

# Battery Voltage Sensor Quick Guide

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## Battery Voltage Sensor (Model: RVSCC)

The Battery Voltage Sensor provides users with more accurate battery charging giving you peace of mind that the charge controller is operating as effectively as it should. On certain applications with long line runs, there can be a difference between the voltage measured at an MPPT/PWM solar charger's terminals and that measured at the battery terminals. The BVS is the perfect solution by providing a more accurate battery voltage to the controller and allowing it to adjust the charging stage more precisely resulting in overall extension of your battery life. Featuring a housing connector that easily connects to most of our Flagship MPPT and PWM charge controllers, the BVS Sensor is a simple yet effective plug and play solution for your system.



The RVSCC is shipped with a small green terminal block and 2 wires with ring terminals. It is compatible with charge controllers that have the battery voltage sensor port, usually marked with a "BATT" label as well as indicating the polarity of "+" or "- "

### Compatible Chargers

The following chargers are compatible with the RVSCC. They will either say BATT+/- or show a "Battery Sampling" text near the port, or say "BVS"

**Note: The list will expand as more as more products are introduced into the market.**

- Rover Elite 20A (Model: RCC20RVRE), Rover Elite 40A (Model: RCC40RVRE)
- Rover Li 60 (Model: RNG-CTRL-RVR60) , Rover Li 100 (Model: RNG-CTRL-RVR100)
- DCDC w/MPPT (Model: RBC50D1S-G1)



Battery Voltage Sensor Port on Rover Elite shows a "BATT" port

Battery Voltage Sensor Port on Rover Li shows a "Battery Sampling" port







Battery Voltage Sensor Port on DCDC w/ MPPT shows a "BVS" port



**Color Scheme**

The RVCSS will have one positive lead and one negative lead that corresponds to the battery positive and negative connections. The following indicates the polarity for the color scheme:

Positive (+)	Negative (-)
<p>Red</p> 	<p>Black</p> 
<p>Brown</p> 	<p>Blue</p> 

## Connecting RVSCC to Charger

**WARNING: Polarity is important when connecting the battery voltage sensor to the corresponding port**

1. Identify the Battery Voltage Sensor Port and verify the polarity through the silk print, the manual, and/or the specification sheet
2. Position the green terminal block so that the wire hatches are facing you. Loosen the terminal block screws on top by rotating counterclockwise on the green terminal block. Make sure that the wire hatch is completely open.



3. In this example we are connecting to the Left (positive, +) and Right (negative, -) convention if facing the terminal block like in the example above. Proceed to connect the positive pin from the RVSCC and rotate clockwise to clamp on the wire. Repeat for the negative connector.
4. Once finished, connect the Ring Terminals of the battery voltage sensor to the respective terminals on the battery.



5. Lastly, connect the green terminal block directly to the battery voltage sensor port.



6. Verify successful connection by making sure that the green connector is pressed firmly in the port or by using a multi-meter to read the respective battery terminals on the screws.