# LMDC-100 Digital Dual Technology Ceiling Mount Occupancy Sensor

Combines passive infrared and ultrasonic technologies for most comprehensive coverage

Component of Digital Lighting Management integrated control system

Quick access to Push n' Learn for system personalization



Digital sensor with LCD display and programming pushbuttons behind snap-off cover

IR transceiver for wireless configuration and remote control

Low profile design for architectural appeal

PROJECT

LOCATION/TYPE

## Product Overview

### Description

The LMDC-100 low profile Digital Dual Technology Ceiling Mount Occupancy Sensor uses both passive infrared (PIR) and ultrasonic technologies to achieve precise occupancy sensing for energy-efficient control of lighting and plug loads. It is a digital sensor, and is part of a WattStopper Digital Lighting Management (DLM) system.

### Operation

The LMDC-100 operates on Class 2 power supplied to a DLM local network by one or more DLM room controllers. It works with the room controller(s) to turn loads on and off based on occupancy. Default operation is established by Plug n' Go, which automatically configures system components to maximize energy savings. Initially, all occupancy sensors control all loads on the same local network. Each LMDC-100 may be assigned to a specific load; load assignments and load parameters may be changed using Push n' Learn. The LMDC-100 may be reconfigured either using the pushbuttons and an LCD screen conveniently located behind the snap-off front sensor cover, or with a wireless configuration tool.

### Digital Settings and IR Communications

The LMDC-100 includes a unique, easy-to-access, LCD screen that displays sensor parameters and simplifies changing those parameters. Time delay and sensitivity can be precisely adjusted. Additionally, walk through mode can be activated and detection and retrigger technologies may be changed. Changes are made at the sensor with easy-to-use pushbuttons, or via a wireless configuration tool that communicates with the sensor using a bi-directional infrared (IR) signal. The LMDC-100 IR transceiver allows wireless system operation in addition to configuration. The LCD display also facilitates system personalization, showing load information when in Push n' Learn mode.

### Applications

The LMDC-100 senses both large and small motions and is recommended for spaces including conference rooms, private offices, open offices and classrooms where using just one detection technology could result in false triggers. Mounted at ten feet, the LMDC-100 can detect motion throughout an area of approximately 1,000 square feet.

## Features

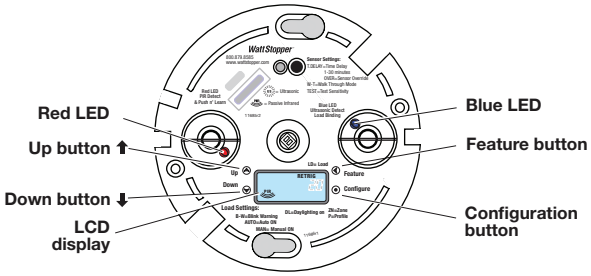
- Plug n' Go™ automatic configuration for quick installation and maximum energy savings
- Push n' Learn™ functionality for customization without the need for tools or a PC
- Digital Lighting Management components plug together on a free-topology Category 5e DLM local network
- Infrared (IR) transceiver for wireless configuration and control
- Ultrasonic diffusion technology spreads coverage to a wider area (patented); 40KHz signal
- 360 degree PIR coverage
- Detection Signature Processing eliminates false triggers and provides immunity to RFI and EMI
- RoHS compliant
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- Qualifies for ARRA-funded public works projects

## Specifications

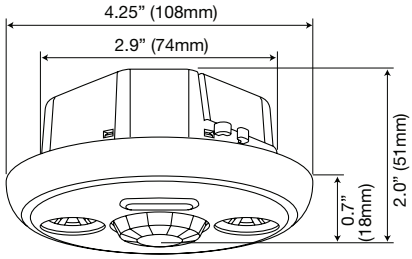
- Input voltage: 24VDC from DLM network
- Current consumption: 20mA
- DLM local network connection: 2 RJ45 ports
- LCD display and pushbuttons for setting sensor and system parameters
- Infrared (IR) transceiver
- Ultrasonic frequency: 40 kHz
- Operating conditions: for indoor use only; 32-104°F (0-40°C); 5-95% RH, non-condensing
- UL and cUL listed
- FCC part 15 compliant
- Five year warranty

## Controls & Dimensions

### Product Controls and Sensor Settings



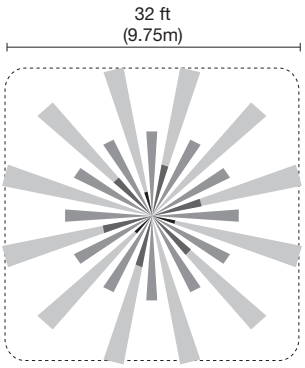

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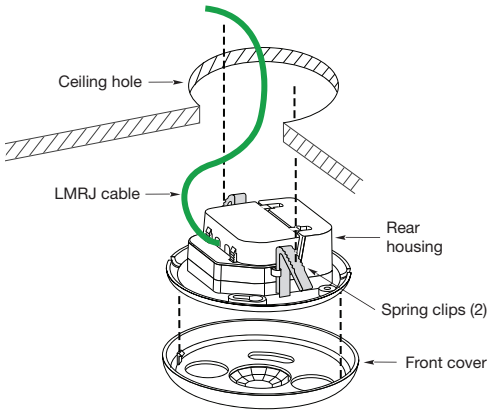

| Sensor Parameter | Available Options | Default Setting |
|---|---|---|
| Time Delay | 1-30 min. (1 min. increments) /Override | 20 minutes |
| Walk Thru | On/Off | Off |
| PIR Sensitivity | 10-100% (10% increments)/Off | 90% |
| Ultrasonic Sensitivity | 10-100% (10% increments)/Off | 70% |
| Test Mode | Activate | Off |
| Detection Technology | Ultrasonic/PIR/Both/Either | Both |
| Retrigger Technology | Ultrasonic/PIR/Both/Either | Either |

## Coverage & Mounting

### Coverage Patterns



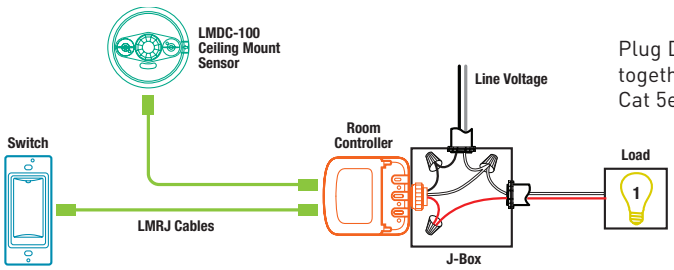

### Mounting Options




Mount directly to ceiling tile using spring clips (included) or to a 4" octagonal box. See installation instructions for more details.

## Wiring

### Sample Connection Diagram




Plug DLM local network components together in any configuration using Cat 5e cables with RJ45 connectors.

## Ordering Information

| Catalog No. | Color | Description |
|---|---|---|
| ☐ LMDC-100 | White | Digital Dual Technology Ceiling Mount Occupancy Sensor |
| ☐ LMDC-100-U | White | Digital Dual Technology Ceiling Mount Occupancy Sensor, ARRA-compliant* |

*Product produced in the U.S.

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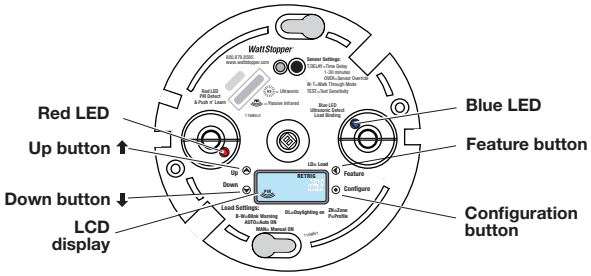
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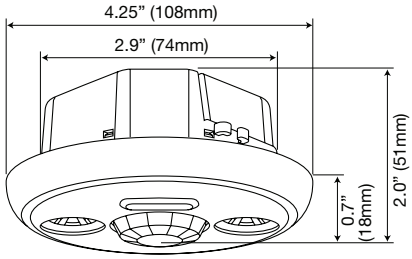
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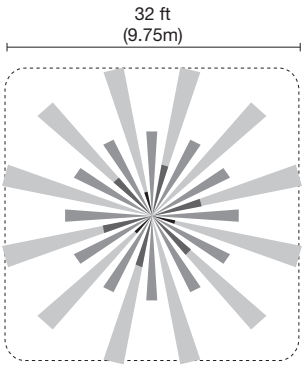

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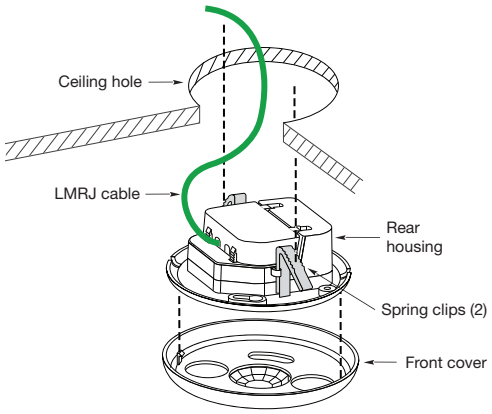

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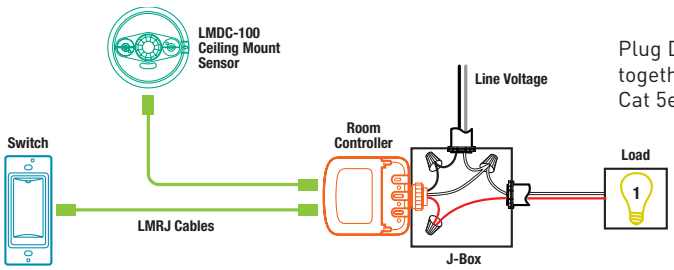

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