Overview

The Load Controller Module 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.

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

- ambient light levels monitored by a 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 is Range Confirmation® compatible, working with all Echoflex sensors equipped with the Range Confirmation® feature to provide visual feedback of a linked sensors signal strength for optimal sensor placement.

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

- 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, Echoflex's Garibaldi software is a PC based tool that includes hands-free commissioning.



Features

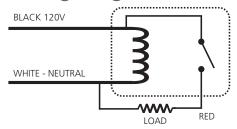
- Use for controlling lighting or HVAC circuits or any miscellaneous electrical load
- Occupancy based lighting controls with auto- ON/ OFF or manual ON, auto-OFF using wireless occupancy sensors
- Daylight harvesting and photo-inhibit modes
- Monitors linked battery-free wall, key card and proximity (reed) switches, photo sensors and occupancy sensors
- Range Confirmation® allows optimal placement of linked sensors (Echoflex sensors with Range Confirmation® feature 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) commercial office spaces (typical), up to 100m (330 ft) line of sight
- 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

Description	902 MHz Model	902 MHz PN	868 MHz Model	868 MHz PN
Load Controller Module 120 VAC	ERM-FLU	8189A1117-X-1	ERM-FLY	8189A1315-X-1



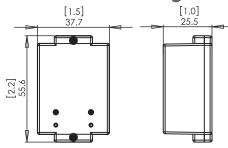
Wiring Diagram



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), set point (0x03)
EEP: A5-10-0A/0B	Room Operating Panel
EEP: D5-00-01	1BS Contact and Switches

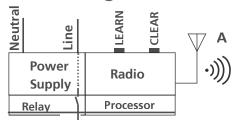
Dimensional Diagram



Hardware Specifications

Power Supply	120 VAC	
Power Consumption	2.5 W max. full load	
Outputs	N.O. Relay rating 15A@ 120 VAC 2 x LEDs, Learn (green) and Power(red)	
Inputs	LEARN and CLEAR buttons for sensor assignment	
Maximum Load Ratings		
Incandescent/Tungsten	1800W @ 120 VAC	
General Purpose & Fluorescent Ballast	15A @ 120 VAC	

Block Diagram



Communications

Radio Frequency	902 MHz and 868 MHz
Antenna	Whip
	24 m (80 ft) - commercial office spaces(typical), up to 100m (330 ft) line of sight

Mechanical Specifications

Operating Temperature	-10 °C to 40 °C (14 °F to 104 °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")

Agency Listing & Compliance

CEC Title 24 Compliant Safety

ETL Listed Component Conforms to UL Standard 508

Certified to CAN/CSA Std. C22.2 No.14



FCC Part 15.231 - Remote Control Transmitter

IC RSS-210



Specifications are subject to change without notification | Range Confirmation is an Echoflex Solutions, Inc. patented technology | Simple Tap is a trademark of Echoflex Solutions, Inc.

