

7000 Series Changelog

Version Number	Date	Changes
2.04	2014/12/02	<ol style="list-style-type: none"> 1. Changed icons, predominantly in the Job and Alarm pages to new icons with matching theme to the front screen. 2. Fixed bug/added feature so that in the Auxiliary page the number of auxiliaries/outputs can be correctly shown/updated by pressing the 'reset/refresh' button. 3. Fixed bug where adding then removing UniPODs in the list of connected PODs could create extra 'phantom' auxiliaries.
2.08	2015/01/27	<ol style="list-style-type: none"> 1. Changed the foam marker widget from 3 separate images to a single Svg image with a widget behind to detect and determine which section was selected. 2. Changed spray section widget so that instead of buttons for sections it has spray nozzle SVG images. 3. Changed spray section widget main spray bar icon, also the spray section widgets grey out when in hold mode.
2.09	2015/03/17	<ol style="list-style-type: none"> 1. MAJOR: fixed issue that would require user to have to re-enter unlock key. 2. Fixed issue with Unipod configuring auxiliary settings (dump valves and sections) 3. Removed spinner test page. 4. Reworked the calibration pages for products
2.10	2015/03/19	<ol style="list-style-type: none"> 1. Added Ethernet support for the LoaderV2 to function correctly 2. Added Unlock file txt reader on unit for future versions (to be included with webserver and LoaderV2).
2.11	PENDING	<ol style="list-style-type: none"> 1. Fixed a spreader bug that erased all the control channel voltages 2. Fixed a spreader bug making the max ramp rate 60 RPM constantly. 3. Fixed ARAG valve base settings to fit the correct version of valve 4. Added second pressure sensor for 2 consecutive 74v1 Configuration. 5. Fixed a rare bug with the prime time & system operation 6. Added a continuous mode for prime for testing. 7. Users are allowed to delete disabled bins / tanks 8. Fixed a bug with Administrator account privileges. 9. Autocalibrate bug fixed to enable it over multiple channels. 10. Fixed bug with Prime not being reset rarely 11. Fixed an issue with span and deadband in spreaders with belts & spinners 12. External Canbus run hold button added to configuration.
2.12 (S)	2015/05/06	<ol style="list-style-type: none"> 1. Release by Jason S for a seeder Clark installed (SOFT RELEASE) 2. Auxiliary methodology changed to include master clutch and the option of putting sensors in any # aux slot.
2.13		<ol style="list-style-type: none"> 1. Added Adaptive smoothing to Rate Tiles so that they are more smoothed near target application rates. 2. Added rounding to rate tiles so that they round slightly to target application rates.

		<ol style="list-style-type: none"> 3. Made small changes to strings in Tanks Menu. 4. Fixed bug where the Flow Factor for spreaders wasn't affecting anything.
2.13a (S)	2015/06/15	<ol style="list-style-type: none"> 1. Fixed a bug regarding slow hold speed not turning off sections and boom. (SOFT RELEASE to bumps in Belgium)
2.14	2015/06/12	<ol style="list-style-type: none"> 1. +1, +10 buttons are fixed so the letters fit onto the buttons correctly. 2. Machine menu has correct amount of menu buttons so in 74v1,7300 there is no scroll bar. 3. Administrator user no longer losing settings when changing password. 4. Test and calibration pages can now use run/hold external buttons. 5. Camera no longer resets 7000 6. Belt motor settings are no longer lost when changing the spreader setup. 7. Auxiliary page revamped so that text is no longer cut off. 8. Tank empty in is no longer a 'rate' tile. 9. Calibration units now in Pulses/Kg as it should be. 10. Up/Down arrows in motor setup are now the new style. 11. Spinners now have a test mode. 12. Test page has been rebuilt with buttons and no slider for ease of use.
2.15	2015/07/20	<ol style="list-style-type: none"> 1. Fixed visual bugs on front screen tiles that were cutting off default tile names and having target application rates rounding incorrectly. 2. Fixed bug with flushing causing problems with normal running of the 74v1. 3. CANBUS Menu now displays if a Run/Hold switch is connected. 4. Second Line –Now works with Speed, Pressure, or Flow rate to determine line selection. Now also has manual line selection. 5. Voltages displayed for the setup of a PWM Voltage Motor/Valve will now be the same as read with a multimeter. 6. Visual warning now shown when removing a front screen tab. 7. Various visual bugs in menus have been cleaned up. 8. A ground speed radar is now an option for setting up the ground speed sensor along with the wheel sensor and GPS. 9. When running the motors/valves in test mode the voltage the UniPOD is outputting is now displayed to make setting up the motors/valves easier. 10. Calibration Screen is now easier to use and shows a warning when the calibration changes. 11. Run/Hold switch and Switch box work in calibration and test menus to start/stop calibration and test.
2.16	2015/07/20 - 2016/04/21	<p>Major Features:</p> <ol style="list-style-type: none"> 1. VRA. 2. Model switching (7500/7300/74v1). 3. Tower Sprayer widget (74v1). 4. Load Cells. 5. Second line-individual section control implementation (74v1).

6. Pressure sensors-New AA-119H/L sensors (74v1/7500) & all pressure sensors of connected UniPODs can be measured now.
7. Sprayer now has 2 pressure sensors per UniPOD (74v1).
8. New TracMap protocol for spraying (74v1/7300).
9. GPS causing long turn on times fixed (new 7000's only [or need to be sent back to Toowoomba]).
10. PWM/Proportional motor AutoCalibrate (7500/7300).
11. Gate Height control (7300).
12. Numerous bug fixes.

Complete List of changes:

1. Implement switching for OEM's / unlocked customers
2. Removed GASON as a valve type.
3. Selection of auxiliary for bin # changed to force a selection and not crash.
4. **New BSP Firmware release – BSP 2.0.3**
5. **Added new VRA mapping**
6. Added m³/Ha unit to list.
7. Added L/m and L/100m Rate.
8. Added diesel engine control connected to effluent pump via pump pressure.
9. Added Secondary alarm.
10. Added spinner auto calibration.
11. Added meter functionality for analogue inputs.
12. Added flow valve direct/bypass control.
13. Added Tracmap V2 protocol.
14. 74v1 – Added Duel line.
15. 74v1- Added separate/individual section control for second line.
16. 7300 – Added gate height manual control.
17. 7500 – 7300 - Added Load Cells to bins.
18. Radar now functioning with setup pages.
19. Auxiliary list now shows the corresponding UniPOD.
20. CANBUS status can now read UniPOD Firmware.
21. Setup page now works with other motor types.
22. Updated front page svg images.
23. Updated 'tick' and 'X' icons.
24. Fixed stability of spinners when controlled.
25. Fixed permission restrictions on second level users adding extra bins.
26. Fixed Auxiliary page crash displaying UniPOD #.
27. Jobs now display the correct product name with multiple bins/products active.
28. Fixed issue with admins not having admin access/privileges.
29. Fixed issue with bin sensors not detecting pulses.
30. Flow factor now reaches above 100%.
31. Run tile now merge correctly.
32. Fixed issue with auto calibration overshooting the min and max points.
33. Manual TEST now works for spray control valves.

		<p>34. Depth page bugs fixed, and made more usable.</p> <p>35. Switch box comm now working properly with 7000.</p> <p>36. Gate sensor enable/disable fixed.</p> <p>37. 74v1 - Changed test screen to show L/s and Hz instead of RPM.</p> <p>38. 74v1 - Fixed valve control not working after manual control.</p> <p>39. 74v1 - Fixed min voltage.</p> <p>40. Slowed boot times with GPS connected fixed with new BSP2.0.3.</p> <p>41. Bin level sensor configuration implemented.</p> <p>42. 7500 depth updated.</p> <p>43. Load Cells mV readings corrected.</p> <p>44. Night mode text colours updated.</p> <p>45. Alarms no longer trigger in calibration mode.</p> <p>46. Fixed Clutch/dump valve issues.</p> <p>47. Fixed issues with unused auxiliaries.</p> <p>48. Fixed auxiliary menu UniPOD configuration.</p> <p>49. Blank tiles no longer merge.</p> <p>50. Home button now returns to the last active page instead of main menu.</p> <p>51. Pre-Filled pressure sensor settings.</p> <p>52. Improved auto-calibrate.</p> <p>53. Fixed issue of drive output when rate sensor loses communication.</p>
2.16.01	26/04/2016	<p>1. Fixed bug where during calibration of bin/tanks the number of 'Pulses' could go negative.</p>
2.16.02	26/04/2016	<p>1. Fixed visual bug in calibration screen of bin/tanks so that the 'Pulses', 'Total', and 'Pulses/Kg(L)' values are all displayed nicely now without being cut off.</p>
2.16.03	27/04/2016	<p>1. Fixed bug where in certain circumstances a huge amount of empty products would be created.</p>
2.16.04	12/05/2016	<p>1. Fixed bug where the alarm tile would cause the software to crash if clicked on when there were no triggered alarms</p> <p>2. Changed the Load Cell calibration to use the 'mV/V & Max Weight' for calibration.</p>
2.16.05	20/05/2016	<p>1. Fixed bug where the products in a job would lose their information when products were changed deleted.</p> <p>2. Added feature to Job tiles such that if they are tapped there is a button to reset the job.</p>
2.16.06	22/07/2016	<p>1. Changed the Sprayer Control algorithm to not have a hidden lower limit to deadband and span.</p>
2.17	14/10/2016	<p>1. Added as applied Mapping, shape file recorded and live coverage map</p> <p>2. Updated Motor control algorithm for hydraulic and electric motors. Only time constant change.</p> <p>3. Sprayer control fix, updated the sprayer control algorithm to display minimum voltage more accurately.</p> <p>4. Added TUVR (Trimble Universal Variable Rate) and Tracmap auto section control for spraying – Spray sections now display as on/off/auto. Switch boxes have on/off as usual, and auto in the middle.</p>

		<ol style="list-style-type: none"> 5. Added grey overlay to pressed buttons 6. Added 'Tare', 'Gross' and 'Bin Select' tile for Load Cells 7. Rearranged Mapping Menu to work like job list. 8. Warning now displays when device is almost out of hard disk space. 9. Removed Power Off tile, due to BSP 2.3 compatibility. 10. Warning now displays when deleting bins/Tanks 11. Map import page no longer displays when no maps are found. 12. Added 'please wait' on pages expected to take a while to load. 13. Reduced sensitivity for screen double taps. Pages now have a time buffer on them. 14. AUX page now displays last 3 digit of its UniPOD. ie. AUX #567, where 567 is the last digits on its respective UniPOD 15. Removed Job Totals from tile list 16. Added Kg/m² 17. Fixed several problems with switchbox interacting with the 7000, including Run/Hold, Calibrate, Test. 18. Fixed issue with rate sensor causing maximum drive output 19. Updated pressure sensor list 20. Motor is now disabled when gate sensor is disabled 21. Fixed flush and run/hold interaction 22. Fixed VRA map tab crashing 23. Updated Run/Hold text 24. Reworked some menus 25. Fixed a few units 26. Fixed some default values 27. Fixed .csv export 28. fixed the rate not controlling properly on sprayers
2.17.01	21/10/2016	<ol style="list-style-type: none"> 1. Fixed motor sensor rate issue on 2 Bin VRC and Spreader UniPODs 2. Fixed issue of non-delete'able bins/tanks when are multiple UniPODs + a Spray UniPOD(s). 3. Fixed issue with TUVR to allow section control from Trimble screen while doing rate control on the 7000.
2.17.01a	08/03/2017	<ol style="list-style-type: none"> 1. Modifications to bin control
2.17.02	23/03/2017	<ol style="list-style-type: none"> 1. Depth sensor now works with multi unipods.
2.17.03	19/04/2017	<ol style="list-style-type: none"> 1. Bin Level Sensor (H/L) is now always enabled. 2. Tiles/Alarm – "Bin level sensor now refers to the H/L Sensor "Bin label load cells" now refer to load cell measurements. 3. As Applied: Polygons are now an average value at the beginning and end points. 4. As Applied: Fixed bug with 0 rate polygons being created when hitting 'hold'. 5. Fixed bug where the 2/10th page would not start in calibration/test mode. 6. Added temporary 7300 Flow Calibration tile.
2.17.04	21/04/17	<ol style="list-style-type: none"> 1. Added PVG32 to Control Output.
2.17.05	27/04/2017	<ol style="list-style-type: none"> 1. Added GLONASS GPS compatibility.
2.18.00	01/05/2017	<p>Feature:</p> <ol style="list-style-type: none"> 1. Added Tramline 2. Added Wifi with Farmscanag CANWIFI

		<ol style="list-style-type: none"> 3. Added Vinterman. 4. Added lighting option to AUX and also a master lighting tile to control all lights. 5. User can now upload language files into the 7000. 6. Added UniPOD alarm <p>Bugs:</p> <ol style="list-style-type: none"> 7. Fixed bug with where product density would affect the zeroed bin weight. 8. Fixed bug where system will remain in calibration mode when exiting the calibration page.
2.18.01	05/05/17	<p>Bugs:</p> <ol style="list-style-type: none"> 1. Updated feeder wagon algorithm 2. Fixed bug where new spray booms will start off as 'AUTO; 3. Fixed bug where some tiles (wifi and light) will not let user change the tile.
2.18.04		<p>Features:</p> <ol style="list-style-type: none"> 1. Added blockage line sensors. <ul style="list-style-type: none"> • Setup page: machine->Blockage • Tile (displays a grid of all sensors) • Alarm (alarms when a section is blocked/stops flowing) 2. Updated CANBUS monitoring in the windows simulation 3. Load Cells now have a higher resolution(accuracy). 4. Load Cells can now red in negative weight. 5. Added smoothing to auto brightness. <p>NOTE: OLD SOFTWARE CAN NOT BE USED WITH NEW LOAD CELLS</p> <p>Bugs:</p> <ol style="list-style-type: none"> 1. Fixed bug where system would get stuck in Test mode when exiting calibration for controls (7300).