

AutoBoom Firmware Release Notes

Version 5.03.02

1. Corrected alarm processing and UI presentation to prevent large historical alarm count on Viper 4
2. Fixed clearing of right side/boom alarms when alarming condition is corrected.

Version 5.02.04

1. Corrected alarm processing and UI presentation.
2. Corrected CAN message processing so no messages get starved.
3. Fixed PGN request data fields for SWID and ECUID for the Raven CAN bus.
4. Corrected processing of UI messages to the application.
5. Several machine tunesets added and several machine tunesets had gain set changes.
6. Increased delay for memory access timeout to help with delayed memory responses.
7. Included new slant control algorithm.
8. Production test R3 external gyro input test corrected.

Version 5.00.08

1. Removed StandardPG tuneset from machine selection list to prevent confusion on how to select PG+ mode of operation.
2. Improved control loop gain initialization and setup for PG+ mode to prevent use of UG control loop gains in PG+ mode.
3. Removed output of left and right boom messages when machine selection mask was present to prevent moving to the calibration screen apriori.
4. Changed output of software version and bootloader version to be a string on the system information screen (allows full xx.xx.xx notation) which the numeric version didn't.
5. Changes added to fix standalone loading of a machine database file from the Raven Service Tool "LoadHex" button.
6. Added machine database field to allow the roll rate at which XT control will be started to be set for each machine (tunesets can now be made "terrain specific").
7. Fixed issue with loading of 5.00.00 and later and then backdating to pre-version 5.00.00 or earlier.
8. Fixed accumulator output "on state" to stay on if the center rack or either boom is enabled.
9. Major upgrade to support AutoBoom machine database for machine specific gain selections and other control system tuning.
10. Fixed "loss of cal" on power down/power up cycle by making sure EEPROM shadow RAM over which the checksum is calculated is not accessed/modified by interrupt handlers or other code while checksum is being computed/compared.
11. Refactored several major modules and fixed at least 2 array bounds access issues.
12. Implemented the Raven J1939/11783 CAN stack for the Raven and ISO CAN bus providing memory access, transport protocol and pgn request functionality to support the Raven Service Tool and other various operations including debug outputs and performance monitoring outputs.
13. Implemented support for Keil simulation interface to the CAN peripheral sim and created a serial EEPROM simulator implemented as a file under the Windows OS and file system handling.

Version 4.00

1. Improvements to the center rack control algorithm to reduce the movement frequency.
2. Fixed issue that would prevent or prolong the calibration sequence.
3. Improvements to the digital center sensor filtering.
4. Added diagnostics for high current and logic voltages where available.
5. Added hour meters for software version and total for hardware.
6. Added statistics numbers for left and right booms.
7. Provisions for XT control for compatible hardware.
8. Provisions for Mid ultrasonic sensors for compatible hardware.

CODE IDENT. NO.	SIZE	DRAWING NUMBER
14979	A	077-0171-218
SCALE	NA	SHEET 2 OF 5