SR

Pro Sensing Module

New Level, Programmable Voltage Sensing Module (PS) - Electrically isotated, non-polarised and bi-directional, completely solid state.

Operation

The PS is a programmable voltage sensing module in terms of voltage and time delay parameters. It allows the user to choose the voltage they want for switching loads on and off rather than be restricted to settings dictated by manufacturers. The time delay function allows the relay to activate only after a user specified time to prevent cyclic (threshold) switching.
In addition the PS is electrically isolated (contact to load), non-polarised and bi-directional.
Additionally the PS has the major benefit of being able to change from normally open or normally closed, all literally, at the touch of the buttons.

Features

- Completely solid state, no moving parts..
- Fully programmable interface for voltage and time delay,
- User configurable for normally open or closed switching.
- Bi-directional and no polarity conscious.
- Alarm output for remote monitoring of voltage condition.
- Electronics are enclosed in dust and water proof housing.
- Over temperature protection with automatic shutdown.
- Separate connection for emergency override or control.

Applications

The PS can be used for a myriad applications, including but not limited to:

- Combining of battery banks for charging and/or load sharing.
- Paralleling battery banks as emergency supplies.
- Switching loads at desired voltages both on and off.
- Protecting equipment from under-voltage supply.
- Isolating batteries at desired voltages both on and off.
- Safe and reliable remote switching of heavy loads.

Available models

PR-XX X
- S/N
- Current rating (Amps)/10
- Pro Sensitive Module(PR)

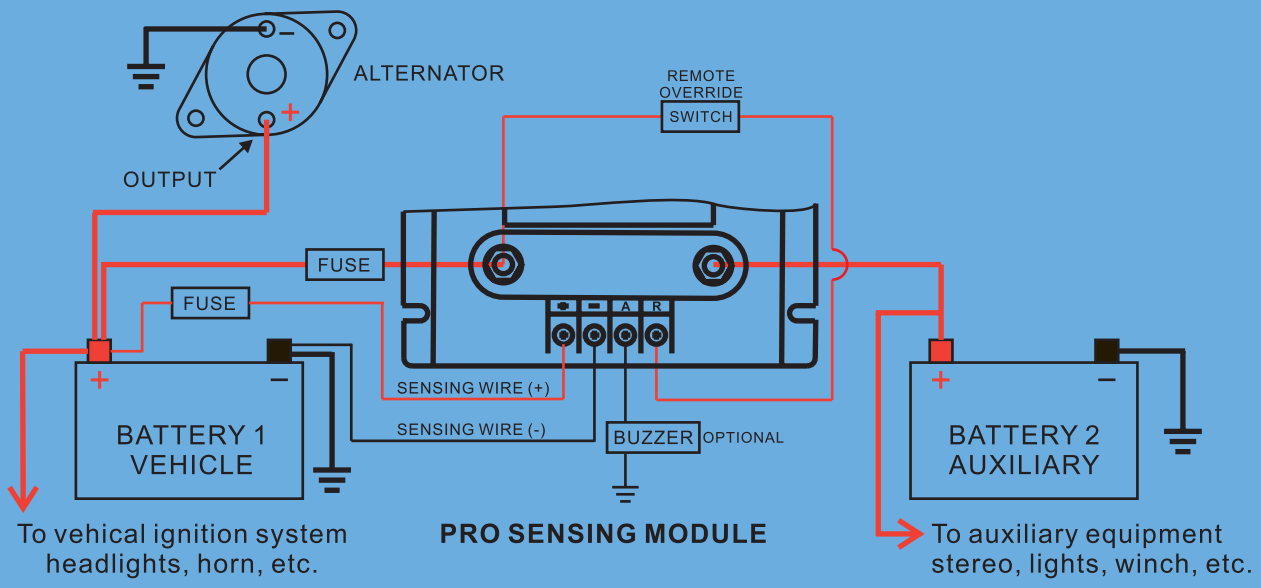
MODEL	AMPS	VOLTAGE	SENSE
PR-101	100	12/24V	single
PR-151	150	12/24V	single

Specifications

- *Topology:* solid state MOSFET switching circuit.
- *Control Voltage:* user adjustable in 0.1 Volt increments from 8.0 Volts to 32.0 Volts.
- *Time delay:* user adjustable in 1.0 second increments from 001 to 255 seconds.
- *Alarm Voltage:* user adjustable in 0.1 Volt increments from 8.0 Volts to 32.0 Volts.
- *Contact Type:* user selectable for normally open (N/O) or normally closed (N/C). The factory default is normally open.
- *Constant Rating:* 100/150 Amps DC continuous @ 25°C ambient temperature.
- *Momentary Rating:* 300/500 Amps DC @ 40°C for a period of 10 seconds @ 10% duty cycle.
- *Input Voltage:*
  -Sensing: 8.0VDC Min., 32VDC max.
  -Switching: 32VDC Max.
- *Alarm Output Signal:* equal to input voltage to 200mA max.
- *Power Consumption* (with LED display in active):
  -Standby (unswitched) current draw is typically 10mA @ 13.5VDC.
  -Active (switched) current draw is typically 55mA @ 13.5VDC.
- *Environmental Considerations*: Operating temperature range is -25°C to + 50°C. Humidity should not exceed 95 %.
- *Environmental Protection:* Electronics sealed for dust and water protection to IP65 rating (internal components only).

PRO SENSING MODULE

Typical installation



APPLICATION: 1 ALTERNATOR - 1 MAIN BATTERY (BANK) - 1 AUXILIARY BATTERY (BANK)

Specifications(continued)

- *User Interface:* for control and monitoring functions. It consists of a 3 digit LED display, 8 control (text) icons and 3 control buttons. The control icons are illuminated (flashing) when used in conjunction with the LED display and control buttons to adjust the desired parameters.
- *Control Connections:* There are 4 connections for control and monitoring functions.
  -Sense Terminals: used to monitor the voltage of the desired 12 VDC supply. They are polarity conscious.
  -Alarm Output: an external signal voltage for remote monitoring of the user selectable low or high voltage alarm feature.
  -Remote Override Input: used to override the user settings and manually activate the module by using an external switch remotely located.
- *Contact Connections:* for load switching. Completely isolated from contact (sense) connections and are bi-directional and uni-polarity (not polarity conscious).
- *Termination:*
  -Load Terminals: M6 threaded stud, tin plated brass, stainless steel hardware.
  -Control Terminals M4 threaded contacts, Nickel-plated brass, stainless steel hardware.
- *Construction:* Manufactured using corrosion resistant materials throughout.
  -Heat sink: anodized 6063-T5 Aluminum.
  -Housing and Cover: PBT injection molded plastics.
  -Fasteners: stainless steel.
- *Dimensions:*
  -Profile: L135mmxW86mmxH67mm overall (including terminal cover)
  -Mounting holes: dia5.0mm, 126mmx52mm
- *Weight:* 0.6Kgs.

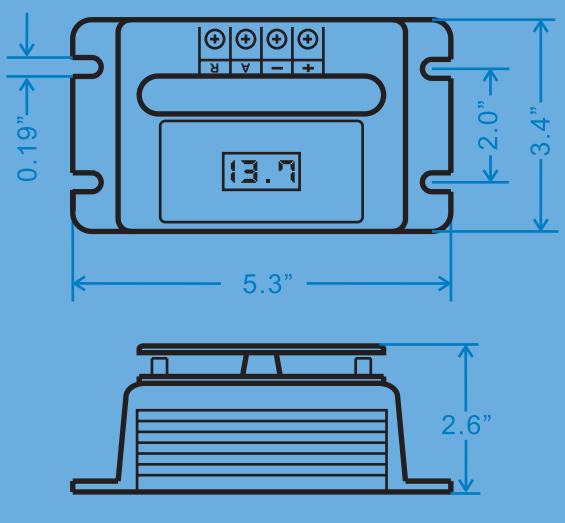
Safety Function

- Thermal shutdown protection with automatic reset for over temperature.
- Low voltage shutdown protection with auto reset @ 8.0VDC

Primary Applications

- Battery combiner for charging
- Low voltage disconnect
- Assist engine start
- Automatic load switching
- Conventional heavy duty relay

Dimensions



Note: mounting hardwares included.