Overview

Sigma Luminous's lighting controllers use wireless technology to monitor the room’s environment. The SL-ERDRC-FD controller can activate lighting loads with received input from a linked sensor or switch. As a lighting controller, it operates lights based on:

- Ambient light levels monitored by a wireless photo sensor
- Occupancy state monitored by a wireless occupancy sensor
- Switch action from a wireless wall switch
- Gateway control implementing scheduled events

The controller will fade lights up or down using the dimming output for a switched event. The controller can also be configured to fade lights based on an occupancy sensor ON or OFF event. With auto detection on the low voltage dimming interface, the controller can adjust between switching only to dimming automatically. A photo-inhibit feature disables Auto-ON when the natural light level measured by the light sensor is above set point.

When only occupancy sensors are linked to the controller, the sensor will automate the lights both ON and OFF. Alternately, in Vacancy Sensor mode the controller will assume manual-ON, auto-OFF operation.

The SL-ERDRC-FD offers central command support to integrate with Building Management Systems gateways.

The controller is Range Confirmation® compatible, working with all Sigma sensors equipped with the Range Confirmation® feature to provide visual feedback of a linked sensors signal strength for optimal sensor placement.

Sigma Luminous offers pre-linking and pre-commissioning on all products sold as a system through Sigma. In addition to this service, Sigma provides several methods of configuring and verifying controller operation once installed on-site:

1. Use the linked sensors and Simple Tap™ to make quick changes to individual controllers.
2. Use Smart Click® to access more configuration parameters using a linked switch.
3. To access the full menu of configuration parameters, Sigma's software is a PC based tool that includes hands-free commissioning.

Features

- Lighting circuit control with dimming ballast control output (closed loop dimming option available)
- Integrated day-light harvesting control with Photo Inhibit mode
- Occupancy based lighting controls with auto-ON/OFF or manual ON, auto-OFF using wireless occupancy sensors
- Automatically detects dimming loads for easy adaption between switching and dimming functions
- Listens for battery-free wall switches, photo sensors and occupancy sensors
- Range Confirmation® allows optimal placement of linked sensors - (Sigma sensors with Range Confirmation® feature only)
- Central Command support for BMS gateway control
- Easy installation on electrical junction boxes with 1/2” mounting nipple
- Easy commissioning options available such as embedded Smart Click® and Simple Tap™ plus availability to work with our remote commission package
- Doubles as a telegram repeater
- CEC - Title 24 Compliant

Ordering Information

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<tr>
<th>Description</th>
<th>902 MHz Model</th>
<th>902 MHz PN</th>
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<tr>
<td>Dimming Controller - 120/277 VAC</td>
<td>SL-ERDRC-FDU 120/277</td>
<td>8189A1111-X-1</td>
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<tr>
<td>Dimming Controller - 120/347 VAC</td>
<td>SL-ERDRC-FDU 120/347</td>
<td>8189A1112-X-1</td>
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For more information please visit www.sigmaluminous.com | 36800 Plymouth Rd. | Livonia, MI 48150 | 866.755.3563
Dimming Controller - F Series
SL-ERDRC-FD

Wiring Diagram

High Voltage
Red

Brown 277V OR

Yellow 347V

Black 120V

White Neutral

Load

Red

Low Voltage

SL-ERDRC-FD

Violet

Grey

0-10V+

Dimming Ballast

Dimensional Diagram

91.35 mm (3.5")

49.40 (1.9")

48.00 (1.9")

Block Diagram

Equipment Profiles - Remote Devices Supported

EEP: F6-02-02  Light and Blinds Control - US/Canada application
EEP: A5-06-02  Light Sensor [range 0 - 1024 lux (0 - 102 fc)]
EEP: A5-07-01  Occupancy Sensor
EEP: A5-38-08  Central Command - switching, dimming, set point

Hardware Specifications

Power Supply  120/277 or 120/347 VAC, 60 Hz
Power Consumption  5.0 W max. full load
Input  LEARN and CLEAR buttons for sensor assignment
Outputs  N.O. Relay rating 20A@120 or 277 VAC, 15A@347VAC; Dimming Output 0-10 VDC @ 25mA maximum

Communications

Radio Frequency  902 MHz
Antenna  Whip
Transmission Range  24 m (80 ft) - commercial office spaces (typical), up to 100m (330 ft) line of sight

Mechanical Specifications

Operating Temperature  -10 °C to 45 °C (14 °F to 113 °F) ambient
Relative Humidity  5% to 95% RH (non-condensing)
Weight  385 g (13.5 oz)
Dimensions  91 x 48 x 49 mm (3.5 x 1.9 x 1.9")
Mounting  ½ " nipple

Listings

CEC  Title 24 Compliant
Safety

ETL Recognized Component Conforms to UL Standard 508 Certified to CAN/CSA Std. C22.2 No.14 UL 2043 Plenum rated

Radio Frequency (902 MHz)

FCC  Part 15.231 -Remote Control Transmitter IC
RSS-210