Batronix Magnova®
Changelog

Version 1.1.7 (20th November 2024)

New functionality:

- Added smooth touch and mouse drag support for scrollable elements, for example the measurement selection.
- Added a textual indicator to show whether the Invert setting is active for analog channels.

Optimizations:

- Decoders now move without displaying a guide line when changing vertical position.
- Optimized component names in Information window for unambiguous identification of currently installed Firmware (Package) version.

Bugfixes:

- Fixed incorrect processing of active downsampling factor.
- Fixed Math channel grid labels not being updated under certain conditions.
- Fixed incorrect channel deskew parameterization at 1.6 GSa/s.
  A prior changelog incorrectly stated this issue was resolved.

Version 1.1.3 (7th November 2024)

New functionality:

- Replaced Welch window with Gaussian window with regard to the FFT functionality.

Bugfixes:

- Fixed FFT RBW always corresponding to bin frequency, not considering window specific bandwidth factors.
- Fixed LIN decoder not showing decoded data.

Version 1.1.2 (30th October 2024)

New functionality:

- Added background offset compensation functionality significantly reducing offset drift.[1]
- Added graphical icons to simplify selection of appropriate automatic measurements.
- Added FFT gate selection functionality (memory or screen).
- Added display of currently utilized FFT support points.
- Added optional signal inversion of analog channels.
- Added optional GND coupling for analog channels.
- Added quick selection and display functionality representing HiRes mode in the status bar.
- Added "Default Settings" functionality allowing all measurement settings to be reset without resetting all general device settings, as would be the case when using "Factory Settings" functionality.
- Added ability to force a hard shutdown by holding the power button for approximately 5 seconds.

Optimizations:

- Optimized touch area next to the rotary knobs to prevent unintended touch inputs when interacting with rotary encoders.
- Optimized reactiveness with regard to aborting Roll-Mode acquisitions at very large time scales.
- Optimized reactiveness in cases of frequent channel baseline / offset changes.
- Optimized responsiveness of (physical) buttons so that even very fast clicks can be considered.
- Optimized XY intensity grading.
- Optimized storage device compatibility.
- Various minor improvements.

Bugfixes:

- Fixed Period Area (+, -, Abs., General) measurements not providing valid results.
- Fixed specific measurement stability issues.
- Fixed incorrect channel deskew parameterization at 1.6 GSa/s.
- Fixed some rare display and stability problems.
- Other minor bug fixes.

[1] This feature will not be enabled by default for devices delivered with firmware versions prior to 1.1.0 since it requires specific preconditions. Corresponding customers will be provided a step-by-step guide to activating offset compensation for existing devices.

Version 1.0.7 (25th September 2024)

- New math functions and constants: abs, log, phi, √2.
- New function: Search now supports the "window" search type.
- New feature: The loading of the last settings can be skipped at startup by holding down the "Run/Stop" button and the top rotary knob.
- New setting: By default, the fan does not turn on until the unit is fully warmed up at an ambient temperature of about 40°C (104°F). A new setting now allows the fan to be turned on earlier to reduce offset drift if needed.
- Optimization: Used memory is now displayed instead of free memory for USB sticks and internal memory.
- Optimization: Trigger time is restored after the search.
- Optimization: After loading setups, the probe readout is repeated to adjust the settings.
- Bug fix: Roll mode starts immediately (previously it could be delayed depending on the settings).
- Bug fix: The trigger channel setting 'AC Line' is now also saved in the settings data.
- Bug fix: The FFT display could crash when combining the dBV display with a probe divider factor.

Version 1.0.6 (9th September 2024)

- Initial release version