



Programming Victron Orion DC-DC Charger for Alternator Charging (LiFePO4 12V & 24V)

Note: Bluetooth is not accessible until power has been run from the Start Battery to the DC-DC Charger input.

1. Open Victron Connect app and select Orion Smart Charger
2. Update charger if prompted to do so. You can also check for updates in "Product Info"
3. In the top right corner, select the settings icon (⚙️).
4. Ensure "Function" is set to "Charger", and NOT "Power supply".
5. Select Battery settings > Battery Preset > User defined
6. Set Absorption Voltage to 14.2V (24V = 28.4V)
7. Set Float Voltage to 13.5V (24V = 27V)

Note: These charge voltages are generally recommended for LiFePO4 batteries. If your battery manufacturer has recommended different 'float' and/or 'absorption' values, use those instead.

8. Navigate back to Settings menu > Engine shutdown detection > Enable
9. Set alternator type based on your particular vehicle. If unsure about alternator type, contact vehicle manufacturer or lookup VIN. Most commonly, the alternator will be "Regular"
10. Set "Start voltage" to 13.5

The rest of the settings can remain as they are by default.

Note: The DC-DC charger will remain in the off position until the vehicle is started and the delayed start voltage conditions have been met. By default, the delayed start voltage delay is 120 seconds. This allows time for the vehicle start battery to charge before connecting your house battery bank. Within a couple minutes of starting your vehicle, you should see that the charger is on and operating via the Victron Connect app.

Congratulations, the Orion DC-DC Charger is now programmed to charge your LiFePO4 batteries!