



WS500 ALTERNATOR REGULATOR

Revision 2.5.0 (Beta) Release Notes

Revision 2.5.0 of Wakespeed's WS500 firmware represents a significant step in advancing the WS500 Alternator Regulator's CANbus communication, particularly in respect to its ability to communicate within the Victron Energy Venus OS and offers additional support for communication in an N2K-style network environment.

In addition, this firmware revision unlocks the ability for the installer and user to utilize the regulator's ability to be configured to access advanced engine loading/white space functions.

Note that a new version of the Communication and Programming Guide for the 2.5.0 Beta is available as a link on the technical page of the Wakespeed website.

Additional features and functional changes include:

- *New default behavior for Field Drive % on 48v installs. See new section The WS500 and Field Drive on page 12.*
- *New user defined Max Battery voltage fault threshold MaxBatVolts (\$CPB: command)*
- *"Promiscuous Mode" (\$SCO: command) – allows auto restart on almost all detected faults.*
- *Improved color mixing of LED when in Slave mode, to bias closer towards Orange/Yellow when locked to external BMS.*
- *Leading dot (.) character on passwords will make it 'Hidden', and suppress its reporting in the NCP status string.*
- *Using a negative voltage value for DCDC Converter set point voltage during half-power mode forces 2nd battery augment mode, overriding the configured Mode.*
- *Revised PID tuning of amperage regulation*
- *Addition of a Battleborn-Specific profile, accessible via DIP switches, to program for Battleborn drop-in LiFePo4 without need for smartphone or computer-aided programming. This DIP switch setting replaces the Carbon Foam (Firefly) setting to better support popular Battleborn and Dragonfly Energy batteries. Firefly users will now need to download the carbon foam program via smartphone or configuration utility on the Wakespeed website.*

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