

Maclean MCE241

Maclean MCE 241 Infrared Motion Detector

MODEL: MCE241 - USER MANUAL

1. Introduction

The Maclean MCE 241 is an advanced infrared motion detector designed for automatic lighting control in various indoor and outdoor environments. Featuring a wide 180-degree detection angle and a maximum range of 12 meters, this device offers reliable and efficient motion sensing. It comes with a convenient remote control for easy adjustment of settings such as detection range, light intensity, and hold time. With an IP65 protection rating, it is suitable for use in diverse weather conditions, providing enhanced safety and energy efficiency for your home or property.

2. Key Features

- **Wide Detection Area:** Practical infrared motion detector with a maximum range of 12 meters and a 180-degree detection angle.
- **Adjustable Sensor Lens:** The sensor lens can be horizontally adjusted by 90 degrees and 180 degrees for optimal coverage.
- **Integrated Light Sensor:** Features a built-in light sensor for intelligent operation based on ambient light levels.
- **Remote Control Operation:** Convenient control via the included remote, allowing easy adjustment of time settings, detection field, and light intensity.
- **Versatile Application:** Ideal for automatic lighting control in entrances, driveways, yards, garages, gardens, basements, hallways, and more.
- **Durable Design:** IP65 protection rating ensures protection against splashes and water jets from any angle, making it suitable for both indoor and outdoor use.

3. Product Overview

The Maclean MCE 241 motion detector consists of the main sensor unit and a dedicated remote control for configuration. Below are detailed views of the product components and their adjustable features.



Figure 3.1: Maclean MCE 241 Motion Detector and Remote Control.



Figure 3.2: Top view showing the LUX (light sensitivity) and TIME (hold time) adjustment dials on the sensor unit.

ON

OFF

AUTO

Detection range ▼

100%

75%

50%

10LUX

50LUX

150LUX

Daylight sensor

2000LUX



10S

1MIN

3MIN

Hold-time

7MIN

15MIN

30MIN

TEST



RESET

Figure 3.3: Detailed view of the remote control, highlighting buttons for ON/OFF/AUTO, detection range, daylight sensor, and hold time settings.



Figure 3.4: Illustration of the sensor's adjustable head, allowing for 90-degree vertical and 180-degree horizontal rotation for precise aiming.



Figure 3.5: Bottom view of the sensor, displaying the product label with model number MCE241, power specifications, and IP65 protection rating.

4. Specifications

Attribute	Value
Manufacturer	Maclean
Item Model Number	MCE241
Product Dimensions (L x W x H)	14 x 9 x 7 cm; 220 grams
Color	White
Power Source	Electric Cable (220 - 240 V)
Frequency	50 / 60 Hz
Detection Angle	180°
Maximum Range	12 meters
Adjustable Detection Field	50% / 75% / 100% (selectable)
Hold Time	Min. 10s ± 3s / Max. 30min ± 3min

Attribute	Value
Power Consumption	~ 0.5W maximum
Max Load (Incandescent)	1200 W
Max Load (Energy-saving/LED)	300 W
Detected Movement Speed	0.6 - 1.5 m/s
Operating Temperature	-20°C to +40°C
Mounting Height	1.8 - 2.5 m
Protection Degree	IP65
Special Features	Remote Control
Included Components	PIR Motion Detector, Remote Control

5. Setup and Installation

Before installation, ensure the power supply is disconnected to prevent electrical shock. It is recommended that installation be performed by a qualified electrician.

- Choose Mounting Location:** Select a suitable location for the motion detector, ideally between 1.8 and 2.5 meters from the ground. Ensure the area to be monitored is within the 180-degree detection angle and 12-meter range. Avoid placing near heat sources, direct sunlight, or areas with strong air currents that might cause false triggers.
- Mounting:** Securely mount the detector to a wall or ceiling using appropriate screws and anchors (not included). The IP65 rating allows for outdoor installation, but ensure wiring connections are properly sealed.
- Wiring:** Connect the power supply (220-240V AC, 50/60Hz) to the detector's input terminals. Connect the output terminals to your lighting fixture. Refer to the wiring diagram provided in the product packaging for specific connections. Ensure all connections are tight and insulated.
- Adjust Sensor Head:** Once mounted, adjust the sensor head horizontally (up to 180 degrees) and vertically (up to 90 degrees) to cover the desired detection area.
- Restore Power:** After completing all connections and adjustments, restore power to the circuit.

6. Operating Instructions

The Maclean MCE 241 can be configured using the included remote control. The remote allows for precise adjustments without needing to access the physical unit.

Remote Control Functions:

- ON/OFF/AUTO:**
 - ON:** Forces the connected light to stay on continuously.
 - OFF:** Forces the connected light to stay off.
 - AUTO:** Activates motion detection mode. The light will turn on when motion is detected and ambient light conditions are met.
- Detection Range (50%, 75%, 100%):** Adjusts the sensitivity and maximum detection distance of the sensor. Select

100% for the full 12-meter range, or reduce for smaller areas.

- **Daylight Sensor (LUX - 10LUX, 50LUX, 150LUX, 2000LUX):** Sets the ambient light threshold at which the sensor will activate. For example, 10LUX means the light will only turn on when it's very dark, while 2000LUX means it will turn on even in bright daylight (for testing purposes).
- **Hold Time (10S, 1MIN, 3MIN, 7MIN, 15MIN, 30MIN):** Determines how long the light remains on after motion is no longer detected.
- **TEST:** Activates a test mode, typically for quick setup and aiming verification. The light may turn on for a short period regardless of LUX settings.
- **RESET:** Resets all settings to factory defaults.

For initial setup, it is recommended to use the TEST mode and adjust the sensor head and detection range to ensure proper coverage. Then, set the desired LUX and Hold Time according to your needs.

7. Maintenance

The Maclean MCE 241 motion detector requires minimal maintenance. Regular cleaning and inspection will ensure optimal performance and longevity.

- **Cleaning:** Periodically wipe the sensor lens and housing with a soft, damp cloth to remove dust, dirt, or debris. Do not use abrasive cleaners or solvents, as these can damage the unit.
- **Inspection:** Regularly check the mounting and wiring for any signs of wear, damage, or loose connections. Ensure the sensor head remains securely positioned.
- **Obstruction Check:** Ensure there are no new obstructions (e.g., growing plants, new structures) blocking the sensor's field of view.

Always disconnect power before performing any maintenance or inspection.

8. Troubleshooting

If you experience issues with your Maclean MCE 241 motion detector, refer to the following common problems and solutions:

- **Light does not turn on when motion is detected:**
 - Check power supply to the unit and the connected light fixture.
 - Ensure the remote control is set to AUTO mode.
 - Adjust the LUX (daylight sensor) setting to a lower value if it's too bright for activation.
 - Verify the detection range is set appropriately and the sensor head is aimed correctly.
 - Test the light fixture independently to ensure the bulb is functional.
- **Light stays on continuously:**
 - Ensure the remote control is set to AUTO mode, not ON.
 - Check for constant motion within the detection area (e.g., tree branches, pets).
 - Reduce the detection range or adjust the sensor head to exclude areas with constant activity.
 - Verify the Hold Time setting is not excessively long.
- **Light turns on for no apparent reason (false triggers):**
 - Reduce the detection range.
 - Adjust the sensor head to avoid detecting movement from public areas, passing vehicles, or animals.

- Ensure the sensor is not exposed to direct sunlight, strong winds, or rapid temperature changes.
- Clean the sensor lens to remove any dirt or insects.

- **Remote control not working:**

- Ensure there are no obstructions between the remote and the sensor.
- Check the remote control's battery and replace if necessary.
- Ensure you are within the effective range of the remote control.

9. Warranty and Support

Maclean products are designed and manufactured to the highest quality standards. For information regarding warranty coverage, technical support, or spare parts availability, please refer to the documentation included with your purchase or visit the official Maclean website. Keep your proof of purchase for any warranty claims.

For further assistance, you may contact Maclean customer service through the contact information provided on their official channels.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

