The Innovative Controls Inc. Electrical Load Manager is used to monitor a vehicle's battery system and control electrical circuits to meet the requirements detailed in NFPA-1901. All settings and status readings are made from the front panel of the control module.

Electrical loads will turn on sequentially in priority order from 1 to 8 when their respective logic switch, either ignition or master warning, is activated and the vehicle is operating in the selected mode, either response and/or scene. Loads sequence off in reverse order. Priority zero loads sequence on and off but will never shed.

The shed point is the voltage that will cause a load to be turned off. If the system voltage drops to or below this setpoint, the load will be shed. The un-shed point is the voltage that must be achieved before a load is turned back on.

Electrical loads will be turned off when the system voltage drops to the shed point for a minimum of 1 minute. The delay prevents load shedding due to momentary system power loading such as high current transient. Once shed, loads will remain off for a minimum of 5 minutes and until the un-shed voltage is achieved for a minimum of 1 minute. Loads will only shed if the Parking Brake is set and the Load Manage Enable input is active.

**FEATURES**

- NFPA-1901 Compliant Main Battery Monitoring
- Auxiliary Battery Monitoring - Accurate to +/- 0.5%
- Electrical Load Shedding and Sequencing
- 12 Programmable Load Outputs and 4 Alarm Outputs
- Low Main Battery Voltage Auxiliary Battery Alarms
- Fast Idle and Variable User Trip Output Functions
- Master Warning, Load Manager Enable, and Park Brake Inputs
- Polarity-Selectable Load Outputs and Control Inputs
- Selectable Load Output Priority, Scene or Response Mode, Ignition or Warning Switch Logic
- Easy-to-Read 0.56” High Digital Display
- Manual Override Switch for Troubleshooting
- -40°C to +105°C (-40°F to +220°F) AEC-Q100 Level 2 Operating Temperature
- All Outputs Protected from Over-Current, Reverse Polarity, Over-Temperature, and Transients
- All Outputs Rated for 1A Continuous Duty
- No Configuration Jumpers – All Parameters are Adjustable from the Front Panel
- Lockable Front Panel User Interface
- Default Configuration Restorable from the Front Panel
- Remote Cab Display
- J1939 CAN Bus, RS-485, and USB Comm. Options
- 12VDC or 24VDC Operation

**RELIABILITY AND PERFORMANCE DELIVERED IN A SMART DESIGN**

The Innovative Controls Inc. Electrical Load Manager is used to monitor a vehicle’s battery system and control electrical circuits to meet the requirements detailed in NFPA-1901. All settings and status readings are made from the front panel of the control module.
Operating Voltage: 7 to 32 VDC

Power Consumption with No Loads:
- 120 mA at 13.8 VDC
- 100 mA at 27.6 VDC

Operating Temperature Range: -40°C to +105°C (-40°F to +220°F)
Storage Temperature Range: -40°C to +105°C (-40°F to +220°F)

Ingress Protection: IP64

Electrical Protection:
- Reverse voltage polarity protection on all connections
- Internal thermal fuses
- CAN Bus and RS485 ports protected to 24V
- ESD protected to J1113-13 specifications
- Transient voltage protected to J1113-11 and J1113-42
- Load and alarm output circuits are protected from reverse polarity, over-current, over-voltage, and voltage transients
- Input circuits are protected from reverse polarity, over-current, over-voltage, and voltage transients

Load Output Current Max.:
- Low side polarity 1A
- High side polarity 1A

Dimensions: 8.125” wide x 4.875” high x 0.875” deep

Weight: 860 grams (1.9 pounds)