

Eco Series Battery Settings for AERL Products



OVERVIEW

Settings listed are only applicable to battery charge.

It is the responsibility of the integrator to have a full understanding of AERL products prior to programming, and it is preferred that they have attended the manufacturer's training or integration course should they be available.

Secondary Charge Source

If the AERL solar charge controller is used with another charger, there is a possibility a conflict will be created between charger sources, and you may need to set the secondary charger $\sim 0.2V$ below the primary charger.

SoC Drift

State of Charge ("SoC") drift happens when the product that is calculating SoC builds up an accumulative error. This error is generally due to tolerance of components that measure voltage and current, and algorithms used to calculate the SoC. Most products will reset its accumulative error when the system gets to 100% SoC or Float.

It is important that a well-designed battery storage system reaches Float stage as regularly as possible, preferably every one to two days to rest SoC drift and at least every seven days to fulfill the warranty restrictions on the battery.

Black Start

For black start (waking batteries if they go to protection mode), you might need to enable 'Black Start Guard' within the battery settings advanced menu. Refer to product manual or AERL.

SoC drift can be addressed in many ways.

Examples:

1. Sufficient solar sized to charge batteries to float on the winter equinox.
2. Backup source installed (grid or generator) to allow charging of batteries during extended bad weather or high load events.

Always consult and read the manufactures documentation before designing, installing and programming their devices.

AERL Charger Settings

	Eco4840P	Eco4847P
Battery Voltage		48V
Max Charge Current	50% or C2 of Total Battery Capacity	
Charger Current Enabled	ON	
CHARGE VOLTAGES		
Absorbion Voltage	57.6V	55.7V
Float Voltage	57.6V	55.7V
Equalization Voltage	57.6V	55.7V
BULK		
Re-Bulk Voltage	55V	54V
ABSORPTION		
Absorption Time	2 Hours	
Tail Current	2A	
EQUALIZATION		
Automatic Equalization	OFF	
TEMPERATURE COMPENSATION		
Temperature Compensation Voltage	Disabled	
Low Temp Cut-Off	Disabled	

Installers should ensure an adequate system design is carried out at all times. PPE accepts no responsibility for underperforming system designs. As part of our continued improvement process, settings are subject to change without notice and are correct at time of publishing.