
Specifications

Features

- Very low power consumption
- Protection against load short-circuit & overload
- Reliable -100% solid state
- No radio interference
- Encapsulated in epoxy potting
- 5 year warranty
- Manufactured with solar power
- Designed and built in North America

Model L15C

Electrical Specifications

Voltage configurations 10V to 50V avail.

Max. input voltage 40 volts

Max. current (at 50 °C) 15 amps DC

Power Consumption

Standby - 0.2 mA, ON - 2.3 mA

16 gauge wire leads

Adjustable set points: 11.2 to 12.4V Off, On approx. 1 volt above Off setpoint.

60 seconds at or beyond setpoint

(other voltage setpoints and time delays available.)

General Specifications

Temperature range: -40° to +50°C (-40° to +160°F)

Case: ABS, sealed in epoxy

Weight: 100 grams, 3.5 oz.

Size (H x W x D): 5.1 x 5.1 x 3.8 cm (2 x 2 x 1.5 ")

Mounting: wall mountable

Features & Options

Built in load snubbing diode

Factory Options: Custom wire length, voltage setpoints and time delays.

Battery Mart
Phone: 800-405-2121

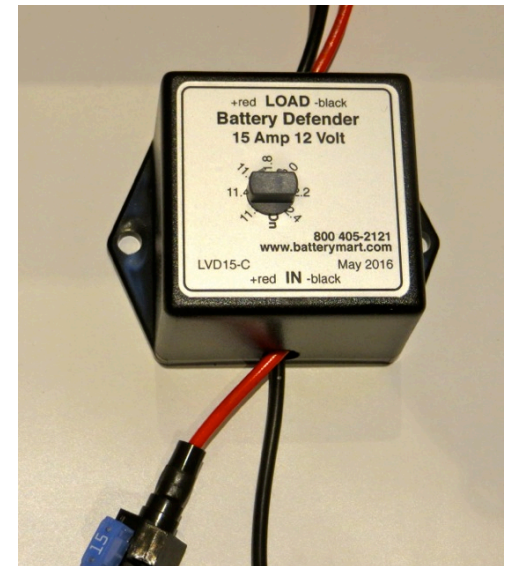
www.batterymart.com

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Installation Guide

Battery Defender L15C

15 Amp Battery Discharge Protection



Battery Mart

Load Control 15 Amp L15C

Normal Operation

The voltage switch protects your batteries from being excessively discharged. The input voltage is constantly monitored with an extremely efficient low power draw design.

When first connected if the input voltage is above the OFF setpoint the load will turn on. If the load is at or below the load setpoint the load will stay off.

When the input voltage is at or 1 volt above the OFF setpoint for 60 seconds the load will turn on.

When the input voltage is at or below the OFF setpoint for 60 seconds the load is turned off to protect the battery from being discharged excessively.

If the switch is turned to the ON position the load will stay on regardless of the input voltage.

Use a 15 Amp Fuse

Wiring

- WARNING -

DO NOT REVERSE INPUT POLARITY
Reverse input polarity may damage the control

#16 AWG or larger wire must be used. The positive wires are Red. The negative wires are Black (both black wires are connected together inside the control). A relay can be installed directly on the output wires to increase the current or voltage capabilities.

Installation

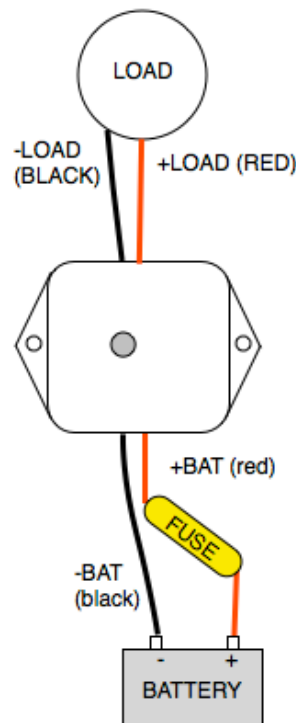
Location

The controller needs to be in a cool location in order to function properly. It should not be in direct sunlight, or mounted in a hot location. The controller should be installed near the batteries, to ensure an accurate battery voltage measurement. The distance from the batteries or input power to the controller should not exceed 40 feet.

- WARNING -

DO NOT EXCEED A LOAD OF 15 AMPS
A Load > 15 Amps can damage the control

Wiring Diagram
Load Control



Operation

- WARNING -

MOTORS & COILS PRODUCE VOLTAGE SPIKES
A large voltage spike will damage the control

A motor, pump or other inductive load on the battery input to the control will briefly turn into a generator when turning off. This will cause a large negative voltage spike. A diode, or voltage snubber is required on the motor, pump or relay to prevent large voltage spikes into the control.

Fault Conditions

Loads such as DC motors, and incandescent lights can have large starting currents as much as 10 times the running current. A high current may trigger the overcurrent protection and turn off the load.

After an over current fault the output will remain off until reset.

To reset the control after a short circuit or overload, to turn off power to the input.

The load will also be turned off when the control is too hot, however it will automatically turn back on when cooled sufficiently.