D.A.S.P. PET IMMUNE PIR Motion Sensor (IRP-29)

The Pet-Immune PIR Motion Sensor ensures the excellent catch performance of its original purpose in the security sense and in addition, eliminates unnecessary false alarms caused by those jumpy little loved pets.   IRP-29 is designed to detect movements within an assigned area and signals the Control Panel to activate the alarm if an intruder crosses its' path of detection but will not detect a dog up to 27 kilos, 10 cats, or numerous rodents.

The PIR consists of a two-part design made up of a cover and a base. The cover contains all the electronics and optics and the base provides a means of fixing. The base has knockouts to allow mounting on either a flat surface or in a corner situation with a triangular bracket for corner mounting.

Provision for a tamper switch that will be activated when the cover is detached from the base prevents unauthorized access and removal from the mounting surface.   The PIR can also alert you to signal communication problems and low battery situations. The PIR is designed to give a typical detection range of 12 meters when mounted at 2 meters above ground.

● *Identifying the Parts*

1. Test Button aka LED indicator

It is the test button and also doubles as the LED indicator. The test button is used for testing the radio performance and for learning purpose. The LED indicator is used to indicate the status of system.

2. Battery Insulator

3. Supervision Enable/Disable Jumper Switch (JP2)

Jumper On
The jumper link is inserted connecting the two pins

Jumper Off
if the jumper link is removed or "**parked**" on one pin.

- When the jumper is set as ON, the Supervision is disabled. **(Factory default)**

- When the jumper is set as OFF, the Supervision is enabled.

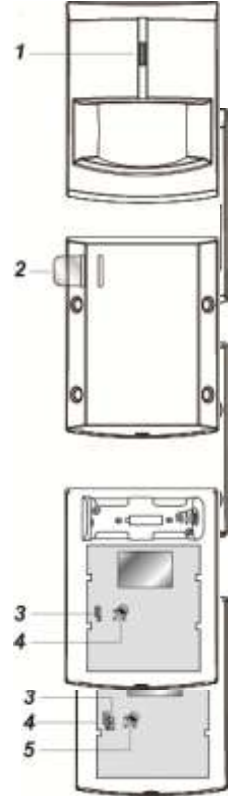### 4. Sensitivity Increaser Jumper Switch (JP3)

-If the jumper is OFF (if the jumper link is removed or "parked" on one pin), the PIR's detection sensitivity is in normal level.

- If the jumper is ON, the PIR's detection sensitivity is high. **(Factory default)**

5. Tamper Switch

The Tamper switch protects the PIR from unauthorized cover opening.

● *Sleep Timer*

The PIR has a "**sleep time**" of approximately 1 minute to conserve power.   After transmitting a detected movement, the PIR will not retransmit for 1 minute; any further movement detected during this sleep period will extend the sleep time by another minute.   In this way continuous movement in front of a PIR will not unduly exhaust the battery.

● *Supervision Function*

If enabled by JP2 setting, when the PIR is in Normal operation mode it will conduct a Self-test Periodically by transmitting a supervisory signal once every 30 to 50 minutes

If the Control Panel fails to receive the Supervisory signals transmitted from a certain PIR for a preset time, an "**Out-Of-Orde**r" fault message will be generated.

● *Sensitivity Increaser Function*

You can use the sensitivity increaser function to increase the PIR's detection sensitivity. To increase detection sensitivity, please enable the Jumper to **ON** position. To maintain the normal detection sensitivity, enable the Jumper to **OFF** position (factory default).

● *Test Mode*

The PIR can be put into Test mode by pressing the Test Button aka LED on the front cover. In Test mode, it will disable the sleep timer and will enable the LED indicator to flash every time a movement is detected. Every time the Test Button is pressed, the PIR will transmit a test signal to the Control Panel for radio range test and enter the test mode for 3 mins. It will exit Test Mode automatically after 3 minutes and return to normal mode.

● *LED Indicator*

In Normal operation mode, the LED Indicator will not light except in the following situations:
● When the PIR is in low battery condition, every time it transmits a detected movement, the LED will light up for about 2 seconds.
● When the cover is opened and the tamper switch is violated, the LED will light up for 2 sec. to indicate it is transmitting the "**Tamper**" signal.
● When the Tamper condition persists, every time it transmits a detected movement, the LED will light up.
● When the PIR is in Test mode, the LED will light up every time a movement is detected.

● *Battery*

The PIR uses two alkaline 1.5 V batteries as its power source. Low battery detection operates where the PIR has enough reserve energy to typically operate for 1 month before complete exhaustion. A low battery signal will be sent to the Control Panel along with regular signal transmissions for the Control Panel to display the status accordingly.

For each installation, the battery is installed in by the factory before shipment with an Insulator inserted.

<NOTE>

☞ When changing batteries, after removing the old batteries, press the Tamper Switch twice to fully discharge before inserting new batteries.

● *Getting Started*

- Pull out the battery Insulator steadily.
- The LED indicator steadily flashes for 30 seconds. (The PIR is warming up). During the warming period, the PIR will not be activated. It is recommended that you stay away from the detection area during this time. After the warming period is over, the light will turn off and the PIR will be ready for operation.
- Put the Control Panel into "**Device +/-**" menu and then select "**Add Device**" menu.
- Press the test buttons on the front cover.
- Refer to the operation manual of your control panel under the section of "**Device +/-**" to complete the learn-in process.
- After the PIR is learnt-in, put the Control Panel into "**Walk Test**" mode, hold the PIR in the desired location, and press the Test button to confirm this location is within signal range of the Control Panel.
- When you are satisfied that the PIR work in the chosen location, you can proceed with installation.

● *Mounting Method*

- The PIR is designed to be mounted on either a flat surface or in a corner situation with fixing screws and plugs provided.
- The base has knockouts, where the plastic is thinner, for mounting purpose.   Two knockouts are for surface fixing and four knockouts are for corner fixing as shown in the picture
    - **Surface mounting:**
        - I. Remove the fixing screw and cover assembly.
        - II. Break through the knockouts on the inside of base
        - III. Using the holes as a template, drill holes in the surface.
        - IV. Insert the wall plugs if fixing it into plaster or brick.
        - V. Screw the base into the wall plugs.
        - VI. Screw the cover onto the base.

    - **Corner mounting:**
        - I. Break through the four corner knockouts.
        - II. Using the four holes as a template, drill holes in the surface of the corner
        - III. Insert the wall plugs
        - IV. Screw the base into the wall plug.
        - V. Screw the cover onto the base.

Corner Fixing Knockouts x 4

Surface Fixing Knockouts x 2 (Inside)
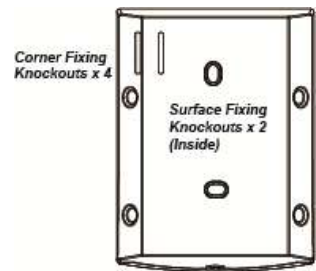
● *Installation*

- Decide on the location of the PIR and if it is to be corner or surface mounted.
- After the installation site is selected, follow the steps described above to mount the PIR.
- Press the Test Button to enter Test Mode. Walk around the protected area noting when the LED lights up and check that the detection coverage is adequate.
- When detection coverage is found to be satisfying, installation is now completed.

● *Installation Recommendations*

The PIR is designed to give a typical detection range of 12 meters when mounted at 2 meters above ground. When mounted at 1.9 meters above ground, it gives a typical PET IMMUNE range of 7 meters.   As the PIR is higher from above ground, it gives a farther PET IMMUNE range.   To take full advantage of PIR, the following guidelines should be considered:

- ◆ **It is recommended to install the PIR in the following locations**
    - Mount the detector at 1.9 M ~ 2.0 M high for best performance:

<IMPORTANT NOTE>
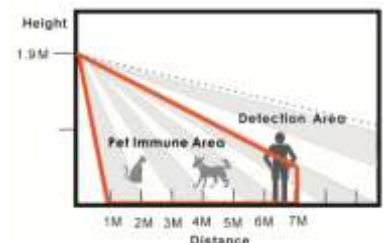
☞ For the most desirable performance, remember to adjust the height of PIR mounting site respectively to the height of the tallest animal in the house.   As the taller than average dogs require the PIR to be mounted higher for the Pet Immunity purpose.

☞ When deciding on the height of the PIR mounting site, remember to take the possible blind spot into consideration.   The blind spot underneath the PIR enlarges proportionally to the height of the PIR mounting site.

☞ Please note that the performance is affected by external factors, such as height of detected object, desired detection range, installation area…etc. The suggested mounting height could be adjusted according to actual installation environment factors.

- Mount where the animals cannot come to the detection area by climbing on furniture or other objects.
- Don't aim the detector at stairways the animals can climb on.
- In a position such that an intruder would normally move across the PIR's field of view.
- In a corner to give the widest view.
- Where its field of view will not be obstructed e.g. by curtains, ornaments etc.
- ◆ **Limitations**
    - Do not position a PIR to look directly at a door protected by a Door Contact, this could cause the Door Contact and PIR radio signals to be transmitted at the same instant when entering, canceling each other out.
    - Do not install the PIR completely exposed to direct sunlight.
    - Avoid installing the PIR in areas where devices may cause rapid change of temperature in the detection area, i.e. air conditioner, heaters, etc.
    - Avoid large obstacles in the detection area.
    - Not pointing directly at sources of heat e.g. fires or boilers, and not above radiators.
    - Avoid moving objects in the detection area i.e. curtain, wall hanging etc.