Paradox MG-10/86BDAM

Paradox MG-10/86BDAM Dual Technology Passive Infrared Detector User Manual

Model: MG-10/86BDAM

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Paradox MG-10/86BDAM Dual Technology Passive Infrared (PIR) Detector. This device is designed to enhance security by detecting motion within its designated area using advanced dual technology and an anti-masking feature, operating at 868 MHz with a curtain effect detection pattern.

2. SAFETY INFORMATION

Please read all safety instructions carefully before installing or operating the device. Failure to follow these instructions may result in damage to the product, void the warranty, or cause injury.

- **Professional Installation:** Installation should ideally be performed by a qualified security professional.
- **Power Source:** This device is battery-powered. Ensure correct battery type and polarity during installation and replacement.
- **Environmental Conditions:** Do not expose the detector to extreme temperatures, high humidity, direct sunlight, or strong vibrations.
- **Interference:** Avoid installing near sources of electromagnetic interference.
- **Disassembly:** Do not attempt to disassemble or modify the detector. Refer all servicing to qualified personnel.

3. PRODUCT OVERVIEW

The Paradox MG-10/86BDAM is a sophisticated motion detector featuring dual technology (PIR and microwave) for enhanced detection reliability and reduced false alarms. Its anti-masking capability detects attempts to obstruct the detector's field of view, providing an additional layer of security. The device operates at 868 MHz and is designed to create a curtain-effect detection pattern, ideal for protecting windows, doors, or specific narrow areas.

Figure 3.1: Image of the Paradox MG-10/86BDAM Dual Technology Passive Infrared Detector, showing its compact white casing.

4. Setup and Installation

4.1. Choosing an Installation Location

Select a location that provides optimal coverage for the desired detection area. For curtain effect detection, mount the detector to cover the entry point (e.g., above a window or door). Avoid direct exposure to heat sources, air vents, or direct sunlight, which can cause false alarms. Ensure the mounting surface is stable and free from vibrations.

4.2. Mounting the Detector

1. Carefully open the detector casing according to the instructions provided inside the packaging.
2. Mark the desired mounting points on the wall or frame.
3. Drill pilot holes if necessary and secure the backplate of the detector using appropriate screws.
4. Ensure the detector is firmly attached and oriented correctly to achieve the desired curtain detection pattern.

4.3. Battery Installation

The MG-10/86BDAM is powered by batteries. Refer to the internal markings for the correct battery type and quantity. Insert the batteries, observing the correct polarity (+/-). Close the detector casing securely after battery installation.

4.4. System Pairing/Enrollment

To integrate the detector with your Paradox security system, follow the enrollment procedure specific to your control panel. This typically involves putting the control panel into programming mode and triggering the detector to transmit its unique identification code. Consult your control panel's manual for detailed pairing instructions.

5. Operating Instructions

5.1. Detection Principle

The MG-10/86BDAM utilizes dual technology: Passive Infrared (PIR) detects changes in infrared energy (body heat), and microwave technology detects movement. Both technologies must be triggered simultaneously to generate an alarm, significantly reducing false alarms. The 868 MHz frequency ensures reliable wireless communication with the control panel.

5.2. Anti-Masking Feature

The anti-masking feature continuously monitors the detector's lens for any attempts to obstruct its view (e.g., by spraying paint or covering it). If an obstruction is detected, the detector will transmit an anti-masking tamper signal to the control panel, alerting you to potential sabotage.

5.3. LED Indicators

The detector may feature LED indicators to provide visual feedback on its status, such as motion detection, low battery, or tamper events. Refer to your system's specific configuration for the exact meaning of each LED state.

6. MAINTENANCE

6.1. 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 device, as this may damage the components or impair detection performance.

6.2. Battery Replacement

When the system indicates a low battery condition for the MG-10/86BDAM, replace all batteries with new ones of the specified type. Always replace all batteries at the same time. Dispose of used batteries according to local regulations.

6.3. Regular Testing

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

7. TROUBLESHOOTING

- **False Alarms:**
    - Check for heat sources (heaters, direct sunlight) or moving objects (curtains, pets) within the detection area.
    - Ensure the detector is securely mounted and not subject to vibrations.
    - Verify that the lens is clean and unobstructed.

- **No Detection:**
    - Confirm batteries are correctly installed and not depleted.
    - Check for obstructions blocking the detector's view.
    - Ensure the detector is properly enrolled with the control panel.
    - Verify the detection range and angle are appropriate for the protected area.

- **Anti-Masking Tamper:**
    - Inspect the detector's lens for any physical obstruction or foreign material.
    - Clean the lens thoroughly.

- **Low Battery Indication:**

    - Replace all batteries with new ones of the specified type immediately.

If issues persist after attempting these troubleshooting steps, contact technical support.

8. SPECIFICATIONS

Feature	Specification
Brand	Paradox
Model	MG-10/86BDAM
Product Type	Dual Technology Passive Infrared (PIR) Motion Detector
Detection Technology	PIR and Microwave
Special Features	Anti-Masking, Curtain Effect
Operating Frequency	868 MHz
Power Source	Battery Powered
Manufacturer	PARADOX
ASIN	B0743F91MZ

9. WARRANTY AND SUPPORT

9.1. Warranty Information

Specific warranty terms and conditions for the Paradox MG-10/86BDAM detector may vary by region and retailer. Please consult your purchase documentation, retailer, or the official Paradox website for detailed warranty information.

9.2. Technical Support

For technical assistance, troubleshooting beyond the scope of this manual, or inquiries regarding your Paradox security system, please contact Paradox customer service or visit their official support website. Ensure you have your product model number (MG-10/86BDAM) and any relevant system information ready when seeking support.