



# Johnson Controls LC-200 15 m Digital PIR Motion Detector Instructions

[Home](#) » [Johnson Controls](#) » Johnson Controls LC-200 15 m Digital PIR Motion Detector Instructions 

## Contents

- [1 Johnson Controls LC-200 15 m Digital PIR Motion Detector](#)
- [2 INTRODUCTION](#)
- [3 INSTALLATION](#)
- [4 CONNECTION AND SETUP](#)
- [5 Technical Characteristics](#)
- [6 SIDE VIEW](#)
- [7 Documents / Resources](#)
  - [7.1 References](#)
- [8 Related Posts](#)



**Johnson Controls LC-200 15 m Digital PIR Motion Detector**





## INTRODUCTION

- LC-200/BLC-200 detectors are the best choice for residential and commercial security installations: BLC-200 is not UL/ULC listed.
- They only use digital PIRs which bypass the conversion that usually must be done with traditional detectors where an analog PIR is amplified and converted to digital. The FULLY digital technology helps the detector more accurately detect intrusions and not be affected by alterations in white light, ultraviolet light, temperature, air movement caused by heating/cooling systems, and it is fully immune to radiated and conducted electromagnetic interference. LC-200/BLC-200 detectors are equipped with lenses designed by Johnson
- Controls and are manufactured by Fresnel Technologies, Inc.
- LODIFF® optic creation technology combined with POLY IR® materials make it a product of the highest quality and efficiency.
- LC-200/BLC-200 detectors are pet immune (feature not evaluated by UL/ULC) and have a 15-meter range at a 100-degree angle.



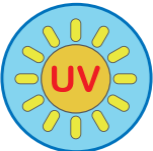
### **White Light Protection**

- The detector digitally filters white light components.



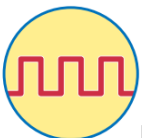
### **High RFI Protection**

- The detector has very high RFI immunity due to the complete lack of traditional amplifiers.



### **Ultraviolet Stabilization POLY IR®4 Lens Material**

- The lens is printed with POLY IR® material. This materials offers a better combination of transmittance, environmental stability and color than any other polymer on the market. Materials are available for the 8-14 micron infrared region. LODIFF® and POLY IR® are registered trademarks of Fresnel Technologies, Inc.



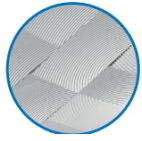
### **Fully Digital PIR**

- The detector has no analog components, and the fully digital PIR interfaces directly with the microprocessor.



### • **Pet Immunity**

- Thanks to a new lens design and the digital analysis system, all of our detectors are immune to pets weighing up to 15 kg.

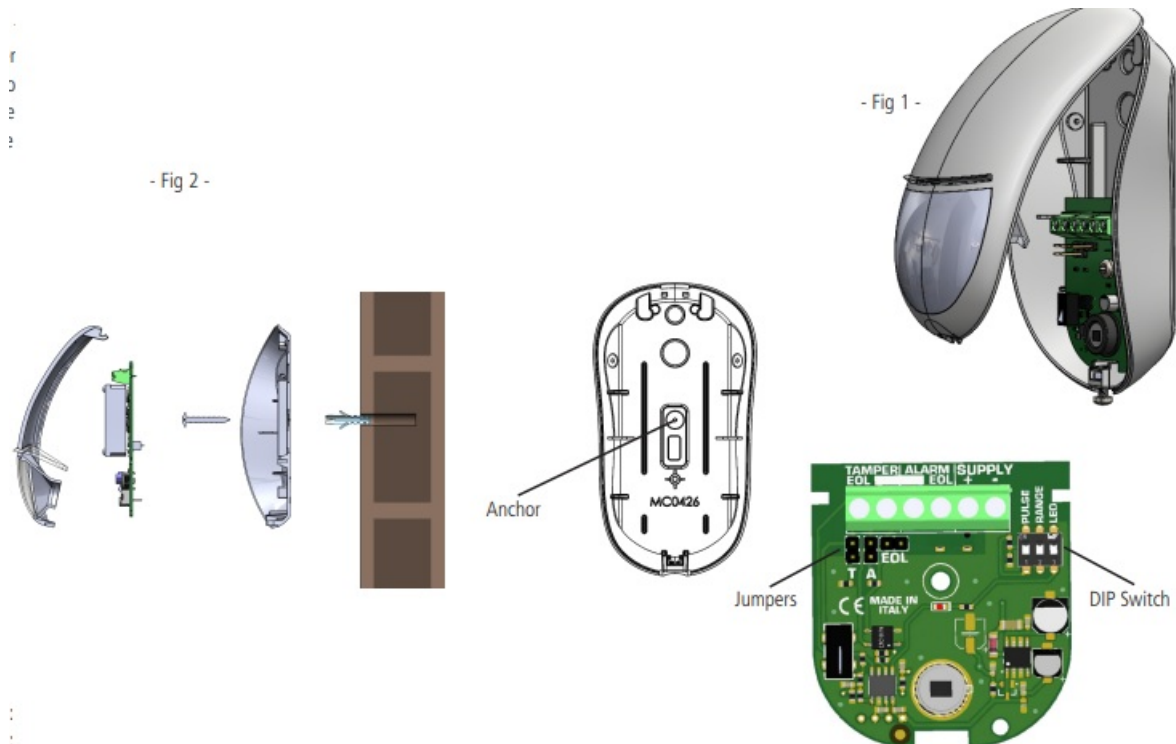


### • **LODIFF® Fresnel Lens Technology**

- This lens series is made by tiling LODIFF® lens pieces. These lenses offer significantly improved performance over the typical constant-bandwidth Fresnel lens. LODIFF® and POLY IR® are registered trademarks of Fresnel Technologies, Inc.

## INSTALLATION

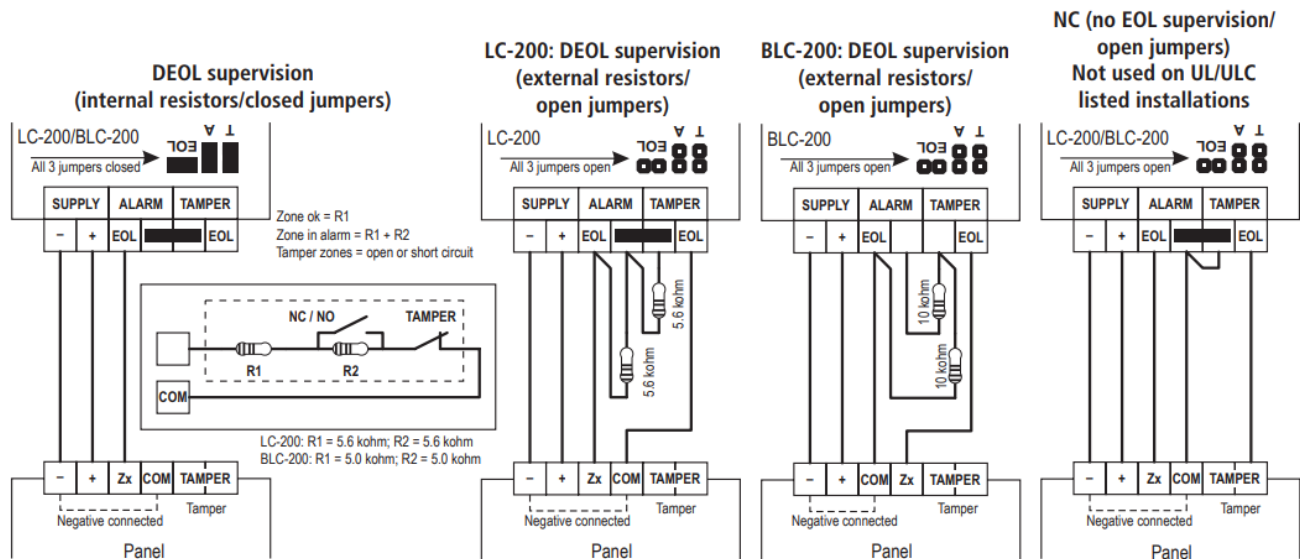
- Using a thin screwdriver, loosen the bottom screw and open the cover (see Fig 1)
- Remove the board from the base by levering the ABS cover (see Fig 2)
- Drill the stopper on the base of the cover at the desired fastening location (or use the optional swivel that is not IMQ certified)
- Open the knockout for the removal protection and fix the anchor to the wall (see Fig 2)
- Recommended height is 2.1 m
- Wire the terminals following the connections shown in “Connection and Setup”



- **NOTE:** Do not partially or completely cover the detector's field of vision
- **NOTE:** the pet function is not IMQ certified

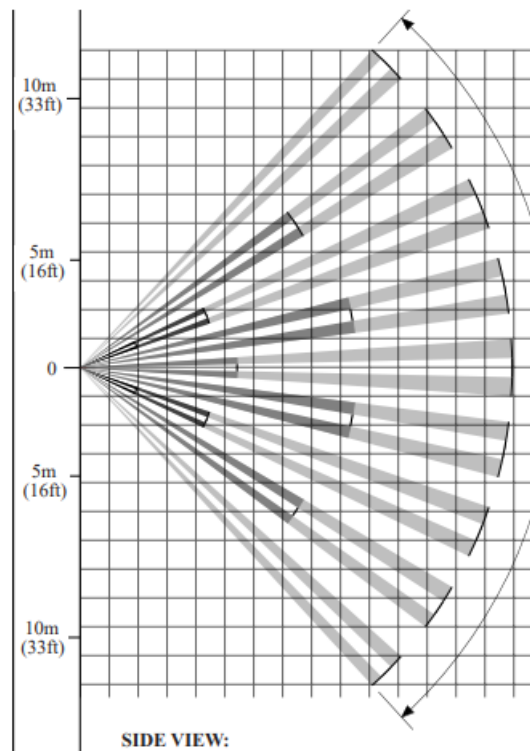
## CONNECTION AND SETUP

- Dip PULSE → off = 1 pulse – on = 2 pulses
- Dip RANGE → off = 7 m – on = 15 m range
- Dip LED → off = LED off – on = LED on
- Jumpers T – A – EOL open = NC contacts without resistors (not for UL/ULC applications)
- Jumpers T – A – EOL closed = DEOL supervision with internal resistors
- SUPPLY: power supply 9-15 VDC / 25 mA. Note: For UL/ULC installations the detector shall be provided with minimum of 4 hours of standby power from either a listed compatible control unit or power supply. Output contacts ratings: 28 VDC / 100 mA. Use only resistive loads on the outputs.
- **Note:** Incorrect connections may result in failure or improper operation. Inspect wiring and ensure connections are correct before turning on the power.

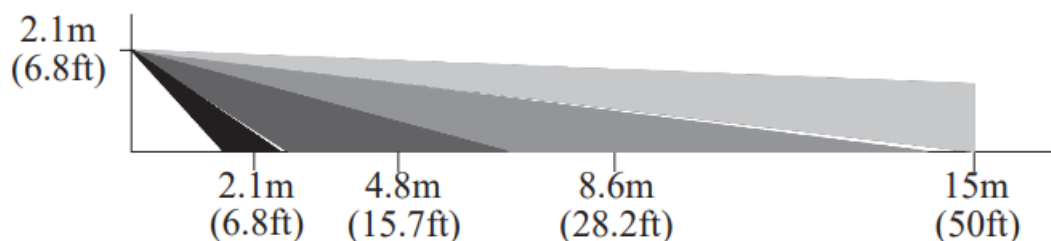


## Technical Characteristics

<b>Technical Characteristics</b>	
<b>RANGE</b>	15 m
<b>HORIZONTAL COVERAGE</b>	100°
<b>LENSES</b>	LODIFF® Fresnel Lens POLY IR®4 material
<b>LED</b>	red
<b>ALARM DURATION</b>	2 s
<b>SELF-DIAGNOSTICS</b>	–
<b>LED WALK TEST</b>	YES
<b>MICROWAVE FREQUENCY</b>	–
<b>SOLID STATE RELAY</b>	YES
<b>EOL RESISTANCE</b>	YES
<b>CREEP ZONE DEVICE</b>	YES
<b>CASE TAMPER</b>	YES
<b>BACK TAMPER</b>	YES
<b>ANTI-MASKING</b>	–
<b>PULSE COUNTER</b>	YES
<b>RFI PROTECTION</b>	30 V/m
<b>HEAT COMPENSATION</b>	YES
<b>FULLY DIGITAL</b>	YES
<b>SWIVEL OPTION</b>	YES
<b>POWER SUPPLY</b>	9-15 VDC / 25 mA
<b>COVER MATERIAL</b>	ABS
<b>PET IMMUNITY</b>	YES
<b>OPERATING TEMPERATURE</b>	-10°C to +40°C UL/ULC tested: 0°C to 49 °C
<b>HUMIDITY</b>	93% RH
<b>DIMENSIONS</b>	114 x 63 x 40 mm



## SIDE VIEW



## LC-200/BLC-200 complies with requirements EN 50131-2-2 Grade 2, EN 50131-2-2 Class II

- Installation must be carried out by trained personnel according to professional standards.
- The manufacturer accepts no responsibility if the product is tampered with by unauthorized persons.
- The alarm system should be checked for proper operation at least once a month. However, a reliable electronic alarm system does not prevent intrusion, robbery, fire or anything else but merely decreases the risk of such situations occurring.
- UL/ULC has certified only the model LC-200 in accordance with UL639 and ULC-S306 for use in Residential and Commercial Burg applications (In Canada for Security Level I-II type applications). Use in dry, indoor ordinary locations, within the protected premises. The detectors shall be tested annually. The installation and wiring methods shall be in accordance with the National Electrical Code, NFPA 70 and CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

- If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna
  - Increase the separation between the equipment and receiver
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
  - Consult the dealer or an experienced radio/TV technician for help.


**Warning!** Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Tyco Safety Products Canada Ltd.) could void the user's authority to operate the equipment. This device complies with part 15 of the FCC rules. Operations are subject to the following two conditions:

1. This device may not cause harmful interference and
2. This device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003 © 2023 Johnson Controls. All rights reserved. JOHNSON CONTROLS is a registered trademark. Unauthorized use is strictly prohibited.  
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## Documents / Resources

	<p><a href="#">Johnson Controls LC-200 15 m Digital PIR Motion Detector</a> [pdf] Instructions LC-200, BLC-200, LC-200 15 m Digital PIR Motion Detector, 15 m Digital PIR Motion Detector, Digital PIR Motion Detector, PIR Motion Detector, Motion Detector, Detector</p>
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## References

- [User Manual](#)