Keysight InfiniiVision 4000A X-Series Oscilloscopes

Version 7.60.2023082217

Release Date:	15 September 2023
Instrument software version:	Revision 7.60.2023082217
File Name:	4000X.7.60.2023082217.ksx

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected SCPI query return result for :CHANnel<n>:BANDwidth?

KEYSIGHT

Version 7.57.2023040125

Release Date:	17 April 2023
Instrument software version:	Revision 7.57.2023040125
File Name:	4000X.7.57.2023040125.ksx

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected change in measurement value and probe attenuation for auto-attenuation probes when an acquisition is stopped. Applies to:

    o N7026A

    o DP0010A, DP0011A, DP0012A, DP0013A

    o PP0004A with PP0001A, PP0002A, PP0003A

- For analog channels, a $50\,\Omega$ impedance setting is no longer persisted when the scope power is cycled.

- Fixed FFT Analysis power measurements failing to start when installed using SCPI commands. Applies to:

    o :MEASure:FFT:ACPR

    o :MEASure:FFT:CPOWer

    o :MEASure:FFT:OBW

    o :MEASure:FFT:THD

Version 7.56.2022120226

Release Date:	15 December 2022
Instrument software version:	Revision 7.56.2022120229
File Name:	4000X.7.56.2022120229.ksx

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected measurement results that indicate "No Signal" after executing a Single or Stopping an acquisition.

- Fixed DP0001A probe from reverting to 500:1 attenuation after executing a Single or Stopping an acquisition.

- Corrected SPI triggering on a serial data string > 32 bits.

Known Problems

This software revision includes the following known problem:

- Removed the following fix that was added in version 7.55.2022071828:

- Corrected change in measurement value and probe attenuation for auto-attenuation probes when an acquisition is stopped. Applies to:

  o N7026A
  o DP0010A, DP0011A, DP0012A, DP0013A
  o PP0004A with PP0001A, PP0002A, PP0003A

Version 7.55.2022071830

Released Date:	29 July 2022
Instrument software version:	Revision 7.55.2022071830
File Name:	4000XSeries.7.55.2022071830.ksx

New Features

This software revision includes the following new capabilities:

- Added support for the new 250MHz to 1.7GHz differential probes:

    o *DP0010A, DP0011A, DP0012A, DP0013A*

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected setup file recall to retain labels in firmware releases after 7.55.

- Fixed phase measurement to measure from correct percentage point.

- Corrected change in measurement value and probe attenuation for auto-attenuation probes when an acquisition is stopped. Applies to:

    o N7026A

    o DP0010A, DP0011A, DP0012A, DP0013A

    o PP0004A with PP0001A, PP0002A, PP0003A

- Increased allowable maximum size of CAN .dbc symbolic files

Version 7.50.2021102832

Released Date:	12 November 2021
Instrument software version:	Revision 7.50.2021102832
File Name:	4000XSeries.7.50.2021102832.ksx

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected issue where WaveGen inversion disappears at 50% duty cycle.

- Corrected issue where remote command :WMEM1:SAVE MATH1 does not behave the same as the front panel operation.

- Fixed incorrect scaling issue with N282xA probes

- Corrected firmware update failure (AUX-V)

Version 7.40.2021031202

Released Date:	26 March 2021
Instrument software version:	Revision 7.40.2021031202
File Name:	4000XSeries.7.40.2021031202.ksx

New Features

This software revision includes the following new capabilities:

- Added support for the following new perpetual software licenses:

    o *D4000GENB, D4000AERB, D4000AUTB, D4000NFCB, D4000PWRB, D400USBB, D4000BDLB*

- Added support for the new Hi-Z+ passive probes and adapter:

    o PP0001A/2A/3A Hi-Z+ passive probes

    o PP0004A Hi-Z+ Adapter

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected wrong number of points returned for the first acquisition after changing acquisition settings.

- Corrected remote segments (WAV:SEGM:ALL ON) in ASCII format sends the wrong amount of data

Version 7.35.2020120823

Released Date:	15 December 2020
Instrument software version:	Revision 7.35.2020120823
File Name:	4000XSeries.7.35.2020120823.ksx

New Features

This software revision includes the following new capabilities:

- Added enhanced security:

    o *DSOX4SECA*

Enhancements

This software revision includes the following new enhancements:

- Chart serial signal for CAN, LIN, and SENT protocols.

- Measurement limit test available with any bundled software license that includes mask testing.

- Channel external scaling.

- In Averaging acquisition mode, "Single" makes the number of acquisitions to average, then stops.

- Web interface VNC authentication.

- Band-pass filter math function.

- SCPI command additions and changes.

- Initial condition option on integrate math function.

- USB test software.

- Delay measurements thresholds settings.

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected CAN load counter freezes on SBUS2

- Restored Lister Data save option to the web interface.

- Corrected license files corrupted by email servers.

Version 7.31.2020012900

Released Date:	26 February 2020
Instrument software version:	Revision 7.31.2020012900
File Name:	4000XSeries.7.31.2020012900.ksx

New Features

This software revision includes the following new capabilities:

- Added support the new 400MHz high voltage differential probe:

    o *DP0001A*

Enhancements

This software revision includes the following new enhancement:

- Added the oscilloscope's Host ID to the About Oscilloscope dialog. The Host ID is used to redeem licenses.

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected the D3000BDLA ultimate bundle license to include the NFC trigger option.

- Changed the My Support Subscriptions table to show N/A for the Support Expiration and Status of legacy perpetual licenses, versus Expired.

- Changed the Installed Options section of the instrument web page to show N/A for the Support Expiration and Status of a legacy perpetual license, versus Expired.

- Networked printing via CUPS print server works correctly.

Version 7.30.2019051435

Released Date:	29 May 2019
Instrument software version:	Revision 7.30.2019051435
File Name:	4000XSeries.7.30.2019051435.ksx

NOTE	Due to a lack of browser support for Java-based applications, support for the legacy Java-based remote front panel has been removed. A modern HTML5-based remote front panel is available.

New Features

This software revision includes the following new capabilities:

- Added support for the following new models:

    o *D4000AUTA, D4000GENA, D4000AERA, D4000PWRA, D4000USBA, D4000NFCA, D4000BDLA*

Enhancements

This software revision includes the following new enhancements:

- Added Digitizer Mode where you specify the sample rate and memory depth instead of having them automatically be determined by the time/division setting.

- Frequency Response Analysis (FRA):

    o The sweep frequency range is no longer limited to decade values.

    o The "points per decade" setting has been changed to "total points" for ease of use.

    o Chart:

        ▪ Minor gridlines for the horizontal axis are now shown to improve readability of the plot.

        ▪ The chart's horizontal display range is now independent of the Start/Stop Frequency setting in the Setup Menu.

- The full waveform data can now be exported while in Roll Mode.

- The `:WAV` subsystem now includes commands to download all segmented memory data in one shot.

- Measurement Trend Math can now be applied on Digital channels.

- The ":MEASure:YATX" and ":MEASure:TEDGe" measurements, previously a SCPI-only operation, are now accessible from the Measurement Menu.

- Added Slew Rate measurement.

- The Delay and count-based measurement can now be applied on Digital channels.

Bug Fixes

This software revision includes the following Bug fixes:

- Corrected the NRZ serial decode from having an extra bit than the frame size when the Start-Bit is 0.

- Corrected ":MEASure:DELay:DEFine" for not accepting a definition that includes the "FALLing" edge parameter.

- Corrected the Reference Waveform data (.h5) from incorrectly saving data with twice the delay where is a delay on the displayed waveform.

- Corrected ":MEAS:SHOW?" always returning "1" regardless of the actual state.

- Fixed various LIN LDF file-parsing bugs.

- Fixed various issues related to the N7026A probe.

Changes

- As of version 7.30, the VNC server software for the remote front panel functionality is no longer bundled with the scope software by default. Upgrading to 7.30 will not delete the VNC server software from the scope, but new scopes will no longer ship with the VNC server software installed. For scopes without the software installed, the Browser Web Control page will provide a link for installing the software.

Version 7.20.20171026

Released Date:	26 October 2017
Instrument software version:	Revision 7.20.20171026
File Name:	4000XSeries.7.20.2017102615.ksx

> **NOTE**
>
> If your oscilloscope's software version is prior to 4.00, you will need to change the suffix of the upgrade file from .ksx to .agx.

New Features

This software revision includes the following new capabilities:

- Added USB-PD (Power Delivery) triggering and decode option (DSOX4UPD).

Enhancements

This software revision includes the following new enhancements:

- Added a SPI decode control for MISO bit delay.

- Added SENT SPC support.

- Minimum Manchester baud rate was decreased to 500bps.

- Added remote commands for gain margin and phase margin.

- Added a FRA option to display either gain or phase separately.

- Added :DISPlay:MESSage:CLEar command to dismiss "File Saved Successfully" message.

- Added remote command for setting FRA single-mode frequency.

- FRA now allows up to 100 points-per-decade.

- Random trigger holdoff is now allowed in additional trigger modes.

- Added support to load reference waveforms programmatically.

- Added support for the N7026A probe.

Bug Fixes

This software revision includes the following Bug fixes:

- An issue with handling CAN DBC signed integers has been corrected.

- Two channel measurements made with the N2820A probe are now functioning correctly.

Version 7.11.20170612

Released Date:	12 June 2017
Instrument software version:	Revision 7.11.20170612
File Name:	4000XSeries.7.11.2017061227.ksx

Bug Fixes

This software revision includes the following Bug fixes:

- Digital channel skew has been corrected.

- Horizontal scale indicators at the bottom of the graticule now update appropriately regardless of the chosen time reference.

- An issue with calibrating an N275XA probe has been corrected.

- An issue with the MEAS:RES query ignoring the count parameter has been corrected.

Version 7.10.20170429

Released Date:	29 April 2017
Instrument software version:	Revision 7.10.20170429
File Name:	4000XSeries.7.10.2017042903.ksx

Bug Fixes

This software revision includes the following Bug fixes:

- Fixed an issue where the user's selected language was not remembered after the power was cycled.

- Fixed an issue where an attached mouse would not operate correctly after the power was cycled.

Version 7.10.20170411

Released Date:	11 April 2017
Instrument software version:	Revision 7.10
File Name:	4000XSeries.07.10.2017041132.ksx

New Features

This software revision includes the following new capabilities:

- Added Frequency Response Analyzer option (DSOX4FRA).

- Added Manchester/NRZ serial decode option (DSOX4NRZ).

Enhancements

This software revision includes the following new enhancements:

- The measurement system has been updated to provide more flexibility to support new measurements with more complex configurations. Some installed measurements will not be recallable if the setup (.scp) file was created with firmware prior to version 7.10.

- Users can now pick specific edges to be used by the Delay measurement.

- Bartlett is now supported as an FFT window choice.

- The UART serial decode now supports baud rates to 12Mbits/s.

- DVM and training signals are now standard features.

- Added random trigger holdoff feature.

- Added support to the NFC option for NFC-F reverse polarity triggering.

- Added Channel Power, Occupied Bandwidth, Adjacent Power Ratio, and Total Harmonic Distortion measurements.

Bug Fixes

This software revision includes the following Bug fixes:

- Fixed an issue where in certain circumstances the Serial Lister would not properly display some UART data.

- Fixed an issue where in certain circumstances the Peak-Peak measurement was incorrect.

Keysight InfiniiVision 4000 X-Series Oscilloscopes Release Notes

Version 4.08

Released Date:	27 July 2016
Instrument software version:	Revision 4.08
File Name:	4000XSeries.04.08.2016071801.agx

New Features

This software revision includes the following new capabilities:

- Added CXPI triggering and decode option (DSOX4CXPI).

- Added NFC triggering option (DSOX4NFC).

- Added frequency response analysis to Power Application (PSRR and Control Loop Response).

- Added FFT phase math operator.

Enhancements

This software revision includes the following new enhancements:

- Allow all time domain math functions to be loaded into waveform memories.

- Allow waveform memories to be used as sources for math functions.

- Added user-customizable labels for internal setup files.

- Added GUI indicator for channel invert setting.

- Added SCPI grammar for N2820 zoom and R-sense.

- Added option for a custom time reference location.

- Added "no length control" option to LIN 1.3.

- Improved WaveGen duty cycle granularity.

- Extended WaveGen pulse width limits to 1ns at frequencies >=25kHz.

- Extended probe attenuation ratio limits to 0.001 : 1 (-60dB).

- Power Application – Inrush Current - Added support for DC-input power supplies.

- Power Application – Turn-on/Turn-off - Added support for DC-input power supplies.

- Power Application – Turn-on/Turn-off - Added option to specify measurement threshold levels.

- Power Application – Current Harmonics – Added option to automatically determine line frequency.

Bug Fixes

This software revision includes the following Bug fixes:

- Fixed incorrect DVM values in rare circumstances after toggling channel states.

- Fixed error messages when loading CAN FD .dbc files with data fields longer than 8 bytes.

- Fixed crash when saving H5 files with long path strings.

Version 4.07

Released Date:	20 April 2016
Instrument software version:	Revision 4.07
File Name:	4000XSeries.04.07.2016040802.agx

New Features

This software revision includes the following new capabilities:

- Added remote interface command logger.

Enhancements

This software revision includes the following new enhancements:

- DVM now defaults to DC.

- Cursor state may now be set independently for each cursor.

Bug Fixes

This software revision includes the following Bug fixes:

- Improved USB device mode stability when booting.

- Fixed various LIN symbol file (LDF) parsing errors.

- Fixed 50Ω probe calibration issue with the Power Analysis application.

- Improved performance when entering the IO menu.

- Fixed FFT vertical units when using a 50Ω current probe.

Version 4.06

Released Date:	27 May 2015
Instrument software version:	Revision 4.06
File Name:	4000XSeries04.05.2015051200.agx

New Features

This software revision includes the following new capabilities:

- CAN-FD ISO support has been added to DSOX4AUTO option.

- Control loop capability in the DSOX4POWER option now includes phase view.

Enhancements

This software revision includes the following new enhancements:

- Upto 10 annotations are now supported.

- mDNS On/Off state is now preserved through power cycles.

- Network connection latencies via Telnet or Socket SCPI ports are improved in some situations in networks without NetBIOS.

Bug Fixes

This software revision includes the following Bug fixes:

- LXI identifier now reports Keysight Technologies.

- DVM has been improved when source channel is inverted

Version 4.05

Released Date:	16 February 2015
Instrument software version:	Revision 4.05
File Name:	4000XSeries04.05.2015021000.agx

New Features

This software revision includes the following new capabilities:

- CAN-FD eye testing support has been added to DSOX4AUTO option.

- LIN Symbolic decoding support has been added to DSOX4AUTO option.

- Control Loop measurements have been added to the DSOX4POWER option.

- Bitrate measurement has been added.

- Single shot capability has been added to the Waveform Generator.

- DSOX4POWER option now includes Class D harmonics measurements, including mA/W.

- USB frame triggers have been added – Start of Packet, End of Packet, Reset Complete, Enter Suspend, and Exit Suspend.

Enhancements

- DSOX4POWER option now supports Keysight's N7020A Power rail probe.

- N7020A Power rail probe has a number of behavior improvements; improved autoscale; added calibration detection; improved trigger level interaction; expansion is now center screen.

- DISPlay:BACKLIGHT [ON|OFF] command has been added.

Bug Fixes

- A number of missing localized help screen strings and GUI strings have been added.

- "FFT" is now a valid waveform source for a number of SCPI commands.

- Status byte behaviors are improved.

Version 4.00

Released Date:	1 Nov 2014
Instrument software version:	Revision 4.00
File Name:	4000XSeries.04.00.2014101303.agx

New Features

This software revision includes the following new capabilities

- DSOX4SENSOR - SENT Serial Triggering and Decode option support has been added.

- N2804A/N2805A 100MHz/300MHz differential probe support has been added.

- N7020A Power rail probe support has been added.

- Event lister sidebar capability has been added.

- Frequency peak searching has been added.

- Gated FFT capability has been added.

- New math operators have been added- Smoothing, Maximum Hold, Minimum Hold, Averaging, Envelope.

- New training signals have been added: Sine with Harmonics Distortion; Square wave with Sinusoidal Noise Coupling; SENT; CAN-FD; Keysight Arbitrary waveform.

- New bit rate measurement has been added.

Enhancements

- Product SW has been branded as Keysight.

- DSOX4AUTO – Has been expanded to support CAN FD signal trigger and decode capabilities.

- User configurable sidebar capability has been added.

- New sidebar counter readout has been added.

- Swiping capabilities have been added to waveform, lists, menus, segments.

- DSOX4POWER – Several new capabilities have been added

    o Switching Loss
        ▪ Added an Offset Calibration feature to correct the oscilloscope/probe offset error.
    o Rds(on) & Vce(sat) Analysis

- New analysis that indicates whether a switching device is operating near the values published in the device's data sheet.
  - Deskew
    - After completion, allow users to restore the oscilloscope's vertical and horizontal setting prior to executing Deskew.
  - PSRR
    - Improved the throughput/speed.
    - Improved the vertical scaling during the sweep.
    - Changed the trigger source to the internal WaveGen for stability.
  - Power Quality
    - Pressing Apply will now install all the measurements in the sidebar

- Annotation has been expanded to 4 annotations.

- Waveform label lengths have been increased to 32 characters.

- Users can now save analysis results to thumb drives; this includes results for Cursors data, Measurement results, Mask Test statistics, Search results, Segment timestamps.

- Phase setting between the two waveform generators has been added for Sine, Sine Cardinal, Ramp, Gaussian, Pulse & Cardiac signals.

Bug Fixes

- DSO4XPOWER

  - **Efficiency**– Fixed *Auto Setup* problem with certain probes

Version 3.22

Oscilloscope Firmware Version 03.22.2014052101
Release Date: May 21, 2014
File Names: 4000XSeries03.22.2014052101.agx

This version of the oscilloscope firmware includes the items below:

Enhancements
- CANdb symbolic decode performance has been improve in a number of situations.
- N2820A/N2821A high sensitivity current probe – Range for the user defined resistance has been expanded and now is 10 microOhms to 1 MegaOhm
- Java application security enhancement to track Java engine security improvements
- USB SQ application fonts now have improved legibility
- Waveform Generator vertical accuracy is now improved in a number of situations.
- V average measurement resolution is much improved for small measurements
- Power application improvements
    - Switching loss measurement now behave better around 0 amps
    - Inrush current measurement is now more reliable
    - Efficiency measurement
        - Scaling of waveforms is now optimized, less clipping in some situations
        - Added DC to DC, DC to AC, AC, to AC efficiency measurement.
        - Absolute current is used to give correct result, even if probe is hooked up backwards
    - Current Harmonic measurement
        - Now uses BH window as default, just like the U1881A application
    - Transient response – triggering is made more flexible

Defects Addressed
- The Tablet viewer will now correctly launch on recent instruments
- :MEAS:DEF THR, PERCent,95,10,5 no longer given an out of range error
- Current Harmonic measurement now correct scales grid at decibels to Vrms settigns change.

Version 3.21

Oscilloscope Firmware Version 03.21.20140110001
Release Date: January 21, 2014
File Names: 4000XSeries.03.21. 20140110001.agx

This version of the oscilloscope firmware includes the items below:

Enhancements
- None

Defects Addressed
- Dual bus lister now operates as intended when both busses are UART

Version 3.20

Oscilloscope Firmware Version 03.20.2013082300
Release Date: September 3, 2013
File Names: 4000XSeries.03.20.2013082300.agx

This version of the oscilloscope firmware includes the items below:

Enhancements
- Zone triggering and segmented memory can now be used at the same time.
- CAN symbolic decode, trigger and search was added to the current CAN serial capability. It uses DBC files to load the symbols.
- LIN triggering for parity and checksum errors was added.
- SPI trigger can be entered using a Hex entry pad.
- In XY mode the user can set the scale between 50ms/div – 200ns/div.
- In Roll mode when stopped the user can zoom in around their reference point without any movement.
- ΔY/ΔX (Slew Rate) readout was added to the cursors sidebar tab.
    - :MARKer:DYDX? Added to support via remote interfaces
- Added Negative Duty Cycle measurement.
- We have enabled the ability to navigate search events using the :SEARch:EVENt remote command.
- N2818A/19 differential probe support has been added.
- N2797A extreme temperature active probe support has been added.

Defects Addressed
- We have improved the ability to abort a :DIGitize remote command.
- The Vpp measurement and cursor behavior have been improved for the N2820A/21 high sensitivity current probes.
- LIN 2.0 decoding now better handles the Checksum field.

- For I2C decoder search: previously, read packets sometimes erroneously found during write searches.

Version 3.12

Oscilloscope Firmware Version 03.12.2013041700
Release Date: April 23, 2013
File Names: 4000XSeries.03.12. 2013041700.agx

This version of the oscilloscope firmware includes the items below:

<u>Enhancements</u>
- MSO threshold calibration has been improved and is now better centered about 0 Volts.
- The default cursor placement has been changed; they are no longer reset to the same values.
- N2820A/21 high sensitivity current probes – the range of resistance supported by the user defined resistance probe head is now 1 milliohm to 10 Ohms.

<u>Defects Addressed</u>
- All segmented memory segments are now saved when using binary and ASCII XY formats.
- Measurements statistics are now reset for the 10th tracked measurement

Version 3.11

Oscilloscope Firmware Version 03.11.2013030100
Release Date: March 01, 2013
File Names: 4000XSeries.03.11. 2013030100.agx

This version of the oscilloscope firmware includes the items below:

Enhancements
- Final localized help screens added for the new 3.10 capabilities.

Defects Addressed
- None

Version 3.10

Oscilloscope Firmware Version 03.10.2013020700
Release Date: Feb. 12, 2013
File Names: 4000XSeries.03.10.2013020700.agx

This version of the oscilloscope firmware includes the items below:

Enhancements
- DSOX4USBSQ option support has been added – This option allows for signal quality testing for low, full and high speed USB 2.0 devices.
- N2820A high sensitivity 2 channel current probe support has been added. This allows current measurements down to micro amp range while simultaneously viewing the large signal behavior on the second channel of the probe.
- Saving of files via email has been added.
- A multichannel Hdf5 file format has been added, allowing direct input into Agilent's InfiniiView offline viewer SW application.
- Hex key pad entry has been improved.
- The delay is now displayed when in Roll mode.
- :TRIGger:LEVel:ASETup has been added, this will set the trigger level of all displayed channels to 50% of the signal on screen.

Defects Addressed
- The Set trigger to 50% function now behaves appropriately when channels are AC coupled.
- Wavegen1&2 now recover better when overload is detected.
- Wavegen2 noise floor is improved for DC signals.
- Help screens for grayed out soft keys are now accessible via touch.
- The Sine w/ Glitch training signal now has repeatable location of glitch on the sine wave.
- Arbitrary Waveform is now preserved across a power cycle. It is no longer defaulted.

Version 3.01

Oscilloscope Firmware Version 03.01.20121212001
Release Date: Jan. 10, 2011
File Names: 4000XSeries.03.01.20121212001.agx

This version of the oscilloscope firmware includes the items below:

<u>**Enhancements**</u>
- Averaging will now enable the display and measurement of zoomed waveforms when entering Zoom mode while stopped.
- A hexadecimal entry keypad has been added.
- The Counter measurement will now display up to 8 digits when an external 10MHz reference is selected.
- For the N2750A probe family, the probing mode is now displayed when changed from the probes action button.
- When in TV trigger mode, the trigger status line now indicates the trigger type, Field1,Field2, AllFields, etc., instead of just the trigger source channel.
- When in Roll mode, touching the Roll indicator in the upper right of screen will now bring up the Horizontal menu, rather than Trigger menu.
- An "Add Annotation" choice has been added to the zoom box list of actions.
- The :BLANk, :VIEW, and :STATus commands now accepts WMEMory<N> as an argument.
- Measurement statistics now accumulate with successive SINGLE acquired waveforms.
- The FFT resolution has been improved.

<u>**Defects Addressed**</u>
- Cursors readings now reliably update in the side bar area after certain changes, when assigned to the Math signal.
- Cursors will now track the reference waveform when selected as the source.
- Cursor readouts will now track units changed on the math waveform when the math operator is 'Chart'
- Cursor handles are now placed correctly after changing cursor values while lister is full screen.
- When measuring an FFT, cursors will now be able to span the full zoomed window.
- Zone windows now draw more consistently when moving to/from main and zoom windows.
- Change of the Standard deviation to/from Relative Standard deviation while stopped now clear the statistics.
- Mask statistics will now update to proper language without cycling power when selected language is changed.
- Mask 'Save On' functionality now works appropriately for SINGLE acquisitions and :Digitize remote command.
- FlexRay TP1 Mask Test now works if the "run until" setting is something other than "forever".
- The Reference waveform is now more consistently cleared from the screen, when the clear reference action is done in Reference Waveform menu.
- When refreshing the Save webpage of scope when Reference is selected, this no longer generates a "parse error" on certain following actions.
- The waveform search marks are now cleared when the source waveform is cleared.

- The differentiate math operator now correctly represents signal amplitude after many acquisitions when using the math averaging operator.
- The :WAV:DATA? query now works for the RAW data format when running.
- The runt Search capability now works correctly the first time after a Default Setup.
- The oscilloscope now more gracefully handles a number of unsupported thumb drives.
- :DVM:FREQ will no longer return stale data when current waveform is blank.
- FFT noise floor has been improved.
- Networking behavior now conforms to LXI v1.4 standards.

Version 3.00

Released Date:	September 2012
Requirements category (e.g., instrument software version):	Revision 3.00
File Name:	4000XSeries.03.00.201209XXXX.agx

Initial Release

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