eyeWAVE™
Wireless PIR Camera
Installation Instructions

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Description

Wireless eyeWave™ is a battery powered PIR detector with an integrated camera, designed for video verification and simple installation by alarm installers. The camera captures and transmits a sequence of images to a remote server or to mobile phones via RISCO systems, upon an intrusion event or homeowner demand

Main Features	Coverage Patterns		Camera FOV
	PIR Model	Pet Friendly Model	

Main Features

➢ PIR coverage 12m (40') wide angle
➢ VGA/VGA camera resolution with ~90° field-of-view
➢ Discreet IR flash allows imaging in complete darkness, up to 10m (33')
➢ Two RF channels with separate antennas:
➢ One for alarms and control; Second channel for image transmission
➢ Sequence of images upon event, configurable number and interval and number of images
➢ During disarm, events are ignored to save battery and for privacy
➢ On-demand images initiated from authorized mobile phone or web browser
➢ Option for on-arm image taking
➢ Images stored on detector until transmission to panel is completed
➢ Includes 2 long-life 3V lithium batteries
➢ Works only with video-supporting systems

PIR Model — PIR - SIDE VIEW, PIR - TOP VIEW

Pet Friendly Model — PIR Pet - SIDE VIEW, PIR Pet - TOP VIEW

Camera FOV — Side view (70°, D = 2,4 m, 10m), Top view (10m, 90°)

Installation

Step1: Preliminary Considerations

Select the mounting location for best coverage of the area that is to be protected (see Coverage Patterns).
Pay attention to the following:

✦ Do not touch the lens with your finger as it will result in blurred image capture.

✦ Do not mount the detector in direct sunlight or near heated sources and metal objects.

✦ Detection sectors should be pointed towards either the wall or the floor and not towards windows and curtains.

✦ Select mounting height according to the coverage patterns (recommended: 2.0–2.4 m in height and at least 40cm from ceiling).

Step 2: Registering the Detector into the system

The eyeWAVE must identify itself to the system receiver in a device allocation (enrollment) process, which can be performed by either RF sequence registering or entering the detector's 11-digit serial number into the system or using RF mode (Panel Quick Key Programming Sequence:

(From the panel) 2) Radio Devices > 1) Allocation > 1) By RF or 2) By Code.

(Through Configuration Software) Click **Radio Device Allocation** > Enter *Serial Code*: [045] + [8 digits]; *Indexed*: Automatic or manually designated 1-32; *Accessory Type:* 2-Way Detector (displayed)). Then click **Allocate**: RF Allocation…… is performed. Refer to the *Sytem Installation* manual for full instructions.

Step 3: Mounting the detector

1. Open the knockout holes of the mounting bracket, and use them as a template for mounting according to the following table (see Figure 1).

Knockout for	Mounting position		
	Left	Flat	Right
Bracket	7,8	1,2,3,4	5,6
Tamper	9	10	11

For Pet-Friendly Model:

In order to optimize pet immunity the following guide lines are recommended:
➢ Mount the detector vertically at right angles to the floor.
➢ Make sure an animal cannot get above height of 1.5m (5') by climbing on furniture, shelving or stairs.
2. Fasten the cover to the base of the detector by inserting and fastening screw (B) into the hole located inside the battery compartment. (see Figure 3)
3. Insert the batteries and close the battery compartment cover. (see Figure 3)
4. Once the bracket is installed, slide and lock the detector onto the mounting bracket in reverse sequence. (see Figure 2)
5. Perform a Walk Test as described in the Walk Test section.
6. Insert and fasten screw (C) into the hole located at the bottom of the detector to lock the detector to the mounting bracket. (see Figure 3).

Step 4: Walk Test

➢ Upon inserting the batteries, the detector goes into a Walk Test mode for 20 minutes and then automatically returns to Normal mode (To save battery power). During Walk Test Mode, the detector will transmit after each detection. Walk test the entire field view of the detector and observe the LED for confirmation. Verify that the receiver is properly receiving the signals
➢ Manually initiate a walk test from the control panel:
Installation Menu: 2) Testing > 2) Zone > 3) Walk Test 1) Start Walk Test

The detector remains in walk test mode until any key on the panel is pressed. Display test results as follows:

Installation Menu: 2) Testing > 2) Zone > 3) Walk Test 2) Walk Test Results

Camera Configuration

Being bi-directional, the detectors parameters can be modified from the keypad or from the system configuration software according to your needs:
➢ PIR Sensitivity: High/Low (Default: Low)
➢ Supervision Time: 0-255 minutes (Default: 15 min)
➢ LED: On/Off (Default: On)
➢ Operation Mode.
  ✦ Walk Test: The detector will transmit after each detection
  ✦ Normal (Default)
For more information refer to the *System Installer Guide*.
*Configure the came*ra settings through the RISCO Configuration Software (right-click on the *Serial Code* field in the **Zones** node screen and in the displayed pop-up click **Additional..**) or through the panel quick key programming sequence as follows (default in **bold**):
Programming > 2) Radio Devices > 2) Modification > 1) Zone [Select (1–32)] >
1) Parameters > 6) Advanced 5) Camera Parameters:
  1) Images at Alarm: **3** (1 to 7 images)
  2) Image Interval: **0.5 sec** (0.5, 1, 2 seconds)
  3) Pre-Alarm Image: **Yes** (Yes, No) (Image capture upon each arm)
  4) Image Resolution: **QVGA** (QVGA 320X240, VGA 640X480)
  5) Image Quality: **High** (High, Low)
  6) Colour Image: **Colour** (Colour, B&W)

Image upon request

Taking a snapshot from the PIR Camera can be initiated by using SMS command from any remote phone
SMS Message structure: [PIN Code][V][Camera No 01-32], example: 1234V01
Images can also be taken using web/smartphone apps (on panels supporting these applications).

Event Report

Every event detected by the PIR camera is recorded into the camera's memory. The event record consists of the date and time mark, detail description of the event including its source and a video record.

LED Status

On: Alarm
Blinking twice: (In alarm mode) Low battery
Blinking four times: (In initial learning mode) Successful write operation

Diagnostics

You can perform diagnostic tests on your detector using the keypad or the configuration software. Diagnostics includes testing the detector battery status and the communication between the detector and the panel. For additional information refer to the *System Installer Manual*.

To replace the batteries:

A low battery condition is detected by a flashing LED on each transmission.
To replace the batteries:
1. Remove the detector from the mounting bracket.(Figure 2)
2. Open the battery cover.(Figure 3)
3. Replace the batteries. Pay attention to the right polarity.
4. Close the battery cover.

⚠️ **CAUTION:**
Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to local regulations.

📝 **NOTE:**
After replacing the batteries and closing the tamper, the detector will automatically go into in Walk Test mode for 20 minutes.

Specifications

Electrical	
Battery Type:	2 x CR 123, 3V Lithium Battery
Battery Life:	2 batteries – 3 year typical lifetime
Current Consumption:	58 µA standby; 200 mA max. peak at capture with flash
Supervision Transmission:	0-255 minutes
RF transmitting frequencies:	868.65 MHz; 869.525 MHz for model RWX95CM8 433.92 MHz; 916 MHz for model RWX95CM4
Optical	
Filtering:	White Light Protection
Pet friendly:	Up to a 36 kg (80lb) animal (pet model)
Physical	
Size:	132 x 67,5 x 56 mm (5.1 x 2.6 x 2.2 in)
Weight:	169 grams (5.96 oz.)
Environmental	
RF Immunity:	According to EN50130-4
Operating Temperature:	-10°C a 55°C (14°F a 140°F)
Storage Temperature:	-20°C a 60°C (-4°F a 140°F)
Camera	
Type:	CMOS digital image sensor
Lux:	0 Lux (total darkness)
View Angle:	H 90° V 71°

Approvals
EN50131-1,
EN50131-2-2 Grade 2,
EN50130-5 Environmental Class II,
EN50131-6: Type C

Ordering Information

Part Number	Description
RWX95CM8000A	868.65 MHz 2-Way WL PIR & CAM Detector
RWX95CMP800A	868.65 MHz 2-Way WL PIR Pet & CAM Det.
RWX95CM4000A	433.92 MHz 2-Way WL PIR & CAM Detector
RWX95CMP400A	433.92 MHz 2-Way WL PIR Pet & CAM Det.

RISCO Group Limited Warranty

RISCO Group and its subsidiaries and affiliates ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for 24 months from the date of production. Because Seller does not install or connect the product and because the product may be used in conjunction with products not manufactured by the Seller, Seller cannot guarantee the performance of the security system which uses this product.

Seller's obligation and liability under this warranty is expressly limited to repairing and replacing, at Seller's option, within a reasonable time after the date of delivery, any product not meeting the specifications. Seller makes no other warranty, expressed or implied, and makes no warranty of merchantability or of fitness for any particular purpose.

In no case shall seller be liable for any consequential or incidental damages for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever.

Seller's obligation under this warranty shall not include any transportation charges or costs of installation or any liability for direct, indirect, or consequential damages or delay.

Seller does not represent that its product may not be compromised or circumvented; that the product will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection.

Seller, in no event shall be liable for any direct or indirect damages or any other losses occurred due to any type of tampering, whether intentional or unintentional such as masking, painting or spraying on the lenses, mirrors or any other part of the detector.

Buyer understands that a properly installed and maintained alarm may only reduce the risk of burglary, robbery or fire without warning, but is not insurance or a guaranty that such event will not occur or that there will be no personal injury or property loss as a result thereof.

Consequently seller shall have no liability for any personal injury, property damage or loss based on a claim that the product fails to give warning. However, if seller is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, seller's maximum liability shall not exceed the purchase price of the product, which shall be complete and exclusive remedy against seller.

No employee or representative of Seller is authorized to change this warranty in any way or grant any other warranty.
WARNING: This product should be tested at least once a week.

Contacting RISCO Group

RISCO Group is committed to customer service and product support. You can contact us through our website www.riscogroup.com or as follows:

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RTTE Compliance Statement

Hereby, RISCO Ltd. declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For the CE Declaration of Conformity please refer to our website: www.riscogroup.com
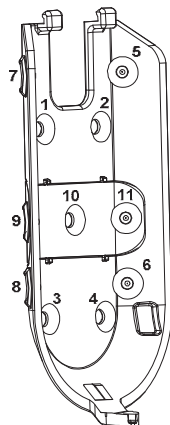
CE

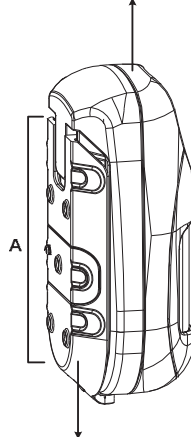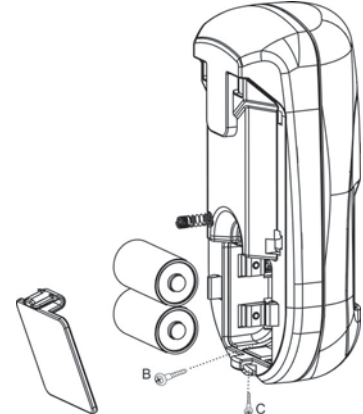| Figura 1: Mounting Bracket	Figura 2: Remove detector from Mounting Bracket	Figura 3: Insert batteries

Specifications are subject to change without prior notice. Should any questions arise please contact your supplier.