

**PRODUCT FEATURES**

**Activ8 MONO**  
**Activ8 COLOUR**

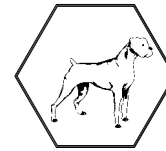
**QUAD ELEMENT PIR**  
**MONO/COLOUR CAMERA**  
**MOTION DETECTOR**  
**With PET IMMUNITY**

*INSTALLATION INSTRUCTIONS*

P/N 7101494 REV. A A.Y.

- Video sensing device**
- \* High sensitivity and high resolution board camera.
  - \* Camera protections cover - optional.
  - \* Electronic shutter control.

- Audio sensing device**
- \* Omnidirectional response.
  - \* High sensitivity.

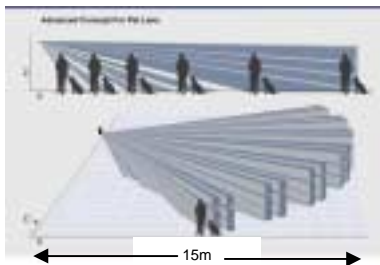


The Activ8 MONO/COLOUR provides immunity up to 25Kg. For better immunity avoid installation in areas where pets can reach upwards.

**DETECTION PATTERN**

**PIR sensing device and general**

- Quad (four element) PYRO sensor and hard lens for outstanding detection performance and elimination of false alarms.
- VLSI based electronics with movement speed spectrum analysis.
- User-friendly installation with swivel bracket.
- BI directional temperature compensation.
- Environmental immunity.
- The ACTIV8 MONO/COLOUR provides *pet immunity* up to 25Kg. Pet active below 1m.
- Height installation calibrations free from 1.8m to 2.4m.
- Wide range operating voltage.
- High reliability and trouble free operation.



**TYPICAL INSTALLATION**

**SELECT MOUNTING LOCATION**

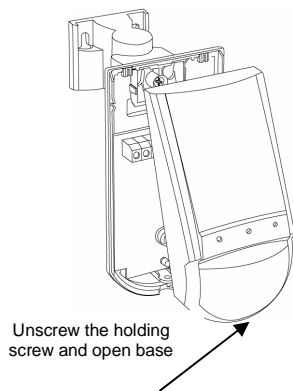
Choose a location most likely to intercept an intruder. (Our recommendation is a corner installation). See detection pattern. The quad-element high quality sensor detects motion crossing the beam; it is slightly less sensitive detecting motion toward the detector. The ACTIV8 MONO/COLOUR performs best when provided with a constant and stable environment.

**AVOID THE FOLLOWING LOCATIONS**

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

The ACTIV8 MONO/COLOUR performs better when provided with a constant and stable environment.

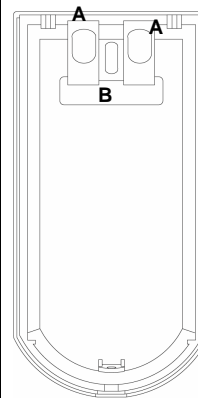
**REMOVAL OF FRONT COVER**



1. To remove the front cover, unscrew the holding screw and gently raise the front cover.
2. To remove the PC board, carefully unscrew the holding screw located on the PC board.
3. Break out the desired holes for proper installing.
4. Put wire through the bracket and holes "A".
5. Mount the detector base to the wall or on the ceiling with a suitable bracket. (Install bracket).
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.

**MOUNTING DETECTOR BASE**

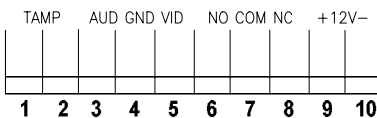
**KNOCKOUT HOLES**



- A. Wire access holes
- B. For bracket mounting

**DETECTOR INSTALLATION**

**TERMINAL BLOCK CONNECTIONS**



**Terminals 1 & 2 - Marked " TAMP "**  
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 3 & 4 - Marked " AUD " & " GND "**  
This is the audio signal output. These two terminals should be connected to an audio input.

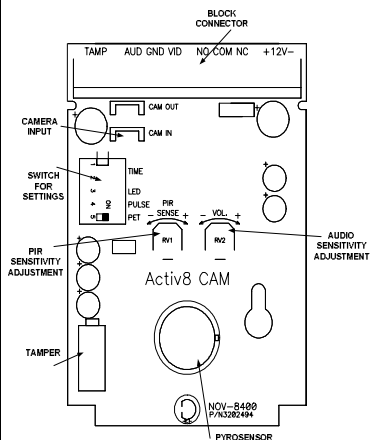
**Terminals 4 & 5 - Marked " GND " & " VID "**  
This is the video signal output. These two terminals should be connected to video input.

**Terminals 6,7 & 8 - Marked " NO,COM & NC "**  
These are the output relay contacts of the detector. Connect to a normally closed or normally opened zone in the control panel.

**Terminal 9 - Marked " + " (+12V)**  
Connect to a positive Voltage output of 8.2 -16Vdc source (usually from the alarm control unit)

**Terminal 10 - Marked " - " (gnd)**  
Connect to the negative Voltage output or ground of the control panel.

**CIRCUIT LAYOUT**



**SETTING UP THE DETECTOR**

**TIME ADJUSTMENT**

**SWITCH 1 & 2 OF DIP-5 SWITCH FOR SETTINGS "TIME"** - provides N.O. relay. (Four options).  
**Position Left** – "OFF".  
**Position Right** – "ON".

| 1   | 2   | TIME RELAY CLOSE/OPEN |
|-----|-----|-----------------------|
| ON  | ON  | 2 SEC                 |
| ON  | OFF | 15 SEC                |
| OFF | ON  | 60 SEC                |
| OFF | OFF | 240 SEC               |

The N.C. Relay opens for 1.8 – 2 sec. when an alarm occurs.

**PIR SENSITIVITY ADJUSTMENT**

**SWITCH 4 OF DIP-5 SWITCH FOR SETTINGS "PULSE"** - provides sensitivity control of the PIR according to the environment.  
**Position Left** – "OFF" – **Low sensitivity**  
 For harsh environments.  
**Position Right** – "ON" – **High sensitivity**  
 For stable environments.

**POTENTIOMETER "RV1"** – adjustment according to protected area range. Use RV1 to adjust the detection range between 68% and 100% (factory set to 84%). Rotate the potentiometer clockwise to increase range, counter-clockwise to decrease range.

**PET IMMUNITY SETTING**

**SWITCH 5 OF DIP-5 SWITCH FOR SETTINGS "PET" 15kg – 25kg**  
**Position Right "ON"**  
 Immunity to an animal up to 15 kg  
**Position Left "OFF"**  
 Immunity to an animal up to 25 kg

**SETTING UP THE DETECTOR**

**SWITCH 3 OF DIP-5 SWITCH FOR SETTINGS "LED"** - LED Enable / Disable

**Position On** - LED ENABLE  
 The RED LED will activate when the detector is in alarm condition.  
**Position Off** - LED DISABLE  
 The LED is disabled.

**Note:** the state of the switch "LED" 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.

**AUDIO SENSITIVITY ADJUSTMENT**  
 Use the potentiometer "VOL." (RV2) to adjust the audio sensitivity. Rotate the potentiometer clockwise to increase sensitivity. Rotate the potentiometer counter-clockwise to decrease sensitivity.

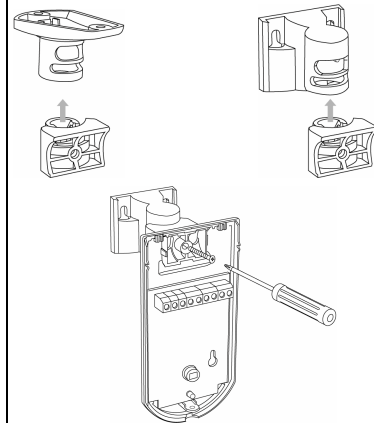
**TEST PROCEDURE**

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

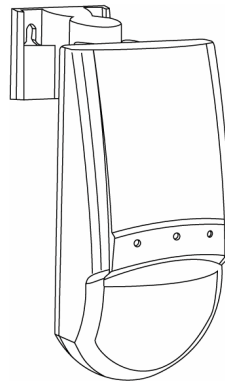
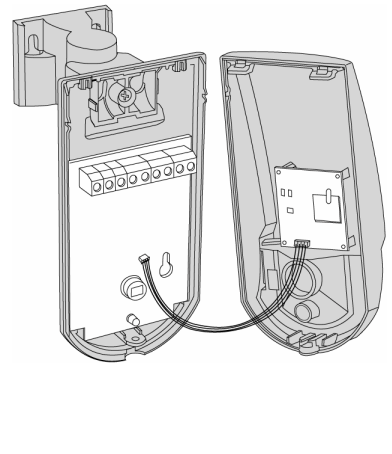
- Walk test**
1. Remove front cover. Set LED to ON position.
  2. Reassemble the front cover.
  3. Start walking slowly across the detection zone.
  4. Observe that the red LED lights whenever motion is detected.
  5. Allow 5 sec. between each test for the detector to stabilize.
  6. After the walk test 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.

**BRACKET INSTALLATION OPTIONS**



**WALL INSTALLATION**



**TECHNICAL SPECIFICATION**

|                       |  |
|-----------------------|--|
| Camera Type           | B&W: CCIR or EIA<br>COLOR: PAL or NTSC                   |
| Picture Elements      | 290K ( CCIR;PAL) or 250K ( EIA; NTSC)                    |
| Resolution (PAL;NTSC) | 400lines(CCIR;EIA) or 330lines                           |
| Sensitivity           | 0.1Lux - F2.0 ( CCIR;EIA) or<br>2.0Lux - F1.2 (PAL;NTSC) |
| S/N Ratio             | Better than 48 dB  |
| Shutter Control       | Electronic Auto-Iris                                     |
| Lens Mount            | F 3.6mm standard (optional available)                    |
| Video Output          | 1V p-p 75Ω   |
| Audio Response        | Omnidirectional  |
| AGC                   | 20dB   |
| Sensing Element       | Electret Microphone                                      |
| Output Impedance      | 32Ω  |

**TECHNICAL SPECIFICATION**

|                          |  |
|--------------------------|--|
| Detection Method         | Quad (four) element PIR  |
| Power Input              | 7.8 to 16 Vdc  |
| Current Draw             | Mono: 115 mA<br>Colour: 135 mA   |
| Temperature Compensation | YES  |
| Alarm Period             | 2 +/- 1 sec  |
| Alarm Output             | N.C 28Vdc 0.1 A with 10 Ohm series protection resistors                            |
| Tamper Switch            | N.C 28Vdc 0.1A with 10 Ohm series protection resistor - open when cover is removed |
| Warm Up Period           | 1 min  |
| LED Indicator            | Red LED is ON during alarm   |
| Dimensions               | 121mm x 60mm x 37mm  |
| Weight (inc. battery)    | 135 gr.  |

For Technical Support, please call 01268 563 247.