedures, as such

procedures are form time to time, to repair or replace, free of charge for materials and/or labor, products proved to be defective in materials or workmanship un normal use and service. Repaired products shall be warranted for the remainder of the original Warranty Period.

All transportation costs and in-transit risk of loss or damage related, directly or indirectly, to products returned to Crow for repair or replacement shall be borne solely by the Purchaser.

Crow's warrantly under this Warrantly Certificate does not cover products that is defective (or shall become defective) due to: (a) alteration of the products (or any part thereof) by anyone other than Crow; (b) accident, abuse, negligence, or improper maintenance; (c) failure caused by a product which Crow did not provide; (d) failure

the Furchaser.

Crow's warranty under this Warranty Certificate does not cover products that is defective (or shall become defective) due to: (a) alteration of the products (or any part thereof) by anyone other than Crow; (b) accident, abuse, negligence, or improper maintenance; (c) failure caused by a product which Crow did not provide; (d) failure caused by software or hardware which Crow did not provide; (e) use or storage other than in accordance with Crow's specified operating and storage instructions. There are no warranties, expressed or implied, of merchantability or fitness of the products for a particular purpose or otherwise, which extend beyond the description on the face hereof. This limited Warranty Certificate is the Purchaser's sole and exclusive remedy against Crow and Crow's sole and exclusive liability toward the Purchaser in connection with the products, including without limitation - for defects or malfunctions of the products. This Warranty Certificate replaces all other warranties and liabilities, whether oral, written, (non-mandatory) statutory, contractual, in tort or otherwise.

In no case shall Crow be liable to anyone for any consequential or incidental damages (inclusive of loss of profit, and whether occasioned by negligence of the Crow or any third party on its behalf) for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever. Crow does not represent that these products can not be compromised or circumvented; that these products will prevent any person injury or property loss or damage by burglary, robbery, for otherwise; or that these products will in all cases provide adequate warning or protection. Purchaser understands that a property installed and maintained product may in some cases reduce the risk of burglary, fire, robbery or other events occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss or damage as a result.

Consequently, Crow shall have no liability for any personal injury; property damage or any other loss based on claim that these products failed to give any warning. If Crow is held liable, whether directly or indirectly, for any loss or damage with regards to these products, regardless of cause or origin, Crow's maximum liability shall not in any case exceed the purchase price of these products, which shall be the complete and exclusive remedy against Crow.



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www.thecrowgroup.com

These instructions supersede all previous issues in circulation prior to January 2024