

Maclean MCE385

Maclean MCE385 PIR Motion Sensor Instruction Manual

Model: MCE385

1. INTRODUCTION

The Maclean MCE385 PIR Motion Sensor is designed to provide automatic control for various applications, enhancing convenience and security. This device utilizes infrared energy to detect movement within its specified range, offering reliable performance for outdoor environments. It features adjustable settings for detection time and ambient light conditions, and is engineered to minimize false activations from small animals.

2. SAFETY INFORMATION

Please read these safety instructions carefully before installation and use. Failure to follow these instructions may result in electric shock, fire, or other hazards.

- Installation must be performed by a qualified electrician in accordance with local wiring regulations.
- Ensure the power supply is disconnected before installation or maintenance.
- Do not exceed the maximum load capacity of 1200W.
- This product is rated IP65 for outdoor use, providing protection against dust and water jets. However, avoid submerging the device in water.
- Keep the device away from flammable materials.
- Do not attempt to repair or modify the device yourself. Contact qualified personnel for service.

3. PACKAGE CONTENTS

Verify that all components are present before proceeding with installation:

- Maclean MCE385 PIR Motion Sensor
- Mounting accessories (screws, wall plugs)



Image 3.1: Maclean MCE385 PIR Motion Sensor product box.



Image 3.2: Dimensions of the Maclean MCE385 PIR Motion Sensor.



Image 3.3: Included mounting accessories (screws and wall plugs).

4. PRODUCT OVERVIEW

The Maclean MCE385 is an infrared motion sensor designed for wall mounting. It features a detection lens on the front and adjustable dials for time and light sensitivity on the underside.



Image 4.1: Front view of the Maclean MCE385 PIR Motion Sensor.



Image 4.2: Rear view of the sensor, indicating wiring access points.



Image 4.3: Example of the motion sensor mounted on an exterior wall.

5. SETUP AND INSTALLATION

The Maclean MCE385 motion sensor is designed for wall mounting and requires a wired electrical connection. Follow these general steps for installation:

1. **Choose a Location:** Select a suitable outdoor location for wall mounting, ensuring the sensor's detection area covers the desired space. Consider the 120-degree detection angle and up to 12-meter range. Avoid placing it near heat sources or objects that might cause false triggers.
2. **Disconnect Power:** Before starting any electrical work, ensure the main power supply to the installation area is switched off at the circuit breaker.
3. **Mount the Sensor:** Use the provided mounting accessories to securely attach the sensor to the wall. Mark the drilling points, drill holes, insert wall plugs, and fasten the sensor with screws.
4. **Wire the Sensor:** Open the wiring compartment on the back of the sensor (refer to Image 4.2). Connect the live, neutral, and load wires according to the wiring diagram provided inside the sensor or in the detailed electrical instructions (not provided in this general manual). Ensure all connections are secure and insulated.
5. **Close and Seal:** Close the wiring compartment securely, ensuring the IP65 rating is maintained.
6. **Restore Power:** Once installation is complete and all connections are secure, restore power to the circuit.

6. OPERATING INSTRUCTIONS

The MCE385 motion sensor operates automatically once installed and configured. It uses passive infrared (PIR) technology to detect changes in infrared radiation caused by moving bodies within its detection zone.

- When motion is detected, the sensor activates the connected device (e.g., light) for the set duration.
- The integrated twilight sensor determines whether the ambient light conditions require activation, based on your LUX setting.
- The sensor is designed to ignore small animals up to 20 kg to prevent unnecessary activations.

7. ADJUSTMENTS

The sensor features two adjustable dials, typically located on the underside, to customize its operation:



Image 7.1: View of the sensor's underside with TIME and LUX adjustment dials.

- **TIME Adjustment:** This dial controls how long the connected device remains active after motion is detected. The adjustable delay time ranges from approximately 10 seconds to 15 minutes. Turn the dial clockwise to increase the duration and counter-clockwise to decrease it.
- **LUX Adjustment:** This dial sets the ambient light level at which the sensor will become active.
 - Turn the dial towards the 'sun' symbol for activation during both day and night (higher LUX threshold).
 - Turn the dial towards the 'moon' symbol for activation only during low light conditions or at night (lower LUX threshold).

Adjust these dials using a small screwdriver or similar tool, carefully turning them to your desired settings.

8. MAINTENANCE

The Maclean MCE385 motion sensor requires minimal maintenance to ensure optimal performance.

- **Cleaning:** Periodically wipe the sensor lens with a soft, damp cloth to remove dust, dirt, or cobwebs that may obstruct detection. Do not use abrasive cleaners or solvents.

- **Inspection:** Regularly check the sensor for any signs of damage, loose connections, or wear. Ensure the mounting is secure.
- **Environmental Factors:** Keep the detection area clear of moving branches, large plants, or other objects that could cause false triggers, especially during windy conditions.

9. TROUBLESHOOTING

If you encounter issues with your Maclean MCE385 motion sensor, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Sensor does not detect motion.	No power; incorrect wiring; LUX setting too high (daylight only); obstructed sensor lens; sensor mounted too high/low.	Check power supply and wiring; adjust LUX setting; clean sensor lens; reposition sensor for optimal coverage.
Connected device (e.g., light) stays on constantly.	Continuous motion in detection area; TIME setting too long; wiring error.	Clear detection area; adjust TIME setting; verify wiring connections.
Connected device turns on too frequently (false triggers).	Sensor too sensitive; small animals (if under 20kg, check placement); moving objects (trees, curtains); heat sources.	Adjust sensor angle/position; ensure animal immunity feature is not compromised by mounting height; remove obstructions; avoid aiming at heat sources.
Connected device does not turn on at night.	LUX setting too low (daylight only).	Adjust LUX setting towards the 'moon' symbol for night operation.

10. SPECIFICATIONS

Feature	Specification
Brand	Maclean
Model Number	MCE385 B
Product Dimensions	17 x 8 x 6 cm
Weight	208 g
Color	Schwarz (Black)
Power Source	Wired Electric (220-240V/AC)
Max Load	1200W
Mounting Type	Wall Mount
Detection Range	Up to 12 meters
Detection Angle	120 degrees

Feature	Specification
Adjustable Delay Time	10 seconds to 15 minutes
Twilight Sensor	Adjustable for day/night operation
Animal Immunity	Ignores small animals up to 20 kg
IP Rating	IP65
Batteries Required	No
Compatible Devices	Home automation and security systems, lighting controllers
Recommended Uses	Outdoor security and automation, energy saving
Operating Temperature	Up to 40°C

11. WARRANTY AND SUPPORT

Information regarding warranty coverage and customer support for the Maclean MCE385 PIR Motion Sensor was not available in the provided product data. For specific warranty details or technical assistance, please refer to the product packaging or contact Maclean customer service directly through their official website or the retailer where the product was purchased.