

Voltage Trip Unit User Manual



The Voltage Trip Unit (VTU) has been designed to monitor a power supply or battery system and to switch on or off when the voltage either goes too high or too low.

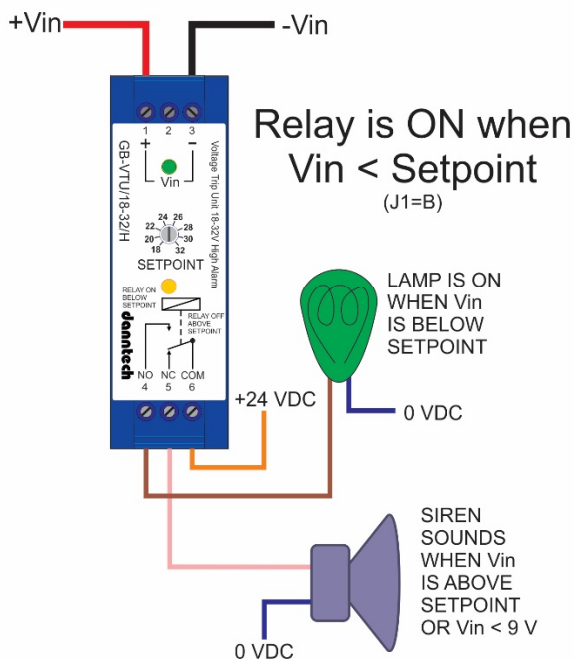
Typically, in a battery voltage monitoring application the VTU is configured as a Low Alarm and the relay is energized while the voltage is above the switching point. When the voltage falls below the switching or trip level the relay opens and then the contacts are wired to suit your alarm requirements.

In a high level monitoring application, say to avoid a supply voltage going too high and damaging equipment, the VTU is configured as a High Alarm and the relay is energized while the voltage is below the switching level.

An internal link is used to configure the VTU as either acting on a High or Low Alarm.

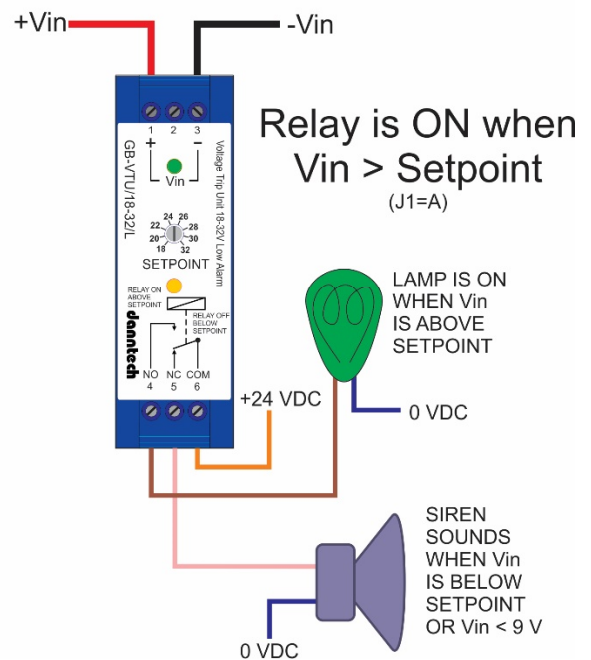
HIGH ALARM SWITCHING

(for failsafe monitoring when input voltage goes too HIGH)



LOW ALARM SWITCHING

(for failsafe monitoring when input voltage goes too LOW)



Specifications

- Input voltage monitoring from 10 to 36 VDC.
- Isolation 2000 V AC RMS –between input and relay contacts.
- Response time approximately 10 mS.
- Front panel trimpot adjustment of switch/trip level
- Voltage Input green LED indication.
- Input voltage range from 9 to 33 VDC
- Operating temperature -10°C to 60°C.
- Relay output 10 A at 250 VAC, 10 A at 28 VDC.
- Input current approximately 25 mA at 24 VDC.
- Internal link to switch between Low and High Alarm operation.
- Relay LED indicates that the relay is ON or energized.
- Screw terminal connections for wire diameter 2.5 mm².
- Dimensions 25 x 80 x 85 mm (W x H x D).

Opening the Unit



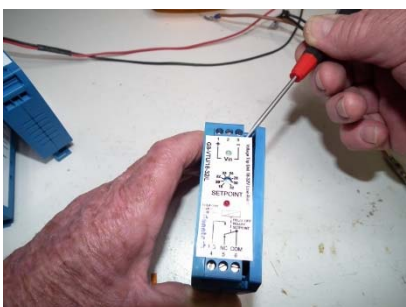
Use something sharp and flat such as a blade or knife carefully lift the label from the top right.



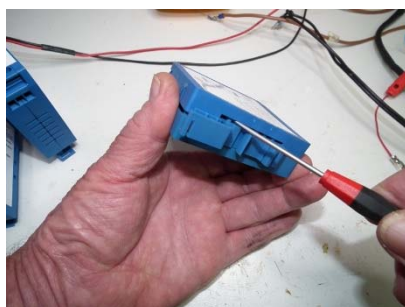
Carefully slide the blade down the label to unstick it from the right side cover. Be careful not to cut the label.



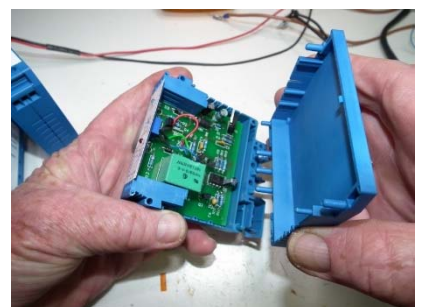
When the label is freed from the right cover use a screw driver to gently prise the right cover open.



Prise from the top as well in an even manner.

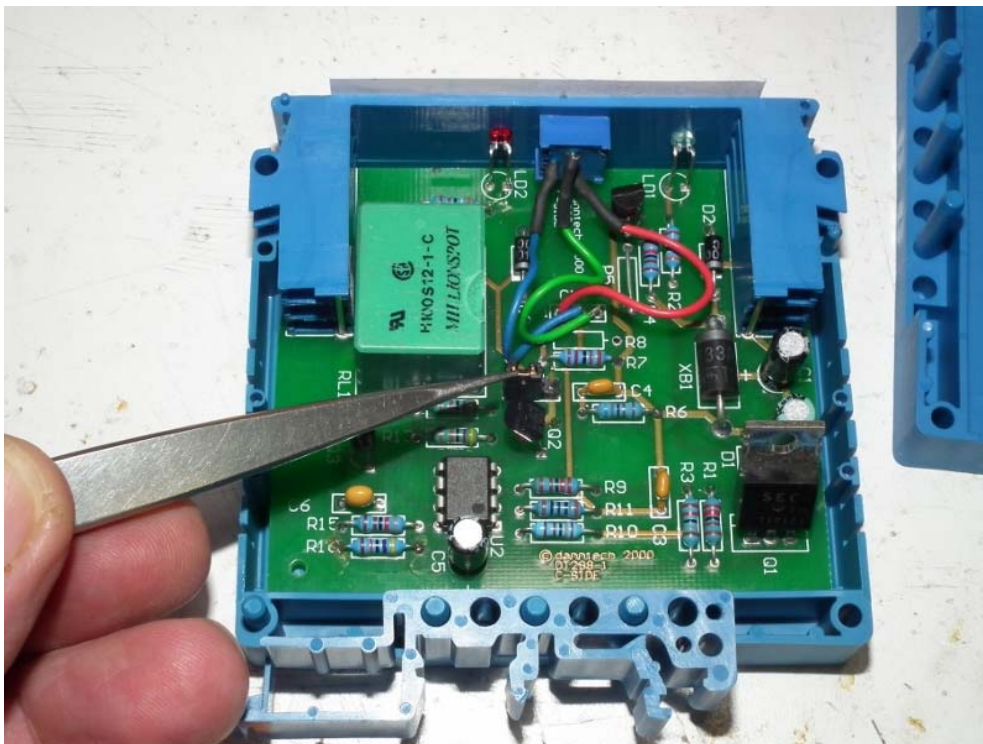


Prise from the rear as well in an even manner.



Finally, open the unit and take care not to damage the exposed part of the label.

Closing the unit by pressing back the right cover being careful not to catch the label between the parts and then press back the label onto the right cover when the unit is closed properly.



Low Alarm - Link = A
High Alarm - Link = B

J1=A, relay ON ABOVE setpoint (Low Alarm)
(Relay ON when $V_{in} > \text{Setpoint}$, Relay Opens/Off when $V_{in} < \text{setpoint}$ or power OFF)

J1=B, relay ON BELOW setpoint, (High Alarm)
(Relay ON when $V_{in} < \text{Setpoint}$, Relay Opens/Off when $V_{in} > \text{setpoint}$ or power OFF)

Part Numbering

GB-VTU/xx-yyV/t Voltage Trip Unit xxV – yyV High/Low Trip

xx - minimum voltage trip value

yy - maximum voltage trip value

t - H = high or L = low

High – switches on rising input voltage i.e. High Alarm

Low – switches on falling input voltage i.e. Low Alarm

To get the latest user manual please download from:

<http://danntech.com/user%20manuals/Voltage%20Trip%20Unit%20User%20Manual.pdf>



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