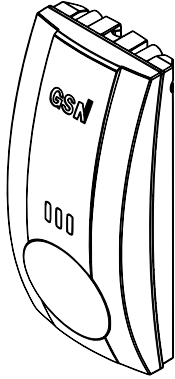


PATROL® - 105PET

COMBINED PIR & MW
DETECTOR WITH
ANTI-MASK TECHNOLOGY
AND PET IMMUNITY
UP TO 25KG

INSTALLATION
INSTRUCTIONS



GSN Electronic Company Ltd.

1

PATROL-105PET

The professional combined passive infrared and microwave detector with dual element pyrosensor, which provides the most efficient security of residential and industrial premises.

PATROL-105PET with dual technology PIR & MW provides stable detection while virtually eliminating false alarms and costly service calls.

PATROL-105PET with anti-mask technology, to detect all types of masking attempts.

PATROL-105PET includes a shock sensor to detect external attack.

PATROL-105PET provides pet immune detection up to 25kg.

2

FEATURES

- HI-TECH DESIGN
- HIGH RFI & EMI IMMUNITY
- DIGITAL PROGRAM ALGORITHM OF SIGNAL PROCESSING
- DUAL TECHNOLOGY PIR & MW
- BUILT-IN SHOCK SENSOR
- ANTI-MASK PROTECTION
- IMMUNE TO PETS UP TO 25KG
- DOPPLER PULSE-COUNT SELECTION (1-5)
- HIGH LIGHT IMMUNITY
- INDIVIDUAL PIR AND MW SENSITIVITY ADJUSTMENT
- LOW OPERATING TEMPERATURE
- AUTOMATIC TEMPERATURE COMPENSATION

3

DETECTOR INSTALLATION

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.

For protecting several windows, mount the detector at optimal distance from them. If heavy blinds of curtains cover the glass, locate the detector so the blinds will not block the sound.

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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.

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PIR ADJUSTMENT

1. Remove the front cover.
2. Connect the power and wait for LED to stop flashing (warm-up time 60 sec).
3. Set Jumper W1 to the "PIR TEST" position, RELAY 1 is open.
4. Replace the cover.
5. Walk into the detector field-of-view. The red LED should flash with each step. Use the "PIR SENSITIVITY" potentiometer to adjust the PIR sensitivity, moving within the protected area.

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MW ADJUSTMENT

1. Remove the front cover.
2. Set Jumper W1 to the "MW TEST" position, RELAY 1 is open.
3. Replace the cover.
4. Use the "MW SENSITIVITY" potentiometer to adjust the MW sensitivity, moving within the protected area. The green LED should flash with each step.

OPERATION MODE

1. Set Jumper W1 to "WORK" position.
2. Set regulator W6 according to animal weight.
3. Close the cover – LED will blink. At the same time, depart from detector for correct the setting of system antimasking until the LED stops blinking. The anti-mask function will then be activated correctly. Use the "ANTIMASK SENSITIVITY" potentiometer to adjust anti-mask sensitivity.

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CHANGING RELAY SWITCH CONNECTIONS

1. Disconnect the power.
2. Set Jumper W4 to "OFF" position.
3. Restore power.

PULSE-COUNTING METHOD

Selectable pulse count 1, 2, 3, 4, or 5 provides users with the option of optimizing detector sensitivity to suit the environment, thus retaining reliable performance at all times. To adjust pulse count for specific operating environments:

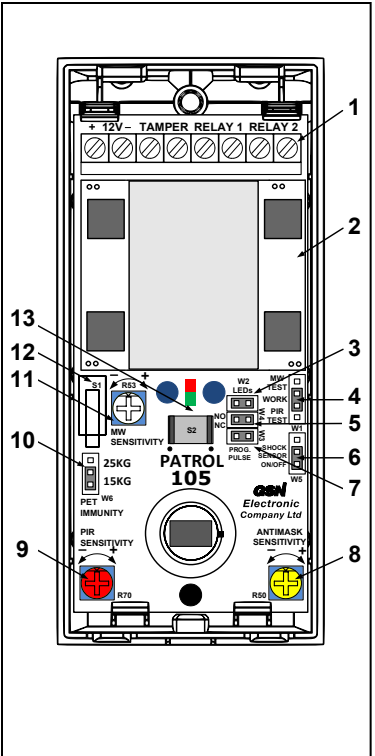
1. Remove Jumper W3.
2. Replace Jumper W3 during pause between LED blinking.

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1. TERMINAL BLOCK

2. MW ANTENNA
3. W2 - ON/OFF LED JUMPER
4. W1 - JUMPER TO SELECT OPERATING AND TEST MODES
5. W4 - JUMPER TO SELECT NC/NO
6. W5 - ON/OFF SHOCK SENSOR JUMPER
7. W3 - PULSE PROGRAMMING JUMPER
8. ANTI-MASK SENSITIVITY ADJUSTMENT
9. PIR SENSITIVITY ADJUSTMENT
10. W6 - ANIMAL WEIGHT REGULATOR
11. MW CHANNEL SENSITIVITY ADJUSTMENT
12. S1 - TAMPER BUTTON
13. S2 - SHOCK SENSOR

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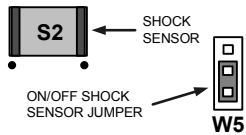
10

SHOCK SENSOR

PATROL-105PET includes a shock sensor that detects external attack. Any physical impact or attempt to separate the detector from the wall will trigger an alarm signal to the control panel through the terminal «TAMPER».

Jumper W5 enables/disables the shock sensor.

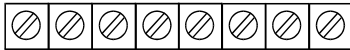
- Jumper W5 On - Shock Sensor activated.
- Jumper W5 OFF - Shock Sensor disabled.



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TERMINAL BLOCK CONNECTION

+ 12V - TAMPER RELAY 1 RELAY 2



Terminals “+12V-“ – for connection to the power supply of the control unit.

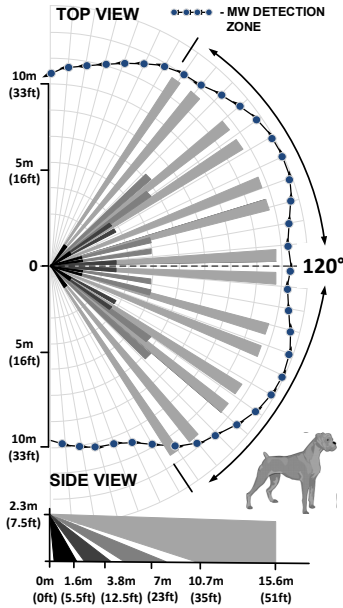
Terminals “Tamper” – for connection to a 24-hour normally closed protective zone in the control unit.

Terminals “Relay 1” – PIR detector relay output.

Terminals “Relay 2” – anti-mask relay output.

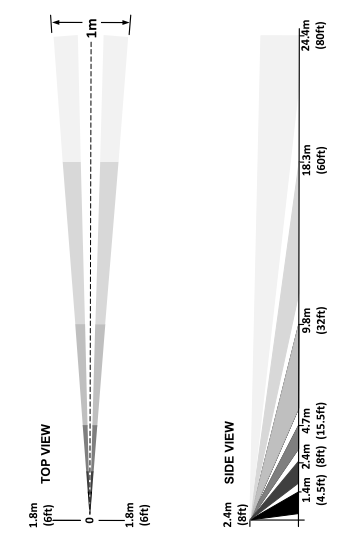
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WIDE ANGLE LENS



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LONG RANGE LENS

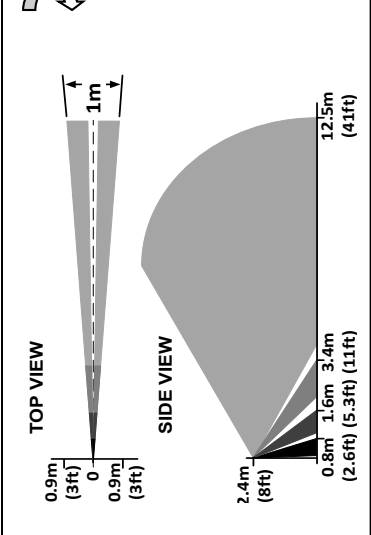


* Detection range for Patrol-105PET decreases up to 16 meters at using “Long range lense”

*ADDITIONAL PURCHASE

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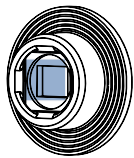
VERTICAL BARRIER LENS



*ADDITIONAL PURCHASE

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SUNSHIELD FILTER

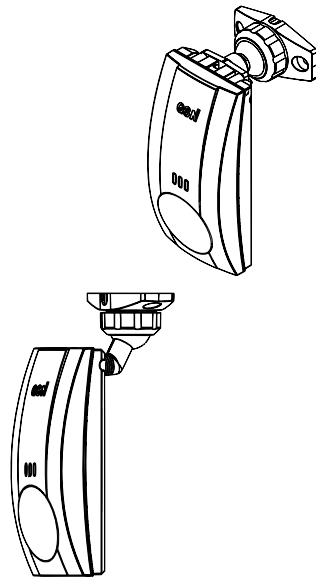


Sunshield filter for extra protection of detector pyroelectric sensor from sunlight and car headlights.

*ADDITIONAL PURCHASE

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UNIVERSAL BRACKETS “UBL-1112”, “UBL-1115”



*ADDITIONAL PURCHASE

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TECHNICAL SPECIFICATIONS

Input voltage.....9 – 16V
 Current consumption:
 In standby mode:83mA
 In alarm mode:.....125mA
 Microwave frequency:..10.525GHz
 Anti-mask startup (boot) period:.....50 ± 5sec
 Warm up period:.....60sec
 Detection range:.....15.6m x 120°
 Detection speed range:.....0.3 – 3 m/sec
 Relay output:.....NC/NO; 60V; 100mA; 16Ω
 Tamper output:.....NC; 60V; 100mA; 16Ω
 Anti-mask Relay output:.....NC/NO; 60B; 100mA; 16Ω
 Anti-mask alarm activation delay:.....40-60sec
 Alarm period:.....3sec

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Reset time:.....5 ± 1sec
 PET mode:.....15/25kg
 Pulse counter:.....1,2,3,4,5
 Installation height:.....2.0 – 2.5m
 Light immunity without sunshield filter:.....no less than 6500 lux
 Light immunity with sunshield filter:.....more 30000 lux
 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 34mm x 120mm
 Weight:.....115gr.

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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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