

ODCOP-D0W Low Voltage 0-10V Dimming Photocell



Description

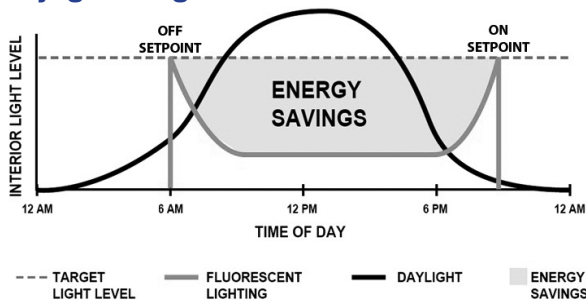
The Leviton ODCOP-D0W is an interior low voltage photocell capable of continually dimming between 0-10VDC based on the amount of natural light contribution. It is a low-power, high-sensitivity mini-daylight harvesting system for precise monitoring of either task or ambient light levels. The ODCOP-D0W's digital onboard microprocessor adjusts light levels by mimicking the spectral response of the human eye for single zone dimming. The ODCOP-D0W uses patented Daylighting Design Level (DDL) technology for precise load dimming that maintains desired light level.

Ideal for existing retrofits and daylight harvesting applications, the ODCOP-D0W can be used with 0-10V sinking loads types and is a cost-effective solution when paired with dimming drivers/ballasts.

Operation

The ODCOP-D0W must be hard wired to a compatible Leviton 24VDC power supply to provide the photocell with power. The ODCOP-D0W measures ambient light in a space and dims fixtures to a targeted lighting level in that specific area. Connection to optional power pack provides true ON/OFF switching.

Daylight Design Levels



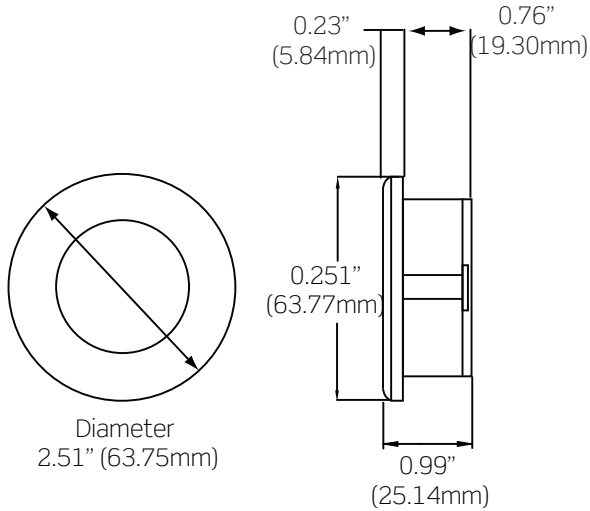
Features

- Dimmed lighting at a desired daylight design level offers greater energy savings and comfort and improved energy efficiency
- Leviton-exclusive, patented Auto-Calibration™ eliminates the need for configuring labor costs during daylight harvesting configuration
- Industry-exclusive fail-safe circuitry: in the event of product failure, return-to-closed feature causes the relay to default to ON which eliminates life safety concerns
- Fade rate time setting 3-30 minutes
- Controls 0-10V sinking ballast
- No additional power supply required for 0-10V sinking operation
- Dim to OFF—over DDL for 30 seconds then lights OFF
- Test Mode—30 second fade rate for 15 minutes then auto exit
- Provides ultra-convenient, hands-free lighting control
- Measures light from any source in the visible spectrum within a 60° cone at 8-12' mounting height
- Provides continual measurements to control the lighting
- Mounts on ceiling—surface mount or low-profile flush mount

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
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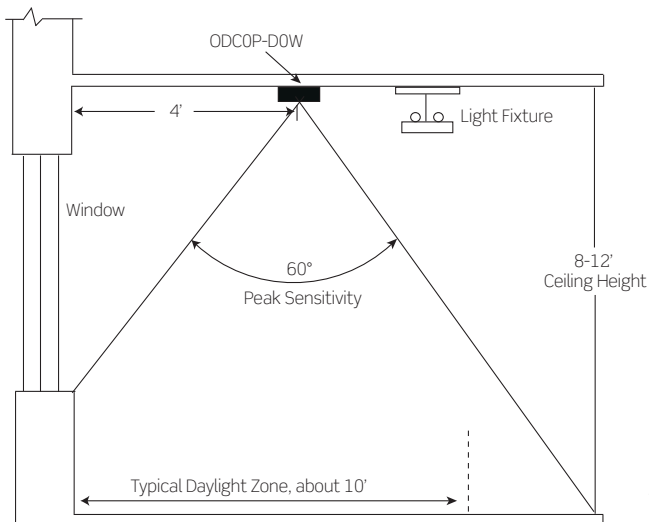
Dimensions



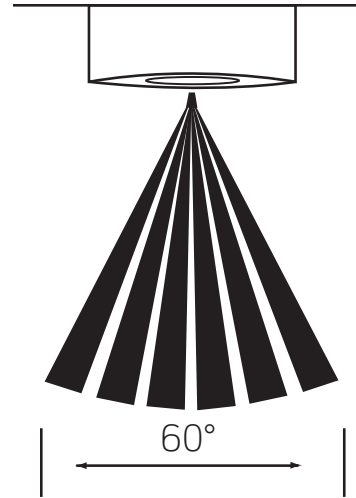
Installation - Low Voltage Class 2 Wiring

- Connects directly to an OPP20 Series Power Pack (OPP20-RD3 or OPP20-RD4) and 0-10V dimming ballasts
- May be installed directly above workspace
- Use with standard Class 2 wiring

Low Voltage Photocell Placement Closed Loop Application



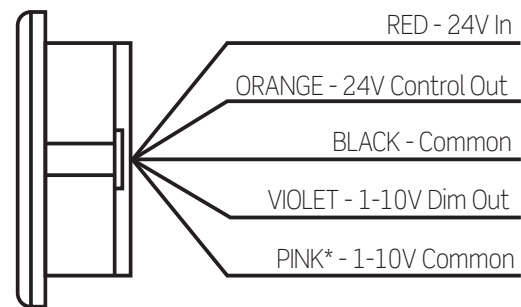
Field-Of-View



Operation

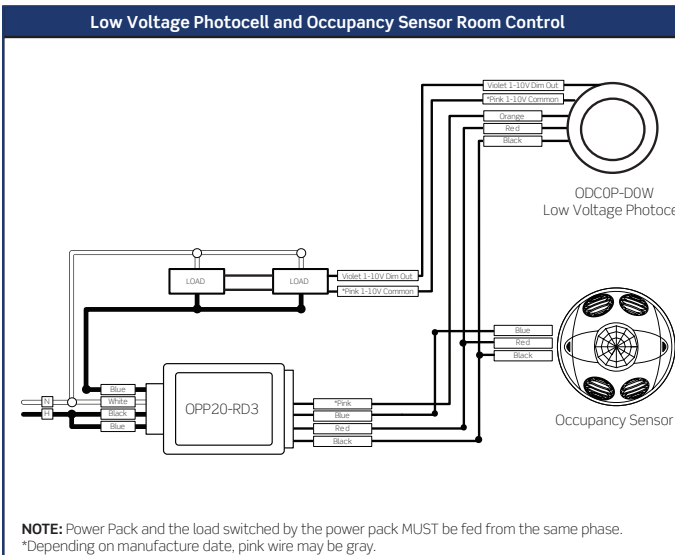
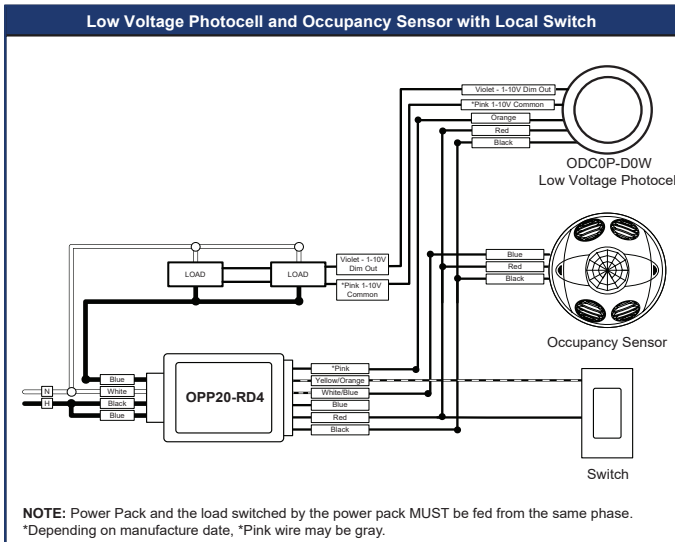
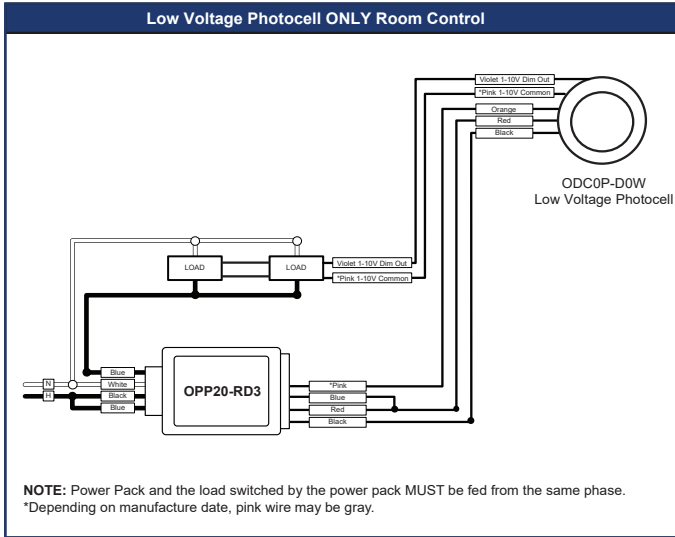
- Measured light level < Target Level Action: Lights level increases
- Measured light level > Target Level Action: Lights level decreases
- Control output state (Orange wire):
 - Photocell not calibrated, factory default state: lights ON, output is 0V
 - Photocell calibrated, light needed state: lights ON, output is 0V
 - Photocell calibrated, light NOT needed state: lights OFF, output is 12-24V

Wiring Diagram



*Depending on manufacture date, pink wire may be gray

Wiring Diagrams



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Specifications

Electrical	
Input Voltage	12-24VDC
Input Current	10mA
Output Current, Dimming Output	0.5-20mA
Operating Power Consumption	1W
Standby Power Consumption	<1/2W
Light Sensitivity	1-1,600 FC (10-16,000 LUX)
Output Voltage, Switching Output	Switched: 12 to 24VDC Dimming: 1-10V sinking
Physical	
Diameter	2.51" (63.5mm)
Depth	0.99" (25.2mm)
Color	White
Environmental	
Operating Temperature Range	32 to 131°F (0 to 55°C)
Storage Temperature Range	14 to 185°F (-10 to 85°C)
Relative Humidity	20-90% non-condensing
Other	
Energy Codes	Can be used to comply with IECC, ASHRAE 90.1 and Title 24, Part 6 0-10V dimming and daylight harvesting requirements and NYC LL48
Listings	UL 916 listed, FCC certified
Warranty	Limited 5-Year

Ordering Information

Low Voltage Photocell	
Cat. No.	Description
ODCOP-D0W	Low Voltage Photocell, 0-10VDC

Leviton Manufacturing Co., Inc. Lighting & Controls

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