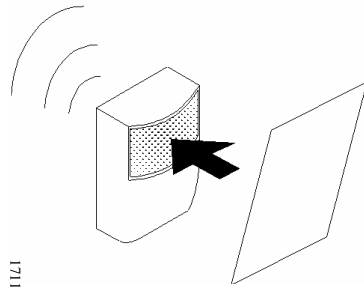


3-D ANTI-MASK

Masking Protected Double Sensor P.I.R. Detector



17111400

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FEATURES

- * 3 Dimensional Thermal Imaging, by Synchronized Double Sensor.
- * Masking Protected, by nonstop active infrared scan.
- * Selectable P.I.R. Detection Sensitivity.
- * Selectable Masking detection Sensitivity.
- * Memory Latched Input.
- * A/D Signal Analyzer.
- * Powerful Microprocessor Controlled.
- * Automatic Temperature Compensation.
- * Increased RFI / EMI Immunity.
- * Two LED indicators:
Blue = P.I.R. detection.
Green = Masking detection.
- * Features can be set by Remote Control that can be purchased separately.
- * TAMPER Switch.

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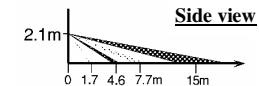
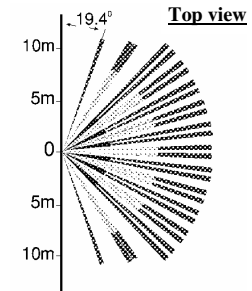
INTRODUCTION

3D ANTI-MASK detector provides highly reliable movement detection and at the same time ensures excellent protection against any attempt to disable its operation by blocking (masking) its near field-of-view, whether the alarm system is Armed or Disarmed. 3D ANTI-MASK will detect almost any type of material which will block (mask) its near field-of-view. 3D ANTI-MASK will alert also if its lens was sprayed with paint or covered by a sticker.

Highly reliable movement detection achieved by two synchronized sensors, which allow three-dimensional thermal imaging of the protected area. The received analog signals from each sensor are converted to digital signals and processed by a powerful microprocessor. The protection against masking the near field-of-view of the detector achieved by a continuous active infrared beams scan.

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DETECTOR'S FIELD-OF-VIEW DIAGRAMS



- 3 -

INSTALLATION

Select location:

- * Choose a location most likely to intercept an intruder, with refer to the detector's field-of-view diagrams (of previous page).
- * Avoid installation in the following locations:
 - Facing sunlight or any strong light source.
 - Facing sources which can change temperature rapidly.
 - Areas with air ducts or substantial air currents.
 - A place which closed more then one meter to any light source.

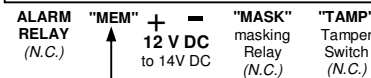
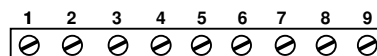
Installing and wiring the detector

- * Open the detector case.
 - Turn it upside-down.
 - Press with the thumb the bottom of the front cover and separate it from the back cover.
- * Take out the internal unit from the back cover:
 - Press the right wall outward (to the right) and pull out the internal unit.

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- * With a screwdriver punch out the mounting and cable entry holes on the back cover.
- * Determine the mounting position and cable routing:
 - Choose a mounting height to fit the application (generally 2 to 2.5 above floor).
- * Run a short part of the cable through the back cover and fix the cover to the wall by screws.
- * Reveal the cable wires and wire them according to the following "Terminal Block Wiring Diagram":

TERMINAL BLOCK WIRING



Input Terminal !

Connect here 0V when System is Armed.
Connect here 12V when System is Disarmed (or leave this terminal free).

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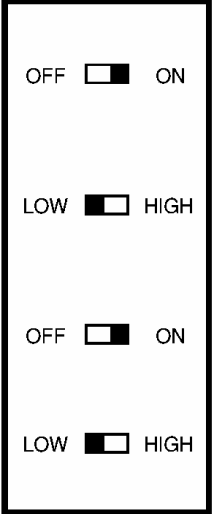

WIRING TERMINAL SPECIFICATIONS

- * **Terminals number 1 + 2.**
Indicated on the circuit as "ALARM". Represent the contacts of the "Alarm Relay" which normally are in closed state (N.C.). Upon any human movement detection, the relay's contacts are opened for about two seconds.
- * **Terminal number 3.**
Indicated on the circuit as "MEM" (memory). This terminal to be used if you wish to get a report from the detector's memory, whether it has detected human movement during the armed period. This terminal supposed to get indication from the alarm system's control panel, whether it is in Armed or Disarmed state.
 - If 0V received, the detector "understands" that the alarm system is Armed.
 - If 12V or no voltage at all received, the detector "understands" that the alarm system is Disarmed.

How to draw and display the detector's memory ?
If: the detector has alerted during the "armed" period, **Then:** upon switching the alarm system from "Armed" to "Disarmed", the Blue will be activated for 5 minutes.

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- * **Terminals number 4 + 5.**
Indicated on the circuit as: **+** **-**. These are the 12V DC power supply inputs.
- * **Terminals number 6 + 7.**
Indicated on the circuit as: "MASK". Represent the contacts of the "Masking Relay" which normally are in closed state (N.C.). All time an object blocks (masks) the near field-of-view of the detector, the contacts will be in open state.
- * **Terminals number 8 + 9.**
Indicated on the circuit as "TAMP". Represent the contacts of the built-in TAMPER switch, which are normally in closed state (N.C.). The contacts will open, upon the detector's case is opened.

<p align="center"><u>DIP SWITCH ADJUSTMENT</u></p>  <p align="center">- 8 -</p>	<p align="center"><u>EXTRA SENSITIVITY ADJUSTMENT</u></p>  <p align="center"><u>PREPARING THE MASKING CHANNEL FOR WORK</u></p> <p>In order to enable the masking detection to operate properly, it is necessary to allow the detector study and analyze automatically the environmental conditions of its protected area. The detector will enter into study procedure in three cases:</p> <ol style="list-style-type: none"> 1. Upon connecting the power supply to the detector. 2. Upon the position of DIP switch number-3 (Masking detection sensitivity) is changed. 3. Once entering the detector into Study procedure by means of a Remote Control that can be purchased separately. <p align="center">- 9 -</p>	<p><u>The study procedure in above three cases:</u></p> <ul style="list-style-type: none"> - In the detector's case is not closed, close it immediately (within 15 seconds maximum). - Keep away (at least 0.5 meter) from its front, until the study procedure will be finished within about 30 seconds. - As an indication for the study procedure, the LED indicators will blink rapidly until the procedure ends. <p><u>In case you would change the internal unit position of the detector:</u></p> <p>You need to initiate the detector to enter into "Study procedure" mode by following these steps:</p> <ul style="list-style-type: none"> - Change the position of DIP switch number-3, and right afterwards switch to the required position. - Close immediately the detector's case (within 15 seconds maximum). - Keep away (at least 0.5 meter) from its front, until the study procedure will be finished, within about 30 seconds. - As an indication for the study procedure, the LED indicators will blink rapidly until the procedure ends. <p align="center">- 10 -</p>	<p align="center"><u>PERFORM A TEST</u></p> <p><u>The test procedure for human movement detection:</u></p> <ul style="list-style-type: none"> - Walk in the protected area. - The necessary reaction of the detector: Upon each detection, the "Alarm Relay" and the Blue indication LED will activate for about 2 seconds. <p><u>The test procedure for masking detection:</u></p> <ul style="list-style-type: none"> - From a distance of about 0.5 meter, move towards the front of the detector a white paper (or any other object). - The necessary reaction of the detector: All time when an object blocks (masks) the near field-of-view of the detector, the masking relay and the Green LED will activate. <p align="center">- 11 -</p>
<p align="center"><u>SPECIFICATIONS</u></p> <p>Power supply.....12V DC</p> <p>Current drain.....30mA (Max.)</p> <p>Relay's contacts withstand.....15V DC / 0.02A</p> <p>TAMPER Switch withstand....15V DC / 0.02A</p> <p>Warm-up time.....2 Minutes</p> <p>Alarm period.....2 Seconds</p> <p>Response time to masking.....30 Sec.(Max.)</p> <p>Masking relay period.....All time of masking (at least 2 seconds)</p> <p>Operation Temperature..... (-)10 ~ (+) 60°C</p> <p>RFI immunity..... >30V/m, DC to 1GHz</p> <p align="center">- 12 -</p>	<p align="center"><u>WARRANTY</u></p> <p>Manufacturer warrants this product against defects in material (conditioned to the components supplier warranty) and workmanship for a period of two years from the date of purchase.</p> <p>This warranty is limited to the repair or replacement, at manufacturer's opinion, of products found to be defective as result of normal use during this period.</p> <p>This warranty is extended to the original purchase only. Manufacturer, distributor, reseller and agent liability is limited to the original purchase price and no payment will be made for related consequential loss, including but not limited to labor costs incurred in inspection, replacement or repair of defective products.</p> <p>THIS WARRANTY IS GIVEN EXPRESSLY AND IN PLACE OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE AND THIS WARRANTY IS THE ONLY WARRANTY MADE BY MANUFACTURER.</p> <p>No agent, representative or employee of manufacturer is authorized to waive, alter</p> <p align="center">- 13 -</p>	<p>or add to this warranty, to make any representation or warranty not contained herein or to extend this warranty to anyone other than the original purchaser of the products.</p> <p>This warranty does not cover any damage caused by natural disaster, misuse, improper installation or use and installation in violation of manufacturer instructions. Manufacturer is not responsible for any direct or indirect damage caused by use or rely on its products.</p> <p>As with any electronic instrument, this instrument also may be neutralized maliciously, likewise may be influenced by external factors like: lightning, electromagnetic interference etc.</p> <p>There may be unique substances which are to be not detected as "Masking".</p> <p>The installer/user must to check whether this detector meets his/her requirements.</p> <p>This detector should be tested in the field on a weekly basis.</p> <p>The installer/user of this product read and understood the warranty conditions and is given his/her agreement to them upon installing and/or use this product.</p>	<p align="center"><u>NOTES</u></p>