

# FULLRIVER<sup>®</sup>

## BATTERY

### SOLAR CONFIGURATION SETTINGS:



#### Custom Settings(recommended):

PWM Voltage (Absorption):	14.7V/29.4V/58.8V**
Battery Temperature Compensation :	-0.024/-0.048/-0.096**
Maximum Compensation Temp:	50
Minimum Compensation Temp :	-40
Float Voltage :	13.65V/27.3V/54.6V**
Equalize Voltage:	14.7V/29.4V/58.8V**
Equalize Time:	0h 0m 0s
Equalize:	Disabled
High Voltage Disconnect:	15.2V/30.4V/60.8V**
High Voltage Resconnect:	14.0V/28.0V/56.0V**

\*\* - 12V/24V/48V systems, respectively

#### Switch Settings:

Switch 1:	OFF
Switch 2:	OFF/ON/ON**
Switch 3:	ON/OFF/ON
Switch 4:	ON
Switch 5:	OFF
Switch 6:	OFF
Switch 7:	OFF
Switch 8:	OFF

#### SunSaver Settings:

Battery Jumper:	Removed
-----------------	---------

Note: We DO NOT recommend using the SunSaver product with our batteries as both settings available are inadequate and will lead to premature failure. Fullriver offers no warranty on products used with the SunSaver product.

#### Notes:

---



---



---



---



---



---

# FULLRIVER<sup>®</sup>

## BATTERY

### SOLAR CONFIGURATION SETTINGS:

### GENERIC SETTINGS

Bulk Voltage:	14.7V/29.4V/58.8V**
Absorption Voltage:	14.7V/29.4V/58.8V**
Float Voltage :	13.7V/27.3V/54.6V**
Absorption Time :	See Formula for Time Calculation
Float Time:	Unlimited
Current Limit:	Up to 25% of bank Ah*
Tail Current/Absorb End Amps/Ending Amps:	1.75% of bank AH
Temperature Compensation:	-4mV/°C/Cell
Equalization Voltage :	14.7V/29.4V/58.8V**
Equalization Time:	0 Hrs
Equalization :	Disabled
Time Calculation Formula:	$[(AH * DOD) / \text{Charge Amps} * 0.85] = \text{Time in Hours, typically 2-3, max 4.}$

Note: We do not recommend equalizing AGM batteries, these settings are set to avoid accidental equalization cycles.

\* - Exception to current limit for DC400-6 on the external threaded stud, 80A max.

\*\* - 12V/24V/48V systems, respectively

### 48V LBCO Guidelines based on ~25% DOD (Voltage vs expected load in kW)

DC400-6 (1 String)	DC1150-2 (1 String)	DC400-6 (2 Strings)	DC1150-2 (2 Strings)
49.6V - 1.0kW	50.4V - 2.9kW	49.6V - 2.0kW	50.4V - 5.8kW
48.8V - 1.9kW	49.6V - 5.2kW	48.8V - 3.8kW	49.6V - 10.4kW
48.0V - 3.3kW	48.8V - 9.3kW	48.0V - 6.6kW	48.0V - 34.2kW
47.2V - 5.5kW	48.0V - 17.1kW	47.2V - 11.0kW	

### Bank AH Examples

2x DC400-6 in 12V = 400Ah	6x DC1150-2 in 12V = 1150Ah
4x DC400-6 in 12V = 800Ah	12x DC1250-2 in 12V = 2300Ah
4x DC400-6 in 24V = 400Ah	12x DC1150-2 in 24V = 1150Ah
8x DC400-6 in 24V = 800Ah	24x DC1150-2 in 24V = 2300Ah
8x DC400-6 in 48V = 400Ah	24x DC1150-2 in 48V = 1150Ah
16x DC400-6 in 48V = 800Ah	48x DC1150-2 in 48V = 2300Ah
24x DC400-6 in 48V = 1200Ah	72x DC1150-2 in 48V = 3450Ah

### AGS Settings

24 Hr - LBCO + 1.0V  
 2 Hr - LBCO + 0.5V  
 2 Min - LBCO + 0.2V  
 30 Sec - LBCO + 0.1V

These guidelines are estimates based off of average voltages observed in our testing and may vary slightly from one production batch to another. The numbers represent discharging at 77F/25C, and can vary greatly with the known impacts of ambient temperature differences. If you are unsure of any settings listed in this sheet, please consult a certified solar installer.

For more information visit [fullriverbattery.com](http://fullriverbattery.com)