EV Battery Charger Display
PN 7517

The EV Battery Charger Display provides two options to monitor your battery banks. When connected to a P12 Battery Charger it can display the charger’s Summary screen—displaying voltage, current, charging stage, and errors from the charger. When the charger is off or if no P12 charger is connected, the unit will display the voltage on up to 3 battery banks in an easy to read bar graph display.

Specifications
Display Size: 55mm x 28mm
Display Type: Yellow OLED
Input Voltage: 6 to 36 Volts DC, reverse polarity protected
Amperage Draw:
  Maximum: 50 mA
  Minimum: < 1 mA in Standby Mode
Standby Mode: The 7517 has the option of a power saving Standby Mode which turns the display off after 4 hours of being stationary. The 7517 will resume normal function upon movement of the vehicle or by tapping the unit several times in succession.
Accuracy: ± 1% at 36 Volts DC
Number of Inputs: 3 battery inputs with common reference.

Regulatory
Monitor face is IP66 – protected against powerful water jets when installed according to instructions.

Wiring and Installation

Please read and understand all instructions before beginning installation.
Note: Pins 1 (Battery 1+) and G (DC Negative) are the power source for the unit and must be connected.
1) Disconnect all AC and DC sources.
2) Carefully prepare cut out hole for unit installation.
   a. Check for pipes, wires, or other systems behind planned cutout area.
3) Set DIP Switches on back of unit for desired display setup. See page 2
4) If connecting to multiple banks, ensure all banks have a Common Ground.
5) Run appropriately sized wires (see Wire Size / Length Chart) from the Positive of each bank and the Common Ground to the 4 position terminal block plug (included), leaving the fuses out of lines 1, 2, and 3 for now.
6) Place gasket around unit.
7) Insert 4 position terminal block plug into unit. It is keyed and will only go one way.
8) If a P12 charger is installed, connect it to the EV Battery Charger Display using the Cat5e cable included.
9) Install unit into cutout.
   a. Do not overtighten screws.
10) Insert fuses into lines 2 and 3 first. Then insert fuse into line 1. All fuses must be appropriately sized for the wiring used.

Included Components

1. EV Battery Charger Display
2. Mounting Gasket
3. 25ft (7.8m) Cat5e Cable
4. Four Position Connector

Connector Pin Assignment

<table>
<thead>
<tr>
<th>4 Pin Connector*</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Required Connection</td>
<td>Battery 1+</td>
</tr>
<tr>
<td>2</td>
<td>Battery 2+</td>
</tr>
<tr>
<td>3</td>
<td>Battery 3+</td>
</tr>
<tr>
<td>G Required Connection</td>
<td>DC Negative</td>
</tr>
</tbody>
</table>

* The 4 Pin Connector supports wire sizes from 12-24 AWG
** All batteries must share a common ground

Wire Size / Length Chart

<table>
<thead>
<tr>
<th>Length of Run - One way (feet (meters))</th>
<th>Minimum Wire Gauge</th>
<th>Recommended Fuse Size (min-max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10ft (0 - 3m)</td>
<td>22 AWG</td>
<td>1A - 2A</td>
</tr>
<tr>
<td>11 - 20ft (3 - 6m)</td>
<td>18 AWG</td>
<td>1A - 10A</td>
</tr>
<tr>
<td>21 - 40ft (6 - 12m)</td>
<td>16 AWG</td>
<td>1A - 15A</td>
</tr>
<tr>
<td>41 - 70ft (12 - 21m)</td>
<td>14 AWG</td>
<td>1A - 20A</td>
</tr>
<tr>
<td>71 - 100ft (21 - 30m)</td>
<td>12 AWG</td>
<td>1A - 25A</td>
</tr>
</tbody>
</table>

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**Dip Switch Settings**

**Bar Graph**
Use if a P12 charger is not connected or the charger summary screen is not desired. When a P12 is connected, the display will show a lightning bolt when the charger is active. The bar graph will indicate when a channel is in Bulk or Absorption modes by a “Filling Up” graphic. When a channel moves to Pre-Float or Float mode the graphic will stop, this will occur independently for each channel.

**P12 Summary Screen**
When the connected P12 charger is ON, the unit will display the charger summary screen. When the connected P12 charger is off, the unit will display the bar graph display.

*Standby Mode: See specifications*