

LOAD CONTROLLER MODULE - F SERIES FOR RECEPTACLES AND WALL BOXES

ERM-FL

Overview

The Load Controller is a versatile control device that can be used in a large number of applications. As a lighting controller, it provides: ON/OFF lighting, timed switch lighting, daylight harvesting, photo inhibit, occupancy based or vacancy based lighting control.

Other vertical market applications include: process control and hospitality applications.

The controller activates electrical loads with received input from a linked sensor or switch transmitting:

- ambient light levels monitored by an wireless photo sensor
- occupancy state monitored by a wireless occupancy sensor
- switch action from a wireless single or dual paddle wall switch
- switch action from a wireless key card switch
- switch action from a wireless door/window (reed) switch
- gateway control implementing schedules or other events

The controller can be used in distributed process applications to eliminate troublesome wiring runs using linked wireless electrical switches. A low voltage or line voltage event can be transmitted to the load controller triggering the 15 amp relay output connected to any electrical load.

The load controller fits equally as well into hospitality applications. Responding to linked key card switches that monitor suite occupancy, control can be added to lighting or other electrical circuits to disable the loads when the suite is vacant. The controller can also be used to enable and disable air-conditioning equipment based on the occupancy state and/or patio door position.

Other features include telegram repeating and BEMS system integration allowing the controller to be used both in distributed control applications or as a component of a centralized system.

The controller supports radio range confirmation, a feature that allows installers to test signal strength for optimal sensor placement and system integrity. This feature is supported with the Echoflex Resonate and 21-series of sensors.

Echoflex offers three methods of configuring the controller:

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



Features

- Use for controlling lighting or HVAC circuits or any miscellaneous electrical load
- Occupancy based lighting controls with auto- ON/OFF or manual ON, auto-OFF using wireless occupancy sensors
- Daylight harvesting and photo-inhibit modes
- Monitors linked battery-free wall, key card and proximity (reed) switches, photo sensors and occupancy sensors
- Range Confirmation (patent pending) allows optimal placement of linked sensors - (Resonate and 21 series sensors only)
- Central Command support for BEMS gateway control
- Supports commissioning via Smart Click, Simple Tap or Garibaldi (remote management) software
- Assign up to 20 battery-free wireless wall switches or sensors to one controller
- Reliable radio reception range of 24 m (80 ft) in most common indoor applications
- Low-cost alternative to running wires and conduit - ideal for retrofit projects
- Doubles as a telegram repeater
- Available in 868 and 902 MHz frequencies
- CEC - Title 24 Compliant

Ordering Information

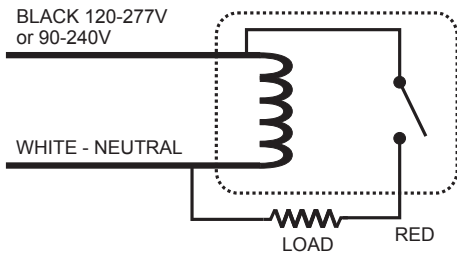
Model	Description	Part # - 868 MHz	Part # - 902 MHz
ERM-FL*-277	Load Controller Module 120 - 277 VAC	001-5656 * = Y	001-7656 * = U

90-240V version available by special order - contact us for details

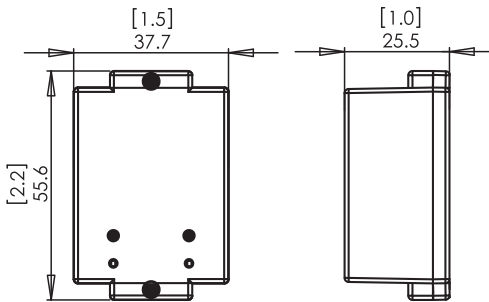


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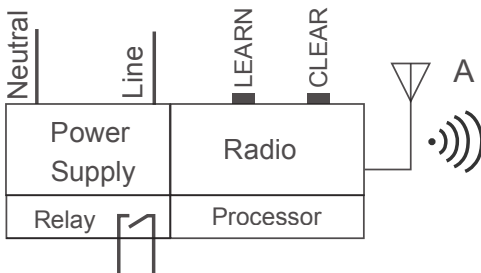
Wiring Diagram



Dimensional Diagram



Block Diagram



Equipment Profiles - remote devices supported

EEP: F6-02-02	Light and Blinds Control
EEP: A5-06-02	Light Sensor [range 0 - 1024 lux]
EEP: A5-07-01	Occupancy Sensor
EEP: F6-04-01	Key Card Activated Switch
EEP: A5-30-02	Single Input Contact (doors and windows)
EEP: A5-38-08	Central Command, switching (0x01), setpoint (0x03)
EEP: A5-10-0A/0B	Room Operating Panel
EEP: D5-00-01	1BS Contact and Switches

Hardware Specifications

Power Supply

Power Consumption	2.5 W max. full load
Outputs	N.O. Relay rating 15A@ 120 - 277 VAC 2 x LEDs, Learn (green) and Power(red)

Maximum Load Ratings	
Incandescent/Tungsten	1800W @ 120VAC 4000W @ 277VAC
General Purpose & Florescent Ballast	15A @ 120-277VAC

Communications

Radio Frequency	902 MHz and 868 MHz
Antenna	Integrated whip
Transmission Range	24 m (80 ft) commercial office space (typical)
Inputs	LEARN and CLEAR buttons for sensor assignment

Mechanical Specifications

Operating Temperature (120-270V)	-10 °C to 45 °C (14 °F to 113 °F) ambient
Operating Temperature(24VAC/DC)	-10 °C to 45 °C (14 °F to 113 °F) ambient
Relative Humidity	5% to 95% RH (non-condensing)
Weight	60 g (2.2 oz)
Dimensions	56 x 38 x 26 mm (2.2 x 1.5 x 1.0")

Listings

CEC Title 24 Compliant
 Safety (90-240 and 120-277V)
 ETL Listed Component
 Conforms to UL Standard 508
 Certified to CAN/CSA Std. C22.2 No.14

Radio Frequency (902 MHz only)
 FCC Part 15.231 - Remote Control Transmitter
 IC RSS-210



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 Range Confirmation Technology - Patent pending
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