
List of changes made to Larson Davis Spartan 730

Spartan 730 Version 1.303

March 2025

Updated JSON Status

1. SDK: Removed duplicate JSON entries for SDK status.

Spartan 730 Version 1.302

December 2024

Bluetooth Configuration for NO_BLE Option

2. Resolved issue where the NO_BLE option failed to disable Bluetooth on revision E hardware for non-IS 730 units. Bluetooth is now properly deactivated when NO_BLE is selected.

Spartan 730 Version 1.301

November 2024

Intermittent Reboot and Format Hang

1. Fixed issue where after software reboot or microSD card format, some units could hang and require a hard power down. Now, reboot and format will not hang the meter.

Spartan 730 Version 1.300

June 2024

Recall Screen

1. Adding warning screen about recall for 730IS units with > 2 GB cards.

Power Off After Calibration

2. Fixed power off issue after pressing power button twice while calibrating to cancel calibration.

Calibration Precision Consistency

3. Two decimal places of precision are now shown for calibration levels and deltas.

Device Name Length

4. Fixed issue with sending device name of 16 characters or longer that would return an invalid string. Device name is now truncated to 15 characters.

Custom Report Settings

5. Added firmware support for custom report settings saved with meter data files

Spartan 730 Version 1.204

March 2024

1. Updated default settings for certain configuration of meters.

Spartan 730 Version 1.203

November 2023

Miscellaneous Bug Fix

1. Fixed an issue that in rare instances would cause the meter to become unresponsive.

Spartan 730 Version 1.202

730 and 730IS Models:

Calibration Routine Improvements

1. Added pop-up message to indicate if calibration process successfully saved the sensitivity or not. Previously the process could exit the calibration routine without informing the user that the calibration was not successful.
2. The stability of the calibration process was improved to make the device less susceptible to bumps or changes in sound level. In previous versions of firmware, the meter would continue to monitor the measured level after displaying the accept dialog. If the measured level went unstable between the time the accept dialog was displayed and the calibration was accepted then the calibration would not be saved. Beginning with version 1.200, the meter now only uses the measured level prior to showing the accept dialog to calibrate the meter.

Missing data when Daily Timer Merge is enabled

3. Fixed an issue that occurred when using Daily Timers with Daily Timer Merge enabled, where data from all but the last timer would be lost. This occurred when the Daily Timer Merge was enabled and the meter was turned off between timer blocks, either manually or due to Auto Off being enabled. This defect is present in versions 1.107 through 1.119. Update firmware to version 1.202 or later. Otherwise, workarounds include disabling Daily Timer Merge or ensuring the meter stays on between timers. Recovering lost data due to this issue is not possible.

730IS only:

Battery Health Monitoring

4. Added a battery health indicator which will show Good, Fair or Replace based on measured battery health. This indication is found under the Meter screen on the Power page beneath the battery voltage and percentage.

Runtime Improvements

5. Increased runtime when a 2 GB microSD memory card is installed. This increases the typical run time by approximately 10%. Devices with microSD cards larger than 2 GB will not have this run time improvement but may be sent to Larson Davis for a warranty replacement.
6. The battery percentage and estimated runtime algorithms have been improved. Fixed an issue that underestimated the runtime after the display was turned on.
7. Changed the battery charging algorithm to account for battery self-discharge while the device is off. The new algorithm assumes a 1.5% charge depletion per day. Previously, the device ignored the self-discharge of the battery, which could prevent it from reaching a 100% charge. After installing the firmware, the device runtime estimation and battery percentage may be inaccurate. We recommend fully discharging the device and recharging it to reset the runtime and battery percentage computation.
8. Maximum battery charge time increased to 16 hours from 12 hours.

Spartan 730 Version 1.119

June 2023

1. Firmware versioning consolidation.

Spartan 730 Version 1.118

Improved

1. Updated the FCC and IC ids on the about screens.
2. Notes entered in files show in the Notes field in the report and in the summary data tab, while notes entered during a measurement will be captured as markers.
3. Increased accuracy of exceedance durations.

Fixed

4. Fixed issue where TWA3 was swapped with TWA5.
5. The meter would not always delete all files when the requested from G4.

Spartan 730 Version 1.115

March 2023

Improved

1. BLE Communication reliability improvements.

Spartan 730 Version 1.114

February 2023

Improved

1. Made the meter calibration more robust across temperature changes.
2. Criteria for accepting calibration results has been tightened to improve overall calibration accuracy. Requires G4 4.8.2 or later.

Spartan 730 Version 1.113

December 2022

Improved

1. Updated to be compatible with the new BLE chip (BMD-360).

Spartan 730 Version 1.111

April 2022

Improved

1. Enabled larger SD Cards for user storage.

Fixed

2. Updated the OSHA-HC Criterion Level (set to 90 dB from 85 dB) and Action Limit in Alarms (set to 50% from 75%) to match the standards. G4 will automatically update and correct any measurement file that used the previous settings when that file is opened.

Spartan 730 Version 1.110

March 2022

Added

1. Support for the Canada preset on the Spartan 730 dosimeters.
2. Shift Time added for all dosimeter types, including OSHA-HC and OSHA-PEL.
3. Screen summary timeout after one minute, toggling between information every three seconds to show activity on meter.

Improved

4. The Auto-Calibration process is more robust.

Fixed

5. The Virtual Dosimeter 1 could be turned off. We have fixed this so that the setting is always enabled.
6. If you enabled more than one timer, with daily timer merge on, and you ran and stopped manually prior to the first timer block, then the time history for that run would not store in the file.
7. The Slow, Fast and Impulse filter characteristics for the lowest three frequency bins for OBA needed correction.

Spartan 730 Version 1.109

January 2022

1. Added support for alternate accelerometer part for Revision D2 Hardware of the Spartan 730.

Spartan 730 Version 1.108

November 2021

1. Added: LAleq metrics to the Live and Overall displayed in the Live View and stored in the file.
2. Fixed: Notes from meter in file so they are JSON compliant.
3. Changed backlight to stay on longer, 30 seconds instead of 9 seconds after a button press.

Spartan 730 Version 1.107

May 2021

1. Fixed: Intermittent failure to wake up with timers for rev A/B HW.
2. Fixed: Issue with failure to wake up on timer when holding power button for 3 seconds after the "Wake at XX:XX" screen showed up.
3. Fixed: Overlapping timers will continue to run, rather than putting the second timer on a different day.
4. Improved: If you create a timer with a run block that contains the current time, the meter will start the measurement.
5. Improved: When you power on the meter during timer block, the measurement will start.

Spartan 730 Version 1.106

March 2021

1. Updated: Removed Virtual Dosimeter Detector setting, force to Slow.
2. Improved: Spartan Backlight button functionality.
3. Fixed: Issue with the updates on the Live View when decimal separator is not a period.
4. Update: Adding South Korean and Japanese Regulatory marks on the about screen for 730 and 730IS.

Spartan 730 Version 1.105

August 2020

1. New Feature: 730IS NiMH fuel gauge setup to provide more accurate battery run time.
2. Improved: The meter uses the default ISO Exposure Limit of 87 dB. The Limit used to be 90 dB.
3. Bug Fix: Time History failed to save some data, if a pause is executed before stopping a run. This is fixed in this firmware.

Spartan 730 Release History

4. Bug Fix: Daily Timer with the stop time set to the same time of the start of the next timer the measurement would skip every other day. Now correctly handles the same start and stop times.
5. Bug Fix: 730IS – When using Daily Timers the auto-off will correctly show the next Wake Time.

Spartan 730 Version 1.100

May 2020

- Feature: No Bluetooth (730-NBT) option added
- Feature: 1 minute period now available for time history to provide smaller size files and shorter download times
- Bug Fix: When creating a measurement note on a dosimeter that is connected by Bluetooth, the note now correctly accepts non-Latin characters.
- Feature: Start and Stop time now have date included in session log on Meter UI
- Feature: Pressing the power button will now confirm calibration
- Feature: Pressing any button will now dismiss startup tip
- Feature: Support for Spartan Model 730IS added
- Improvement: A momentary fluctuating signal such as bumping the calibrator will not cause the auto-calibration routine to exit
- Feature: Overload count and duration are now reported on the measurement summary tab in the spreadsheet
- Bug Fix: A bug that caused the 730 to stop a measurement at the stop time and date for the previous day has been fixed. If the timer ended on the previous day, the stop will no longer be processed.
- Feature: When the meter stops due to low power or a dead battery, the meter now reports this in the time history and session log
- Feature: Added support for the Finnish language

Spartan 730 Version 1.030

August 2019

- When using daily timers, powering off the meter by holding the power button, after the countdown, the display will show the next wake/run time until the power button is released
- Time-out on front light after turn on due to charging (Removing "Night light" feature)

Spartan 730 Version 1.020

July 2019

- The allowable minimum criterion (**Min Crit**) and **Threshold** levels are changed to 55 dB from 70 dB (7442).
- Feature: You have the option to set an administrator passcode that, when set, allows users to access settings, system tools, or delete files, only after providing the passcode. The passcode is enforced only when using a Bluetooth connection and not when connected via USB.

- Bug fix: Fixed a defect with daily timers and both of the following conditions that caused all timer-created files after the first to be corrupt (7441).
 - The end time of a timer matches the start time of the following timer
 - The time falls on a 5-minute boundary
- Bug Fix: When making a measurement with more than 150 sound recordings, sometimes the 730 stored the measurement in two files. The first file contains all the measurement data except for the very end of the measurement. This first file contains valid data although G4 may report parse errors due to the missing data from the end of the measurement. The end of the measurement is stored in the second file and can be up to 5 minutes of data and cannot be opened using G4. This firmware version ensures that the complete measurement is stored in a single file. (7614).
- Bug Fix: A defect has been fixed that occurred when using the 730-ESR firmware option and caused a 5 minute gap of missing time history data at the same time as an event sound recording. This was the result of data not storing properly and did not affect the validity of other data in the file. When this occurs, data on the Summary tab is correct and not affected although modified data is affected if the missing data is not excluded. (7382).

Spartan 730 Version 1.010

May 2019

- Bug Fix: Daily Timer Merge (7295)
- Bug Fix: Post Calibration lockup when downloading (7292)
- Bug Fix: Status and Session log were not reset with settings change (6864)
- Bug Fix: Options install hangs on reboot (7276)
- Bug Fix: USB Reset command(7285)

Spartan 730 Version 1.000

May 2019

- Initial Release