

LC-202

GLASSBREAK DETECTOR MICROPHONE

Johnson Controls
CE | 2012/19/EU

1. INTRODUCTION

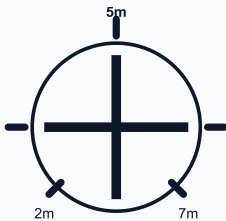
The **LC-202** is a dual-technology detector consisting of a PIR sensor and a microphone sensor to notify glass breakage and impacts. Adjustments for the PIR sensor and the microphone are independent. Microphone detection has a maximum coverage of 7 meters, while infrared detection reaches up to 12 meters. The microphone detection can be adjusted for glassbreak only or for both glassbreak and impact detection. Filters can be acquired in different options to increase or decrease the sensitivity of breakage/impact detection.

2. INSTALLATION

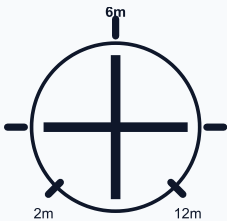
- Using a small gauge tool, press the round button on the bottom of the detector and open the cover.
- Remove the printed circuit board (PCB) from the bottom cover by releasing the mounting clips on the sides of the terminal block.
- Punch out the desired knockouts for installation, or use a suitable swivel bracket (optional).
- Thread the connection cable through the guide on the back cover and pull it out through the hole at the top. Wire the circuit following the wiring diagram.

Note 1: An installation height of 2 meters above floor level is recommended. Verify that all DIP switches are set to the desired positions (see table below).

- Turn on the power supply and wait for the device to become operational (i.e., green LED indicator stops flashing).
- Adjust the coverage limiter so that the detector senses motion and breakage at the required distance ("+" for greater coverage, "-" for smaller coverage), then close the detector cover.



Microphone Coverage



Infrared (PIR) Coverage

3. CONNECTIONS AND SETTINGS - DIP SWITCHES

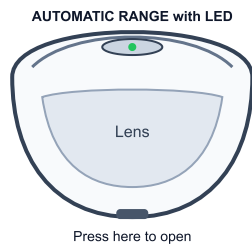
DIP 1	DIP 2	Configuration Description
OFF	OFF	Single-band frequency detection (High sensitivity)
OFF	ON	Dual-band frequency detection (Normal sensitivity)
ON	OFF	Single-band plus impact frequency detection (Low sensitivity)
ON	ON	Dual-band plus impact frequency detection (Low sensitivity)
OFF	-	DIP 3 OFF: 1-pulse PIR operation
ON	-	DIP 3 ON: 2-pulse PIR operation

TERMINALS AND ADJUSTERS

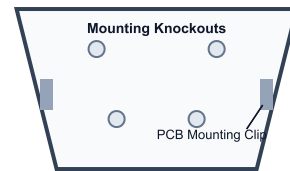
+ and -	Sensor power supply (13.8 Vdc)
MIC	Microphone alarm output
PIR	Infrared detection alarm output
C	Common alarm reference
TAMPER	Detector tamper terminal, NC (Normally Closed)
MIC Trimmer	Adjusts microphone sensitivity coverage ("+" higher coverage / "-" lower coverage)
PIR Trimmer	Adjusts PIR sensitivity coverage ("+" higher coverage / "-" lower coverage)

Note: Because this sensor includes an audio microphone, it is recommended to install it away from exceptionally loud sound sources.

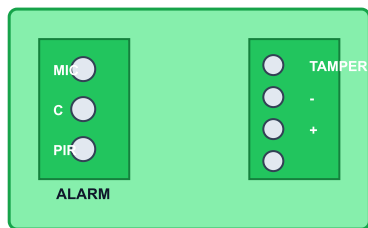
4. General View



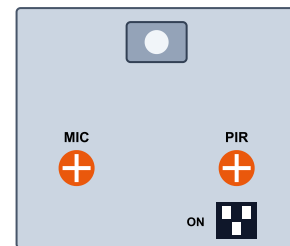
5. Internal View



6. TERMINALS

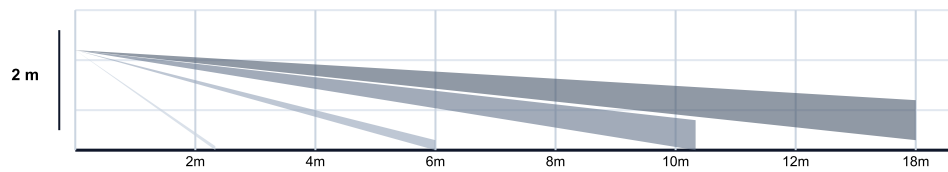


7. PCB BOARD

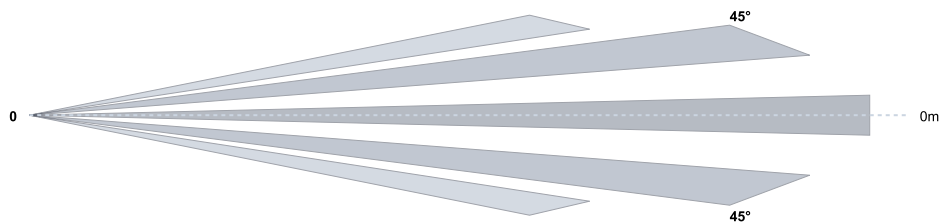


8. LENS PATTERNS AND COVERAGE

Side View Pattern (Mounting Height: 2m)



Top View Pattern (90° Angle Detection)



TECHNICAL SPECIFICATIONS

Power Supply	9 to 15 VDC
Current Draw (Alarm / Standby)	(23 mA / 19 mA) @ 13.8 VDC
Nominal Voltage	13.8 VDC
Coverage (PIR / Microphone)	12 m (PIR) / 7 m (Microphone)
Coverage Width / Angle	90°
PIR Sensor Element	Dual Element
Lens (Patterns and Levels)	18 patterns across 3 levels
Alarm Duration	2 seconds
Tamper Protection	Yes (NC contact)
Creep Zone / Immediate Zone	Included
Alarm Contact Rating	100 mA - 40 V - 2.5 - 16 Ω
Tamper Contact Rating	Max. 40 mA - 30 VDC
Operating Temperature	-10 °C to +55 °C (14 °F to 131 °F)
Storage Temperature	-20 °C to +60 °C (-4 °F to 140 °F)
RFI Immunity Protection	30 V/m (80 MHz to 2000 MHz)
AUTOMATIC RANGE with LED (MIC & PIR)	✓ (Supported)
Housing Material	ABS Plastic
Accessories	Swivel bracket (optional)
Dimensions (H x W x D)	110 x 60 x 46 mm

COMPLIANCE & LEGAL NOTICES

All our products comply with standard standards IEC 79-2 2nd ed. 1998 + Ab 2000.

Only qualified personnel should perform the installation of this device in accordance with best professional practices. The manufacturer shall not be held liable in the event of unauthorized modifications or repairs made to the product or system.

It is recommended to check that the alarm system functions correctly at least once a month. Despite this, a reliable alarm system does not prevent intrusions, theft, fires, or other incidents; rather, it serves to reduce the risk of such situations occurring.

