

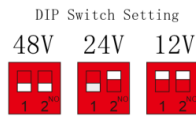
DC Voltage Detector Operation Manual

Mode #: DCBTC



This Sigineer Power's DC Voltage Detector is designed with 3 relays which will close or open at preset battery voltage to trigger the operation of Inverter Charger RLCD, 60/62.5hz inverter frequency switch and AC circuit breaker with remote control.

All the 3 relays are rated at 2 amps and operate within designed amp/voltage.



On the top cover, there are three buttons: "Set""Up"and "Down".

On the side, there is a 2-pin DIP switch, the nominal battery voltage is set through DIP switches , 0,0 for 12v / 1,0 for 24v / 1,1 for 48v.

Press up and down button to enter a setting, then long press "SET" button to enter edit mode, then press up and down to adjust the valune.

The voltage setting comes in increments of 0.1Vdc. When the setting is changed, it takes 10 seconds to refresh to voltage page to take effect.

Detector Setting	Relay Status	Connection	12V	24V	48V
1 Low Battery Cutoff	Relay A gets from Close to Open	Dry Contact on RLCD	6-17v	13-34V	26-68V
2 Low Battery Recovery	Relay A gets from Open to Close		7-18V	14-35V	28-70v
3 Frequency Switch	Relay B gets from Open to Close	60/62.5hz Dry Contact on inverter	7-18V	14-35V	28-70V
4 Frequency Recovery	Relay B gets from Close to Open		6-17V	13-34V	26-68V
5 AC Charger Cutoff	Relay C gets from Close to Open	Remote Control of AC Input Breaker	7-18V	14-35V	28-70V
6 AC Charger Recovery	Relay C gets from Open to Close		6-17V	13-34V	26-68V

7 Screen Timeout	10 to 60 mins, 99 represents constant on
8 Audio Alarm	99 represents constant on, 00 presents off

Relay	Wire Color	Statue	Function
A	Blue+Green	Constantly Close	Connects to dry contact at Inverter Remote LCD, gets open at preset voltage to power off inverter.
B	Yellow+Orange	Constantly Open	Connects to 60/62.2hz frequency switch dry contact, get closed at preset voltage to change frequency to 62.5Hz.
C	Black+White	Constantly Close	Connects to circuit breaker remote control cables, opens at preset voltage to cut off AC input for charging.
C	Black+Red	Constantly Open	Reserved for DIY users.

Note:

- 1: The low battery alarm is 0.5V higher than "1 Low Battery Cutoff" at 12Vdc, 1Vdc at 24Vdc and 2Vdc at 48Vdc. The high voltage alarm is 0.5V lower than "5 AC Charger Cutoff", at 12Vdc, 1Vdc at 24Vdc and 2Vdc at 48Vdc. The audio alarm is controlled by setting "1" and "5" only.
- 2: Setting 3 is lower than setting 5 in software. There is a locking between 1&2, 3&4, 5&6. Setting 2 is 1V lower than 1. Setting 3 is 1V higher than 4. Setting 5 is 1V higher than 6.
- 3: Low voltage alarm, beeps 0.5s at every 5 seconds; high voltage alarm, beeps 0.5s at every 2 seconds;
- 4: Setting 7(Screen Timeout) is for LED light time, resettable value from 10, 20, 30, 40, 50, 60 minutes to 99 which represent constantly light.
- 5: For relay C, there are three cables, white, black and red, the users can choose to two of them to flexibly control our circuit breaker.

Contact us at info@sigineer.com if you have further questions.

Wiring Diagram

