

# Patterning Software Revision History

## Version 1.3.4

### Bug Fixes and Improvements

- Corrected issue where wrong LEDs were activated on D4 cassettes when loading fluid.
- Note that the version number jumped from 1.3.2 to 1.3.4 due to as-yet released changes not in this release

## Version 1.3.2

### Bug Fixes and Improvements

- Fixed issue where dispensing with partially used cassettes could lead to HW\_ERROR\_BADDHPOSIDX error in some cases.

## Version 1.3.1

### Bug Fixes

- Miscellaneous bug fixes. Includes an issue where default fluid values (Settings) were reset to application defaults each session.

## Version 1.3.0

### Changes or Improvements

- Supports updated hardware.
- Changes to master mix fluid classes.

## Version 1.2.4

### Bug Fixes

- Fix to resolve an issue where the dispenser very rarely did not dispense until power-cycled.

## Version 1.2.3

### New Features

- Protocol Run:
  - Notes can be added for each fluid, included in reports.
  - Fluid load volumes can be modified at load time to match actual.

## Version 1.2.2

### New Features

- PDF reports.
- Print Report added to print a report from the most recent protocol run.
- Protocol revision tracking.
- Run-Only version of software available (protocols can be run, but cannot be modified).

## Version 1.2.1

### Bug Fixes

- Default files, including layout and pattern libraries, are copied to user's Documents folder when application starts if Bio Pattern folder does not exist.

## Version 1.2.0

### New Features

- Gradient volume dispense can be applied across a group of patterns or across pattern spots.
- A delay can be added after the dispense of a layer.
- Regular grids of patterns can be copied and pasted to the same or another layer. The entire layer can also be copied and pasted to another layer.
- Fluid volume dispensed at specific target locations can be Normalized. This may useful if patterns are being dispensed to a well plate using DMSO-based fluids.
- Guided Alignment supports iterative A1 alignment using a single dispense head and without loading a protocol.

### Changes or Improvements

- Pattern edit uses a selection rectangle when drawing/erasing dots.
- Pattern width and height are now specified using spot-center to spot-center dimensions.
- Patterns using Upper-Left target alignment will align on the upper-left spot-center.
- Pattern drawing efficiency is improved, which will be noticeable for protocols with many patterns and spots.

## Run Experience Changes or Improvements

- Run experience has been changed to highlight the most relevant features.
- When the dispenser is waiting on the operator, a large unique banner is displayed.
- While filling dispense heads, they can be Locked to temporarily prevent dispense of the locked fluids.
- During dispense Pause, the plate can be moved to the load position for examination.
- During dispense Pause, un-dispensed fluid can be Cancelled and re-scheduled using a new dispense head. This allows for recovery from certain fluid load errors.
- At end of run, the plate holder can be “parked” ... drawn back into the dispenser.

## Bug Fixes

- If a protocol includes both T8 and D4 dispense, dispense will occur in strict layer order even if multiple cassette changes are required.

## Version 1.1.0

Initial customer release.

