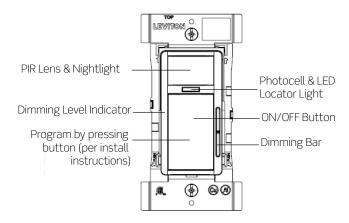


# Smart PIR 24V Dimming Wallbox Sensor





#### **Description**

The Leviton Smart 24V Dimming Wallbox Sensor (ODD24-IDW) is designed for use with an OPP20 or OSA20 Power Pack or other Leviton (24V) low voltage sources. The sensor uses Passive Infrared (PIR) detection technology to monitor a room for occupancy using a segmented, tamper resistant lens. A specialized lens 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 long as an occupant moves through the sensor zones and after the timeout expires. The ODD24-IDW 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 ODD24-IDW 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 common pre- configured options. The ODD24-IDW integrates a photocell for daylighting hold-OFF which can be programmed using the Leviton Smart Sensor App.

#### **Applications**

- Office
- Small Lobbies
- Meeting 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 wallbox and gangable with other units
- Use the Leviton Push to Pair (P2P) process to create a multiway system for up to 5 devices
- ODD24-IDW is designed for use with a power pack (OPP20 or OSA20) or other Leviton low voltage (24V) source
- 180° field-of-view provides approximately 1,100 square feet of coverage
- Maximum sensing distance in front of the sensor is 30-40 feet and 15-20 feet on either side
- Latest PIR technology accurately detects minor motion up to 400sq ft and major motion up to 1,100 sq ft
- Integrated photocell for daylighting hold-OFF
- Add a Power Pack and Controlled Receptacles for plug load control
- Available models with antimicrobial treated plastic helps keep the device clean
- 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
  - Activate the nightlight and select nightlight colors
  - Set a security code to lock configuration settings
- Out-of-the-box configuration default mode:
  - Auto-ON/Auto-OFF with 10-minute timeout
  - Sensitivity set to 75%
  - Nightlight and daylighting disabled

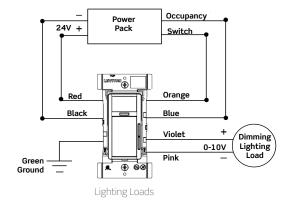
### Features (continued)

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

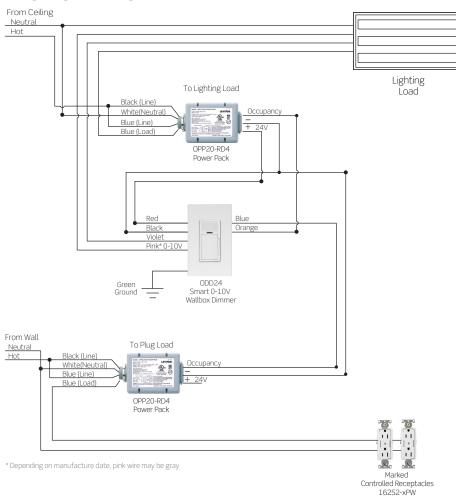
Pushbutton Hold Configuration			
Button (#)	Operating Mode	Sensitivity (%)	Time Out (mins)
1	Auto-ON/ Auto-OFF	75	10
2			20
3		100	10
4			20
5	Manual-ON/ Auto-OFF	75	10
6			20
7		100	10
8			20

<sup>\*</sup>Requires removal of front face cover

# **Wiring Diagrams**



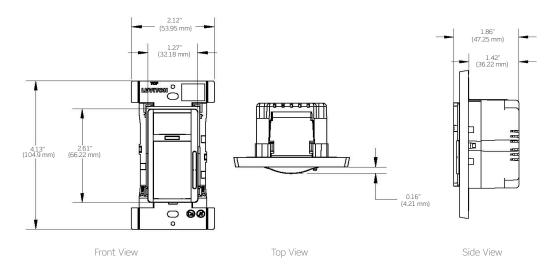
# Wiring Diagram—Plug Load Control



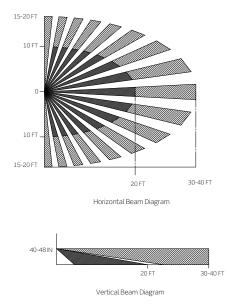
Lighting and Plug Load Controls



## **Dimensions Diagram**



## Field of View Diagram







### **Specifications**

Electrical		
Input Voltage/Frequency	12-24VDC/AC	
Input Current		
24V	0.02A	
120-277	N/A	
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	
001-ODD24-IDW	Smart PIR 24V Dimming Wallbox Sensor, Antimicrobial, 12-24V input Sensor, App configurable; White	
011-ODD24-IDW	Smart PIR 24V Dimming Wallbox Sensor, 12-24V input Sensor, App configurable; White	
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: Wallplate sold separately. For Antimicrobial, order 80401-2AW, 1-Gang Decora Wallplate.

### Leviton Manufacturing Co., Inc. Lighting & Controls

20497 SW Teton Avenue, Tualatin, OR 97062 tel 800-736-6682 tech line (6:00AM-4:00PM PT Mon-Fri) 800-959-6004

#### Leviton Manufacturing Co., Inc. Global Headquarters

201 North Service Road, Melville, NY 11747-3138 tel 800-323-8920 tech line (8:00AM-10:00PM ET Mon-Fri, 9:00AM-7:00PM ET Sat, 9:00AM-5:00PM ET Sun 800-824-3005