



## **Agilent N5416A USB 2.0 Compliance Test Software Release Notes**

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### **Agilent N5416A Software Version 03.82**

**Released Date: 12 May 2014**

**Minimum Infiniium Oscilloscope Baseline Version: 4.20 (90000 series),  
4.6(9000 series)**

**File Name: SetupInfUSBXP0382.exe**

#### Modifications:

1. To release last version for XP Oscilloscope.
2. Update pass fail requirement on Test J and Test K due to latest specification. The maximum allowed voltage increase from  $\pm 10\text{mV}$  to  $\pm 20\text{mV}$ .

### **Agilent N5416A Software Version 03.81**

**Released Date: 28 October 2013**

**Minimum Infiniium Oscilloscope Baseline Version: 4.20 (90000 series),  
4.6(9000 series)**

**Minimum Infiniium Oscilloscope Baseline Version: 4.60.0005 (90000 series),  
4.6(9000 series)**

**File Name: SetupInfUSBXP0381.exe**

#### Modifications:

1. To upgrade framework to 0391 and support layer to 2.01
2. Fixed the problem where Upstream Low Speed test able to run at first trial, however at second trial, the test aborts with error message "Did not find correct waveform".
3. For Inrush Current set the sensitivity to HIGH and the Acquisition to High Resolution Auto mode.
4. Fixed test abort intermittently when ran Suspend / Resume Timing, to turn off Bandwidth limit to fix this issue. (This issue only affect window 7, it had been fixed by using baseline 4.6)
5. Fixed test abort occasionally on Signal Quality Test with error message "HSSQDevice0.tsv" was not found, especially when ran repetitive. This is due to waveform file was not properly saved.
6. Fixed connection error where connection break when ran with 81130A. This is due to GPIB command error. (\*IDN?;\*OPT?)



**Agilent N5416A Software Version 03.80**

**Released Date: 14 June 2013**

**Minimum Infiniium Oscilloscope Baseline Version: 4.20 (90000 series), 4.20 (9000 series)**

**File Name: SetupInfUSBXP0380.exe**

Modifications:

- Embedded Host Test update
- Remove the lost from Agilent fixture using InfiniiSim.

**Agilent N5416A Software Version 03.74**

**Released Date: 27 May 2013**

**Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.40 (90000 series), 2.40 (9000 series)**

**File Name: SetupInfUSBXP0374.exe**

Modifications:

- Updated USB-IF's USBET dll to version 1.20
- Upgraded framework to version 3.82
- This is last version for 80000 series oscilloscope.

**Agilent N5416A Software Version 03.73**

**Released Date: 6 April 2012**

**Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.40 (90000 series), 2.40 (9000 series)**

**File Name: SetupInfUSBXP0373.exe**

Modifications:

- Updated USB-IF's USBET dll to version 1.13.
- Fixed marker placement for EL\_21 test.

**Agilent N5416A Software Version 03.72**

**Released Date: 25 Sept 2011**

**Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.40 (90000 series), 2.40 (9000 series)**

**File Name: SetupInfUSBXP0372.exe**

Modifications:

- Upgraded framework to version 3.61 to support Windows 7 platform.
- Replaced USB-IF MATLAB scripts with USB-IF's USBET dll. Version of the USBET dll for this release is 1.12.

**Agilent N5416A Software Version 03.71**



**Released Date: 20 July 2011**

**Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.40 (90000 series), 2.40 (9000 series)**

**File Name: SetupInfUSBXP0371.exe**

Modifications:

- Reduced sampling rate of low speed signal quality test back to 1Gsa/s as MATLAB script cannot handle fast sampling rate.
- Fixed insufficient memory points issue for low speed signal quality test.

**Agilent N5416A Software Version 03.70**

**Released Date: 4 Oct 2010**

**Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.40 (90000 series), 2.40 (9000 series)**

**File Name: SetupInfUSBXP0370.exe**

Modifications:

- Upgraded framework to version 3.40 to support DSOX90000 series oscilloscopes.

**Agilent N5416A Software Version 03.60**

**Released Date: 10 April 2010**

**Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 1.41 (90000 series), 2.00 (9000 series)**

**File Name: SetupInfUSBXP0360.exe**

Modifications:

- Upgraded framework to version 3.11.
- Fixed algorithm for droop drop fixture detection.
- Fixed Inrush current probe impedance detection bug.

**Agilent N5416A Software Version 03.51**

**Released Date: 25 September 2009**

**Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 1.41 (90000 series), 2.00 (9000 series)**

**File Name: SetupInfUSBXP0351.exe**

Modifications:

- Fixed algorithm for EL\_38 and EL\_40.

**Agilent N5416A Software Version 03.50**

**Released Date: 22 June 2009**

**Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 1.41 (90000 series), 2.00 (9000 series)**

**File Name: SetupInfUSBXP0350.exe**



Additions:

- Supports the Infiniium 9000 series oscilloscope.
- Supports latest USB-IF MATLAB script version 2.30.01.
- Droop drop fixture and OTG fixture drivers are now installed automatically.
- Supports single-ended measurement for Packet Parameter Tests.

Modifications:

- Outdated connection diagrams are updated.
- Changed algorithm for EL 21 to ignore the first K bit in the SYNC field since it is allowed to be distorted.
- Signal quality tests do not pop-up instruction dialogs in multi-trial mode
- Addressed bugs for EL 16, 17, 21, 22, 36, 37.
- Changed Inrush Current Test to trigger only once then fail the test if failed to trigger.
- Corrected connection instructions for bus-powered hub Drop Test using the new fixture.

**Agilent N5416A Software Version 03.40**

**Released Date: 20 May 2008**

**Minimum Infiniium Oscilloscope Baseline Version: 5.20 (80000 series), 1.00 (90000 series)**

**File Name: SetupInfUSBXP0340.exe**

Additions:

- Supports the Hi-Speed new fixture E2649-66401, E2649-66402, E2649-66403 and E2649-66404.
- Supports the Droop/Drop tests' new fixture in automatic and manual measurement method.
- Supports the SMA connection measurement for the Hi-Speed Signal Quality tests.
- Supports the new USB-IF definitions on the Inrush current test.



- Added trigger level option for the Packet Parameter Test.

Modifications:

- Connection diagram of the tests related to the new fixture are updated.
- Rise time and fall time measurements in the Low/Full speed tests are informative tests.

**Agilent N5416A Software Version 03.30**

**Released Date: 10 Jan 2008**

**Minimum Infiniium Oscilloscope Baseline Version: 5.20 (80000 series), 1.00 (90000 series)**

**File Name: SetupInfUSBXP0330.exe**

Additions:

- Supports the Remote Interface Control.
- Supports the Infiniium 90000 Series High Performance Oscilloscope.

Modifications:

- Connection diagram for the Host Controller Packet Parameter is updated.
- Non-Monotonic hysteresis is set to 30mV by default.

**Agilent N5416A Software Version 03.20**  
**Released Date: September 2007**  
**Minimum Infiniium Oscilloscope Baseline Version: 05.20.00**  
**File Name: SetupInfUSBXP0320.exe**

Additions

- Added manual method in Signal Eye Quality tests for Hi speed, Full speed and low speed tests.
- Added sensitivity option for the EL\_28 Measure Device Chirp-K Latency Test.

Modifications:

- Images for the result are shown up to the worst 25 trials.
- Supports Matlab script 2.30 provided by USB-IF.
- Used new specification for Rise/Fall time tests.



**Agilent N5416A Software Version 03.10**  
**Released Date: March 2007**  
**Minimum Infiniium Oscilloscope Baseline Version: 05.20.00**  
**File Name: SetupInfUSBXP0310.exe**

Additions

- Supports Multitrial testing.
- Added compliance features to allow customers to choose the hysteresis measurement level for non-Monotonic Edge Test.
- Added Noise reduction option checking system.

Modifications:

- Trigger level is modified to 100mV for signal quality tests.
- Only supports Matlab script 2.12.

**Agilent N5416A Software Version 03.02**

**Released Date: 20 Dec 2006**

**Minimum Infiniium Oscilloscope Baseline Version: 05.20.00**

**File Name: SetupInfUSBXP0302.exe**

Modifications:

- Matlab migration from version 7.1 to version 7.5.
- Code change for triggering the last packet of signal in Host/Hub Disconnect test.
- Unit of measurement displayed at result has been corrected in Host Packet Parameter test.



**Agilent N5416A Software Version 03.01****Released Date: 17 Oct 2006****Minimum Infiniium Oscilloscope Baseline Version: 03.90.00****File Name: SetupInfUSBXP0301.exe**Additions

- OTG test supports Cypress boards (and any other manual OTG test boards) in debug mode.
- Supports MATLAB script both versions 2.10 and 2.12.
- Data export tools to export test results into customer's database
- Debug features to allow customers to adjust trigger level and threshold level for Packet Parameters test and to allow customers to adjust total time range and trigger level for Inrush Current test.

Modifications:

- Segregated test groups: Device, Hub, Host, OTG
- Changed algorithm for Receiver Sensitivity test. New algorithm checks for 100% NAK.