

1 Purpose

This document describes the fixed bugs and problems as well as improvements in the following new firmware version in comparison with the previous version.

- New version: 8.0.1.136
- Old version: 8.0.0.98

2 New features

Topic	Description
SERS Tip	SERS Tip can be used with ID Kit operating procedure and with other libraries for R&D purposes.
New library	New 19,000+ entries library is available: Mira Lib Bio-Rad™ Full Raman Library Collection.
Result screen	New Mixture Match result screens.
Intelligent Universal Attachment	New intelligent Universal Attachment (iUA) is implemented in firmware.
New functions	Guided user interface for iUA. iUA positions for surface, bag and bottle measurements.
Content ID operating procedure	Content ID operating procedure is available with iUA, results are separated to show the container and the content.
Hit Quality Index	HQI (Hit Quality Index) is available on the instrument.
Foreign language support	Added foreign language support to library names.
Spectral representation	Spectral representation (spectral quantification) is shown in the Mixture Matching result screen.
Renaming spectrum	Rename spectrum on the instrument.
Global Harmonization System	Global Harmonization System placards are now visible on the instrument.



3 Improvements

Topic	Description
Screen interaction	Various improvements for stability. Faster and smoother screen interaction.
Faster matching	Library optimization for faster results when matching against large libraries.
Number of averages increased	Number of allowed averages increased to 30.
Library management	Updated library management for large libraries (STJ and BioRad).
More consistent measurements	Improved algorithms for more consistent Standoff attachment measurements.
Bluetooth improvements	Bluetooth communication improvements for more reliable connection and transfer speed.
Translations	Updated translations.
SERS Library updates	SERS library updates with new entries.
Screen dimming set to 30 s	Shortened the delay before the screen dims to 30 s from 120 s. This improves battery life.
Screen comes back with tip activity	Any time an attachment is removed or opened, the screen comes back to full brightness. This improves user-friendliness.
Battery messaging and indicator (Battery type)	Developed better battery levels based on voltage that are specific to the battery chemistry (Li or NiMH). This battery chemistry is selectable on device.
Mixture matching	Improved mixture matching algorithm.

4 Fixed bugs

Topic	Description
Mixture match	Optimized mixture matching for improved results.
Boot speed	Boot speed increased.
Narrow peak removal	Narrow peak removal (irregular pixel correction).
Messaging between processors	Updated the messaging between processors to prevent occasional lock-up.
Reprocessing mixture match	Fixed the mixture matching reprocessing in the scan log screen. This fixes the issue where the mixture matching was not being performed.
Class 1 vs class 3B tips	Updated class 1 tip behavior to better prevent tampering.



5 Known issues

None.