

Integrated Scene Control With Daylighting Overrides

Easy solutions for energy savings
and code compliance



Leviton Dimming Photocell and Dimensions® D4000 A COMPLETE, SIMPLIFIED SOLUTION FOR DAYLIGHTING

Create a simple daylighting system using a Dimensions® D4000 lighting controller, a power extender and a dimming photocell, which creates a cost-effective and easy to install solution. The dimming photocell ensures that electric lighting does not exceed preset limits when sufficient ambient light is present. By dimming the lights based on occupancy and natural daylight in the space, this solution allows facilities to meet code and standard requirements including ASHRAE Standard 90.1 2010 and California Title 24 2013.



PROBLEM

Commercial facility with Dimensions D4000 system requires a simplified dimming lighting control solution with zone and scene control benefits that will meet code and standard requirements.

- Solution must provide dimming of lighting loads when ambient daylight is present in the space for energy savings
- Solution must meet ASHRAE Standard 90.1 2010 and California Title 24 2013 requirements for daylighting
- Facility already contains a Dimensions system for architectural lighting control
- Facility contains LED or other lighting loads

SOLUTION

Combine a dimming photocell with a Dimensions D4000 lighting controller and a power extender for a quick, effective and compliant daylighting solution.

- Dimming photocell monitors the area for ambient lighting and adjusts electric lighting to maintain lighting levels—the daylighting target set by the photocell is the maximum for the zone, overriding the D4000 scene control setting, if necessary
- Solution meets ASHRAE 90.1 and Title 24 requirements for daylighting control
- Dimming photocell works with new or existing D4000 controllers
- Dimming photocell provides a low-cost solution with significantly less installation requirements than more complicated centralized or distributed lighting control systems
- Dimming photocell and D4000 are LED ready for 0-10V LED or other lighting loads

Leviton Manufacturing Co., Inc. Lighting & Energy Solutions

20497 SW Teton Avenue, Tualatin, OR 97062 1-800-736-6682 Tech Line: 1-800-959-6004 Fax: 503-404-5594 www.leviton.com/les
© 2015 Leviton Manufacturing Co., Inc. All rights reserved. Subject to change without notice.

Dimming Photocell and D4000 Lighting Controller Daylighting Solution



Configuration and Programming Notes:

- Connect the dimming photocell to the AUX input of the D4000
- Connect the lighting loads and/or power extenders to the D4000
- Set the dimming threshold at the photocell
- Program scenes including “daylighting” and “normal” at the D4000 controller
- Configure scheduler, load types and other standard configuration options at the D4000 controller
- Configure the D4000 AUX/Occ Input for the active state to trigger the “daylighting” scene



D4000 Controller:

- Recommend the D4104, D4106, D4206 or D4200 controller depending on desired configuration and load control type. Refer to data sheet for additional information

WHAT YOU WILL NEED

Switching Photocell and D4000 Lighting Controller Daylighting Solution

	Dimensions D4000 Controller D4xxx <ul style="list-style-type: none"> • Scene-based architectural lighting controller NOTE: Refer to data sheet for configuration and load type information	1
	Low Voltage 0-10V Dimming Photocell ODC0P-D0W <ul style="list-style-type: none"> • Communicates with D4000 Controller to maintain the daylighting target as the maximum level in zone 	1
	Power Extender PE300-D0W <ul style="list-style-type: none"> • Recommended for certain configurations and loads—see data sheet NOTE: Required when load type is 1-10V controlled load. D4000 controls 120V 2-wire loads only. Other power extenders are available, refer to the data sheet for more information.	1

Disclaimer: This document is for informational purposes only. Each project will have its own specific requirements for satisfying ASHRAE 90.1 and Title 24 code compliance based on a variety of factors. Other exceptions or details may apply. Review the code for specific requirements and/or consult with a professional advisor. Leviton Mfg. Co., Inc. is not responsible for any loss resulting from the use of any information found in this document. Solutions are subject to change without notice. For additional assistance, contact your local Leviton representative.

Leviton Manufacturing Co., Inc. Lighting & Energy Solutions

20497 SW Teton Avenue, Tualatin, OR 97062 • Tel: 1-800-736-6682 • FAX: 503-404-5594 • Tech Line (6:00AM-4:00PM P.S.T. Mon-Fri): 1-800-959-6004

Leviton Manufacturing Co., Inc. Global Headquarters

201 N. Service Rd. Melville, NY 11747-3138 • Tech Line: 1-800-824-3005 • Fax: 1-800-832-9538

Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 • Telephone: 1-800-469-7890 • FAX: 1-800-563-1853

Leviton S. de R.L. de C.V.

Lago Tana 43, Mexico DF, Mexico CP 11290 • Tel. (+52) 55-5082-1040 • FAX: (+52) 5386-1797 • www.leviton.com.mx

Visit our Website at: www.leviton.com