

4.2 – Charge Controller Settings

Please review Table 2.0 below for Midnite Solar charge controller program settings. To initiate a factory reset, hold left & right arrow buttons while turning on Battery Breaker. This is normally only done for initial setup, as doing so will erase all custom settings.

Table 2.0 - Settings for SimpliPhi PHI 3.8 kWh Batteries w/ Midnite Solar Charge Controller

CHARGE CONTROLLER	PHI 2.9 kWh & 3.8 kWh; 24V / 48V
Charging Source	
Source	Solar / Wind / Hydro
Battery Voltage (V)	24 / 48
Charge	Battery Charge Setpoints
Volts	
EQ (V)	28 / 56
Absorb (V)	28 / 56
Float (V)	27 / 54
ChgTime	
Absorb (Hrs:Mins)	.1 hour (6 minutes)
EQ	0 (Disabled)
T-Comp	
Comp (mV/°C/cell)	0 (Disabled)
EQ Comp'd	NO
EQ	
Auto EQ	0 (Disabled - shows "Manual interval")
Advanced	
Ending Amps ³ (A)	2% of the PHI Battery bank's capacity
Re-Bulk Voltage (V)	25.6 / 51.2
Limits	
Output Amps ^{1,2}	75A per PHI 3.8 24V; 37.5A per PHI 3.8 48V
Input Amps ¹	Size based on input charging source
Min T-Comp	N/A (Disabled)
Max T-Comp	N/A (Disabled)
Mode	Battery Charge Setpoints
On/Off	ON
Mode	Hydro / Solar / Legacy P&O / Wind Track / Dynamic / U-Set Voc%
AUX 1	Manual Off
AUX 2 ³	Manual Off

Notes:

- ¹ Per PHI battery – Refer to Section 3.0 herein for charge controller PHI battery bank sizing.
- ² Per PHI battery – These settings are calculated by multiplying the nominal value per each PHI battery times the # of PHI batteries. For other batteries, refer to the Warranty and Specification Sheet for the specific model.
- ³ End Amps settings only work when the "Midnite Whiz Bang Jr & 500A/50mV shunt" are installed. When the Whiz Bang Jr is used, Aux 2 is not available for a turn off signal from auxiliary source.
- Levels are typical @ 25°C and may need adjusting at temperature extremes.
- When performing rapid deep charge/discharge cycles, the PHI battery should be allowed to "rest" 15 minutes in between
- Always refer to the SimpliPhi Power Manual and Warranty for the specific PHI battery model.



CAUTION: When PHI battery quantities change, the capacity & charge/discharge current settings must to be reassessed. Failure to do so will void the Warranty.