LARIS QUAD

PIR MOTION DETECTOR with PET IMMUNITY Up to 25Kg

INSTALLATION INSTRUCTIONS

PRODUCT FEATURES

The LARIS QUAD detector uses a special designed optical Lens with unique Quad (four element) PIR Sensor and ASIC based electronics optimized to eliminate false alarms, caused by small animals and Pets.

The LARIS QUAD (P/N: 5010124) provides unprecedented levels of immunity against visible light. The Detector offers an exceptional level of detection capability and stability for every security installation.

The LARIS QUAD is supplied with a wide-angle lens.

- Quad Linear Imaging Technology for sharp analysis of body dimensions, and differentiation from background and animals.
- ASIC based electronics
- Immunity to animals up to 25Kg
- 18m Detection Range with Wide Angle Lens
- Temperature compensation
- Compact Design for Residential Installation
- Variable pulse width adjustment
- Sensitivity adjustment
- Environmental immunity
- Height installation calibration free (1.8m - 2.4m)
- LED remote function

TYPICAL INSTALLATION

Choose a location most likely to intercept an intruder. See detection pattern as below:

- For better Pet Immunity avoid installation in area where pets can reach upwards.
- The LARIS QUAD performs best when provided with a constant and stable environment and background.

Avoid the following locations:

- Facing direct sunlight.
- Facing areas that may change temperature rapidly.
- Areas where there are air ducts or substantial airflows.

WIRE SIZE REQUIREMENTS

Use #22 AWG (0.5 mm) or wires with a larger diameter. Use the following table to determine the required wire gauge (diameter) depending on the length of wire between the detector and the control panel.

Wire Length	m	200	300	400	800
Wire Diameter	mm	0.5	0.75	1.0	1.5
Wire Length	ft.	800	1200	2000	3400
Wire Gauge	#	22	20	18	16

INSTALLATION

The detector can either be wall, or corner mounted (We recommend on corner installation). If ceiling or special wall mounting is required, use the optional bracket base. Refer to bracket description (See fig. 6).

1. To remove the front cover, unscrew the holding screw and gently raise the front cover.

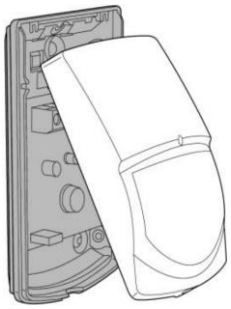
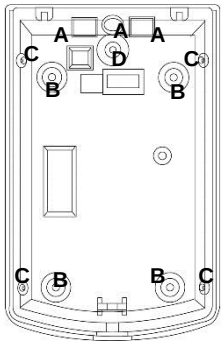


Fig.1

2. To remove the PC board, carefully unscrew the holding screw located on the PC board.
3. Break out the desired holes for proper installation.

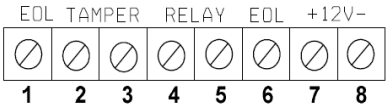


A. Wire access holes
B. Use for flat wall mounting
C. Corner mounting - use all 4 holes. Sharp left or right angle mounting - use 2 holes (top and bottom)
D. For bracket mounting

Fig.2

4. The circular and rectangular indentations at the bottom base are the knockout holes for wire entry. You may also use mounting holes that are not in use for running the wiring into the detector. (For Bracket option - lead wire through the bracket).
5. Mount the detector base to the wall, corner, or ceiling. (For bracket installation option, see fig. 6).
6. Reinstall the PC board by fully tightening the holding screw. Connect wire to terminal block.
7. Replace the cover by inserting it back in the appropriate closing pins and screw in the holding screw.

CONNECTION



Terminals 1 & 6 - Marked "EOL" - Not in use.

Terminals 2 & 3 - Marked "TAMPER"
If a tamper function is required, connect these terminals to a 24-hour normally closed protective zone in the control unit. If the front cover of the detector is opened, an immediate alarm signal will be sent to the control unit.

Terminals 4 & 5 - Marked "RELAY"
These are the output relay contacts of the detector. Connect to a normally closed zone in the control panel.

Terminal 7 - Marked "+" (+12V)
Connect to a positive voltage output of 8.2 -16VDC source (usually from the alarm control unit).

Terminal 8 - Marked "-"
Connect to the negative voltage output or ground (GND) of the control panel.

TESTING

Wait one minute after applying 12VDC power for warm up time. Conduct testing with the protected area cleared of all people.

Walk test

1. Remove the front cover.
2. Set the LED to ON position.
3. Reassemble the front cover.
4. Start walking slowly across the detection zone.
5. Observe that the LED lights, whenever motion is detected.
6. Allow 5 sec. between each test for the detector to stabilize.
7. After the walk test is completed, you can set the LED to OFF position.

NOTE:
Walk tests should be conducted, at least once a year, to confirm proper operation and coverage of the detector.

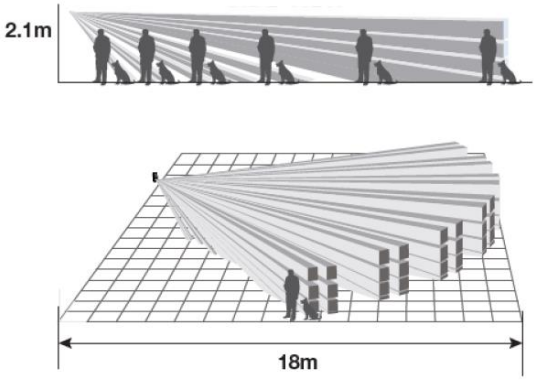


Fig. 3

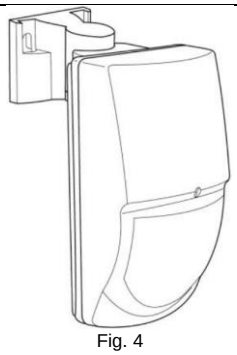


Fig. 4

PIMA
FOR BETTER PROTECTION

SETTING UP THE DETECTOR

PET IMMUNITYJUMPER SETTING

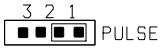
Use his jumper for setting the PET Immune up to 15Kg or 25Kg function, depending on the pet size.

Immune to pet weighting up to 15Kg

Immune to pet weighting up to 25Kg

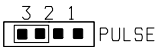
PULSE WIDTH JUMPER SETTING

Use this jumper for setting the PULSE count function in order to provide PIR sensitivity control according to the environment.



Very stable environment
Jumper #1 = ON
Without PET

Moderate nuisance situation
Jumper #2 = ON
PET up to 15Kg



Relatively high chance of false alarms
Jumper #3 = ON
PET up to 25Kg

LED ENABLE JUMPER SETTING

Use this jumper for setting - LED Enable/Disable.

ON - LED Enabled. The LED will activate when the detector is in alarm condition.

OFF - LED Disabled.

Note: The LED switch does not affect the operation of the relay. When an intrusion is detected, the LED will activate and the alarm relay will switch into alarm condition for 2 sec.

PIR SENSITIVITY ADJUSTMENT

Use the Potentiometer marked “SENS” to adjust the detection sensitivity between 15% and 100%, according to walk test in the protected area.
(Factory set to 57%)
Rotate the potentiometer clockwise to increase range, counter-clockwise to decrease range.

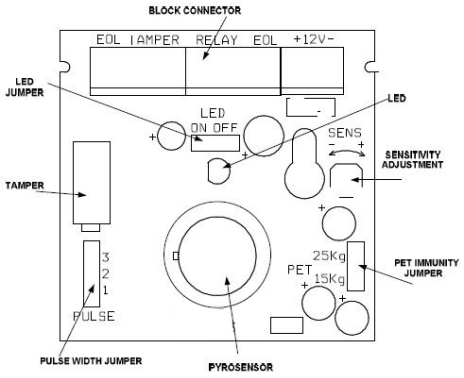


Fig.5

BRACKET INSTALLATION OPTION

Ceiling bracket base

Wall bracket base

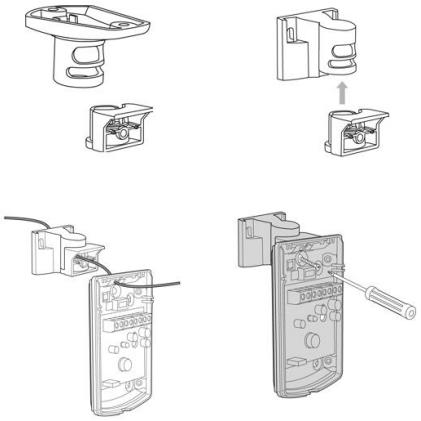


Fig. 6

TECHNICAL SPECIFICATIONS

MODEL	LARIS QUAD
Detection Method	*Four element PIR*
Power Input	*8.2 to 16VDC*
Current Draw	*Standby: 8mA (± 5%)* *Active: 10mA (± 5%)*
Temperature Compensation	*YES*
Pulse Width	*Adjustable*
Alarm Period	*2 sec (± 0.5sec)*
Alarm Output	*N.C 28VDC 0.1 A with 27Ohm series protection resistor*
Tamper Switch	*N.C 28VDC 0.1A with 10 Ohm series protection resistor - open when*
cover	*is removed*
Warm Up Period	*60sec (± 5sec)*
LED Indicator	*LED is ON during alarm*
Operating Temperature	*-20℃ to +60℃*
RFI Protection	*30V/m 10 - 1000MHz*
EMI Protection	*50,000V of electrical interference from lightning or power through*
Dimensions	*92mm x 59mm x 37mm*
Weight	*40gr*
Approval:	*EN50131-2-2 Grade 2* *(w/o swivel mount bracket)*

Limited Warranty

PIMA Electronic Systems Ltd. does not represent that its Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. The User understands that a properly installed and maintained equipment may only reduce the risk of events such as burglary, robbery, and fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no death, personal damage and/or damage to property as a result.

PIMA Electronic Systems Ltd. shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function.

Please refer to a separate warranty statement found on PIMA website at: http://www.pima-alarms.com /site/Content/t1.asp?pid=472&sid=57

Warning: The user should follow the installation and operation instructions and among other things test the Product and the whole system at least once a week. For various reasons, including, but not limited to, changes in environment conditions, electric or electronic disruptions and tampering, the Product may not perform as expected. The user is advised to take all necessary precautions for his/her safety and the protection of his/her property.

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