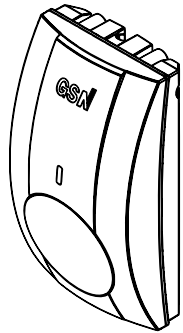


PATROL® - 903 «QUAD PIR»

PASSIVE
INFRARED DETECTOR
FOR EXTREMELY HARSH
ENVIRONMENTS

INSTALLATION INSTRUCTIONS



GSN Electronic Company Ltd.

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PATROL-903

The PATROL-903 is a digital passive infrared detector with quad element pyrosensor, which provides the most efficient security of residential and industrial premises.

The PATROL-903 applies the most effective method of bipolar detection.

The algorithm, based on bipolar detection, includes an analysis of signals and a calculation of bipolar pulses within a certain time intervals and allows the detector to be adapted to various objects with complex operational conditions.

The principle of bipolar detection has led to the detector with high interference immunity, which ignores disturbances, such as light exposure, sudden temperature changes, radio frequency interference (RFI) and electromagnetic interference (EMI).

2

FEATURES

- “QUAD” PYROELECTRIC SENSOR
- HI-TECH DESIGN
- HIGH RFI & EMI IMMUNITY
- BIPOLAR DETECTION TECHNOLOGY
- BIPOLAR PULSES COUNTER
- PIR SENSITIVITY ADJUSTMENT
- HIGH LIGHT IMMUNITY
- HERMETICALLY SEALED PYROELECTRIC SENSOR
- LOW OPERATING TEMPERATURE
- AUTOMATIC TEMPERATURE COMPENSATION

3

DETECTOR INSTALLATION

1. Fix the detector vertically on solid, flat wall surface. The installation height is 2 – 2.5 meters.

For corner or ceiling installations, you can use universal brackets – models: "UBL-1112" or "UBL-1115." (Additional purchase!)

For corner installation, use knockouts located on the sloping part of the detector base.

To connect the wires use the specially signed knockout on the detector base.

2. Connect the wires according to the scheme.



4

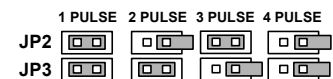
INSTALLATION LIMITATIONS

- Do not install the detector on unstable or vibrating surfaces.
- Do not install the detector close to curtains, blinds or other items that vibrate with air movement.
- Do not install the detector close to air conditioners, air blast sources or above heat sources.
- Do not install the detector or route power wires and alarm loops next to high voltage cables.

5

DETECTOR ADJUSTMENT

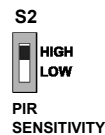
1. Remove the front cover.
2. Connect the power and wait for LED to stop flashing (warm-up time 60 sec).
3. Select the required number of pulses (1-4) using JP2, JP3 jumpers. Selectable pulse count 1, 2, 3 or 4 provides users with the option of optimizing detector sensitivity to suit the environment, thus retaining reliable performance at all times.



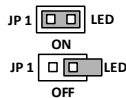
4. Replace the cover.
5. Pass in the field of view detector. The RED LED should actively respond to your movement.

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6. If necessary, change the PIR sensitivity of the detector using S2 regulator (HIGH or LOW).



LED INDICATION

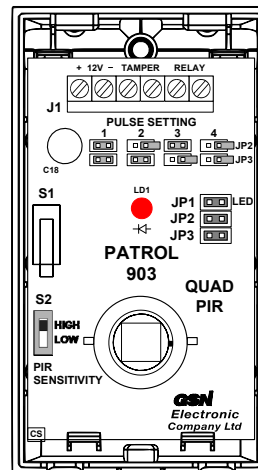


Jumper JP1 enables/disables the alarm LED.

Jumper JP1 ON – LED activated.

Jumper JP1 OFF – LED is disabled.

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- J1** – Terminal block
- JP1** – Jumper will enable/disable the alarm LED
- JP2, JP3** – Pulse counter jumpers
- S2** – PIR sensitivity regulator
- S1** – Tamper button

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TECHNICAL SPECIFICATIONS

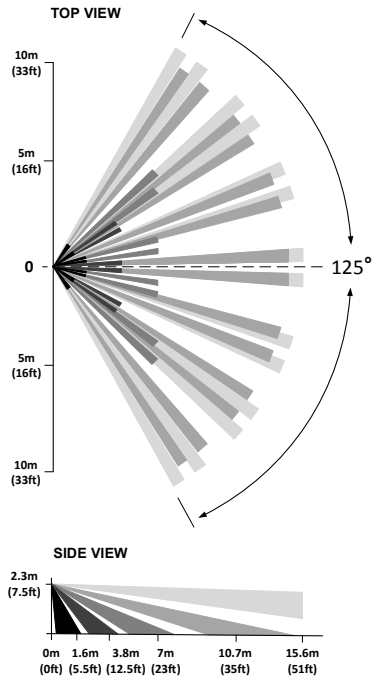
- Input voltage.....8.5 – 16V
- Current consumption:
In standby mode:.....9.7mA
In alarm mode:.....10.5mA
- Warm up period:.....60sec
- Detection range:.....15.6m x 125°
- Detection speed
range:.....0.3 – 3m/sec
- Relay output:.....
.....NC; 60V; 100mA; 16Ω
- Tamper output:.....
.....NC; 10Ω
- Alarm period:.....3sec
- Reset time:.....5 ± 1sec
- Pulse counter:.....1,2,3,4
- Installation height:.....2.0 – 2.5m
- Light immunity without sunshield
filter:.....no less than 6500lux

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- Light immunity with sunshield
filter:.....more 30000lux
- Operating temperature
range:.....– 30°C +60°C
- Storage temperature
range:.....– 50°C + 80°C
- RFI immunity: 30V/m
at a frequency range 30MHz-1GHz
- EMI immunity.....50,000V
- Dimensions:.....
.....54mm x 33mm x 99mm
- Weight:.....75gr.

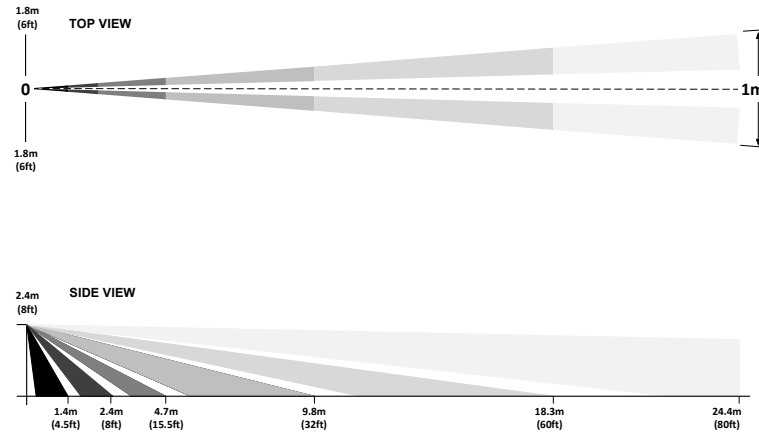
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WIDE ANGLE LENS.



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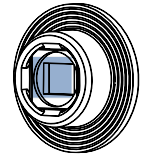
LONG RANGE LENS



*ADDITIONAL PURCHASE

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SUNSHIELD FILTER

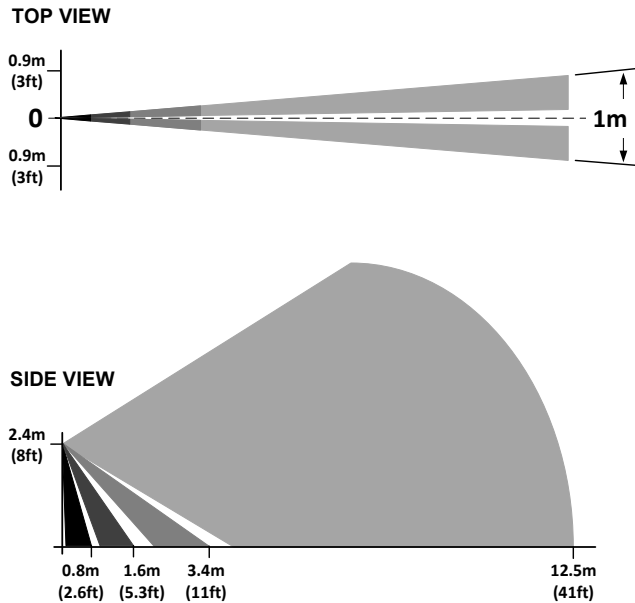


Sunshield filter for extra protection of pyroelectric sensor of detector from sunlight and car headlights.

*ADDITIONAL PURCHASE

13

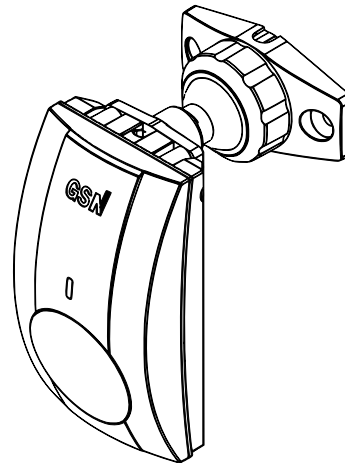
VERTICAL BARRIER LENS



*ADDITIONAL PURCHASE

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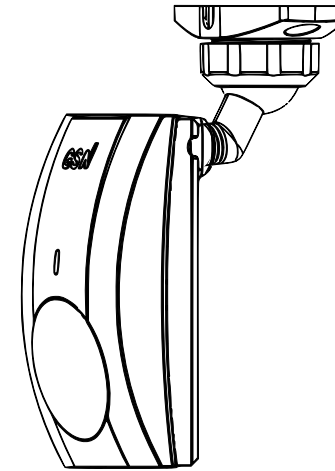
UNIVERSAL BRACKET MODEL "UBL-1112"



*ADDITIONAL PURCHASE

15

UNIVERSAL BRACKET MODEL "UBL-1115"



*ADDITIONAL PURCHASE

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WARRANTY

GSN Electronic Company Ltd. warrants the product to be free from defects in materials and workmanship under condition of observance of service regulations and to be repaired or replaced under absence of mechanical damages for a limited period of five years from the date of sale.

GSN Electronic Company Ltd.

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