

# GUARD

## Outdoor/Indoor Waterproof Anti-masking Detector

### FEATURES

- \* Two PIR sensors.
- \* Microwave sensor.
- \* Waterproof and all-weather resistant.
- \* Frontal Anti-masking, by active infrared.
- \* Anti-case-shifting, by inertial switch:  
Alerts when detector has been shifted.
- \* Microprocessor controlled.
- \* Selectable PIR detection sensitivity.
- \* Adjustable Microwave detection sensitivity.
- \* Selectable detection combination type (AND / OR).
- \* Memory latched input.
- \* Wide-angle (110°) field-of-view.
- \* Auto temperature compensation.
- \* High level of RFI/EMI immunity.
- \* Vertical adjustment.



### APPLICATIONS

Courtyards, Garages, Hangars, Car parks, Farms, Agricultural fields, Army facilities, Banks, Plants, Museums, Hotels, Businesses, Homes.

Due to environmental condition changes, it is a must to backup the protected area by additional detection means!

**MAXIMUM Security (1984) Ltd.**

MAXIMUM HOUSE at Savyon Junction. 201 Levy Eshkol Road, Kiryat-Ono, ISRAEL. Tel: +972-3-634-9853, Fax: +972-3-634-9775

[www.maximum.co.il](http://www.maximum.co.il)

### CONGRATULATIONS

We thank you for choosing a product of **MAXIMUM (1984) LTD.** Based on more than 25 years experience in R&D and in production of advanced security systems, we are proud to introduce to you the best Outdoor / Indoor motion detector ever presented, for industrial, commercial and residential security.

To ensure proper operation and maximum use of all its advantages, please read all parts of this installation and operating manual, and follow the step-by-step instructions.

### INTRODUCTION

**GUARD** is virtually the best Outdoor / Indoor motion detector ever presented, for industrial, commercial and residential security.

**GUARD** has a massive aesthetic design and combines the technologies of Passive infrared, Active infrared and Microwave as well. It is waterproof and all-weather resistant.

**GUARD** also alerts in any attempt to damage or disable its operation. **GUARD** combines a variety of detection techniques that enable it to work in the most difficult environmental conditions and where high security is required while maintaining unprecedented immunity to false alarms.

#### Excellent 4-dimensional detection

The two synchronized PIR sensors produce a three-dimensional thermal imaging of the protected area.

Combining the fourth dimension as microwave scanning contributes to an amazing detection capacity and at the same time it also increases the reliability and immunity to false alarms.

Using this technique allows high sensitivity level adjustment in both detection technologies without the need of pulse count.

#### Alerts in any attempt to damage or to disable its operation

In addition to an unprecedented amazing and reliable detection skill, **GUARD** is equipped with unique protection mechanisms against any attempt to damage or to disable its operation.

These following protection mechanisms always work- weather the alarm system is Armed or Disarmed:

1. Frontal Anti-masking by a continuous active infrared scan, against masking the near field-of-view of the detector (Detects even transparent objects such as clear glass, plastic bags or transparent spray of any kind).

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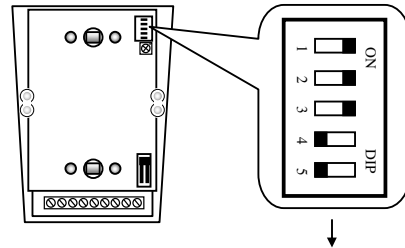
2. Imposes "OR" mode in distress. If, from any reason, the PIR detection channel is neutralized (for example, the detector's front was masked), the Microwave detection channel will guard the protected area.
3. Anti-case-shifting, by inertial switch that alerts if someone shifts, moves or turns the detector.
4. Traditional Tamper switch.

**GUARD operates its relays and LED indicators according to the detection nature as following:**

TYPE OF DETECTION	LED INDICATORS	RELAY STATUS
Alarm- True motion detection	<b>Red + Yellow</b> Blinking together	<b>ALARM</b> relay will activate for 2 seconds.
P.I.R. detection	<b>Red</b>	No relay will operate
Microwave detection	" <b>AND</b> " mode	No relay will operate
	" <b>OR</b> " mode	<b>ALARM</b> relay will activate for 2 seconds (During masking only!!!)
Anti-masking detection	<b>Green</b> Blinking	If masking exists for more than 2 minutes, the green LED will glow constantly, and the " <b>MASK</b> " relay will operate for at least 2 seconds and all time the masking exists
Anti-case-shifting detection	<b>Orange</b>	" <b>MASK</b> " relay will operate for at least 2 seconds

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### DIP SWITCH ADJUSTMENT



1. **LEDs**  
OFF  ON
2. **PIR Sensitivity**  
LOW  HIGH
3. **Anti-masking & Anti-case-shifting Sensitivity**  
LOW  HIGH
4. **Detection Combination Type**  
Microwave }  } Microwave AND P.I.R. Highest Sensitivity  
"AND" }  } "OR"  
P.I.R. }  } Just Microwave (During masking only!)
5. **Anti-case-shifting Enabling**  
ENABLED  DISABLED

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