

Voltage to State of Charge (SoC) Chart

For Timberleaf trailers with a basic voltmeter (no shunt or percentage readout)

Battery Voltage (12V, at rest*)	State of Charge (%)	What It Means
12.7V - 12.6V	100%	Fully charged
12.5V - 12.4V	80%	Mostly charged
12.3V - 12.2V	60%	Moderate charge
12.1V - 12.0V	40%	Getting low
11.9V - 11.8V	20%	Very low, recharge soon
11.7V or below	0-10%	Nearly empty, recharge now!

How to use this chart:

- Turn off all major loads (lights, fridge, fan) and let the trailer sit for at least 30 minutes before reading voltage.
- Take the reading at the voltmeter.
- Find the voltage in the left column to estimate your battery's SoC.

Note: Lithium and AGM batteries have slightly different voltage curves, but this chart works well for both in Timberleaf applications. For lithium, the voltage stays higher longer, then drops quickly below 20%. Always recharge before dropping below 12.0V for longest battery life.

If your battery ever reads below 11.7V (at rest), recharge as soon as possible to avoid damaging the battery.