RISCO RWX350DC Beyond Wireless DT Beyond Wireless DT Camera Instruction Manual

RISCO RWX350DC Beyond Wireless DT Beyond Wireless DT Camera

Description

The Beyond™ DT is a battery-powered wireless DT detector that includes an integrated camera (in model RWX350DC) for visual verification and has been designed to provide enhanced 24-hour outdoor protection, with Active IR Anti-mask capabilities. Integrated Dual Technology (DT) combines two K-band microwave channels with two PIR sensors for better catch performance and pet immunity, minimizing false alarms.
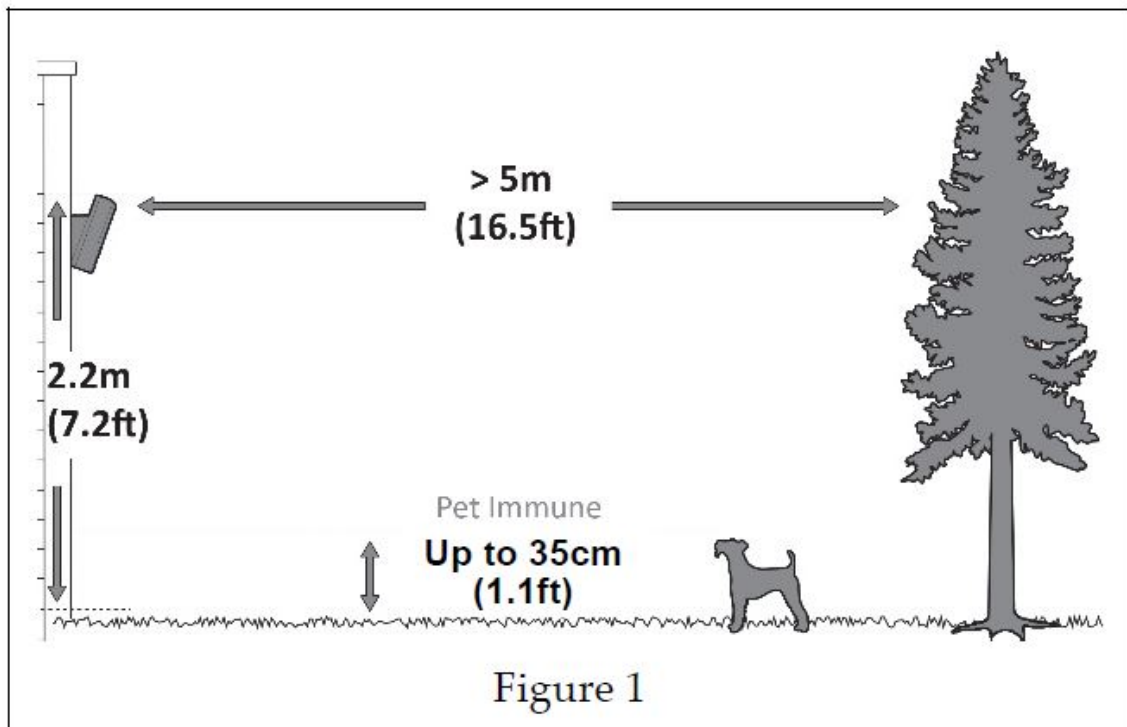
Features include

- PIR coverage: 12m, 90°
- VGA or QVGA camera resolution with ~90° field-of-view
- Two-channel K band – MW detection (Sway Recognition)
- Pet immunity
- Two correlated PIR Sensors
- Light sensor for reducing false alarms due to sunlight
- Active IR Anti mask
- Various mounting heights with optional swivel bracket
- Designed for outdoor installation, UV resistant, IP 65
- Cover and wall tampers
- 3-axis-accelerometer for protection against vandalism
- Solar swivel for increased battery life (6+ years typically): RWX350S (optional)

Installation

Step 1: Preliminary Considerations
Select the mounting location for best coverage of the area that is to be protected (see Step 2: Coverage Patterns).
Pay attention to the following:

> 5m
(16.5ft)

2.2m
(7.2ft)

Pet Immune
Up to 35cm
(1.1ft)

Figure 1

Applicable to the RWX350DC model.

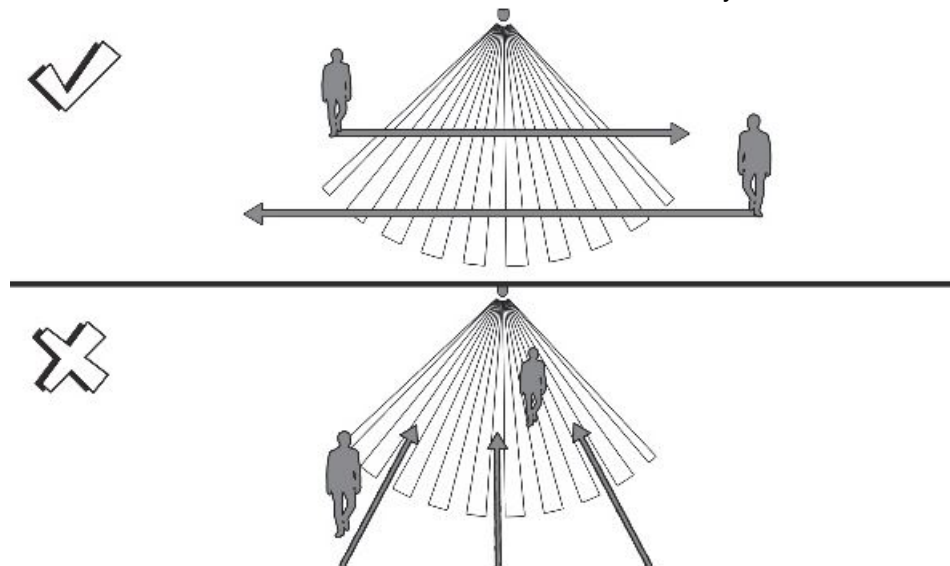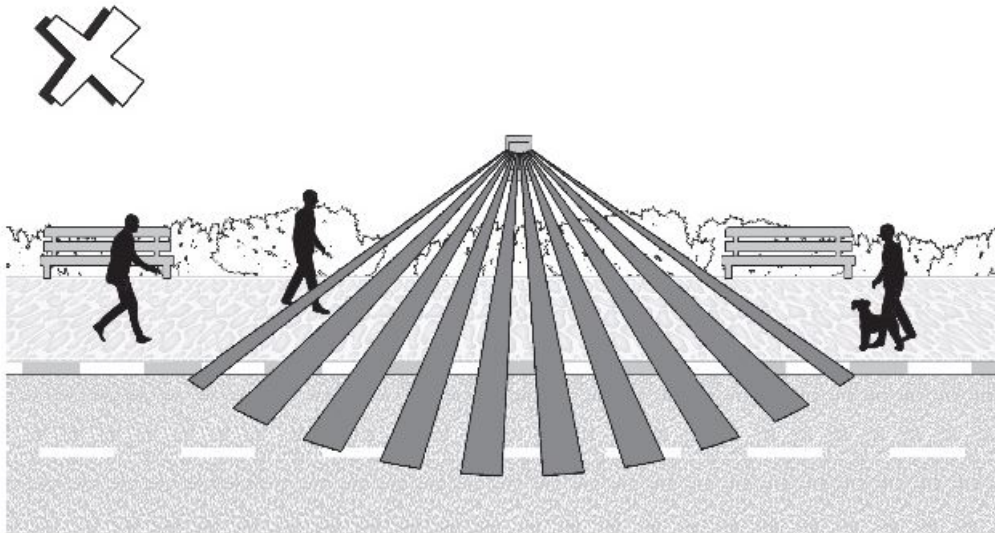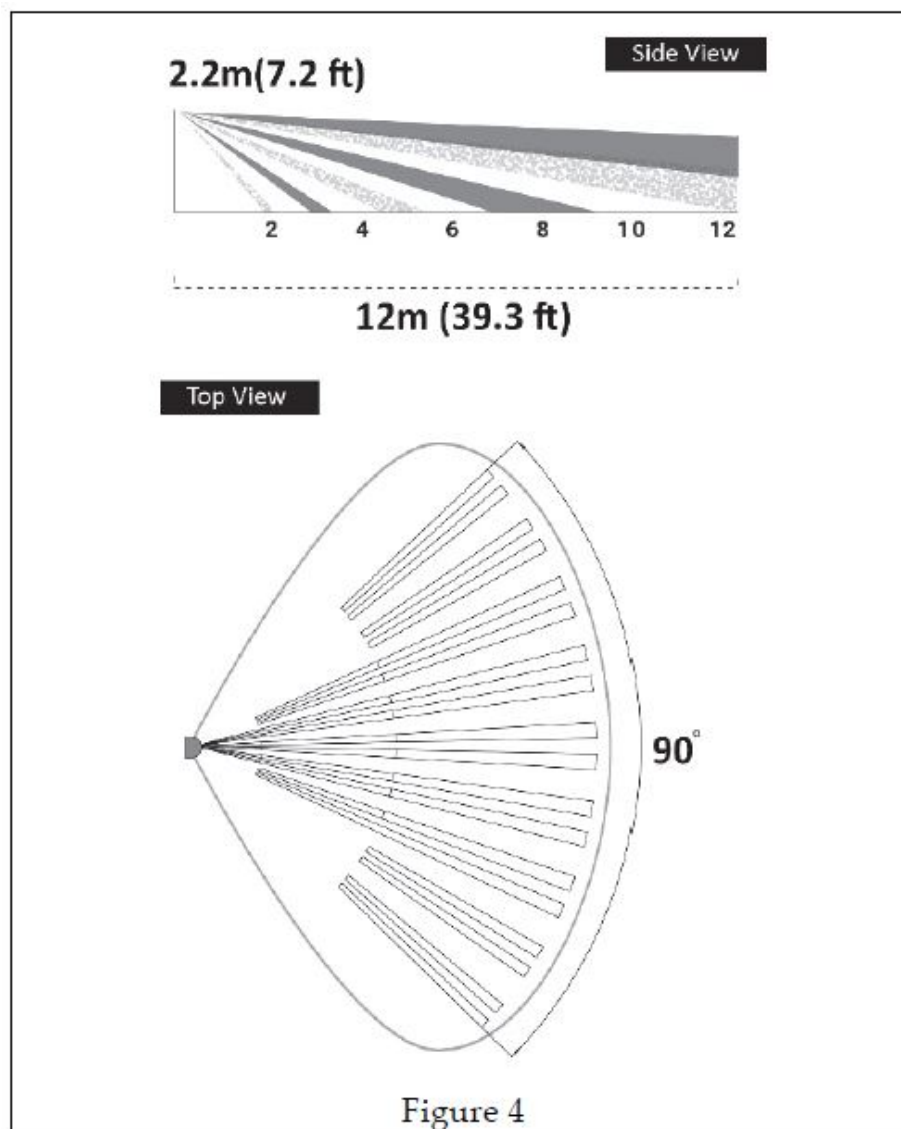Install the device in a location where the detector's field of view is clear of any static obstacle.

Figure 2

Walking direction must cut across the beam pattern.

Do not install the device close to any moving objects.

Step 2: Coverage Patterns

Figure 4

Step 3: Coverage

PIR Coverage

Mounting height [m]	Distance [m]
1.8	10
2.2 (optimal)	12

Note For pet immunity, install the detector at the optimal height of 2.2 meters.

PIR Coverage – Using Swivel
Note The table below is relevant when using the Swivel/Solar Swivel Bracket (Model: RA350S).

Mounting height [m]	Swivel Angle [°]	Distance [m]
1.8	0	10
	5	7
	10	5
2.2 (optimal)	0	12
	5	8
	10	6
2.5 – 2.7	0	N/A
	5	10
	10	7

NA = Avoid such installation

Step 4: Registering the Detector into the System

The detector 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.

Enrolling using RF communication:

1. Set the receiver to Learn mode.
2. Insert the batteries (see Step 5), connect the detector to the mounting bracket and wait for at least 3 seconds.

    The Beyond DT will send a WRITE message. Successful learning will be indicated by:
    1. The system will sound a confirmation message and indicate the detector allocation in the system.
    2. The green LED will blink.

Enrolling through the Configuration Software:
Click Radio Device Allocation > Enter Serial Code: [11 digits]; Indexed: Automatic or manually designated 1-32; Accessory Type: 2-Way Detector (displayed). Then click Allocate: RF Allocation is performed.
For more information refer to the System Installer Manual.
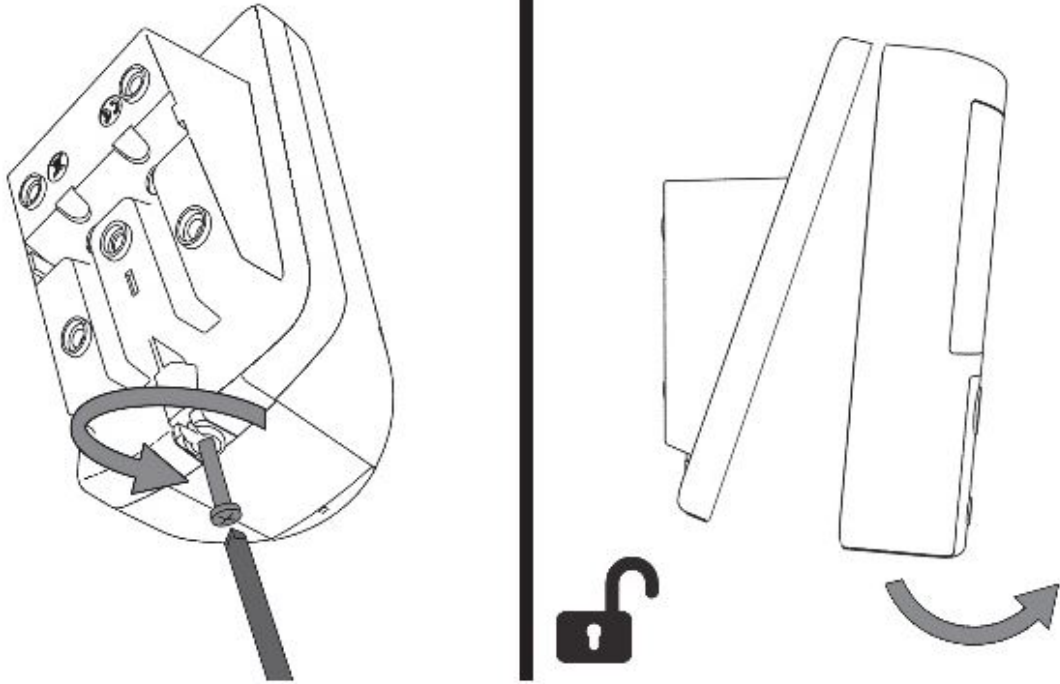
Step 5: Mount the Detector on the Wall Bracket

1

Figure 5

Unscrew and separate detector from mounting bracket.
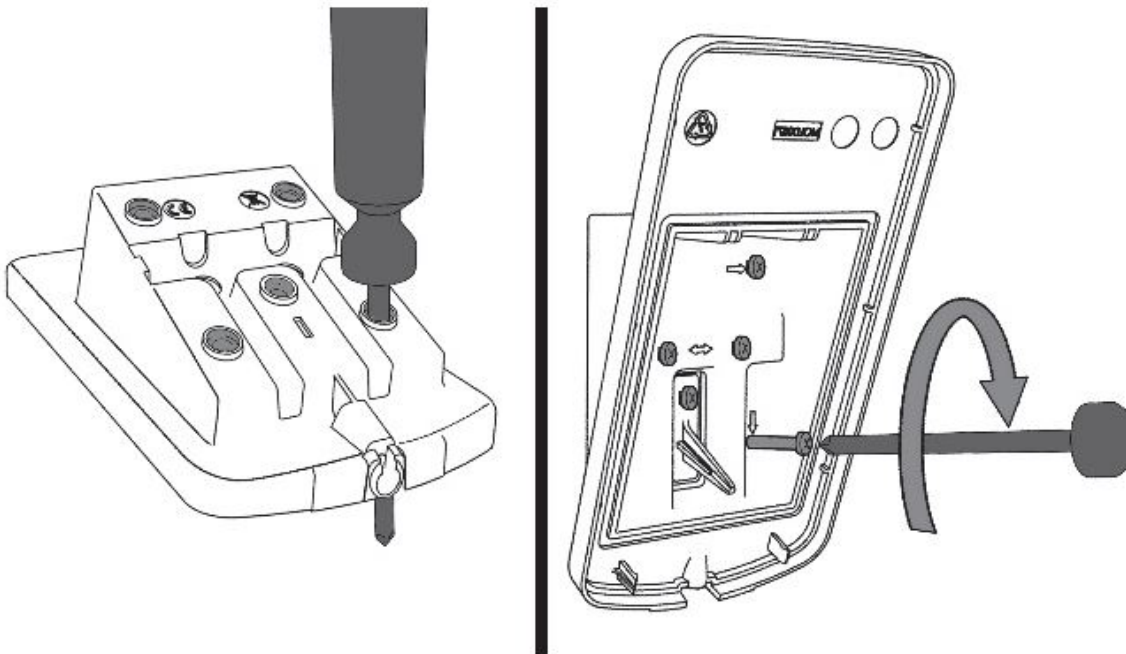
2

Figure 6

Open the 5 knockout holes of the wall bracket, and use as a template for mounting.
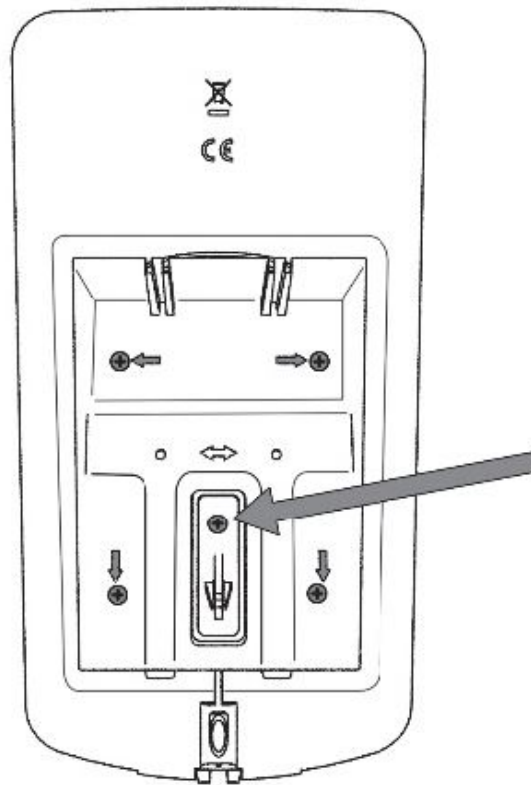
3

Figure 7

Secure the wall bracket to the wall using the 5 screws.
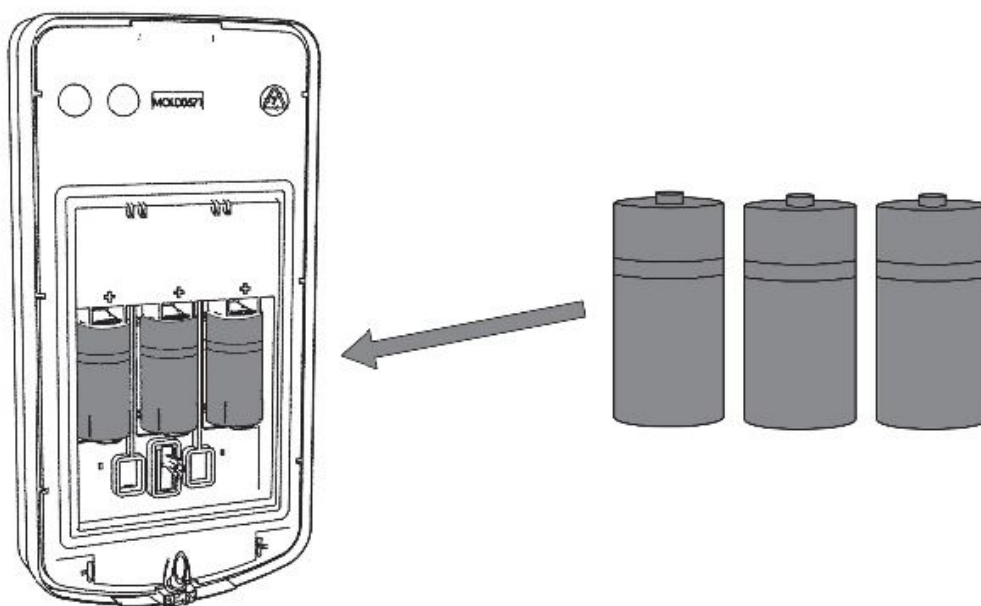
4

Figure 8

CAUTION
The detector batteries are supplied inside of the unit, which are covered with plastic wrapping. Remove the plastic wrapping from the batteries before installation. Observing battery polarity, insert 3 CR123 3V Lithium batteries (supplied) into the batteries compartment.
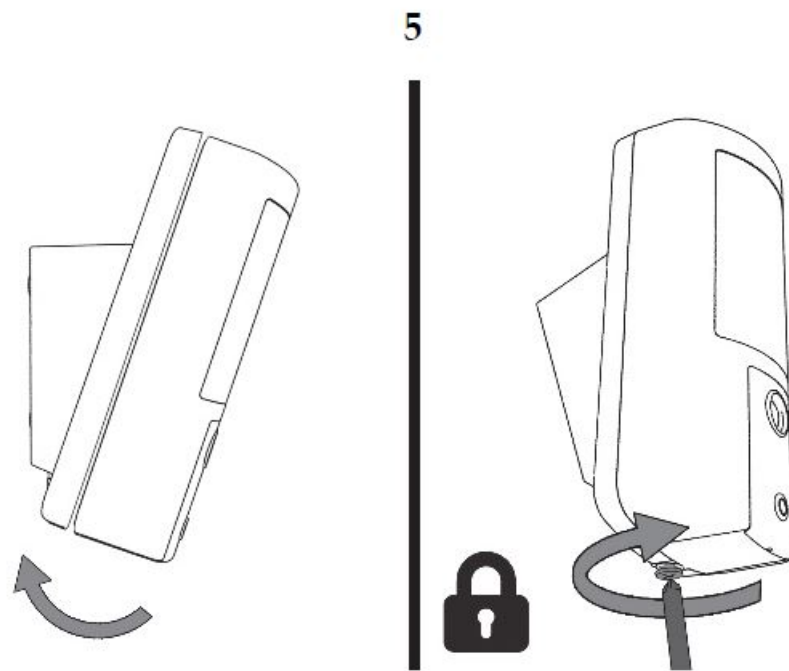

Figure 9
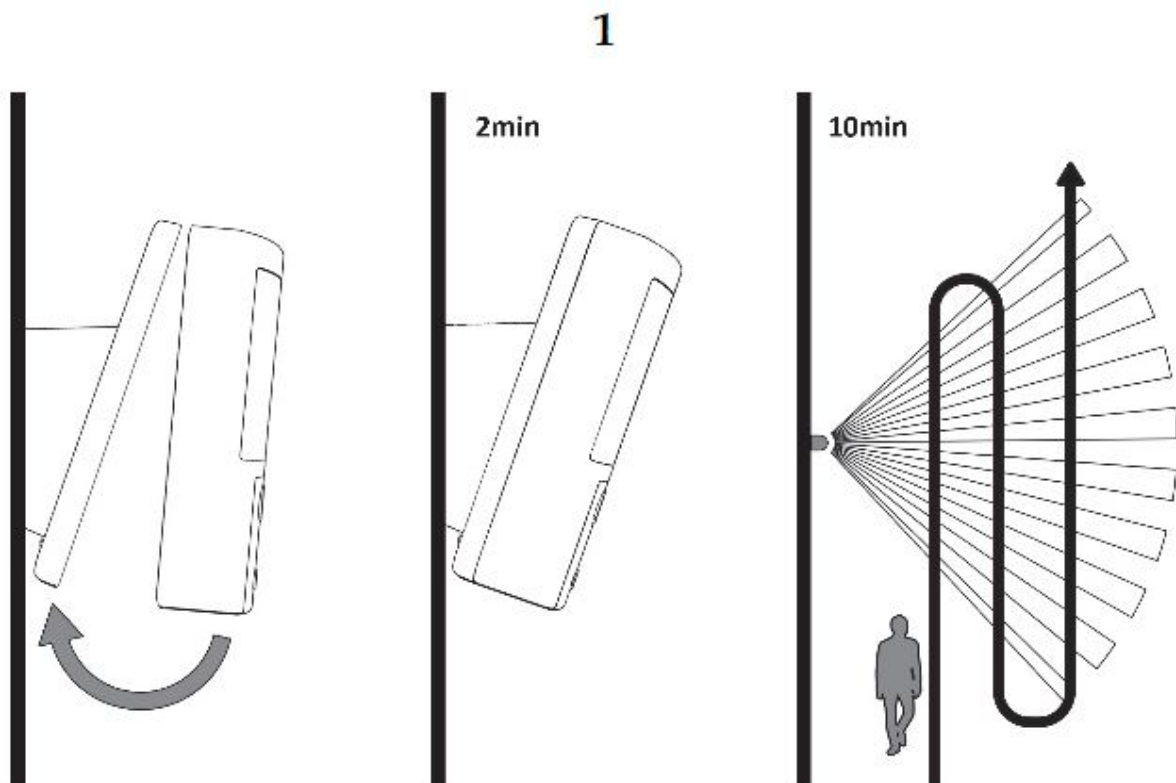
Insert and fasten the screw to lock the detector.

Step 6: Performing a Walk Test

Figure 10

The detector automatically enters walk test mode for 10 minutes following tamper closure. Walkthrough the entire

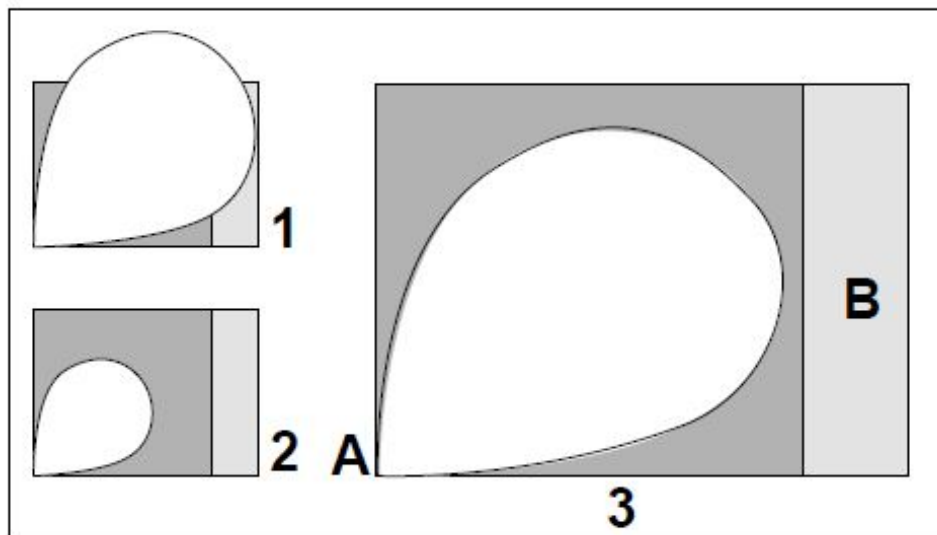protected area and observe the LEDs to confirm full coverage (see LED Status).

Manually initiate a walk test:
Select User Menu: 5) Maintenance > 1) Walk Test > Select Full Walk Test or Quick Walk Test. The detector remains in walk test mode until any key on the panel is pressed.

Note: The LEDs switch off after Walk Test to avoid a situation of mapping the detection zone and to extend battery life.

Step 7: MW Range Adjustment

1. Over power
2. Under power
3. Correct adjustment
4. A Detector
5. B Corridor

Anti-Mask Calibration

Following tamper closure, the anti-mask calibration procedure begins (up to 2 minutes). For successful calibration, make sure that there are no objects near the detector for the duration of the procedure.

Detector Configuration

Being bi-directional, the parameters of the detector can be modified from the keypad or from the system configuration software according to your needs.

PIR Sensitivity:	High/Low*
MW Sensititvity	Min. 25%, 50%, 65%*, 85%, max. **
Anti-Mask	Yes/No*
Supervision Time:	0-255 minutes (15 min*)
LED:	On*/Off
Operation Mode:	Walk Test: The detector transmits after each detection
	Normal*
Disposition Sensor:	Enable/Disable*

* Default

** In maximum sensitivity sway recognition is disabled to achieve optimum sensitivity

NOTE: The Disposition Sensor sends an alarm following change in the position of the detector.

Camera Detector Configuration via RISCO Configuration Software
Configure the camera 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:

Images at Alarm:	3 (1 to 7 images)
Image Interval:	0.5 sec (0.5, 1, 2 seconds)
Pre-Alarm Image:	Yes (Yes, No) (Image capture upon each arm)
Image Resolution:	QVGA (QVGA 320X240 or VGA 640X480)
Image Quality:	High (High, Low)
Color Image:	Color (Color or B&W)

Image upon request
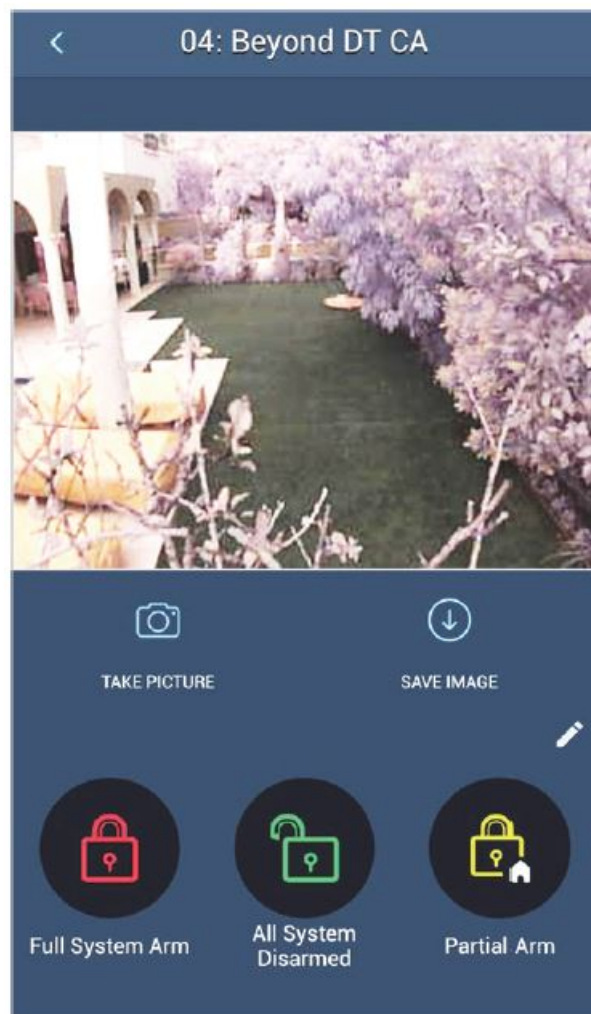Snapshot images can be taken using web/smartphone apps (on panels supporting these applications).

Figure 11

LED Status

LED	State	Description
Yellow	ON	PIR detection
	Flashing	Anti-Mask detection
Red	ON	Alarm, Tamper Close/Open
	Flashing (4 times)	Low battery indication
Green	ON	MW detection
	Flashing (4 times)	Successful registration

Specifications

Electrical	
Battery Type :	3 x CR 123, 3V Lithium Battery
Battery Life:	3 batteries – 3 year typical lifetime
Current consumption:	RWX350DC : 25 mA sleep; 200 mA max. peak at capture with flash RWX350 D: 48 mA
Supervision Transmission:	0-255 minutes
RF transmitting frequencies:	868.65 MHz, 869.525 MHz, 24.05 GHz; 433.92 MHz, 916 MHz, 24.05 GHz for model RWX350DC 433.92 MHz, 24.05GHz; 868.65 MHz, 24.05 GHz for model RWX350D (without camera)
Optical	
Filtering:	White Light Protection
Pet Immunity:	Up to 35cm (1.1ft) animal
Physical	
Size (LxWxD):	176 x 89 x 107 mm (7 x 3.5 x 4.2 in)
Weight:	410 grams (14.5 oz.)
Environmental	
RF Immunity:	According to EN50130-4
Operating Temperature:	-30°C to 60°C (-22°F to 140°F)
Storage Temperature:	-20°C to 60°C (-4°F to 140°F)
Relative Humidity	90% max
Camera[*]	
Type:	CMOS digital image sensor
Lux:	0 Lux (total darkness)
View Angle:	H 90° V 71°
Power Output	Security 868.65 Mhz: 10mW Max. Camera 869.525 Mhz: 100mW Max. MW 24.05 GHz: 39.8mW Max.

RED Compliance Statement

Hereby, RISCO Group declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. For the CE Declaration of Conformity please refer to our website: **www.riscogroup.com**.

Documents / Resources

[**RISCO RWX350DC Beyond Wireless DT Beyond Wireless DT Camera**](#) [pdf] Instruction Manual
Beyond Wireless DT Beyond Wireless DT Camera, RWX350DC Beyond Wireless DT Beyond Wireless DT Camera, RWX350DC, RWX350D

References

- [**riscogroup.com**](#)
- [**RISCO Cloud**](#)
- [**riscogroup.com**](#)