Onstate™ Technologies

Bulb Controller

Description

The Bulb Controller module is designed for controlling the brightness and extending the life of light bulbs. Its soft-start feature slowly increases the power to the bulb to reduce damages caused by initial surge currents to the bulb during start-up. Other features include battery monitoring and low voltage disconnect (LVD) to increase the operating life of rechargeable batteries.

Operation

The Bulb Controller soft-starts a light bulb to the set brightness level whenever the power is turned on. The circuit also monitors the battery voltage by flashing the LED power indicator once the battery goes below a preset voltage (level). The flashing rate will increase as the battery voltage decreases. The bulb will completely shut off once the battery goes below a preset voltage. Simply turn the power switch off and on again to reset the circuit.

Wiring

Simply connect the positive (+ Red) wire in series to the power switch (light switch output positive) and the negative (- Black) to the battery ground on the input wires of the Bulb Controller. Connect the positive power wire to the positive side of the bulb and the negative output of the circuit to the negative of the bulb ground on the output wires of the Bulb Controller.

Features

- Flashing LED voltage level indicator.
- Easy-to-use.
- Compact and small size.
- Adjustable low voltage disconnect level.
- Adjustable low battery flashing points.
- Soft start.
- Variable brightness, full on and off.

Benefits

- Extends battery life.
- Prevents over-current starting surges.
- Increases bulb life.

Applications

- Searchlights.
- Headlights.

Technical Specifications

Operating voltage:	10V-17V
Low flashing voltage:	11.8V (adjustable)
Low shut off voltage:	10.8V (adjustable)
Low voltage reset:	~13V
MOSFET current:	5A max.
Current drain:	7mA
Operating temperature:	-30°C to +65°C
Initial power stay on delay:	~ 10 seconds
Voltage drop surge delay:	~ 5 seconds

Note: Reset voltage is linked to the shut off voltage.

Housing dimension:
72mm x 50mm X 21mm
(2.8" x 2" x 0.8")

Available Model

OTSI-BC01　　Bulb Controller, LVD, soft start, variable brightness, 12VDC.