LEVITON ODDMT-MDx Smart Multi Tech 0-10V Dimming Wallbox Sensor Owner's Manual

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LEVITON ODDMT-MDx Smart Multi Tech 0-10V Dimming Wallbox Sensor

Product Information

Specifications

- **Electrical:**
  - Input Voltage/Frequency: 120-277VAC, 50/60Hz
  - **Input Current:**
    - 120V – Standby: 0.2W; Max: 0.5W+Load Current
    - 277V – Standby: 0.3W; Max: 0.6W+Load Current
  - **Load Ratings:**
    - General Purpose @ 120V: 10A
    - General Purpose @ 277V: 10A
    - LED/Electronic Ballast @ 120V: 8A
    - LED/Electronic Ballast @ 277V: 5A
    - Standard Ballast @ 120V: 10A
    - Standard Ballast @ 277V: 6.67A
    - Tungsten @ 120V: 10A
    - Tungsten @ 277V: 6.67A
    - Motor @ 120V: 1/4HP (FLA 5.8A)
    - Motor @ 277V: 1/3HP (FLA 3.0A)
  - **IP Rating:** IP20
  - **Network Connections:** BLE 4.2, BLE 5.0
- **Environmental:**
  - Operating Temperature:

    - Storage Temperature:
- **Physical Dimensions:** 4.13 x 2.12 x 1.86 (104.90mm x 53.95mm x 47.25mm)
- **Other:**
    - **Energy Codes:** Can be used to comply with ASHRAE 90.1, IECC and 2022 Title 24, Part 6 occupancy/vacancy sensing, dimming, and manual-ON/auto-OFF requirements
    - **Listings:** IECC, UL, and cUL listed; JIS Z 2801:2000
    - **Certifications:** FCC, ICC
    - **Warranty:** Limited five-year warranty

Product Usage Instructions

Installation

To install the ODDMT-MDx Smart Multi-Tech 0-10V Dimming Wallbox Sensor, follow these steps:

1. Turn off the power supply to the wall box.
2. Remove the front face cover of the sensor.
3. Connect the electrical wiring according to the provided wiring diagram.
4. Attach the sensor to the wall box using the provided screws.
5. Replace the front face cover.

Sensor Configuration

The ODDMT-MDx sensor can be configured using the following methods:

Program by Pressing the Button

To program the sensor using the button, follow these steps:

1. Ensure the power supply to the sensor is turned on.
2. Press and hold the button for 5 seconds until the LED indicator starts flashing.
3. Release the button and wait for the LED indicator to stop flashing.
4. The sensor is now ready for configuration.

Pushbutton Hold Configuration

The sensor can also be configured using the pushbutton hold configuration method. Refer to the user manual for detailed instructions on this method.

Sensor Operation

The ODDMT-MDx sensor operates based on motion detection and provides various modes of operation. The sensor has minor motion and major motion zones with different sensitivity levels.

Sensitivity Settings

The sensor sensitivity can be adjusted to suit the specific requirements of the space. Refer to the sensitivity table in the user manual for the recommended settings.

Auto-ON/Auto-OFF Mode

In Auto-ON/Auto-OFF mode, the sensor automatically turns the lights ON when motion is detected and turns them OFF when no motion is detected for a certain period.

Manual-ON/Auto-OFF Mode

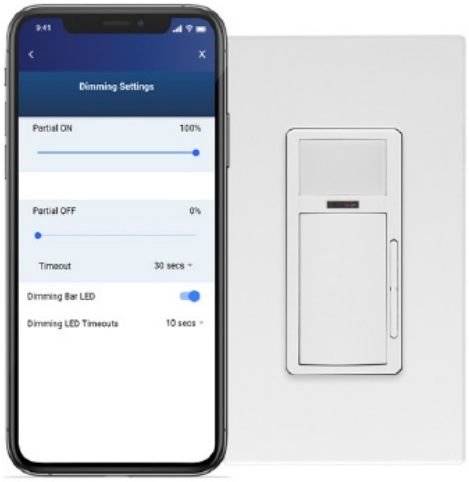
In Manual-ON/Auto-OFF mode, the sensor requires manual activation to turn the lights ON. Once activated, it will automatically turn the lights OFF when no motion is detected for a certain period.

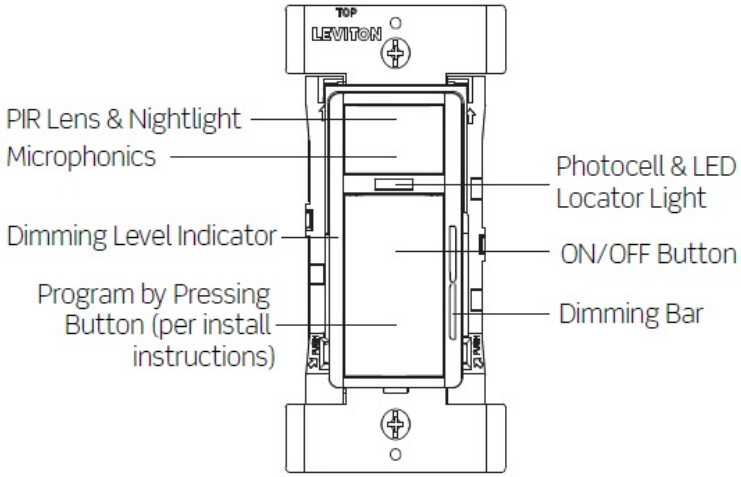
Troubleshooting
If you encounter any issues with the ODDMT-MDx sensor, please refer to the troubleshooting section in the user manual for possible solutions.

FAQ

- **Q: What is the operating temperature range of the ODDMT-MDx sensor?**
  The operating temperature range of the ODDMT-MDx sensor is [insert operating temperature range].
- **Q: Can the ODDMT-MDx sensor be used to comply with energy codes?**
  Yes, the ODDMT-MDx sensor can be used to comply with ASHRAE 90.1, IECC, and 2022 Title 24, Part 6 occupancy/vacancy sensing, dimming, and manual-ON/auto-OFF requirements.
- **Q: What is the warranty period for the ODDMT-MDx sensor?**
  The ODDMT-MDx sensor comes with a limited five-year warranty.

Overview





Description

The Leviton Smart Dimming Wallbox Sensor (ODDMT-MDx) is designed for use with 0-10V ballasts and uses Passive Infrared (PIR) detection and Microphonics technology to monitor a room for occupancy. The PIR sensor uses a specialized segmented and tamper-resistant lens that divides the field of view into sensor zones. When a person passes in or out of a sensor zone the sensor detects motion and switches the lights ON. The lights will remain ON as long as an occupant moves through the sensor zones and will turn off when the space becomes vacant and after the timeout expires. The ODDMT also utilizes Microphonic technology that “listens” for human activity in space and will keep the lights ON when motion is detected. Microphonics does not require a direct line of sight and can pick up human activity behind obstructions that PIR-only devices are unable to detect. The ODDMT features a vacancy mode for manual-ON/auto-OFF operation, ideal for installations where manual-ON switching is required for energy code applications. Lighting levels can be adjusted using the dimming bar next to the switch.

A “minor motion” zone detects small body movements. This detection allows the lights to remain ON when individuals in the space are more stationary. The “major motion” zone exhibits a lesser degree of sensitivity requiring larger movements.

Configuration of the ODDMT is made using the Leviton Smart Sensor App from a smartphone or other

Bluetooth®-enabled Android or iOS device. Simple configuration can also be applied using pushbutton setup for several popular preconfigured options. The ODDMT integrates a photocell for daylighting hold-OFF which can be programmed using the Leviton Smart Sensor App.

Applications

- Office
- Small Lobbies
- Meeting Rooms
- Bathrooms/Restrooms
- Conference Rooms

Features

- Can be used to comply with ASHRAE 90.1, IECC, and 2022 Title 24, Part 6 occupancy/vacancy sensing, dimming, and manual-ON/auto-OFF requirements
- Fits in a standard wall box and is changeable with other units
- Controls LED lighting loads up to 8A
- One relay module for single-level switching
- 180° field-of-view provides approximately 1,100 square feet of coverage
- Latest PIR technology accurately detects minor motion up to 400 sq ft and major motion up to 1,100 sq ft
- Maximum sensing distance in front of the sensor is 30-40 feet and 15-20 feet on either side
- Microphonics technology can detect minor human activity and does not require direct line-of-sight
- Integrated photocell for daylighting hold-off
- Tamper-resistant PIR lens
- Use the Leviton Push to Pair (P2P) process to create a multi-way system for up to 5 devices
- Antimicrobial-treated faceplate and wallplate available
- Advanced configuration can be performed using the Leviton
- **Smart Sensor App on any Bluetooth-enabled Android or iOS device:**
    - Set operating mode to Occupancy (Auto-ON/Auto-OFF) or Vacancy (manual-ON/auto-OFF)
    - Adjust sensitivity and timeouts
    - Set up partial-ON and partial-OFF levels and partial-OFF timeouts
    - Enable the integrated photocell for daylighting hold-OFF and select target daylighting hold-OFF levels
    - Create custom templates for easy multi-room replication of sensor settings
    - Activate the nightlight and select the nightlight color
    - Set a security code to lock configuration settings
- **Out-of-the-box configuration default mode:**
    - Auto-ON/Auto-OFF with 20-minute time out
    - Sensitivity set to 75%
    - Nightlight and daylighting disabled

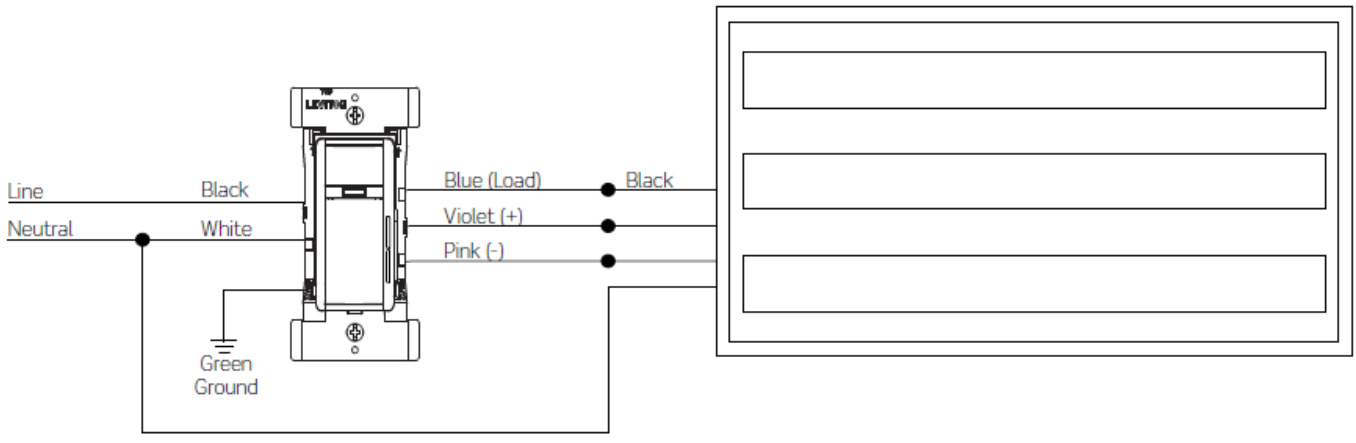
Convenient pushbutton hold configuration for installers without a smart device*:

Pushbutton Hold Configuration				
Button (#)	**Operating Mode**	**PIR Sensitivity (%)**	**Microphonics Sensitivity (%)**	**Time Out (mins)**
1	Auto-ON/ Auto-OFF	75	75	20
2				10
3			OFF	20
4			50	
5		100	75	
6			100	
7	Manual-ON/ Auto-OFF	75	75	
8				10
9			OFF	20
10			50	
11		100	75	
12			100	

Requires removal of front face cover

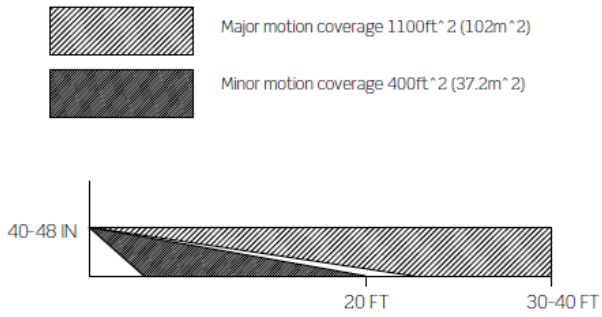
Wiring Diagrams

Wiring Diagrams—ODDMT-MDW



Field of View Diagram

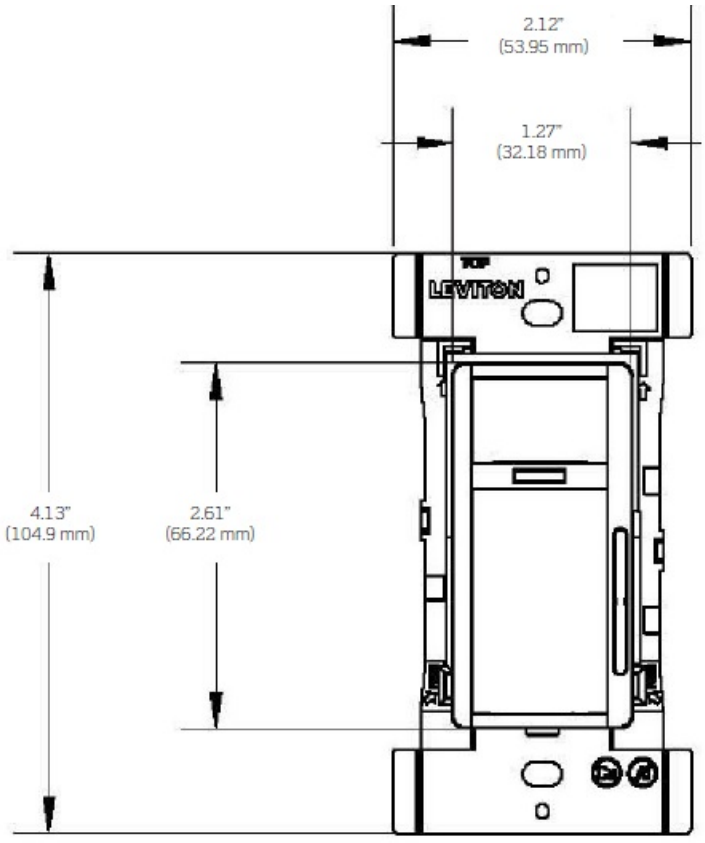
Horizontal Beam Diagram



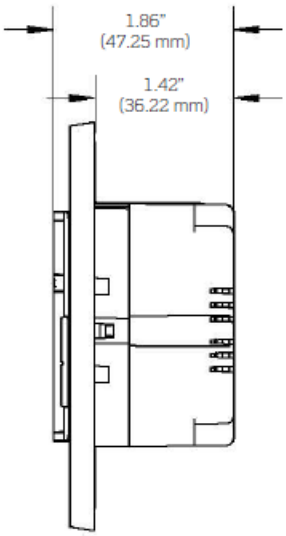
Vertical Beam Diagram

Dimensions Diagram

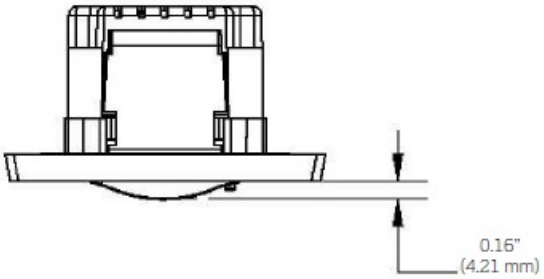
Front View



Side View



Top View



Specifications

Electrical	
Input Voltage/Frequency	120-277VAC, 50/60Hz
Input Current	
120V	Standby: 0.2W; Max: 0.5W+Load Current
277V	Standby: 0.3W; Max: 0.6W+Load Current
Load Ratings	
General Purpose @ 120V	10A
General Purpose @ 277V	10A
LED/Electronic Ballast @ 120V	8A
LED/Electronic Ballast @ 277V	5A
Standard Ballast @ 120V	10A
Standard Ballast @ 277V	
Tungsten @ 120V	6.67A
Tungsten@ 277V	
Motor @ 120V	1/4HP (FLA 5.8A)
Motor @ 277V	1/3HP (FLA 3.0A)
IP Rating	IP20
Network Connections	BLE 4.2, BLE 5.0
Environmental	
Operating Temperature	32 to 104°F (0 to 40°C)
Storage Temperature	-40 to 185°F (-40 to 85°C)
Physical	
Dimensions	4.13” x 2.12” x 1.86” (104.90mm x 53.95mm x 47.25mm)
Other	
Energy Codes	Can be used to comply with ASHRAE 90.1, IECC, and 2022 Title 24, Part 6 occupancy/vacancy sensing, dimming, and manual-ON/auto-OFF requirements
Listings	IECC, UL, and cUL listed; JIS Z 2801:2000
Certifications	FCC, ICC
Warranty	Limited five-year warranty

Ordering Information

Smart Wallbox Sensors	
Cat. No.	**Description**
ODDMT-MDW	Smart Multi-Tech 0-10V Dimming Wallbox Sensor, App configurable; Auto-ON/Auto-OFF or manual-ON/auto-OFF, neutral wire required, 120/208/220/230/240/277VAC, 50/60 Hz; White
ODDMT-MDI	Smart Multi-Tech 0-10V Dimming Wallbox Sensor, App configurable; Auto-ON/Auto-OFF or manual-ON/auto-OFF, neutral wire required, 120/208/220/230/240/277VAC, 50/60 Hz; Ivory
ODDKT-00E	Smart Dimming Wallbox Sensor Color Change Kit, Black
ODDKT-00R	Smart Dimming Wallbox Sensor Color Change Kit, Red
ODDKT-00G	Smart Dimming Wallbox Sensor Color Change Kit, Gray
ODDKT-00I	Smart Dimming Wallbox Sensor Color Change Kit, Ivory
ODDKT-00T	Smart Dimming Wallbox Sensor Color Change Kit, Light Almond
ODDKT-00W	Smart Dimming Wallbox Sensor Color Change Kit, White

Note: The Wallplate is sold separately.

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Visit our Website at: www.leviton.com/smartsensors

Documents / Resources

	LEVITON ODDMT-MDx Smart Multi Tech 0-10V Dimming Wallbox Sensor [pdf] Owner's Manual ODDMT-MDx Smart Multi Tech 0-10V Dimming Wallbox Sensor, ODDMT-MDx, Smart Multi Tech 0-10V Dimming Wallbox Sensor, Multi Tech 0-10V Dimming Wallbox Sensor, Tech 0-10V Dimming Wallbox Sensor, Dimming Wallbox Sensor, Wallbox Sensor, Sensor

References

- Smart Sensor: Occupancy, Vacancy, Dimming, Light Integrated
- User Manual