# D9010USBC USB Compliance Test Application Software

Keysight D9010USBC Software Version 4.20.0.0

Release Date:	Oct 16, 2023
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	<ul> <li>6.74.00402 (9000 Series, S-Series, 90000-Series, X-Series, V-Series, Q-Series, and Z-Series)</li> <li>11.50.00402 (UXR Series)</li> <li>11.50.00402 (MXR Series)</li> <li>11.50.00402 (EXR Series)</li> </ul>
File Name:	SetupD9010USBC_USB2_4.20.0.0.exe
Licenses:	Please see the product data sheet on Keysight.com.

#### New Features / Additions

- Supports eUSB test.
- USBET Setup option added to the Set Up tab.

### Modifications / Changes

- Updated the following tests to run with USBET tool.
  - o Inrush current test
  - o High speed signal quality tests
  - Low and full speed tests

Please install USBET version 2.20 from the USBIF webpage:

https://www.usb.org/sites/default/files/USBET2\_20.zip

References: https://www.usb.org/compliancetools

- Removed support for Keysight Droop Drop Test Fixture.





- Removed unused configL[SSigIntegrityTestType] from **Configure** tab.
- Changed EL\_16 test limit to pass the test if more than 40mV. (Please refer to USB 2.0 DCR ECN.pdf within https://www.usb.org/sites/default/files/usb\_20\_20230224.zip)

### Notes/Recommendations

- USB App requires EZJ license/ D9010JITA/D9020JITA license.
- Manual oscilloscope measurement for eUSB is not supported.
- If it is needed to disconnect external instrument after receiver sensitivity, please change "Configure External Instrument" setting to "No", this will specifically disconnect and unregister instrument connected with USB cable.

#### Known Issues

- When run the packet parameter test group with "Suppress All Connection Prompts" checkbox disable, it will reset the vertical scaling during the run for "EL\_22 Inter-packet Gap Between Host And Device Packet Test" and the measurement will fail to proceed. The workaround is to run the packet parameter test with "Suppress All Connection Prompts" enabled.

### Keysight D9010USBC Software Version 4.14.0.0

Release Date:	May 29, 2023
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	<ul> <li>6.73.00102 (9000 Series, S-Series, 90000-Series, X-Series, V-Series, Q-Series, and Z-Series)</li> <li>11.50.00401 (UXR/ UXR-B Series)</li> <li>11.50.00402 (EXR Series / MXR/ MXR-B Series)</li> </ul>
File Name:	SetupD9010USBC_USB2_4.14.0.0.exe
Licenses:	Please see the product data sheet on Keysight.com.

#### New Features / Additions

- Support UXR-B Series and MXR-B Series Oscilloscope.

- "Suspend measurement threshold" option has been made user configurable.
   Application Path: Configure tab > Device Suspend/Resume/Reset Timing > Suspend measurement threshold option.
- Default suspend measurement threshold has been set to 200 mV.
- For host low speed signal quality test, changed trigger setting from edge trigger to pattern trigger.
- The pattern trigger time range setting has been made user configurable.
   Application Path: Configure tab > Host Low Speed Signal Quality and Transition Time Test
   > Pattern Trigger Time Range option.
- Default pattern trigger time range is 2 μs (min) and 18 μs (max).
- Changed droop test triggering to falling edge. For more info please refer:
   https://www.usb.org/sites/default/files/USB20\_32\_BC12\_Drop\_Droop\_1\_4\_1.pdf





- Updated app to support Keysight License Manager 5.

## Keysight D9010USBC Software Version 4.13.0.0

Release Date:	December 16, 2022
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	6.73.00003(9000 Series, S-Series, 90000-Series, X-Series, V-Series, Q-Series, Z-Series) 11.40.00002 (UXR Series) 11.40.00002 (MXR Series)
File Name:	SetupInfUSBXP04130000.exe
Licenses:	Please see the product data sheet on Keysight.com.

## Modifications / Changes

- In "EL\_44 EL\_45 Downstream Measure Repeated EOP Width" test, extended the scroll window to cover longer waveform length. This change is applicable when user selects multiple hubs that have longer EOP.
- Bandwidth option has been made user configurable.
   Application Path: Configure tab > Bandwidth option
- Default bandwidth limit has been set to 2.5 G.

#### Notes / Recommendations

- Keysight Droop Drop Fixture is obsolete, and it will not be supported by the test application.

## Keysight D9010USBC Software Version 4.12.0.0

Release Date:	August 16, 2022
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software	6.72.00501(9000 Series, S-series, 90000 Series, 90000 X-
version):	Series,
	90000 V-Series, 90000 Q-Series, 90000 Z-Series)
	11.30.00406 (UXR Series)
	11.30.00406 (MXR Series)
File Name:	SetupInfUSBXP04120000.exe
Licenses:	Please see the product data sheet on Keysight.com.

### New Features / Additions

- Support provided for ARSL command "Get IDN" to initialize the 81160A instrument.

### Issues Fixed

- Fixed the issue wherein on opening a saved project the external instrument configuration didn't load correctly.
- Fixed the issue in which the **HS Test Connection** option settings were not getting updated after loading a saved project.





- Fixed Receiver Sensitivity test info in the MOI (Methods of Implementation) document. Path: MOI document > Device/Hub Receiver Sensitivity test > Connect to Equipment section > Step 5.

Change: The updated info appears in the MOI in the following manner:

- o Connect the 81130A / 81134A / 81160A to the oscilloscope using the 82357A USB/GPIB Interface.
  - If you choose to use the Keysight 81130A Pulse/Pattern Generator, connect the 8493C 6dB attenuators to OUTPUT1 and OUTPUT2 of the Keysight 81130A Pulse/Pattern Generator.



## Keysight D9010USBC Software Version 4.11.0.0

Release Date:	March 04, 2022
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	6.71.00001(9000 Series, S-series, 90000 Series, 90000 X-Series, 90000 V-Series, 90000 Q-Series, 90000 Z-Series) 11.20.00001 (UXR Series) 11.20.00001 (MXR Series)
File Name:	SetupInfUSBXP04110000.exe
Licenses:	Please check the product data sheet on Keysight.com.

#### New Features / Additions

- Allowed bandwidth control in Configure tab.
   (Configure tab > Bandwidth parameter)
  - Default value set to 2.5 GHz
  - Lowest value begins from 2.0 GHz (previous was 1.5 GHz)

- Disabled hardware mask.
- Hub Type C connection diagram updated.
- Disabled droop/drop test for Hub Type C.
- Changed naming for J/K/SE0 Test:
  - EL\_9 Undriven Voltage Test\_J (D-)
  - EL\_9 Undriven Voltage Test\_K (D+)
  - EL\_9 Undriven Voltage SE0\_NAK (D+)
  - EL\_9 Undriven Voltage SE0\_NAK (D-)



### Issues Fixed

- Fixed EL\_39 Suspend Timing Response Test by adding delta time measurement between the END of the last SOF packet and the rising edge transition to full speed J-state.
- Fixed the connection diagram issue in J/K/SE0 Test for:
  - Probe
  - Voltmeter
- Fixed EL\_48 Hub Downstream Delay Test; added following parameters in **Configure** tab: (Configure tab > Hi Speed > Hub Hi-Speed)
  - Packet Parameter Test Measurement Threshold (Positive)
  - Packet Parameter Test Measurement Threshold (Negative)



## Keysight D9010USBC Software Version 4.10.1.0

Release Date:	September 30, 2021
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	6.55.00902(9000 Series, S-series, 90000 Series, 90000 X-Series, 90000 V-Series, 90000 Q-Series, 90000 Z-Series) 10.25.00702 (UXR Series) 11.06.00401 (MXR Series)
File Name:	SetupInfUSBXP04100001.exe
Licenses:	Please check the product data sheet on Keysight.com.

### **New Features**

- The compliance test application license has been upgraded to enable application specific EZJIT capabilities.



## Keysight D9010USBC Software Version 4.10.0.0

Release Date:	December 02, 2020
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	6.55.00902 (9000 Series, S-series, 90000 Series, 90000 X-Series, 90000 V-Series, 90000 Q-Series, 90000 Z-Series) 10.25.00702 (UXR Series) 11.06.00401 (MXR Series)
File Name:	SetupInfUSBXP04100000.exe
Licenses:	Please check the product data sheet on Keysight.com.

## Modifications / Changes

- Changed the receiver sensitivity measurement for EOP according to spec. https://compliance.usb.org/index.asp?UpdateFile=Electrical#134

#### Issues Fixed:

- Fixed reporting for selected port when using Keysight Droop Drop fixture.
- Fixed droop setup only stuck at droop port 1 when use Keysight Droop Drop Fixture.



## Keysight D9010USBC Software Version 4.02.0.0

Release Date:	August 07, 2020
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	6.55.00504(9000 Series, S-series, 90000 Series,90000 X-Series, 90000 V-Series, 90000 Q-Series,90000 Z-Series) 10.25.00902 (UXR Series)
File Name:	SetupInfUSBXP04020000.exe
Licenses:	Please check the product data sheet on Keysight.com.

### New Features / Additions

- Migrated to FW0614

### Changes / Modifications

- Do an Infiniisim license check when run signal quality test using debug mode.
- Added license check for EZJIT.

#### Known Issues

- This version will not support MXR scope. The edge trigger will not work if the offset of the signal is not set to 0.



## Keysight D9010USBC Software Version 4.01.0000

Release Date:	December 20, 2019
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	6.50.00906 (9000 Series, S-series, 90000 Series, 90000 X-Series, 90000 V-Series, 90000 Q-Series, 90000 Z-Series)
	10.12.05302 (UXR Series)
File Name:	SetupInfUSBXP04010000.exe
Licenses:	Please check the product data sheet on Keysight.com.

#### New Features / Additions

- Added Number of Hub configuration for Hub signal quality test

### Modifications / Changes

- Fixed project load problem where older project file unable to load.
- Fixed Droop drop test unable to run on S-series.
- Removed warning message for Resume timing test.

#### Known Issues

- If run Host/ Hub packet parameter test on a UXR scope (For version 10.10 and above), enumerate the DUT before start execute the test, do not re-enumerate the DUT after executed the test.
- When run suspend/resume/reset test on a UXR scope (For version 10.10 and above), run the test individually, do not run the entire test group for suspend/resume/ reset tests.



## Keysight D9010USBC Software Version 4.00.0000

Release Date:	August 09, 2019
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	6.40.00801(9000 Series, 90000 Series, 90000 X-Series, 90000 V-Series, 90000 Q-Series,90000 Z-Series) 10.10.04601 (UXR Series)
File Name:	SetupInfUSBXP04000000.exe
Licenses:	Please check the product data sheet on Keysight.com.

### New Features / Additions

- Migrated to Framework 6.01.

### Modifications / Changes

- Changed to new GUI.
- Removed OTG test.
- Added Type C option for USB2
- Changed max limit for drop no load from 5.25 to 5.50
- For 900mA option in drop test, change the min loaded drop limit from 4.45 to 4.75.

### Known Issues

 Signal quality tests unable to run with differential probe. For alternative, change the "Marker Placement" to "MANUAL" (This setting is in configure tab). It only affected by version 10.10.04601.



## Keysight N5416A/N5416B Software Version 3.96.0000

Release Date:	December 19, 2018
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	6.30.00701(9000 Series, 90000 Series, 90000 X-Series, 90000 V-Series, 90000 Q-Series, 90000 Z-Series)
File Name:	SetupInfUSBXP03960000.exe
Licenses:	Please check the product data sheet on Keysight.com.

#### New Features / Additions

- Added support for Infiniium Oscilloscope Software version 10.00.03902

### Modifications / Changes

- Fixed packet parameter test failed to find pattern (test ID 205).
- Fixed EL\_40 resume test unable to find SOF.
- Changes below for upstream full speed and low speed test in manual measurement
  - Removed deskew setting, do not need to set position or deskew to fold the eye, this is not required.
- Modification for UXR series, turn off high bandwidth trigger for Droop test using Keysight fixture (manual configuration)
- Removed Mask averaging method, replace directly with acquired averaging for droop test (manual configuration)

#### Known Issues

 E2649-66405 no longer supported in UXR-series. However, user still able to run with manual configuration



### Keysight N5416A/N5416B Software Version 3.95.0000

Release Date:	October 09, 2018
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	6.30.00609(9000 Series, 90000 Series, 90000 X-Series, 90000 V-Series, 90000 Q-Series,90000 Z-Series)
File Name:	SetupInfUSBXP03950000.exe
Licenses:	Please check the product data sheet on Keysight.com.

- Integrated USBET 1.31.02.
- Modified error message for High Speed Signal Quality test
- Add status check in SQ test due to intermittent error when running SQ test.
- Fixed trigger not working on other channels except channel 1.
- Fixed apps default to differential even the selection is SMA.
- Added Command ":MARKER:MODE MANUAL" before setup the Marker due to baseline behavior 6.20 and above
- Modified Drop test limit to 5.25V instead of 5V.
- Updated test description for J/K Test.
- Fixed packet parameter test trigger not work when using Single ended connection.
- Set the measurement to focus on main window not zoom window. Additional setting due to baseline behavior on 6.20 and above.
- Removed Data eye screenshot reporting. (But maintain the screenshot image)
- Fixed manual eye measurement histogram had been place wrongly on the right eye crossing that cause to return invalid measurement.
- Changed the Acquire averaging from mask average to acquire average.
- Fixed hub repeater test unable to find 2k pattern.



## Keysight N5416A/N5416B Software Version 3.94.0000

Release Date:	March 31, 2017
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	6.30.00537(9000 Series, 90000 Series, 90000 X-Series, 90000 V-Series, 90000 Q-Series, 90000 Z-Series)
File Name:	SetupInfUSBXP03940000.exe
Licenses:	Please check the product data sheet on Keysight.com.

#### New Features / Additions

- Added support for Infiniium Oscilloscope Software version 6.00
- Add support for 81160A.

- Disable fixture de-embed selection for USB2 to avoid confusion. It will move to debug mode.
- For S-series oscilloscope, the HF Reject coupling will be turned on while running inrush current test.
- Revised USBIF droop drop loaded connection diagram.
- Separate loaded test and non-loaded test.
- Add drop test for USB3 using USBIF fixture. (Change the Test load to 900mA in configure tab).
- Change Drop limit from 5.25 to 5.50. This is due to the ECN VBUS Max Limit



## Keysight N5416A/N5416B Software Version 3.93.0001

Release Date:	May 31, 2016
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	5.60
File Name:	SetupInfUSBXP03930001.exe
Licenses:	Please check the product data sheet on Keysight.com.

- Fixed issue for connection unable to be established using SICL address.
- Calculate measurement threshold before proceed for EL\_31 measurement.



## Keysight N5416A/N5416B Software Version 3.93.0000

Release Date:	April 05, 2016
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	5.60
File Name:	SetupInfUSBXP03930000.exe
Licenses:	Please check the product data sheet on Keysight.com.

- Change on Instruction window by maximize window by default.
- Create connection diagram and instruction to setup droop and drop test using USBIF droop drop fixture.
- Increase the number of Average in droop drop test from 8 to 16 according to CTS.
   Implemented in both test that using Keysight droop drop fixture or USBIF droop drop fixture.
- Added configure option for trigger threshold in droop test. The selection was within the configure tab.
- Reset the external scaling ratio from 0.5 to 1.0 after finish the test. (Only affect droop drop test that ran with Keysight Droop Drop fixture)
- Enabled the option to disable Infiniium GUI in order to improve scope performance
- Fixed SICL/IP selection issue.



## Keysight N5416A/N5416B Software Version 3.92.0000

Release Date:	September 18, 2015
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	5.50.0031
File Name:	SetupInfUSBXP03920000.exe
Licenses:	Please check the product data sheet on Keysight.com.

## Modifications / Changes

- Keysight Rebranding.



## Agilent N5416A Software Version 3.91.0000

Release Date:	April 15, 2015
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	4.60 (90000 Series and 9000 Series)
File Name:	SetupInfUSBXP0391
Licenses:	Please check the product data sheet on Keysight.com.

### New Features / Additions

- Added support for Infiniium Oscilloscope Software version 5.50.



## Agilent N5416A Software Version 3.90.0000

Release Date:	May 30, 2014
Requirements Category (e.g., operating system):	Microsoft Windows 7
Requirements Category (e.g., instrument software version):	4.60 (9000 Series and 90000 Series)
File Name:	SetupInfUSBXP03910000.exe
Licenses:	Please check the product data sheet on Keysight.com.

### New Features / Additions

- Added support for Infiniium Oscilloscope Software version 5.00.



## Agilent N5416A Software Version 3.82.0000

Release Date:	May 12, 2014
Requirements Category (e.g., operating system):	Microsoft Windows 7, Microsoft Windows XP
Requirements Category (e.g., instrument software version):	4.20 (9000 Series and 90000 Series)
File Name:	SetupInfUSBXP0382.exe
Licenses:	Please check the product data sheet on Keysight.com.

- To release last version for XP Oscilloscope.
- Update pass fail requirement on Test J and Test K due to latest specification. The maximum allowed voltage increase from ±10mV to ±20mV.



### Agilent N5416A Software Version 3.81.0000

Release Date:	Oct 28, 2013
Requirements Category (e.g., operating system):	Microsoft Windows 7, Microsoft Windows XP
Requirements Category (e.g., instrument software version):	4.20 (9000 Series and 90000 Series)
File Name:	SetupInfUSBXP0381.exe
Licenses:	Please check the product data sheet on Keysight.com.

- To upgrade framework to 0391 and support layer to 2.01
- 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".
- For Inrush Current set the sensitivity to HIGH and the Acquisition to High Resolution Auto mode.
- Fixed test abort intermittently when ran Suspend / Resume Timing, to turn off Bandwith limit to fix this issue. (This issue only affect window 7, it had been fixed by using baseline 4.6)
- 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.
- Fixed connection error where connection break when ran with 81130A. This is due to GPIB command error. (\*IDN?;\*OPT?)



## Agilent N5416A Software Version 3.80.0000

Release Date:	June 14, 2013
Requirements Category (e.g., operating system):	Microsoft Windows 7, Microsoft Windows XP
Requirements Category (e.g., instrument software version):	4.20 (9000 Series and 90000 Series)
File Name:	SetupInfUSBXP0380.exe
Licenses:	Please check the product data sheet on Keysight.com.

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



## Agilent N5416A Software Version 3.74.0000

Release Date:	May 27, 2013
Requirements Category (e.g., operating system):	Microsoft Windows 7, Microsoft Windows XP
Requirements Category (e.g., instrument software version):	2.40 (9000 Series and 90000 Series) 5.71 (80000 Series)
File Name:	SetupInfUSBXP0374.exe
Licenses:	Please check the product data sheet on Keysight.com.

- 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 3.73.0000

Release Date:	April 06, 2012
Requirements Category (e.g., operating system):	Microsoft Windows 7, Microsoft Windows XP
Requirements Category (e.g., instrument software version):	2.40 (9000 Series and 90000 Series) 5.71 (80000 Series)
File Name:	SetupInfUSBXP0373.exe
Licenses:	Please check the product data sheet on Keysight.com.

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



## Agilent N5416A Software Version 3.72.0000

Release Date:	September 25, 2011
Requirements Category (e.g., operating system):	Microsoft Windows 7, Microsoft Windows XP
Requirements Category (e.g., instrument software version):	2.40 (9000 Series and 90000 Series) 5.71 (80000 Series)
File Name:	SetupInfUSBXP0372.exe
Licenses:	Please check the product data sheet on Keysight.com.

- 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 3.71.0000

Release Date:	July 20, 2011
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	2.40 (9000 Series and 90000 Series) 5.71 (80000 Series)
File Name:	SetupInfUSBXP0371.exe
Licenses:	Please check the product data sheet on Keysight.com.

- 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 3.70.0000

Release Date:	Oct 04, 2010
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	2.40 (9000 Series and 90000 Series) 5.71 (80000 Series)
File Name:	SetupInfUSBXP0370.exe
Licenses:	Please check the product data sheet on Keysight.com.

## Modifications / Changes

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



## Agilent N5416A Software Version 3.60.0000

Release Date:	April 10, 2010
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	1.41 (9000 Series and 90000 Series) 5.71 (80000 Series)
File Name:	SetupInfUSBXP0360.exe
Licenses:	Please check the product data sheet on Keysight.com.

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



## Agilent N5416A Software Version 3.51.0000

Release Date:	September 25, 2009
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	1.41 (9000 Series and 90000 Series) 5.71 (80000 Series)
File Name:	SetupInfUSBXP0351.exe
Licenses:	Please check the product data sheet on Keysight.com.

## Modifications / Changes

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



## Agilent N5416A Software Version 3.50.0000

June 22, 2009
Microsoft Windows XP
1.41 (90000 Series)
2.00 (9000 Series)
5.71 (80000 Series)
SetupInfUSBXP0350.exe
Please check the product data sheet on Keysight.com.
_

#### New Features / 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.

- 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 3.40.0000

Release Date:	May 20, 2008
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	1.41 (90000 Series) 5.20 (80000 Series)
File Name:	SetupInfUSBXP0340.exe
Licenses:	Please check the product data sheet on Keysight.com.

#### New Features / 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.

- 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 3.30.0000

Release Date:	January 10, 2008
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	1.00 (90000 Series) 5.20 (80000 Series)
File Name:	SetupInfUSBXP0330.exe
Licenses:	Please check the product data sheet on Keysight.com.

### New Features / Additions

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

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



## Agilent N5416A Software Version 3.20.0000

Release Date:	September 2007
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	5.20 (80000 Series)
File Name:	SetupInfUSBXP0320.exe
Licenses:	Please check the product data sheet on Keysight.com.

#### New Features / 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.

- 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 3.10.0000

Release Date:	March 2007
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	5.20 (80000 Series)
File Name:	SetupInfUSBXP0310.exe
Licenses:	Please check the product data sheet on Keysight.com.

### New Features / Additions

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

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



## Agilent N5416A Software Version 3.02.0000

Release Date:	December 20, 2006
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	5.20 (80000 Series)
File Name:	SetupInfUSBXP0302.exe
Licenses:	Please check the product data sheet on Keysight.com.

- 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 3.01.0000

Release Date:	October 17, 2006
Requirements Category (e.g., operating system):	Microsoft Windows XP
Requirements Category (e.g., instrument software version):	3.90 (80000 Series)
File Name:	SetupInfUSBXP0301.exe
Licenses:	Please check the product data sheet on Keysight.com.

#### New Features / 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 / Changes

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

#### Initial Release

Keysight Technologies © 2000-2022