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CROW SCIENTIFIC RESEARCH™

SRP-PET 4

**PASSIVE INFRARED QUAD
INTRUSION DETECTOR
WITH PET UP TO 90LBS IMMUNITY**

CROW
ELECTRONIC ENGINEERING LTD.

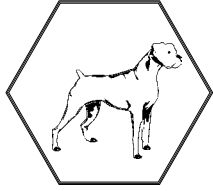
INSTALLATION INSTRUCTIONS
P/N 71ii050

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SRP-PET 4 FEATURES

- * Immunity to animals up to 90lbs.
- * Quad element pyrosensor.
- * Hard type full pattern spherical lens.
- * Sensitivity adjustment.
- * Automatic temperature compensation.
- * Low current consumption.
- * Height installation (calibration free) from 1.8m to 2.4m.
- * Environmental immunity.
- * High - tech design.

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The SRP - PET 4 provides immunity to 40 kg (90 LB) pet active below 1m (3 ft). For better immunity, avoid installation in area reached by pet.

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SELECTING MOUNTING LOCATION

Choose a location most likely to intercept an intruder.


The quad-element high quality sensor detects motion across the beam. It is slightly less sensitive when detecting motion toward the detector.

The SRP-PET 4 performs best when provided with a constant and stable environment.

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AVOID THE FOLLOWING LOCATIONS

- Facing direct sunlight.
- Facing areas subject to rapid quick temperature changes.
- Areas with air ducts or substantial air flows.



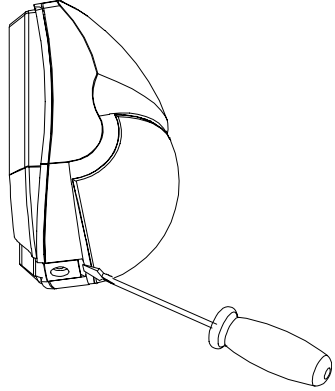
MOUNTING THE DETECTOR

For PET immunity mount flat on the wall or in the corner.

It is recommended to mount the detector between 7ft and 8ft for optimal coverage, and pet immunity.

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FIG. 1 - REMOVAL OF FRONT COVER



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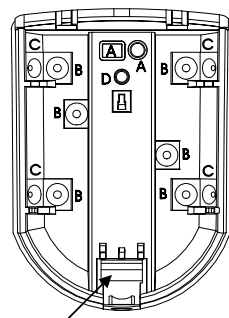
1. To remove the front cover, insert a flat screwdriver in the slot between the front and the bottom, above the holding screw hole and push gently, until the front cover is disengaged and the opening click is heard (Fig 1.)
2. To remove the PC board, carefully loosen the holding screw located on the PC board.
3. Break out the desired holes for proper wiring as per fig 2.
4. Insert the wire through the wire access hole, and mount the detector base to the wall, corner or ceiling with the necessary number of screws and the suitable bracket.

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5. Reinstall the PC board, set it as low as possible - till stopper (see fig.2). Tight the holding screw.
6. Access for wiring connections is very easy via the terminal block located on the PCB. See fig 3.
7. Replace the cover by inserting it back in the appropriate closing pin until the closing click is heard.

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FIG. 2 - KNOCKOUT HOLES



A. WIRE ACCESS HOLES (2)

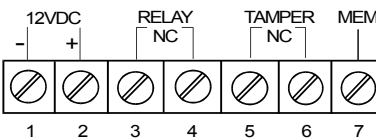
B. USE FOR FLAT WALL MOUNTING (2)

C. CORNER MOUNTING - USE ALL 4 HOLES. SHARP LEFT OR RIGHT ANGLE MOUNTING - USE 2 HOLES (TOP AND BOTTOM)

Stopper pins for PCB

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FIG. 3 - TERMINAL BLOCK



NOTES for U.L. referring countries
Connect the SRP-PET 4 to a "U.L." listed burglar alarm Power Supply or control panel capable of providing standby power for at least four (4) hours.
Refer to national electric code, NFPA-70 for wiring methods.

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TERMINAL BLOCK CONNECTIONS

Run the cable through the cable entry hole and connect the wires in accordance with the following instructions:

Terminal 1 - Marked - (-12V gnd)
Connect to the negative Voltage output or ground of the control panel.

Terminal 2 - Marked + (+12V)
Connect to a positive Voltage output of 7.8-16Vdc source (usually from the alarm control unit).

Terminals 3 & 4 - Marked RELAY
These are the output relay contacts of the detector. Connect to a normally closed zone in the control panel.

Terminals 5 & 6 - Marked TAMPER
If a Tamper function is required connect these terminals to a 24hour normally closed protective zone in the control unit. If the front cover of the detector is opened, an immediate alarm signal

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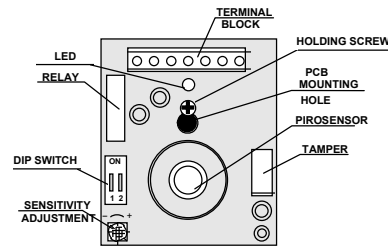
Terminal 7 - Marked MEMORY

The alarm memory function allows the identification of an alerting detector out of multiple detectors connected to one (or the same) zone of the control panel.

To enable this function, connect (switch on) the M terminal to a switched +12 to +16V_{DC} source (e.g. Arm / Disarm voltage output from the control panel.)

1. In case of an alarm, the memory function stores the alarm event in the detector.
2. To identify the detector that alarmed, disconnect (switch off) (grounded) the voltage from M terminal.
3. The LED of the detector with the alarm event in memory will light constantly until memory function is reset.
4. To reset the memory function, switch on and switch off the M terminal.

FIG. 4 - PCB LAYOUT



The SRP-PET 4 production batch can be identified by the 4 digits printed on the terminal strip side of the PC board.

LENSES-INTERCHANGEABLE HARD TYPE SPHERICAL LENSES PATTERN

COVERAGE WIDE ANGLE
105°
18m x 10m

TOTAL DETECTION ZONES 52*

18 long range, 16 intermediate, 10 short range, nearest range, 2 creep zones.

CHANGING THE LENS

1. Remove the front cover by inserting a flat screw driver in the appropriate slot.
2. Using a small flat screwdriver, press on left or right side of the installed lens which will then pop out from its side right and left holding pins.
3. Select the desired lens and hold it while making sure its upper holding pin is pointed upwards.
4. Snap the lens to its place by pressing again from outside of the front cover until a click is heard, confirming the new lens is tightly inserted. See fig 6.
5. Replace front cover.

TECHNICAL SPECIFICATIONS

Power Input	7.8 - 16 Vdc
Current Draw	Active / Standby: 9 mA
Detection Method	Quad element PIR
Sensitivity	A2°C (A3.6°F) at 0.6 m/sec (2 ft/sec)
Detection Speed	0.5 - 1.5 m/sec (1.5 - 5 ft/sec)
Bi Directional Temperature	YES
Pulse Count	1,2-automatic switch from 2 to 3 depending on speed spectrum analysis
Alarm Period	1.6 sec
Alarm Output	N.C 28VDC 0.1 A with 10 Ohm series protection resistor
Tamper Switch	N.C 28VDC 0.1A with 10 Ohm series protection resistor - open when cover is removed
Warm Up Period	20 sec
LED Indicator	Led is blinking during warm up period and self testing, Led is ON during alarm
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
RFI Protection	≥ 30V/m 10 - 1000MHz
EMI Protection	50,000V of electrical interference from lightning or power through stable against halogen light 2.4m(8ft) or reflected light
Visible Light Protection	
Dimensions	106mm x 68.5mm x 57mm (4.2"x2.7"x2.3")
Weight	90 gr. (3.2 oz)

Crow reserves the rights to change specifications without prior notice

DIP SWITCH SETTING

PULSE COUNT - Dip Switch marked 2 (Fig. 4)
Provides control for normal or high risk operating environments.

Position Off (down)

This setting is for a stable environment without air drafts.

Position On - AUTOMATIC PULSE COUNT

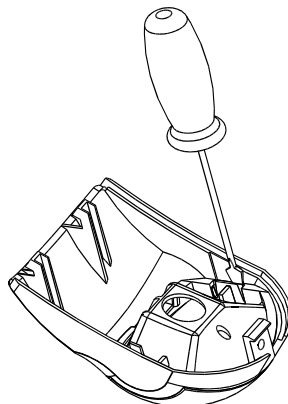
The SRP-PET 4 will automatically select the appropriate pulse count level (2 or 3) according to the strength of the incoming signals. This setting is for operation within a harsh environment.

When an intrusion is detected, the led will light on and the alarm relay contacts will transfer condition for 1.6 sec.

NOTE:

DETECTION RANGES ARE SPECIFIED AT 20° C (68° F) AMBIENT TEMPERATURE.

FIG. 6 REPLACING THE LENS



CROW LIMITED WARRANTY

(Crow) warrants this product to be free from defects in materials and workmanship under normal use and service for a period of one year from the last day of the week and year whose numbers are printed on the printed circuit board inside this product.

Crow's 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. Crow shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than Crow.

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 Crow 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 Crow's own negligence or fault.

Crow 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, Crow 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 Crow is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, Crow's maximum liability shall not in any case exceed the purchase price of this product, which shall be the complete and exclusive remedy against Crow.



N345

LED ENABLE/DISABLE Dip Switch - marked 1

Position Off (down)- LED ENABLE - The led will light when the SRP-PET 4 is in alarm condition.

Position On - LED DISABLE - The led is disabled.

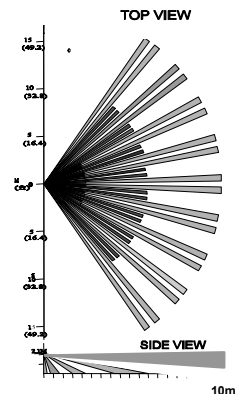
Note: the state of the dipswitch -1 does not affect the operation of the relay.

SENSITIVITY ADJUSTMENT

Use this potentiometer (see fig. 4) to adjust the detection sensitivity between 68% and 100% (factory set to 84%). Rotate the potentiometer clockwise to increase sensitivity. Rotate the potentiometer counter-clockwise to decrease sensitivity.

IMPORTANT - After adjusting the sensitivity perform a walk test to verify optimum correct sensitivity in the protected area.

FIG. 5 - WIDE ANGLE LENS



TEST PROCEDURES.

WAIT ONE MINUTE WARM-UP TIME AFTER APPLYING 12 VDC POWER. CONDUCT TESTING WITH THE PROTECTED AREA CLEARED OF ALL PEOPLE.

Walk test

1. Remove front cover.
The pulse switch must be in OFF position. The led must be enabled.
2. Replace the front cover.
3. Start walking slowly across the detection zone.
4. Observe that the detector's led lights whenever motion is detected.
5. After the walk test is completed, the led may be disabled.
6. Allow 5 sec. between each test for the detector to stabilize.

NOTE:

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

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These instructions supersede all previous issues in circulation prior to Sept. 1999.