

PATROL – 701

PASSIVE INFRARED OPTOELECTRONIC INTRUSION DETECTOR FOR INDOOR USE

INSTALLATION AND USER MANUAL



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G.S.N. Electronic Company Ltd.

Special features.

- Hi – tech design
- Automatic pulse count
- Detector's sensitivity switch regulator
- Optoelectronic switch relay
- Hi-light immunity – no less then 10000 Lux
- Hermetically insulated pyrosensor
- Low temperature mode of working
- Automatic temperature compensation
- High RFI & EMI immunity.

Description.

«PATROL-701» – passive infrared detector with dual element pyrosensor, was designed for use in electronic alarm and security systems.

The device detects intrusion by determining changes of energy spectrum in infrared areas. It emits no radiation and is harmless for humans & animals.

The usage of “Fresnel Technologies” original, optical, lightproof lens, has allowed creating the detector, which is protected from false alarms, caused by a sunlight.

Selecting mounting location.

Choose a location where the detector will have a best view angle of the most possible intrusion sight. For gain maximum protection zone it is recommended to place a detector on **2.1** meter height.

Attention!

Avoid the following locations:

- Areas with rapid temperature changes.
- Areas with strong air flows
- On unstable or vibrating surfaces.

Detector performance improves, if it's located in thermo stable and dynamically constant environment.

Mounting the detector.

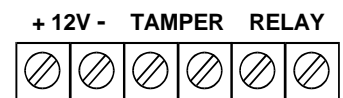
1. To remove the front cover, push the lower part of the case, with a flat screwdriver.
2. Loosen the screw that holds the PCB and move it, down to the keyhole. Remove the PCB from the plastic case.
3. Detector can be placed vertically or at a small angle (up to 10°).
 - For vertical mount use the holes on the front side of the back cover.
 - Use a bracket for mounting the detector at an angle.

4. For wires connection use the specially signed holes on the plastic case of the detector.

5. Mount the back cover of the detector to the wall.

6. Place the PCB back in the cover and fix the correct position with a screw.

7. Connect the wires according to the scheme.



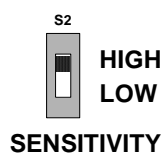
8. For vertical mount place the PCB in the "A" position.

9. For mounting on a bracket place the PCB in the "B" position.

10. Close the detector's cover and fasten the screw.

Pulse count.

"PATROL-701" - Automatically chooses and counts the levels of the entering impulses, according to the strength of the signals acting on the detector.

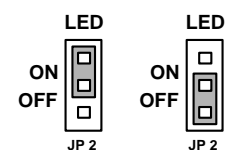


Sensitivity switch regulator.

For premises with stable temperature environment, without warmth's & another's influences on the detector, use the "HIGH" mode.

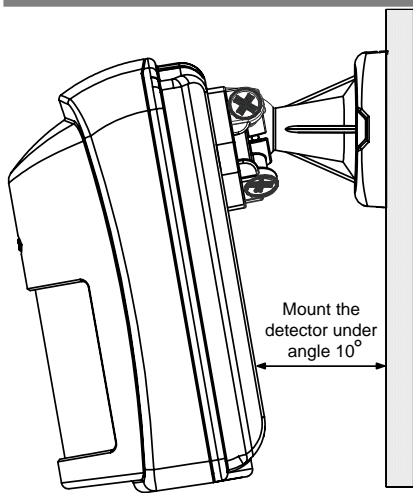
For premises with strong air flows, temperature changes, vibrations and est., use the "LOW" mode.

Led indicator.

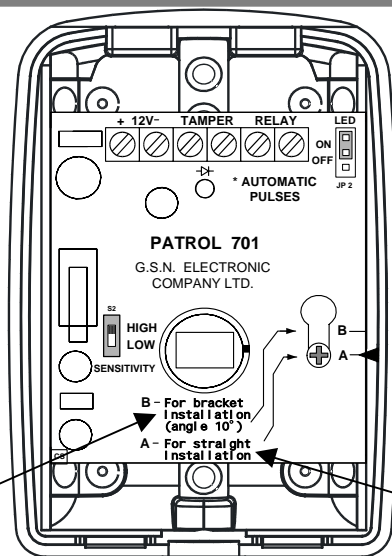


Jumper's "ON" position – LED is activated and will light on in case of intrusion.

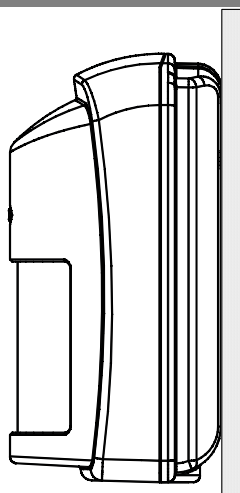
Jumper's "OFF" position – LED is turned off.



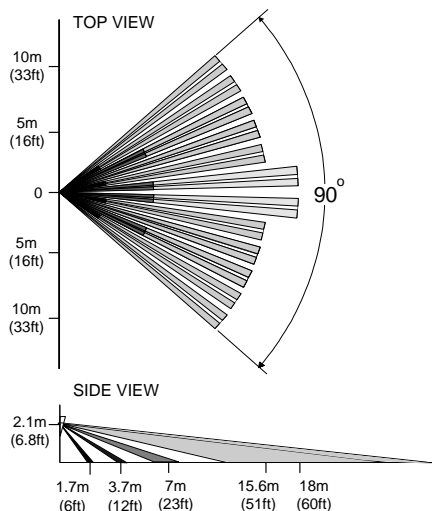
Place the PCB in "B" position if the detector is mounted on the bracket.



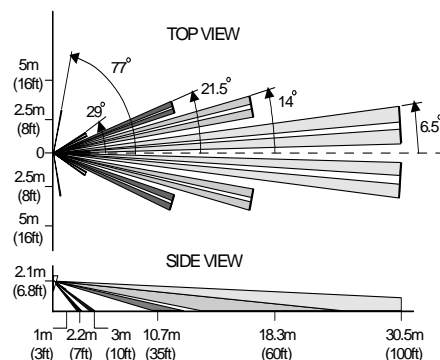
Place the PCB in "A" position if the detector is mounted on the vertical position.



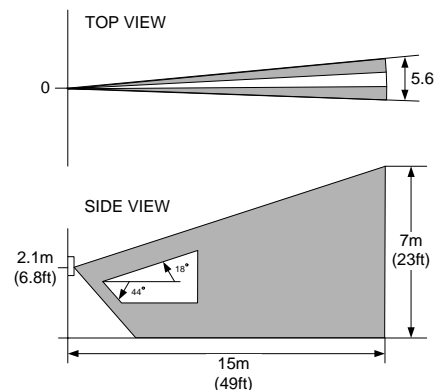
Wide angle lens



Long range lens



Curtain lens



Technical specification.

Detection speed range:.....0.3 to 3.0 m/sec
 Power input:.....8.5 – 16Vdc
 Current consumption:
 In stand by mode:.....11.5mA
 In alarm mode with LED on:.....10mA
 In alarm mode with LED off:.....7mA
 Pulse mode adjustable:.....automatic
 Alarm period:.....3 sec
 Maximum detection range:.....18 m
 Relay output:..60V; 120mA; 16 Ohm

Warm up period:.....40 sec
 Reset time:.....5 ± 1 sec
 Light immunity:.....no less than 10000 Lux
 Temperature range:.....from – 30°C to + 50°C
 Storage temperature range:.....from – 40°C to + 80°C
 RFI immunity:.....30 V/m in range from 10 to 1000 MHz
 EMI immunity:.....50 000 V
 Dimensions:93mm x 66mm x 46mm
 Weight:......85 gr.

Warranty.

G.S.N. Electronic Company Ltd. warrants this product to be free from defects in materials and workmanship under normal use and service for a period of five year from the last day of the week and year whose numbers are printed on the printed circuit board inside this product. GSN obligation is limited to repairing or replacing this product, at its option, free of charge for materials or labor, if it is proved to be defective in materials or workmanship under normal use and service. GSN shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than GSN. GSN shall not be liable for any malfunction that may be caused due to improper installation. The customer should take all precaution necessary to avoid and eliminate electro-static discharges and/or any other disturbances that might interfere with its operation of the product. There are no warranties, expressed or implied, of merchantability or fitness for a particular purpose or otherwise, which extend beyond the description on the face hereof. In no case shall GSN be liable to anyone for any consequential or incidental damages for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever, even if the loss or damage is caused by GSN own negligence or fault. GSN does not represent that this product can not be compromised or circumvented; that this product will prevent any person injury or property loss or damage by burglary, robbery, fire or otherwise; or that this product will in all cases provide adequate warning or protection. Purchaser understands that a properly installed and maintained product can only reduce the risk of burglary, robbery or other events occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss or damage as a result. Consequently, GSN shall have no liability for any personal injury, property damage or any other loss based on claim that this product failed to give any warning. However, if GSN is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, GSN maximum liability shall not in any case exceed the purchase price of this product, which shall be the complete and exclusive remedy against.