## Paradox PMD2P/86

# Paradox PMD2P/86 Supervised Analog Passive Infrared Detector User Manual

## INTRODUCTION

The Paradox PMD2P/86 is a high-performance, supervised analog passive infrared (PIR) detector designed for reliable motion detection in security systems. This device features single optics, providing an 11x11 meter detection range with an 88.5° angle. It incorporates advanced technology for enhanced security and user convenience.

Key features include:

- **Patented Signal Processing:** Utilizes pulse count processing for accurate detection.
- **Automatic Temperature Compensation:** Ensures consistent performance across varying environmental temperatures.
- **Energy Saving Transmission Block:** After two detections within 5 minutes, transmission is blocked for 3 minutes to conserve battery life.
- **High Pet Immunity:** Designed to ignore pets weighing up to 18 kg, reducing false alarms.
- **Tamper and Anti-Deterioration Switches:** Provides additional security against unauthorized access or damage.
- **Power Supply:** Supplied with 3 AA alkaline batteries for immediate use.

This image shows the front view of the Paradox PMD2P/86 detector, highlighting its compact design and lens.

## SETUP AND INSTALLATION

### 1. Unpacking and Battery Installation

Carefully remove the detector from its packaging. The PMD2P/86 is supplied with 3 AA alkaline batteries. Open the detector casing according to the instructions provided in the full manual (not included here) and insert the batteries, ensuring correct polarity. Close the casing securely.

### 2. Mounting Location

Choose a mounting location that provides optimal coverage of the area to be protected. Consider the following:

- **Height:** Typically mounted at 2.1 to 2.7 meters (7 to 9 feet) above the floor.
- **Detection Range:** The detector offers an 11x11 meter range with an 88.5° angle. Position it to cover entry points and valuable areas.
- **Pet Immunity:** For optimal pet immunity (up to 18 kg), ensure the detector is mounted at the recommended height and that pets cannot climb onto objects within the detection zone that would place them at a higher level.
- **Avoidance:** Do not aim the detector directly at heat sources, air vents, or windows that receive direct sunlight, as these can cause false alarms.

### 3. Mounting the Detector

Use the provided mounting hardware to securely attach the detector to a wall or corner. Ensure the tamper switch is properly engaged once the detector is mounted to prevent unauthorized removal.

### 4. System Integration

The PMD2P/86 is a supervised analog detector. Refer to your security system's control panel manual for instructions on how to enroll or integrate new wireless devices. The detector will communicate with the control

panel at 868MHz.

# OPERATING INSTRUCTIONS

### Detection Principle

The Paradox PMD2P/86 detects motion by sensing changes in infrared energy (body heat) within its detection zone. When a moving heat source, such as a person, crosses the detection pattern, the detector triggers an alarm signal to the connected security system.

### Pet Immunity

The advanced design of the PMD2P/86 provides high immunity to pets weighing up to 18 kg. This means that normal movement of small to medium-sized pets within the protected area should not trigger an alarm. For best performance, ensure pets cannot get too close to the detector or climb onto furniture that would place them in the upper detection zones.

### Energy Saving Mode

To extend battery life, the detector incorporates an energy-saving feature. After two detections occur within a 5-minute period, the detector will enter a transmission block mode for 3 minutes. During this time, it will continue to detect motion but will not transmit further signals to the control panel. This prevents excessive battery drain in high-traffic areas.

### Supervision

As a supervised detector, the PMD2P/86 periodically sends a supervisory signal to the control panel. This confirms that the detector is operational and within communication range. If the control panel does not receive a supervisory signal within a set timeframe, it will indicate a trouble condition.

# MAINTENANCE

### Battery Replacement

The detector is powered by 3 AA alkaline batteries. When the battery level is low, the detector will send a low battery signal to your security system's control panel. Replace all three batteries promptly with new, high-quality alkaline AA batteries. Always ensure correct polarity during installation.

### Cleaning

Periodically clean the detector's lens and casing with a soft, dry cloth. Do not use abrasive cleaners, solvents, or spray directly onto the unit, as this can damage the optics or electronic components.

### Regular Testing

It is recommended to test the detector's functionality periodically (e.g., once a month) to ensure it is operating correctly. Refer to your security system's manual for instructions on how to perform a walk test or system test.

# TROUBLESHOOTING

### No Detection / Detector Not Responding

- **Check Batteries:** Ensure batteries are correctly installed and not depleted. Replace if necessary.
- **Obstructions:** Verify that there are no physical obstructions blocking the detector's field of view.

- **Mounting Height:** Confirm the detector is mounted at the recommended height.
- **Signal Range:** Ensure the detector is within the wireless communication range of the control panel. Relocate if necessary.
- **Enrollment:** Confirm the detector is properly enrolled with the security system.

## False Alarms

- **Heat Sources:** Check for heat sources (heaters, direct sunlight, air vents) within the detection zone. Relocate the detector or adjust its aim.
- **Pets:** Ensure pets are not exceeding the 18 kg immunity limit or climbing onto objects that place them higher in the detection zone.
- **Drafts:** Strong drafts can sometimes cause false alarms. Seal windows or doors if this is a factor.
- **Vibrations:** Excessive vibrations near the detector can sometimes cause issues.

## Low Battery Indication

If your control panel indicates a low battery for the PMD2P/86, replace all three AA alkaline batteries immediately. Do not mix old and new batteries.

## TECHNICAL SPECIFICATIONS

| Feature | Specification |
| --- | --- |
| Model | PMD2P/86 |
| Detection Type | Supervised Analog Passive Infrared (PIR) |
| Optics | Single Optics |
| Detection Range | 11 x 11 meters (35 x 35 feet) |
| Detection Angle | 88.5° |
| Pet Immunity | Up to 18 kg (40 lbs) |
| Frequency | 868 MHz |
| Power Source | 3 x AA Alkaline Batteries (included) |
| Tamper Protection | Anti-tamper and anti-deterioration switches |
| Dimensions (approx.) | 13.2 x 6.8 x 4.8 cm (5.2 x 2.7 x 1.9 inches) |
| Weight (approx.) | 160 grams (0.35 lbs) |
| Manufacturer | PARADOX |

## WARRANTY AND SUPPORT

For specific warranty information, please refer to the documentation provided with your purchase or contact your authorized Paradox dealer or installer. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase.

If you encounter any issues that cannot be resolved using the troubleshooting guide, or require technical assistance, please contact your security system installer or Paradox customer support. Ensure you have your

product model number (PMD2P/86) and purchase details available when seeking support.