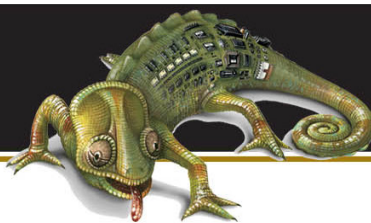




gentec



kameleon™
ADAPTABILITY IN LIGHTING CONTROL

ERDRC-FD
Dimming Controller - F Series

Overview

Gentec's lighting controllers use wireless technology to monitor the room's environment. The 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 an 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 ERDRC-FD offers central command support to integrate with Building Management Systems gateways.

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

There are 3 ways to configure the controller which allows installers and facility operators to manage configuration settings without any tools, reducing call-backs and installation expense.

Simple Tap uses the switches and sensors that are linked to the controller to set the associated configuration parameters.

The ERDRC-FD controllers have Gentec's Smart Click Technology which allow configuration changes to be made with a linked wireless switch. Gentec also offers Garibaldi software which allows configuration of the controllers from a PC.



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 (patent pending) allows optimal placement of linked sensors, (Gentec wireless sensors with range confirmation feature only)
- Central Command support for BMS gateway control
- Easy installation on electrical junction boxes with ½ in mounting nipple
- Easy commissioning options available such as embedded Smart Click and Simple Tap plus availability to work with Garibaldi, our remote commission package
- Doubles as a telegram repeater

Listing and Compliance

CEC Title 24 compliant

Safety

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

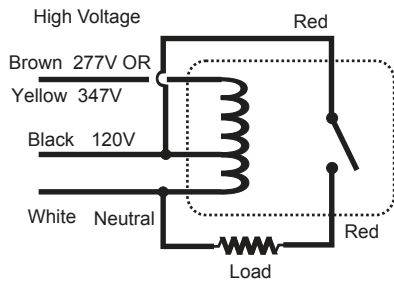


Radio Frequency (902 MHz)

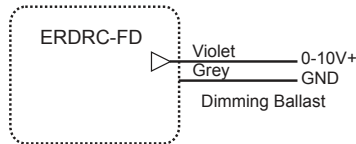
FCC Part 15.231- Remote Control Transmitter
IC RSS-210



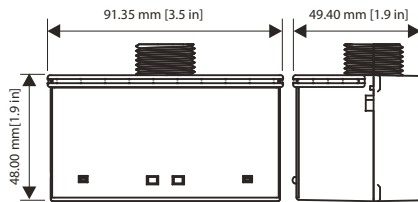
Wiring Diagram



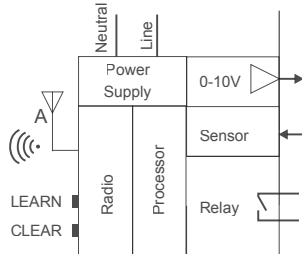
Low Voltage



Dimensional Diagram



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 20 A at 120 or 277 VAC, 15 A at 347 VAC; Dimming Output 0-10 VDC at 25 mA maximum

Communications

Radio Frequency	902 MHz
Antenna	Whip
Transmission Range	24 m (80 ft) - commercial office spaces (typical), up to 100 m (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 in)
Mounting	½ in nipple

Ordering Information

Description	902 MHz Model	Gentec Part Number
Dimming Controller – 120/277 VAC	ERDRC-FDU 120/277	29693
Dimming Controller –120/347 VAC	ERDRC-FDU 120/347	29694

Specifications are subject to change without notification. | Smart Click is a Echoflex Solutions patented technology, Simple Tap is a trademark of Echoflex Solutions, Inc. | Range Confirmation Technology – Patent pending