Icstation Digital Low Voltage Protector Switch

Over Discharge Protection Module

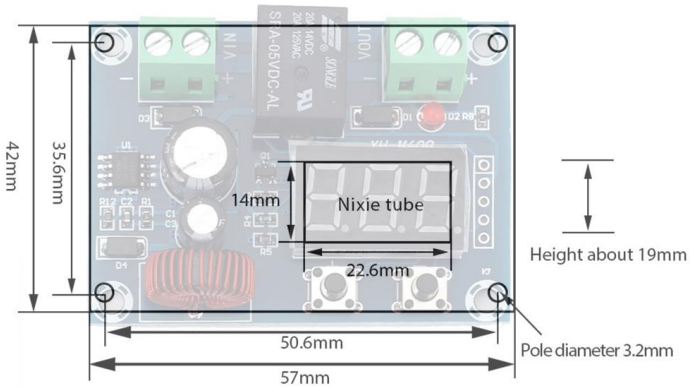
1. Parameters

Parameter	Value
Product name	Battery over discharge protection module
ASIN	B07929Y5SZ
Power supply voltage	The 12 V- 36 V battery
Output voltage	Equal to power supply voltage
Control precision	0.1 V
Power consumption	Less than 1.5 W
Net weight	28 g
Size	57 * 42 * 19 mm

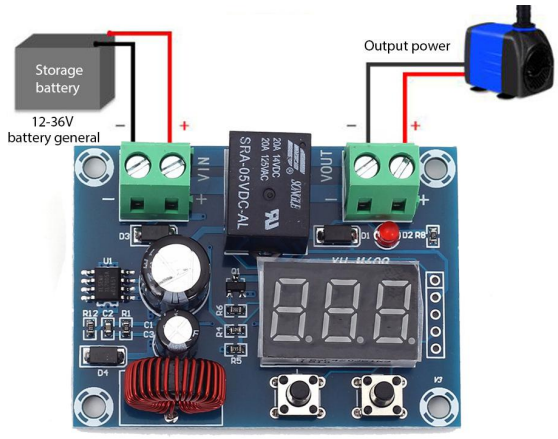
2. Features

- ✓ For DC12-36V lead acid battery and lithium ion battery.
- ✓ Programmable disconnect voltage and reconnect voltage.
- ✓ 3 Digit red LED displays the parameters.
- ✓ When the battery voltage reaches the set disconnect voltage, the module will disconnect load automatically to avoid the battery from over discharging to prolong the battery lifetime.
- ✓ Support delay 0-10 minutes to reconnect.
- ✓ Save the setting when power off suddenly.

3. Size



4. Wiring Diagram



5. Instruction

1. Double press the "+" button, and then use the "+" or "-" button to set the **disconnect voltage**

2. Double press the "-" button, and then use the "+" or "-" button to set the **difference value***. The load will reconnect when the battery voltage reaches the "disconnect volt+difference value".

3. Long press the "+" button, and then use the "+" or "-" button to **calibrate** the displayed input voltage

4. Long press the "-" button, and set the **delay value T**. That is, when the battery voltage reaches the reconnect value, it will delay T minutes, the load reconnects. The delay T range from 000 to 010 minutes. It displays like 000, 001, 005, 010(no decimal point)

5. Press the "+" button to view the current disconnect value

6. Press the "-" button to view the current difference value

***What is the "difference value"?**

The value between the disconnect voltage and the reconnect voltage. That is to say, difference value = reconnect voltage - disconnect voltage

For example

1. *How to set if I want it to stop outputting when the voltage is lower than 11V and start when the voltage is over 11.6V?*

Double press "+" and set the value as 11. The LED starts flashing. After the flashing stops, double press "-" and set the difference value as 0.6V.

2. How to set if I want it to stop outputting when the battery voltage is lower than 12.5V and when it is over 14.8V, it starts outputting after 2 minutes?

Double press "+" button to set it as 12.5 and then double press "-" button to set the difference value as 2.3 (because 14.8V-12.5=2.3V). And then press and hold on the "-" button, set T=2.

Why it doesn't has output when I first connect it?

For example, if the disconnect volt is 9V and the difference value is 5V, then:

1. When first connected, if the battery is lower than 9V, there will be no output;

2. When first connected, if the battery is higher than 9V but lower than 14V (9+5), there will be no output;

3. When first connected, if the battery is higher than 14V(the reconnect voltage), there will be an output;

4. During use, the module will be disconnected when the voltage drops to 9V, and will be automatically reconnected when the battery is charged to 14V.