

# DC-DC Voltage Reducer Owners Manual

Part #'s Covered

EB-DC-48135-30

EB-DC-36135-30

#### **WARNING!**

- ·Always wear safety glasses when working with any type of battery
- •Do not short circuit the battery terminals
- •Do not connect the battery terminals with reverse polarity
- ·Make sure the battery pack voltage matches the input voltage of the converter.
- •Do not connect with reverse polarity.
- •Always protect the input and output leads with a fuse or circuit breaker.

#### Overview

The Eco Battery DC-DC voltage reducer is designed to output 13.5V nominal DC power from a 36V or 48V lithium (LiFePo4) battery pack input. It has low voltage input protection to stop output if the input battery reaches a critically low state of charge. The input has key-on sense to eliminate the need for an auxiliary relay.

#### Installation

### <u>Input Terminals</u>

- 1. Connect a fused 48V+ or 36V+ (depending on your particular model) positive cable to the positive input terminal of the converter. **Remove the input fuse until installation is complete.**
- 2. Connect a 48V- or 36V- (depending on your particular model) negative cable to the negative input terminal of the converter
- 3. (OPTIONAL) If you would like to have the converter power on/off with the key switch, remove the jumper that connects ACC and + on the input. Connect a keyed 48V or 36V positive cable to the ACC input terminal. The converter will now power on/off with the key. If you leave the jumper in place, the converter will be powered on all time.

#### **Output Terminals**

1. Connect fused 12V loads to the 13.5V output terminals, making sure not to reverse the polarity.

## **Troubleshooting**

If no output on the 13.5V terminals, the input battery may not have sufficient voltage to provide output. If input battery has sufficient voltage and still no output, check the input and output fuses. If input battery has sufficient voltage, and fuses are good, converter may be damaged.