TECHNICAL MANUAL

STRIXORF

Indoor/outdoor advanced wireless double-technology detector with vertical curtain protection for intrusion detection systems

090010916

IT08020000001624

EL.MO. SPA

FOREWORD

FOR THE INSTALLER:
Comply strictly with current standards governing the installation of electrical systems and security systems, and with the manufacturer's directions given in the manuals supplied with the products.
Provide the user with full information on using the system installed and on its limitations, pointing out that there are different levels of security performance that will need to suit the user's requirements within the constraints of the specific applicable standards. See that the user looks through the warnings given herein.

FOR THE USER:
Check the system's operation thoroughly at regular intervals, making sure the equipment can be armed and disarmed properly.
Make sure the system receives proper routine maintenance, employing the services of specialist personnel who meet the requirements prescribed by current regulations.
Ask your installer to check that the system suits changing operating conditions (e.g. changes in the extent of the areas to be protected, change in access methods, etc...).

This device has been designed, built and tested with the utmost care and attention, adopting test and inspection procedures in accordance with current legislation. Full compliance of the working specifications is only achieved in the event the device is used solely for its intended purpose, namely::

Indoor/outdoor advanced wireless double-technology detector with vertical curtain protection for intrusion detection systems

The device is not intended for any use other than the above and hence its correct functioning in such cases cannot be assured.
Consequently, any use of the manual in your possession for any purpose other than those for which it was compiled - namely for the purpose of explaining the product's technical features and operating procedures - is strictly prohibited.
Production processes are closely monitored in order to prevent faults and malfunctions. However, the componentry adopted is subject to an extremely modest percentage of faults, which is nonetheless the case with any electronic or mechanical product.
Given the intended use of this item (protection of property and people), we invite you to adapt the level of protection offered by the system to suit the actual situation of risk (allowing for the possibility of impaired system operation due to faults or other problems), while reminding you that there are specific standards for the design and production of systems intended for this kind of application.

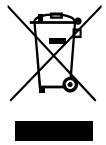
We hereby advise you (the system's operator) to see that the system receives regular routine maintenance, at least in accordance with the provisions of current legislation, and also check on as regular a basis as the risk involved requires that the system in question is operating properly, with particular reference to the control unit, sensors, sounders, dialler(s) and any other device connected. You must let the installer know how well the system seems to be operating, based on the results of periodic checks, without delay.

Work involved in the design, installation and maintenance of systems incorporating this product should be performed only by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply. If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

EU DECLARATION OF CONFORMITY

Hereby, EL.MO. S.p.A. declares that the STRIXORF radio equipment is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: elmospa.com – registration is quick and easy.

DISPOSAL INSTRUCTIONS



According to Directive 2012/19/EU on the Waste of Electric and Electronic Equipment (WEEE), it is here specified that this Electrical-Electromechanic Device started to be commercialized after 13th August 2005, and it shall be disposed of separately from ordinary waste products.

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1. GENERALS

STRIXORF is an advanced miniaturized wireless IR detector characterized by high performances and designed for the protection of indoor/outdoor walls, window openings or rolling shutters thanks to its curtain coverage. It can be installed on a wall (in vertical position) or on the ceiling, using the optional kits of accessories.
The STRIXORF detector allows achieving an efficient three-level wireless perimetral protection. Indeed, it has input terminals for connecting a rolling shutter detector and a magnetic contact.
To make the installation process easier, STRIXORF features entry holes in its base and swivel mount, equipped with protection gaskets to prevent water penetration.
The detector's functions are settable via dip switches; the radio section encoding can be set to be compatible with the protocols used by the Helios system or by the Villeggio system with fw. 5.x or higher. The detector is also compatible with RIVERRF wireless concentrators connected to NET series, ETRG2 series or TITANIA control units, with RX8CH receivers and with HALLEY and HALENTE wireless interfaces.
Note: Use the HELIOS protocol for Villeggio control units with fw. lower than 5.0.0 and in case RIVERRF is used; the Villeggio protocol can only be used with Villeggio series control units using fw. 5.0.0 or higher and by other compatible devices.
The detector uses a digital PIR sensor in order to achieve a very high detection precision and immunity to interferences.
The detector's appealing look supports its installation in any kind of setting.

2. FEATURES

2.0.1 General features

- **High performance miniaturized wireless detector.**
- **Choice between the Helios (default) or Villeggio wireless transmission protocols.**
- **Designed for an efficient wireless perimetral protection on three levels: MW-IR - Magnetic contact - Rolling shutter detector.**
- **Vertical or horizontal installation.**
- **It can be used to protect any combination of windows or French doors with regular or rolling shutters, to realize a protection parallel to the external wall, and so on.**
- **DIGITAL high-immunity PIR sensor with temperature compensation.**
- **Anti-dazzling silicon filter.**
- **IR lens with vertical curtain protection (7° horizontal beam opening, 80° vertical opening), 8 m range to achieve the best protection for doors, windows or walls.**
- **MW section featuring small-sized low-noise 24 GHz planar antenna, pulsed circuit and neon lights filter, 80° horizontal and 32° vertical beam opening.**
- **Sophisticated MW section management circuit with activation and signal processing started by the IR section motion detection.**
- **Sophisticated alarm generation circuit with wireless encoded transmission and transmitter equipped with special amplifiers for a 150 m operative range in open field.**
- **Front LEDs providing operative status indications.**
- **Advanced AND management.**
- **Terminal inputs for a magnetic contact with tamper and for a rolling shutter sensor.**
- **Internal dip switches to set the operating modes.**
- **Powered by an included 2ER14505 7.2 V lithium battery.**
- **Advanced internal battery charge state control, any anomalies are queued after the first useful transmission.**
- **Transmissions for supervision, alarm, tamper, magnetic contact alarm or tamper and rolling shutter sensor alarm.**
- **Supervision transmissions towards the receiver device at defined time intervals (every 26 min).**
- **Preset identification code, randomly chosen among more than two billions (2^{31}) different combinations, for a quicker installation.**
- **Extremely compact dimensions and pleasing design of the plastic case, arranged for wall mounting. The back of the case is ready for cable feeding, with protection grommet.**
- **Accessories: mod. ANGSGX bracket for corner mounting, mod. CUPSGX protection sunshield for outdoor installation and mod. SNDSGX swivel mount for tilted mounting.**

2.1 Technical specifications

Model:	**STRIXORF**		
Protection class:	IP55 when using the supplied mandatory protection gaskets.		
Performance level:	II° (none wen the joint is used)		
EN 50131 compliance:	grade 1, environmental class III.		
Power supply:	supplied mod. 2ER14505 7.2 V lithium battery.		
Low battery detection:	when less than 5 V (re-arm at 5.5 V).		
Minimum operating voltage:	4 V dead battery.		
Power consumption of the detector @7.2 V			
Idle:	33 µA		
During IR alarm, with open magnetic contact and shutter sensor ON:	16 mA		
Function selection:	dip switches on board, see the electrical diagrams.		
TX frequency:	digital transmissions on LPD (Low Power Devices) frequencies.		
TX protocol:	Selectable to be compatible with Helios (default) or Villeggio systems.		
Max transmitted power	10 mW		
Wireless range:	150 m in open field, limited by environmental conditions.		
Average battery life			
2 years with the Helios protocol, 2.5 years with the Villeggio protocol. **Note:** the average is calculated with 20 total communications per day and a supervision transmission every 26 minutes. Inhibition time set to 5 minutes. Setting the inhibition time to 30 s significantly shortens battery life.			
Timings			
First power-up:	IR section disabled for 40 s, the other inputs are active.		
Walk-Test delay:	activated at the first switch on for 8 minutes or reset from the first useful movement of the shutter or of the magnetic contact.		
Time between first and second IR pulses:	10 s only with sensitivity set to its minimum value.		
IR inhibition delay during Walk-Tests after an alarm transmission:	3 s		
Shutter input alarm:	5 pulses in 15 s.		
Supervision interval:	26 minutes, preset.		
MW section		**Infrared section**	
Anti-noise digital filter	for neon lamps.	**Lens type:**	vertical curtain lens.
Integration:	fixed, 2 pulses.	**Number of sensitive zones:**	2 beams.
TX frequency:	24.125 GHz.	**Covered area:**	see covering diagrams.
Range:	8 m, with dip switch to reduce it to 2 m (dip 3 - 4 ON).	**Covering:**	max 8 m, see covering diagrams.
Sensitivity:	1 IR pulse + 2 MW pulses in 3.5 s.	**PIR sensor:**	digital type, highly immune to RF interferences. Equipped with anti-dazzling silicon filter.
		IR stage gain:	optimised according to the temperature.
Visual indicators:	Blue LED: Power On, alarm, MW section WALK TEST, alarm and tamper with different flashing. Green LED: Power On, alarm, IR section WALK TEST, contact alarm.		
Visual indicator examples:	Both LEDs ON for first Power On; Both LEDs blinking slowly for Walk-Test alarm transmission; Green LED ON for 3.5 s for IR pulse during the Walk-Test; Blue LED single flash for RF transmission in operation.		
Connections:	terminal board for connecting a magnetic contact, a rolling shutter sensor and a tamper input.		
Protection:	against case opening		
Operating conditions:	from −10 to +55 °C — 93% r.h.		
Dimensions and weight:	H 155 – L 39 – P 44 mm, 140 g with battery and no accessories.		
Parts supplied:	screws, rubber washers, dowels, technical manual, mod. 2ER14505 7.2 V battery, cable feed gasket, rubber washers for the front screws.		

STRIXORF is compliant with the EN50131-5-3+A1 standard for grade 1 and environmental class III.

3. VIEW OF THE DETECTOR

Exploded diagram of the detector, including accessories.

CUPSGX sunshield for outdoor installations.
Optional.
Side hooks for fixing in position.

* = the cover is equipped with an internal gasket for outdoor installation.

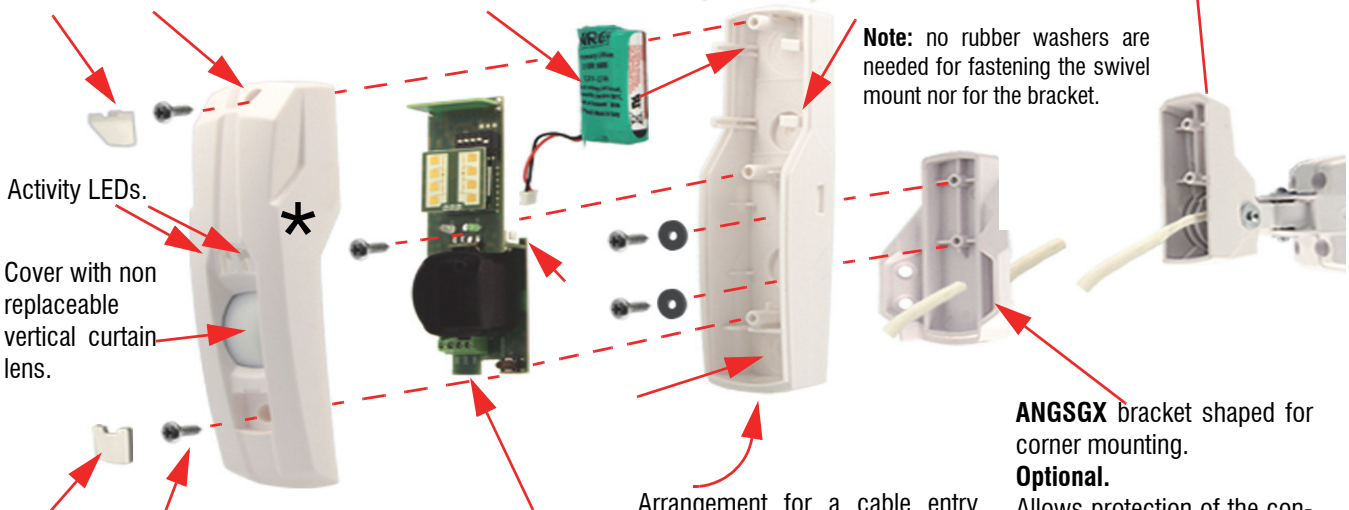
SNDSGX joint for mounting at an angle, with pan/tilt option.
Optional.
Mount as shown in the instructions.
Allows protection of the connection cables.
Fix to the lower part of the STRIXORF detector to allow the required tilt.

Upper cap to conceal the cover closing screw. Insert the washer as shown below.

mod. 2ER14505 7.2V lithium battery to be positioned in its dedicated area.

Wall mount back cover, with knockout cable entry.

Note: no rubber washers are needed for fastening the swivel mount nor for the bracket.



Activity LEDs.

Cover with non replaceable vertical curtain lens.

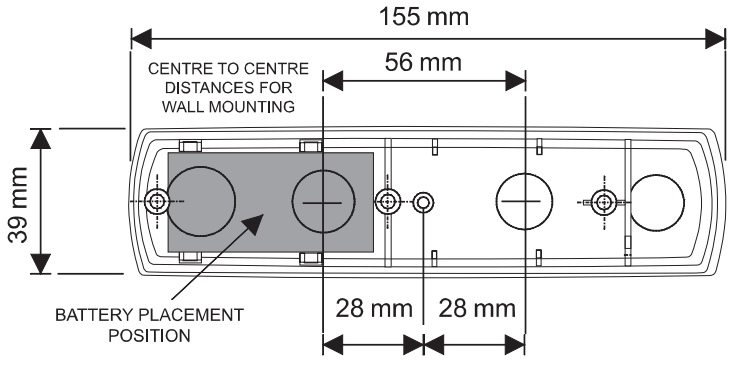
Lower cap to conceal the cover closing screw.
Insert the washer as shown below.

Detector board equipped with input terminals in its lower part.

Arrangement for a cable entry hole. Once opened, equip with the provided gasket for protection.

ANGSGX bracket shaped for corner mounting.
Optional.
Allows protection of the connection cables.
Fix to the upper or lower part of the detector.

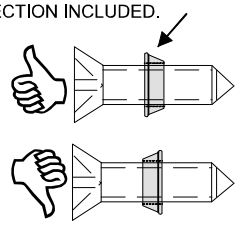
Back view with centre-to-centre distances for fastening.



CENTRE-TO-CENTRE DISTANCES FOR THE ANGLE BRACKET, USE THE CENTRAL HOLE AND ON OF THE OUTER TWO

Detail for front screws washers.

TO GUARANTEE THE STATED IP PROTECTION CLASS, PLACE THE WASHERS ON THE FRONT SCREWS AS SHOWN IN THE FIGURE, DIRECTION INCLUDED.



ATTENTION
The detector is suitable for outdoor installations if the indicated washers and gaskets are used. For a better sealing, apply a line of silicone around the screw holes.

4. INSTALLATION

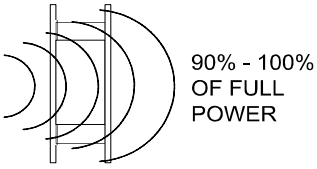
4.1 General installation suggestions

- Do not touch the PIR sensor with your fingers while installing or touching the board.
- The curtain detector has to be placed between the door/window and its shutter. The protection area is approximately 90° longitudinally open and 7° transversely open.
- The device can be mounted horizontally or vertically: horizontal mounting is suggested for protection of doors or windows, vertical mounting for protection of main doors or walls.
- Adjust the range according to the chosen mounting position.
- When installing the device:
  A) for a vertical mount, have the lens face down and the detector in contact with the ceiling (mounted on a properly tilted swivel mount in case of main door protection).
  B) for an horizontal mount, install the detector at the centre of the door/window frame.
  In both cases, look at the installation examples for a better understanding.
- Connect the optional rolling shutter sensor and magnetic contact, following the electrical wirings chapter.
- Carefully consider the wireless signal attenuation caused by the building materials.

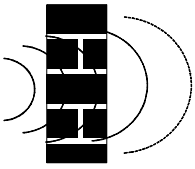
4.2 Effects of building and furniture materials

The STRIXORF installation has to abide by some rules in order to avoid performance reductions caused by bad positioning. Indeed, it is very important to carefully analyse the operative area where the wireless receiver is installed, the real area covered by the detectors and the proper installation position in relation to the materials used for the construction of the building. The drawings below show correct and wrong installation position, items that can interfere with the RF signal and materials that can weaken it.

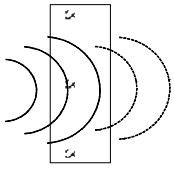
Radio-frequence weakening due to typical building materials.



WALL MADE OF PLYWOOD, PLASTELBOARD, HONEYCOMB

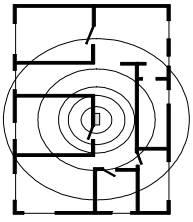


WALL MADE OF SOLID OR HOLLOW BRICKS



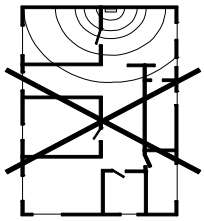
WALL MADE OF REINFORCED CONCRETE OR PLASTER AND METAL SHEETS

Installation positions.



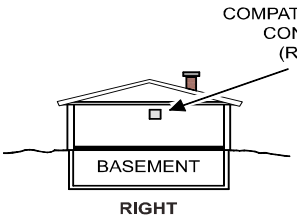
RIGHT

PLACE THE CONTROL UNIT OR THE COMPATIBLE RECEIVER IN A CENTRAL LOCATION



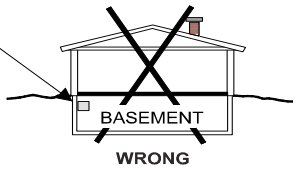
WRONG

THE TRANSMITTERS ON THE OPPOSITE SIDE OF THE BUILDING MIGHT BE TOO FAR AWAY



RIGHT

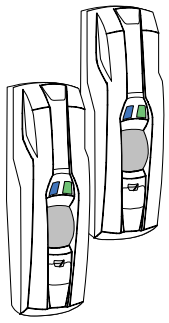
PLACE THE CONTROL UNIT (RECEIVER) AS HIGH AS POSSIBLE COMPARED TO THE GROUND LEVEL

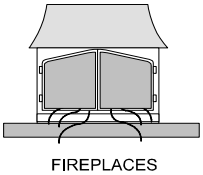


WRONG

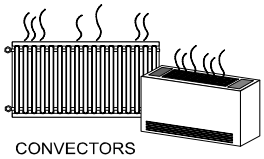
PLACING THE CONTROL UNIT (RECEIVER) BELOW THE GROUND LEVEL GREATLY REDUCES THE SIGNAL

Some IR interference examples.

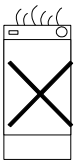




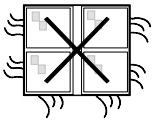
FIREPLACES



CONVECTORS
RADIANT PANELS

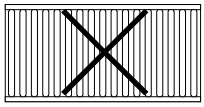


REFRIGERATORS OR APPLIANCES WHICH PRODUCE HOT AIR

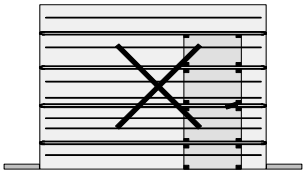


WINDOWS WITH AIR DRAUGHTS

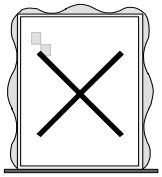
Some items that can modify or weaken the wireless range.



METAL GRIDS (E.G. IN BASEMENT WINDOW WELLS) AND REINFORCED CONCRETE WALLS



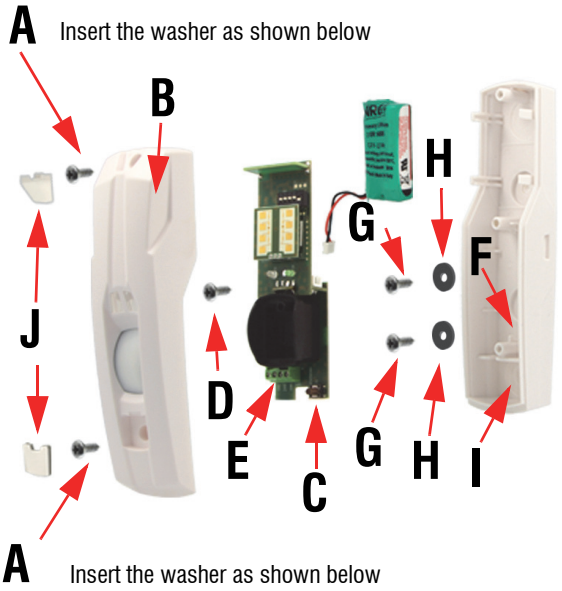
METAL DOORS



MIRRORS

4.3 Opening, fixing and closing operations

The electronic board can be damaged by electrostatic discharge.
The installer shall free himself of electrostatic charges before opening the housing and he shall keep free from electrostatic charges during the whole installation or maintenance process.



Opening/closing process:

1) Unscrew the fixing screws with washer from the upper and lower part of the cover (**A**).
2) Remove the front cover **B**.
3) To close the cover, proceed in reverse. Be sure to have the Tamper spring **C** fall in its special place, see note at the end of “Memorizing a transmitter in a compatible control unit” on page 13. Conclude the procedure by fastening the self-tapping screw in the cover, then placing the cover taps **J** to hide the heads of the screws.

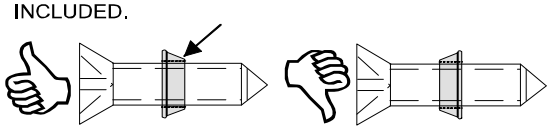
Removing/reinstalling the board:

1) Remove the fixing screw of the board, **D**.
2) Remove the board **E** by gently rotating it forward, then pulling it out until it is free from he lower hook **F**, also see the details for battery replacement on page 11.
3) To reinstall the board, proceed in reverse.

Wall installation and hole drilling:

Remove the front cover and the board, then use holes of the back cover seen on page 5 (centre-to-centre distance: 56 mm) as a drilling template. Place the supplied **H** washers around the **G** screws (see above and read the attention note below).
To use the swivel mount or bracket, see their leaflet. Secure the detector only after analysing the installation options and after **understanding** the limitations and warnings described in this manual.

TO GUARANTEE THE STATED IP PROTECTION CLASS, PLACE THE WASHERS ON THE FRONT SCREWS AS SHOWN IN THE FIGURE, DIRECTION INCLUDED.

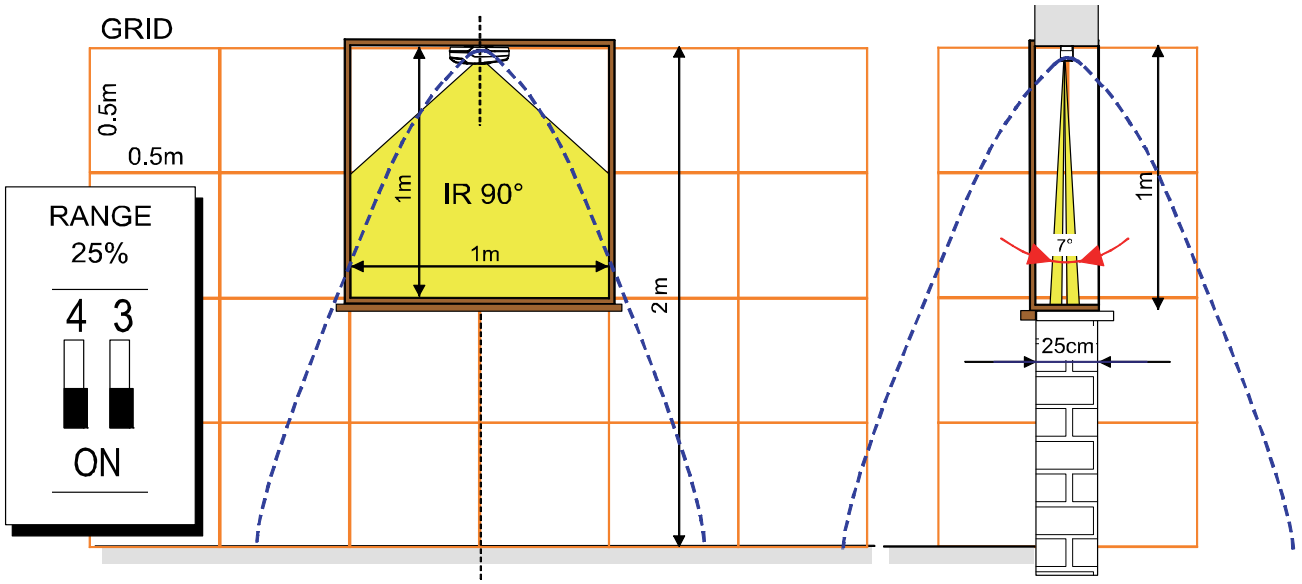


Cable feeding:

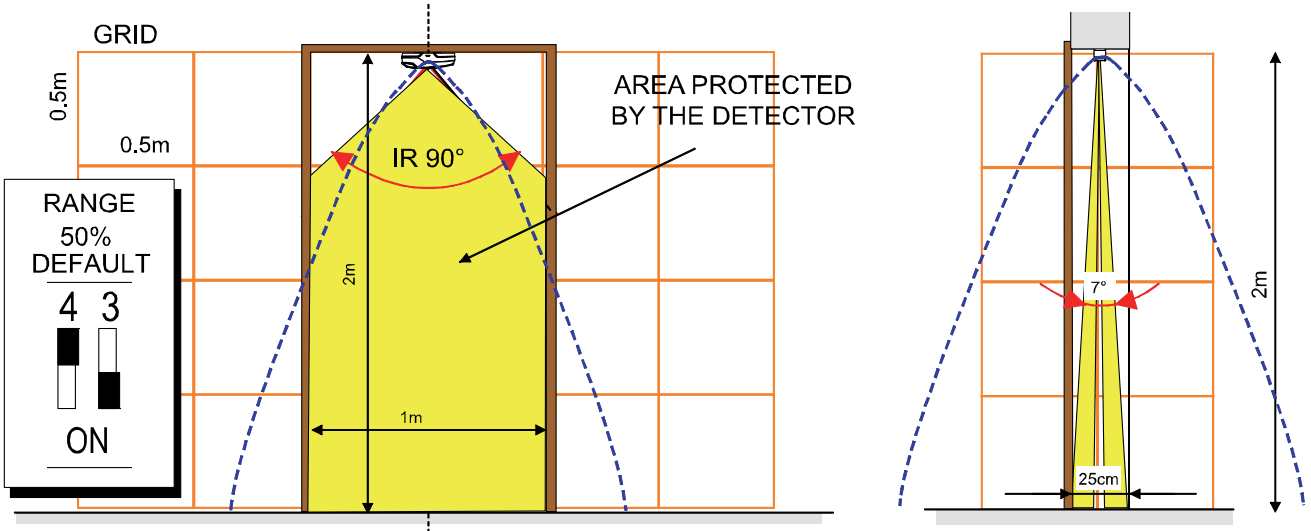
For connecting a magnetic contact or a rolling shutter sensor, feed the cables through the **I** hole, using the provided gasket. The path of the cable also depends on the accessories and on the positioning of the connection cables.

ATTENTION
The detector is suitable for outdoor installations if the indicated washers and gaskets are used. For a better sealing, apply a line of silicone around the screw holes.

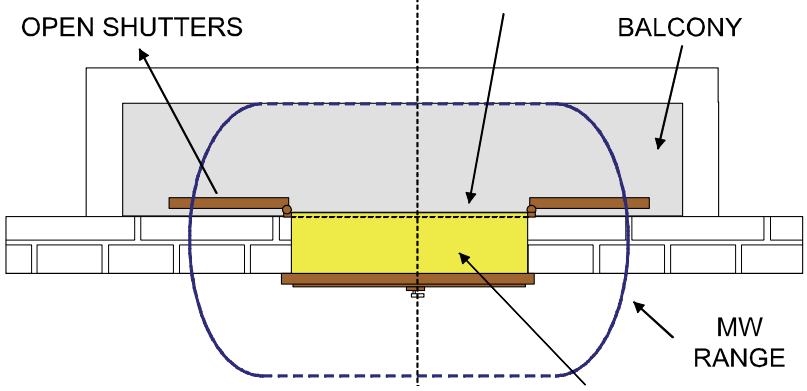
4.4 Installation for window protection and covering diagram



4.5 Installation for door protection and covering diagram

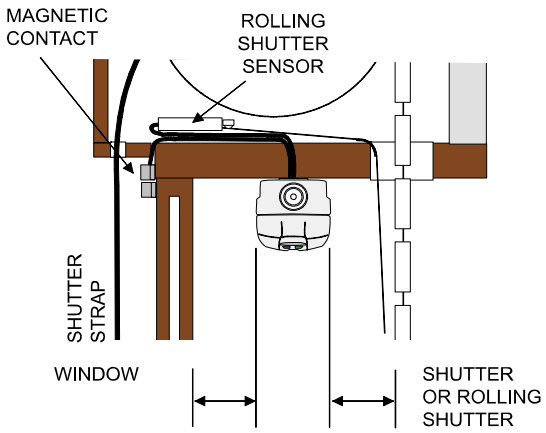


TOP VIEW OF A BALCONY WITH A SHUTTER OR ROLLING SHUTTER ANDMICROWAVE PROTECTION AREA

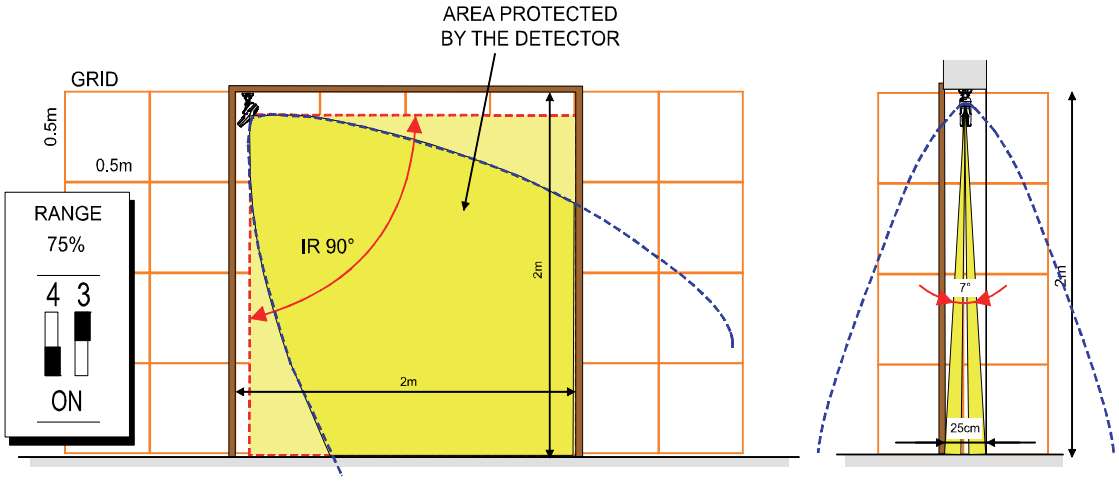


4.6 Securing the detector - Suggestions

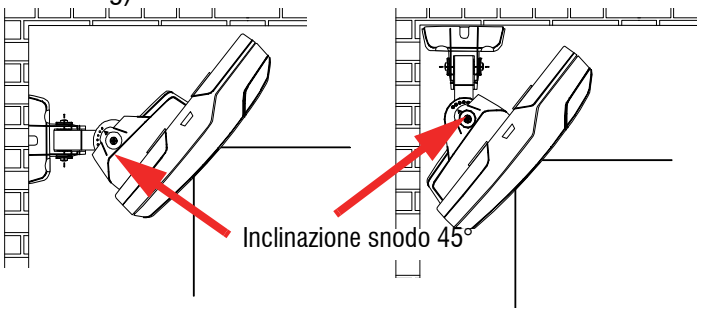
For the horizontal mounting, it is mandatory to mount the detector with the lens placed at the middle of the lintel.
Leave at least 3 cm from the window and from the shutter, except for what is described in the diagrams.
Note: we strongly advise against mounting the detector where venetian blinds or metal shutters are installed.



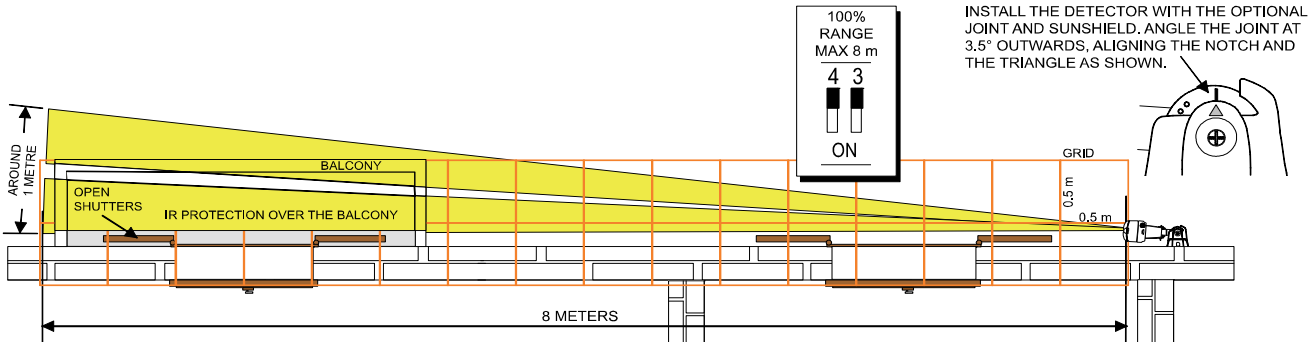
4.7 Installation for gate protection and covering diagram



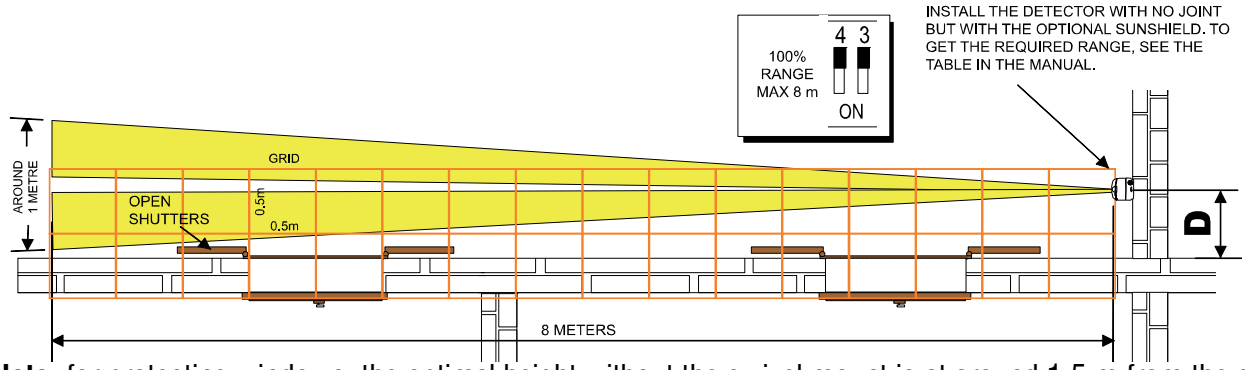
Note: to realise a vertical curtain protection for gates and French doors up to 2 meters large, it is possible to mount STRIXORF with the (optional) swivel mount tilted at an angle of **45°** as shown below (choose one according to the possible wiring).



Top view of the IR covering of a STRIXORF used to protect a wall, using the optional swivel mount.



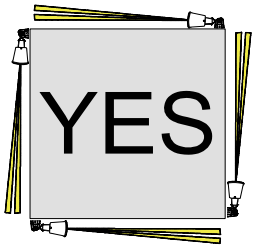
Top view of the IR covering of a STRIXORF used to protect an outer wall, screwed to a nearby wall. This kind of installation can also be used for indoor walls, without the optional sunshield:



Note: for protecting windows, the optimal height without the swivel mount is at around 1.5 m from the ground. If mounted perpendicular to the wall as in the image above, keep a minimum distance "D" from the protected wall, according to the covered area set with the dip switches:

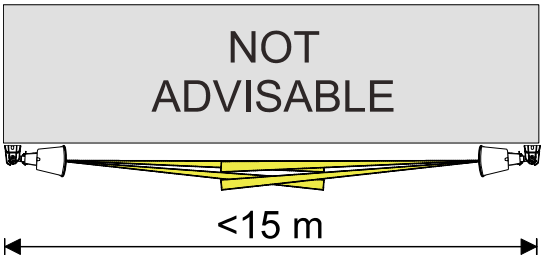
D = distance from the wall	L = covering length
18 cm	2 m
35 cm	4 m
70 cm	8 m

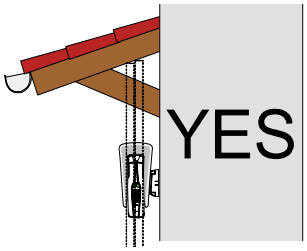
For more details on outdoor installations, with optional sunshield and joint, see the following images:



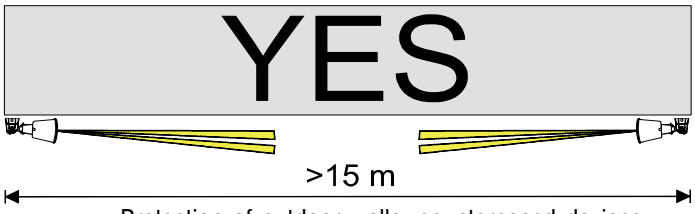
Protection of outdoor walls, with swivel mount tilted at 3.5° and sunshield.

Protection of outdoor walls, counterposed devices at less than 15 m.



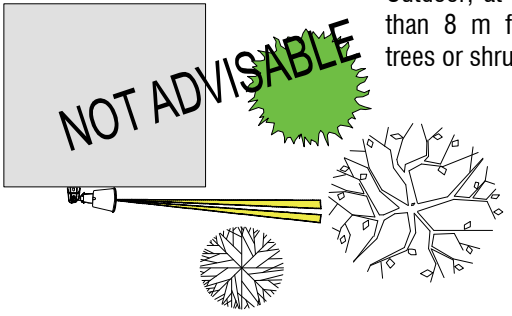


Outdoor, protected by a porch or a balcony, with swivel mount tilted at 3.5° and sunshield.

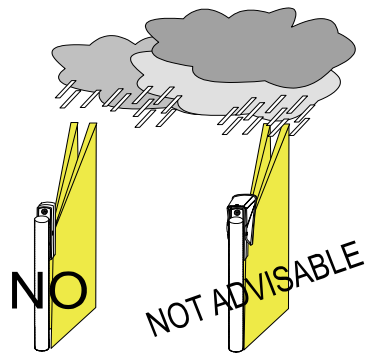


Protection of outdoor walls, counterposed devices installed at more than 15 m from each other.

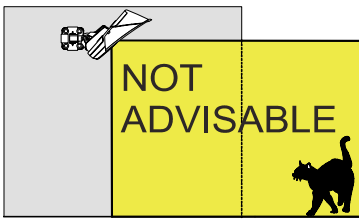
Outdoor, at less than 8 m from an alley/road with vehicle passage.



Outdoor, at less than 8 m from trees or shrubs.



Outdoor, on a pole, with or without sunshield. **Bad weather can cause false alarms.**

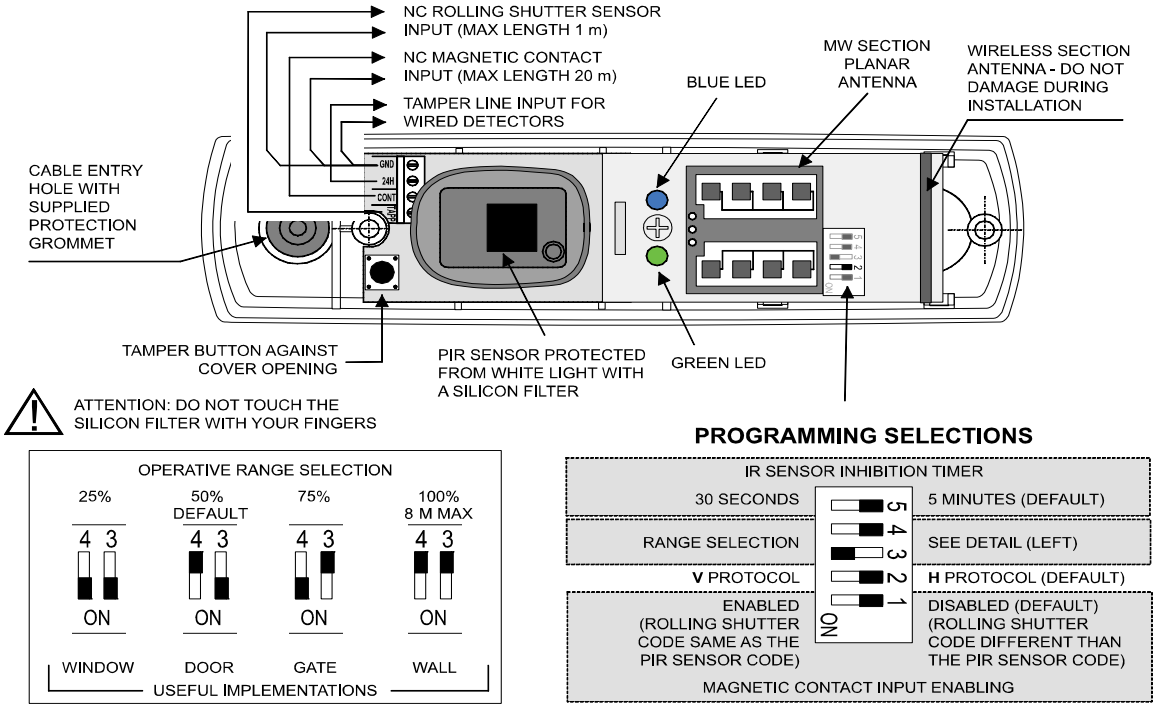


Outdoor installation with animal passage.

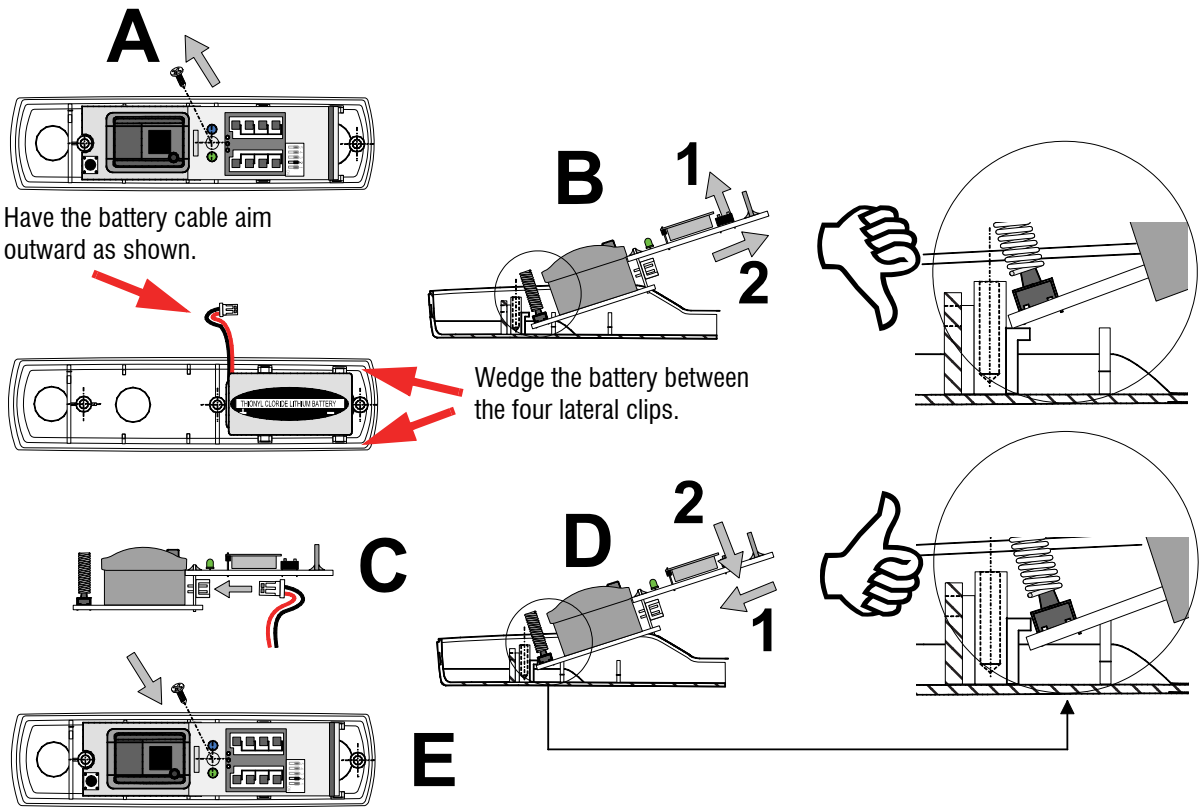
IMPORTANT: do not install the detector directly aiming towards the sun.

5. WIRINGS

Internal view of the board:

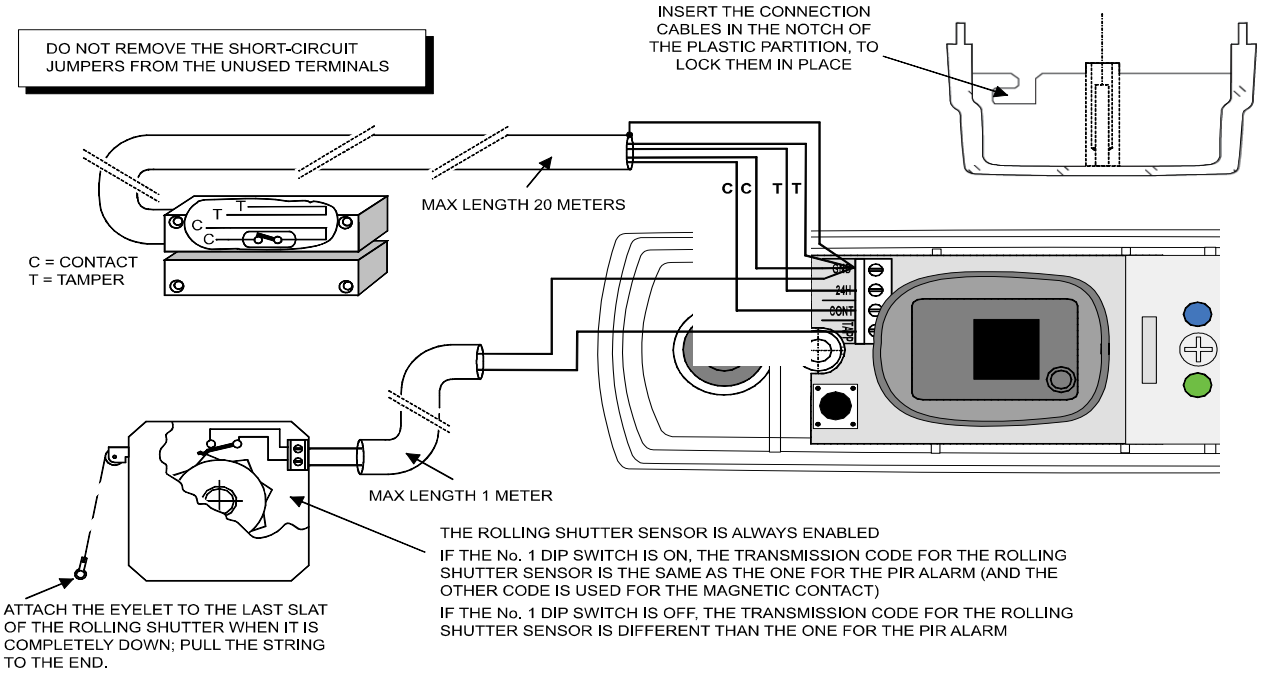


Sequence for battery connection



info@elmospa.com
elmospa.com

Terminal board wiring:



6. FIRST POWER-ON

The STRIXORF detector requires extra care during the first powering. The correct procedure is summarized here:

1. Set and connect the supplied 7.2 V battery, making sure that the polarity is correct, as explained in the previous chapter.
2. Press and release the Tamper button 3-4 times.
3. Reset any low battery memories at the control unit or at the compatible receiver device.

WARNING: a new battery, or a battery that has not been used for a long time, can sometimes provoke a low battery alarm on its first activations. This is due to the chemical properties of the **Thionyl Chloride Lithium** batteries and it can be solved by running the aforementioned operations.
If the battery has been exposed to low temperatures, it is suggested to keep it at room temperature for a while before installing it.

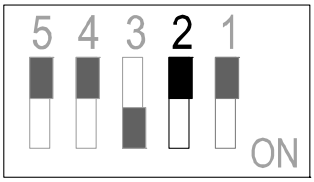
7. SETUP PROCEDURE

7.1 Setting the communication protocol

STRIXORF is an accessory to wireless systems based on the HELIOS or Villeggio control units (or other expressly compatible models). The communication protocol has to be set properly in order to let the control unit understand which events are being transmitted.

The protocol selection in made through the internal dip switch No. 2:

HELIOS PROTOCOL (DEFAULT) **H**



Note: also use for Villeggio control units with firmware before version 5.0.0, and to acquire STRIXORF to a RIVERRF.

VILLEGGIO PROTOCOL **V**

Note: use for Villeggio control units with fw version 5.0.0 or higher and with expressly compatible devices.

ATTENTION: setting the wrong dip switch position will generate a transmission that the control unit can not read.

Note: the Villeggio protocol (use with compatible devices only) improves both communication reliability and battery life.

Note: please note that, in case you need to acquire STRIXORF to a RIVERRF concentrator, the protocol must always be set to **H** (Helios) even if RIVERRF is connected to Villeggio NG-TRX/2K control units.

7.2 Memorizing a transmitter in a compatible control unit

A. Open the plastic cover.

B. Set dip switch 5 to OFF (PIR sensor inhibition time = 5 minutes).

C. If you want to manage a PIR sensor and a rolling shutter sensor, set dip switch 1 to OFF. The following steps are only valid in this case. Otherwise, with dip switch 1 set to ON (magnetic contact enabled), see the note at the K letter.

D. Power up the detector and wait for the Walk-test to end (8 minutes) or manually provoke an alarm thanks to the magnetic contact or to the rolling shutter sensor to immediately activate the operative status.

E. Once the detector is operative, have the PIR sensor detect you.

F. Enter the programming menus of the compatible control unit and browse to the acquisition menu to start the code learning procedure.
Note: while dip switch 5 is OFF, run the learning procedure within 5 minutes, otherwise any movement in front of the detector might cause unwanted transmissions of the code for the PIR sensor.

G. Cause a transmission by pressing the Tamper button and keeping it pressed (until the instructions tell you), *this way the PIR sensor recognition code is sent.*
Note: if the PIR sensor has to be controlled but the rolling shutter sensor is not needed, exit the programming and release the Tamper button ONLY after exiting.

ATTENTION: an incorrect press-release sequence of the TAMPER button causes the receiver to memorize the wrong transmission code. If that happens, it is necessary to remove the last stored codes and to correctly repeat the operation.

H. Keep pressing the tamper button while proceeding in the control unit menu to add a new transmitter.
I. Activate the recognition of the new transmitter.
J. Release the Tamper button. *The control unit stores a new transmission code, recognising it as coming from the rolling shutter sensor.*
K. Exit the programming as usual.
Note: if STRIXORF is programmed for the magnetic contact (Dip No.1 = ON), releasing the Tamper will send the same transmission code that will be used for the magnetic contact alarm. In this case, the rolling shutter sensor will use the same alarm transmission as the PIR sensor.
L. Once the transmission codes have been memorized, it is possible to set the device specific parameters.
M. Install the transmitter where allowed, following the drawings in the "INSTALLATION" chapter and checking its functioning through some test transmissions.
N. Close the cover of the transmitter, making sure that the Tamper button is correctly pressed.

ATTENTION: positioning the Tamper button incorrectly while closing the cover may cause a Tamper circuit anomaly, which in turn triggers a tamper alarm at **each supervision transmission**.
The tamper code is queued to any transmission communication with the control unit: therefore it is possible to get an alarm even during the day, when the control unit is disarmed: the detector detects a movement and sends an alarm that gets correctly ignored (since the unit is disarmed), but the queued tamper event generates a tamper alarm.

8. OPERATION

8.1 Precautions before arming

- It is suggested to close the shutter before arming the system.
- When arming the system with open shutters, make sure that there is no risk that someone passes close the protected areas. Even if the detection towards the outside is greatly limited, people or animals passing at less than 20 cm from the protected frame might be detected anyway.
- **The inner window or French door shall be closed** before arming the system (no vibrations, wind or inside/outside air passage shall happen).
- If the detector is installed with an existing insect screen, it is suggested to roll it up before arming the system.

The STRIXORF detector, being battery-powered, has a peculiar functioning:

- When the stabilization time ends (both LEDs ON for 40 seconds), it automatically enters the WALK-TEST mode, allowing the installer to check the LED and the transmissions for the following 8 minutes.
- The detector is normally in stand-by and the MW section is off until the IR section perceives something (the LEDs are off).
- As soon as an IR pulse is detected, the IR section enters a pre-alarm status (green LED ON) for 3 seconds. Simultaneously, the MW section is turned ON and, if during these 3 seconds 2 MW pulses are detected (2 blue LED pulses), an alarm transmission is sent (both LEDs on for 1.5 s).
- If no MW alarms occur during these 3 seconds, the device goes back to stand-by and it is ready to acknowledge new IR alarms 2 seconds after the green LED has turned OFF.
- During the WALK TEST, after each alarm transmission, 10 seconds must pass before the detector can transmit a new alarm sequence. During this inhibition time, all LEDs are OFF.
- The detector becomes operative after 8 minutes from the start of the WALK-TEST or as soon as it receives an alarm input from the magnetic contact or the rolling shutter sensor.
  Note: to start the WALK-TEST again, shut down the detector, wait 30 seconds and restart it. Remove and insert the battery connector with care.
- In operating mode, a single blue LED flash reveals an RF transmission. After each alarm transmission, the detector will be inhibited for the time set via dip switch 5 (default = 5 minutes). The CONT (magnetic contact), TAPP (rolling shutter) and 24H inputs are active even during this inhibition time.

9. VISUAL INDICATIONS

The LED lights of the STRIXORF detector signal the following operative states:

Green LED = during the WALK-TEST, this LED flashes each time the PIR sensor detects any movement. The detector never lights it up while operative, but some connected devices might (see table). For accurate covering tests, see the description of the WALK-TEST state.

Blue LED = during the WALK-TEST, this LED flashes each time the MW section detects something. While the detector is operative, this LED flashes during a wireless transmission.

LED meaning:

Blue and Green LEDs steadily glowing=	stabilization during the first powering.	Green LED flashing during Walk-test=	single IR pulse.
Blue and Green LEDs flashing=	tamper.	Blue LED flashing during Walk-test=	single MW pulse.
Blue LED flashing in operation=	RF transmission.	Both LEDs on for around 2 s during the Walk-test=	alarm.
Green LED flashing in operation=	contact/shutter alarm.		

10. HOW TO CHANGE AND DISPOSE THE BATTERY

The STRIXORF detector uses a 2ER14505 2.4 Ah 7.2 V lithium battery. Replace it with a new, same model battery only. While replacing it, strictly follow the instructions below:

1. Remove the dead battery.
2. Press and release the Tamper button 3-4 times to discharge any charged capacitor.
3. Insert the new battery.
4. Press and release the Tamper button 3-4 times.
5. Reset any low battery alarms in the control unit or in the compatible receiving device.

Dispose of the dead battery according to the regulations in force, using the special containers.
Dispose of the detector according to the regulations in force in the country where it is installed.
The materials used for this product are very harmful and polluting if dispersed in the environment.

Indoor/outdoor advanced wireless double-technology detector with vertical curtain protection for intrusion detection systems mod. STRIXORF
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