MEIKEE FLB020

MEIKEE 20W LED PIR Motion Sensor Security Floodlight User Manual

Model: FLB020

INTRODUCTION

Thank you for purchasing the MEIKEE 20W LED PIR Motion Sensor Security Floodlight. This manual provides essential information for the safe installation, operation, and maintenance of your new floodlight. Please read these instructions carefully before use and retain them for future reference.

IMPORTANT SAFETY INSTRUCTIONS

- Always disconnect power before installation or servicing.
- Installation should be performed by a qualified electrician or in accordance with local electrical codes.
- Ensure the power supply voltage matches the product specifications (85-265VAC).
- Do not look directly into the LED light source when illuminated, as it may cause eye damage.
- Do not modify the product in any way, as this will void the warranty and may pose safety risks.
- Keep packaging materials away from children.

PACKAGE CONTENTS

Please check the package for the following items:

- 1x MEIKEE 20W Motion Sensor Floodlight
- 1x Screw Package (Mounting Hardware)
- 1x User Manual (this document)

PRODUCT OVERVIEW

The MEIKEE 20W LED PIR Motion Sensor Security Floodlight is designed for outdoor use, featuring a sensitive motion sensor and durable, waterproof construction. It provides warm white illumination for enhanced security and convenience.

Figure 1: Front view of the MEIKEE 20W LED PIR Motion Sensor Security Floodlight, showing the main light panel, integrated motion sensor, and mounting bracket.

Key Features:

- **Wattage:** 20W LED
- **Lumen Output:** 1700lm
- **Color Temperature:** Warm White
- **Motion Sensor:** PIR (Passive Infrared) with 180° detection angle and up to 12m detection distance.
- **Waterproof Rating:** IP66 for floodlight, IP65 for sensor.
- **Adjustable Settings:** Time duration and light sensitivity (LUX).
- **Durable Construction:** Aluminum body, nano-material front cover.

INSTALLATION INSTRUCTIONS

Before installation, ensure the power supply is turned off at the main circuit breaker.

1. **Choose a Mounting Location:** Select a suitable location for the floodlight, ideally between 9.84ft (3m) and 16.4ft (5m) high for optimal detection range and light coverage. Consider the 120° beam angle and 12m detection distance.

Beam angle: 120°

Max detect range: 39ft

Ideal mounting height: 9.84ft - 16.4ft

Optimum light range: > 19.69*19.69ft

Figure 2: Illustration of optimal mounting height (9.84ft - 16.4ft) and detection range (max 39ft / 12m) for the floodlight, showing a 120° beam angle.

2. **Mark Drilling Points:** Use the mounting bracket as a template to mark the drilling points on the wall or mounting surface.

3. **Drill Holes:** Drill holes at the marked points and insert appropriate wall plugs (if necessary, depending on the surface).

4. **Secure the Bracket:** Attach the mounting bracket to the surface using the provided screws.

5. **Wire the Floodlight:** Connect the floodlight's cable to your main power supply. The 1.5m cable includes three wires: Live (Brown), Neutral (Blue), and Earth (Yellow/Green). Ensure correct polarity and secure connections.

Figure 3: Rear view of the floodlight, illustrating the adjustable mounting bracket and the power cable connection point.

6. **Adjust Sensor Angle:** The motion sensor can be rotated 360° horizontally and 270° vertically to cover the desired detection area.

Figure 4: Close-up of the motion sensor showing the TIME and LUX adjustment dials protected by a waterproof soft rubber cover, and illustrations of the sensor's 360° horizontal and 270° vertical rotation capabilities.

7. **Restore Power:** Once installation is complete and all connections are secure, restore power to the circuit.

OPERATION

The MEIKEE floodlight features two adjustable settings on the motion sensor: TIME and LUX. These settings are located under a waterproof soft rubber cover on the sensor unit.

Figure 5: Detailed view of the TIME and LUX adjustment dials on the motion sensor.

1. TIME Setting:

This dial controls the duration the light stays on after motion is detected and the sensor is triggered. Rotate the dial to select the desired time:

- **10s:** Light stays on for approximately 10 seconds.
- **45s:** Light stays on for approximately 45 seconds.
- **120s:** Light stays on for approximately 120 seconds (2 minutes).
- **600s:** Light stays on for approximately 600 seconds (10 minutes).

2. LUX Setting:

This dial determines the ambient light level at which the sensor will activate the floodlight. Rotate the dial to select the desired mode:

- **"SUN" (Daylight Mode):** The sensor will work continuously, activating the light both during the day and at night when motion is detected.
- **"MOON" (Night Mode):** The sensor will only activate the light when motion is detected during low light conditions or at night.

Note: The detection range defaults to a maximum of 12 meters (39 feet).

MAINTENANCE

- **Cleaning:** Periodically clean the floodlight and sensor lens with a soft, damp cloth to ensure optimal performance. Do not use abrasive cleaners or solvents.
- **Inspection:** Regularly inspect the power cable and housing for any signs of damage. If damage is found, disconnect power and have it repaired by a qualified technician.
- **No User-Serviceable Parts:** The LED light source and sensor unit are not user-replaceable. Do not attempt to open or repair the unit.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Light does not turn on.	No power supply. LUX setting is too low (Moon mode during day). Sensor is obstructed. Faulty sensor.	Check power connections and circuit breaker. Adjust LUX setting to "SUN" for testing, or wait until night. Clear any obstructions from the sensor's view. Contact customer support.
Light stays on continuously.	Continuous motion in detection area. LUX setting is too high (Sun mode at night). Faulty sensor.	Ensure no constant movement is triggering the sensor. Adjust LUX setting to "MOON" for night-only operation. Contact customer support.
Light turns on for too short/long a period.	Incorrect TIME setting.	Adjust the TIME dial to the desired duration (10s/45s/120s/600s).
Reduced detection range or sensitivity.	Sensor lens is dirty. Sensor angle is incorrect. Ambient temperature too high (reduces PIR effectiveness).	Clean the sensor lens. Adjust the sensor angle to cover the desired area. This is normal behavior for PIR sensors in very warm conditions.

SPECIFICATIONS

Model Number	FLB020
Wattage	20W
Voltage	85-265VAC
Luminous Flux	1700lm
Luminous Color	Warm White
Beam Angle	120°

Working Temperature	-25°C to 40°C
Sensor Detection Angle	180°
Detection Distance	Up to 12m
Waterproof Rating (Floodlight)	IP66
Waterproof Rating (Sensor)	IP65
Cable Length	1.5m
Material	Aluminum (body), Nano-material (front cover)
Dimensions (approx.)	140mm x 98mm x 60mm (excluding bracket)

Figure 6: Diagram showing the approximate dimensions of the floodlight: 140mm (5.51in) width, 98mm (3.82in) height, and 60mm (2.4in) depth (excluding the sensor and bracket).
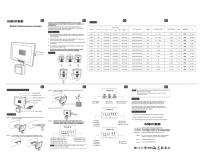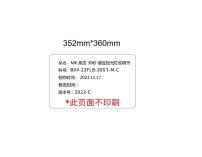
For detailed product information and energy efficiency, please refer to the official EPREL database: EPREL Product Information Sheet

WARRANTY AND SUPPORT

MEIKEE products are designed for durability and performance. For warranty information or technical support, please contact your retailer or visit the official MEIKEE website. Please retain your proof of purchase for warranty claims.

Related Documents - FLB020

	[MEIKEE PIR Motion Sensor Floodlights: Specifications, Installation & Features](#) Detailed specifications, installation guide, and sensor adjustment features for MEIKEE PIR Motion Sensor Floodlights, covering models FLB010 to FLB150. Learn about power, lumen output, installation height, lighting range, and operational modes for enhanced outdoor security lighting.
	[MEIKEE LED Flood Light with Motion Sensor User Manual](#) This manual provides instructions for the MEIKEE LED Flood Light with Motion Sensor, including installation, operation, and maintenance. It details product specifications, safety precautions, and troubleshooting tips for various models.
	[MEIKEE 42W LED Security Lights User Manual](#) Comprehensive user manual for MEIKEE 42W LED Security Lights with Motion Sensor, covering installation, operation, and specifications. Features IP66 waterproofing and adjustable 180° angle.
	[MEIKEE RGB Floodlight User Manual: Installation, Features, and Troubleshooting](#) Comprehensive user manual for MEIKEE RGB Floodlights, covering installation, remote control functions, color modes, timing, troubleshooting, and maintenance. Features IP66 waterproof rating and wide lighting range.
	[MEIKEE Solar RGB Floodlight User Manual and Specifications](#) Comprehensive user manual for the MEIKEE Solar RGB Floodlight, detailing installation, operation, specifications, and troubleshooting for this IP66 waterproof, remote-controlled solar lighting solution.
	[MEIKEE Motion Sensor Lights with 3 Adjustable Heads Installation and Specifications](#) Comprehensive guide for MEIKEE Motion Sensor Lights with 3 Adjustable Heads, covering installation, component diagrams, sensor settings, and technical specifications. Learn how to properly install and adjust your motion sensor lights for optimal performance.