

Sniper W

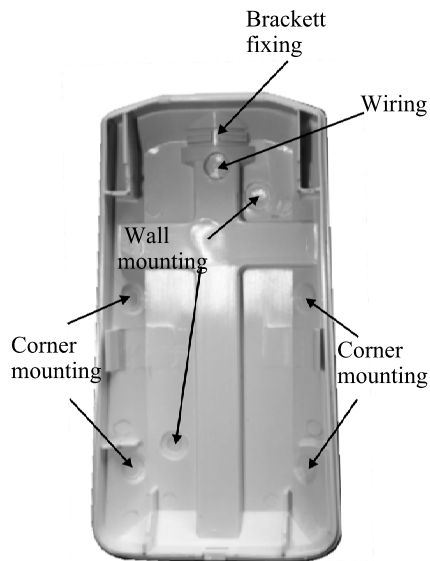


Fig. 1

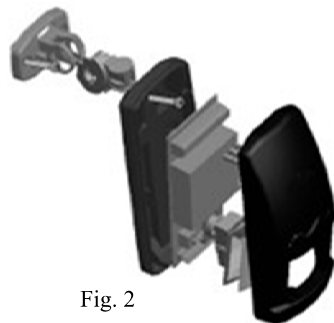
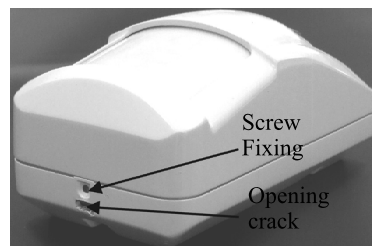


Fig. 2



Wall/Corner mounting

The maximum coverage is achieved by installing the detector at a height of 2.1m and be sure that the detector has an unobstructed view in front of it. Remove the front cover by pressing on the crack opening shown in Fig. 2 and remove the circuit. Engrave, as need, the keyholes on the back cover (fig 1) cut out the wire keyhole. Sign holes on the wall. Drill the holes of 5mm. Secure the bottom of the box to the wall with screws. Assemble the circuit on the case and ensure the cable to the terminal. Give power to the SNIPER-W during the first 60 sec. the detector will enter the SELF-TEST mode and the LEDs light up alternatively. At last, the sensor will enter the LED ON mode for 40 min, regardless of the setting, to allow to perform the WALK TEST.

Bracket Mounting

Cut out the Brackett fixing and wiring hole from the bottom as shown in fig 3 assemble the Bracket as required : ceiling mount fig 5 or wall mount fig 6

Fig. 3

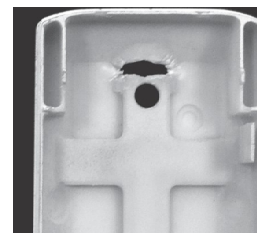


Fig. 4



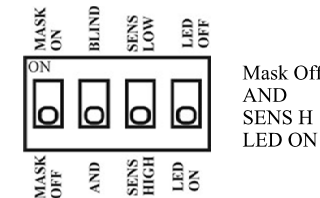
Fig. 5



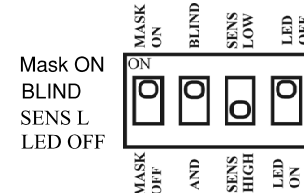
Fig. 6



DEFAULT CONFIGURATION



IDEAL/RECOMMENDED CONFIGURATION



Terminal Wiring

To increase the RFI immunity use a shielded cable with the shield connected to ground only on the central unit side.

12 +	SET	TAMPER EOL	ALARM DEOL	MASK TEOL
☐	☐	☐	☐	☐

+12V Supply input

SET Input for system armed/not armed. A +12 determines system not armed

EOL Common output for End Off Line

TAMPER N.C. Tamper switch

ALARM N.C. Relay

DEOL Double end of line.

MASK N.C. relay Open with microwave masked

TEOL Triple end of line

Ideal/recommended configuration

To maximize the potential of the SNIPER-W, the following configuration is recommended:

DIP 1 POS ON MASK ON
DIP 2 POS ON BLIND
DIP 3 POS OFF SENS H
DIP 4 POS ON LED OFF
SET connected to the control panel

MASK ON and BLIND

In this configuration, a possible masking of the microwave is immediately reported to the control panel. If the IRP is circumvented, sabotaged or blocked, a detection of microwave will generate a signal alarm. In this mode, the SNIPER-W is insabotabile.

LED OFF and SET line connected

In this mode there is no chances for any malicious to verify the coverage area of the sensor. With the SET line connected, it's possible to verify daily the operation of the SNIPER-W. See LED OFF part.

N.B. To perform the WALK TEST it only needs to restore the power to the sensors through the central. (See WALK TEST part.)



EN 50131-2-4

GRADE 2 CLASS II

INSTALLATION MANUAL

- Antimask autaset
- Microwave Synchronization
- Modes of detection: BLIND -AND
- Detection sensibility selectable
- Memories of alarm type with delay
- Interactive LED OFF
- Remote WALK TEST
- Antiflicker
- Solid state relays
- Microwave stripline pulse emission
- Fresnel lens 18 zones on 4 planes with look down zone
- Sealed optics
- Cover 90 degrees for 12 M
- Corner, wall or bracket mounting
- Bracket (optional) anti-violation with regulation 90°horiz. 30°vert
- Certificated IMQ I Level
- EN 50131-1 GRADE 2 CLASS II

The SNIPER-W is a dual motion detector equipped with two sensors:

- A) A dual element infrared (IRP)
- B) A microwave microstrip (uW).

The SNIPER-W offers the advantage of 2 different modes of detection with two levels of sensibility, which enables the choice of the most useful for the area to be protected. In addition to the traditional AND the SNIPER-W offers the BLIND modality recommended for installation in area where is possible sabotage with spray varnish on the IRP lens. Furthermore the SNIPER-W offers a multitude of function among which is the Antimask autaset, memory of alarm type and microwave synchronization.

SYSTEM INSTALLATION

Select the best possible location in the room for both the IRP and uW technologies. If possible, aim the unit towards the room's interior and away from windows, moving machinery, heating and cooling sources. If one or more detectors are required to protect the same area, it's recommended to use the SYNC-8 module see the last paragraph MICROWAVE SYNCHRONIZATION to avoid microwave interference.

TEST (CALIBRATION)

DIP N°1 OFF (Antimask OFF)

DIP N°4 OFF (Led enabled)

In this modality the ANTIMASK function is disabled

Microwave

Set the trimmer at minimum, range 4-15mt, go to the border of the protected area and, with leds off, move towards the unit to verify the detection of the uW, the green led will light up. Whenever the green led will not Light up increase the range of the uW by turning the trimmer clockwise.

N.B. REGULATION OF THE uW: the range must be regulated to the minimum necessary because the uW goes over walls and regulating the uW at a high range does not improve detection in the desired area.

IRP.

Mount the front cover and, when leds are off move in the area. The lighting of the yellow led enables verification of no shadow zones in the protected area.

DETECTION MODE

AND

DIP SWITCH N°2 IN POS. OFF The alarm condition occurs, if both the sensor, at (or about) the same time give an intruder signal. Recommended for installation in areas that could create environmental disturbance.

BLIND

DIP SWITCH N°2 IN POS. ON The alarm condition occurs as the and MODE or if there are many detections of uW with no detection of IRP.

Recommended for installation in areas that require the "AND" mode but could present shadow zones for the IRP or where sabotage is possible with for example varnish spray on the IRP lens.

SENS -L

DIP SWITCH N°3 IN POS.ON

Sensitivity detection reduced for both the detectors. Detection will occur IRP: crossing both edges of a zone uW: human movement of 0.6 Mt/sec.

FUNCTION

ANTIMASK

Any object which is able to mask the uW, will activate the alarm, displayed by the flashing of the leds which will be signalled by the MASK terminal. This condition will remain until the cause that has generated it is removed

ANTIMASK ENABLE

DIP SWITCH N°1 IN POS. ON

The enabling of the Antimask is the last operation to be made. When enabling the antimask the detector will get in the autosest modality for 60 sec within this time close the front cover and move away from the detector, than it will make the automatic calibration of the antimask level in function of the ambient. In this phase nothing should be present near the detector to not alterate the calibration.

LED OFF: DIP SWITCH N°4

The ON position disables the display of detection. With the INHIBIT line connected when the system will be armed off, the detector will enable the display for 30 sec. from the first detection.

Attention: at power on the detector will get in the LED ON mode for 40 min.

MICROWAVE OFF

DIP SWITCH N°1 IN POS.OFF

DIP SWITCH N°4 IN POS ON

Antimask disabled and led off, with SET connected, at the arming off the system the microwave will be turned off to not radiate in vain the protected area.

In this modality the ANTIMASK function is disabled

MEMORIES

With the INHIBIT line connected, at the arming off of the system, the memory of the first alarm will be displayed (Tab.1), which will be reset by the control panel unit at its insertion. The eventual alarm's that will occur during the first 30 Sec. from the arming of the system will be ignored, while the alarm's that will occur 30 Sec. before the arming off of the system will be cancelled. So this memory can be used also in timed zones.

TAB 1

MEMORY DISPLAYS			
ALARM CONDITION	LED GREEN	LED RED	LED YELLOW
IR+uW (AND)	OFF	ON	OFF
uW (BLIND)	ON	ON	OFF
MASK	FLASH	ON	FLASH

MICROWAVE SYNCHRONIZATION

Connecting the SNIPER W SET line to the Comander module the detectors will be synchronized each other to avoid any false detections due to MICROWAVE INTERFERENCE.

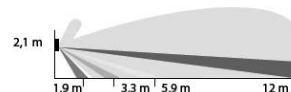
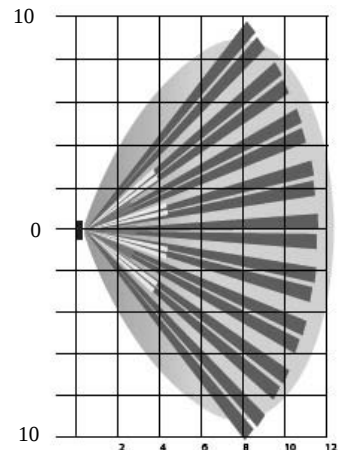
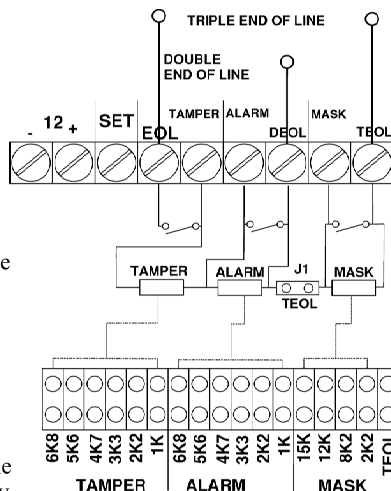
Recommended for intallations that requires 2 or more SNIPER (up to 12) in the same area.

WALK TEST

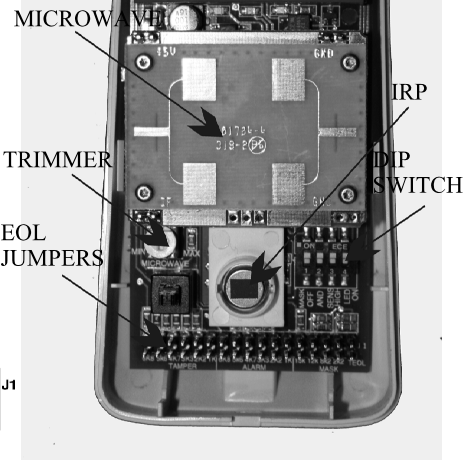
In order to test the sensor without intervening on the switch (LED ON), it only needs to give power to the sensor and in the first 40 minutes the SNIPER will enter in the LED ON mode to give a possibility to check the coverage areas.

END OF LINE JUMPERS

The SNIPER is equipped with selectable resistors for DEOL or TEOL. See the diagram



TERMINAL BLOCK



TECHINICAL SPECIFICATIONS

VOLTAGE:	12V+/- 30 %
CURRENT MAX:	40mA
CURRENT stand by:	20mA
MICROWAVE:	microstrip 8dBm 10.525 Ghz
ALARM PERIOD:	3 sec
RFI IMMUNITY:	0.1 to 500 Mhz 3 V/m
SOLID STATE RELAY:	100mA / 24V
COVER TAMPER :	100mA / 30V
WALL TAMPER:	300mA / 48V
OPERATING TEMP:	-10°C/+55°C
AMBIENT HUMIDITY:	95%
MTBF TEORIC:	98.803 ORE
DIMENSIONS:	108x64x46mm



GRADE 2 CLASS II

RTTE Compliance statement

Hereby, De Tech Srl declares that the equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC



clarification

AT	BE	CY	CZ	DK
EE	FI	FR	DE	GR
HU	IE	IT	LV	LT
LU	MT	NL	PL	PT
SE	SL	ES	SK	GB
BG	RO			

De Tech srl

Via Enzo Benedetto, 27/B
00173 Roma
ITALY
TEL +390672016428
info@detechsrl.it
WWW.detechsrl.it