

Locate the User's Guide

- ◆ Download the user's guide from the probe's product page on www.keysight.com.
- ◆ Read the user's guide in Keysight's **Probe Resource Center (PRC)**. The PRC is an application that runs on a PC, Mac, or iOS device. Available at www.keysight.com/find/PRC.

CAUTION. Risk of Damage Due to Electrostatic Discharge (ESD)

This probe is a high-performance device that ESD can quickly and imperceptibly damage or destroy. Always work at a static-safe workstation and wear a wrist strap when handling probe components. Refer to the User's Guide. To connect the probe to the oscilloscope, follow these four steps:

- 1** If the DUT is not grounded to the oscilloscope via the AC mains ground, connect the DUT ground to the oscilloscope ground. An example of a floating ground is a battery-powered DUT.
- 2** Connect the probe head to the DUT. The probe amplifier *must not* be connected to the oscilloscope or the probe head!
- 3** Connect the probe amplifier to the oscilloscope. Do not connect the probe head to the amplifier at this time.
- 4** Connect the probe head to the probe amplifier.

When probing, you can move the probing site *without* breaking the head-to-amplifier connection. EXCEPTION: break the connection before moving an N2836A or N5441A solder-in probe head.

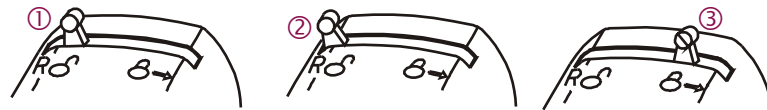
Connecting the Probe to the Infiniium Scope

To Connect

1. With the lever in relaxed in position ① push the probe onto the BNC.
2. The lever moves towards the R (release) ② and returns to symbol.
3. Move the lever towards the symbol until snug. ③

To Disconnect

Move and hold the lever at R (Release) and pull the probe from the BNC.



Additional Accessories

- ◆ N1022B for connecting the InfiniiMax III+ probing system to Infiniium 86100D DCA-X sampling oscilloscope or other RF instruments.
- ◆ N2787A 3D probe positioner for holding the browser or probe amplifier.
- ◆ Strain relief putty (N5439-65201).
- ◆ N5450B Extreme Temp. Extension Cable. See user's guide for more information.
- ◆ E2655C or N5443A PV Fixture. Required to calibrate, deskew, and verify the performance of the probe. Properly positions the probe for performance verification testing.

InfiniiMax III+ Probe Compatibility

Compatible Oscilloscopes

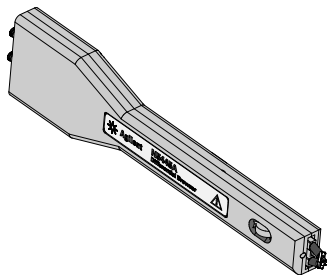
- ◆ 90000 X/Q Series (with N5442A adapter)
- ◆ 90000A Series
- ◆ S Series
- ◆ 86100C/D Series (with N1022A/B adapter)

Not Compatible

- ◆ 9000 and InfiniiVision scopes
- ◆ N2830/1/2A InfiniiMax III+ probes are *not* compatible with InfiniiMax I and II probe heads and vice versa.

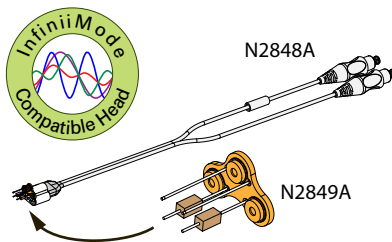
Recommended Probe Configurations *See user's guide for detailed information.*

1 N5445A Differential Browser



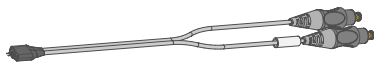
- ◆ BW up to 30 GHz
- ◆ Replacement tips, ground blades and ground screws available
- ◆ Best handheld probe for differential and single-ended signals
- ◆ Spring-loaded tips and variable spacing (0.5 mm to 3.1 mm, use thumbwheel to adjust)
- ◆ Accessory: 4 replacement tips (N5476A)
- ◆ Accessory: 4 replacement ground blades (N5445-68700)
- ◆ Accessory: 4 replacement ground screws (N5445-68701)
- ◆ Using the N2787A 3D probe positioner with the N5445A browser probe head reduces the chance of browser tips breakage and ensures that the tips maintain solid contact.

2 N2848A QuickTip Probe Head



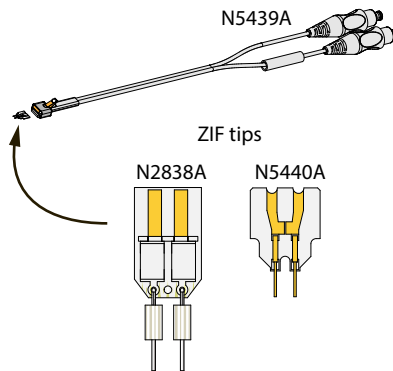
- ◆ InfiniiMode. Differential, common mode, single-ended measurements without changing connections.
- ◆ BW: 16 GHz Diff, 10 GHz CM, 10 GHz SE
- ◆ Easy, secure magnetic connection between head and tip.
- ◆ Extreme temperature environments.
- ◆ Accessory: 4 QuickTips (N2849A)

6 N5441A Solder-In Probe Head



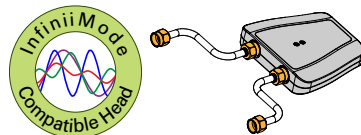
- ◆ BW up to 16 GHz, variable span
- ◆ Economical, semi-permanent connection
- ◆ Extra wire accessory: 7 mil (01169-81301), 5 mil (01169-21306).

3 N5439A ZIF Probe Head



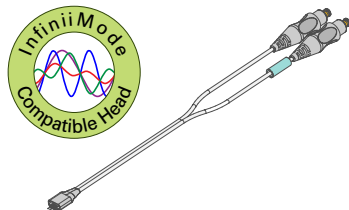
- ◆ N2838A: 25 GHz BW, normal sensitivity
- ◆ N5440A: 28 GHz BW, normal sensitivity
- ◆ N5447A: not compatible with InfiniiMax III+ amplifiers
- ◆ 5 PC Board ZIF tips (N2838A)
- ◆ 5 Ceramic ZIF tips (N5440A)
- ◆ Economical replaceable tip form factor
- ◆ Choice of 450Ω (normal sensitivity) or 200Ω ZIF tips (high sensitivity)
- ◆ Variable spacing
- ◆ N2838A replacement axial resistors: N2836-68701

4 N5444A 2.92 mm/3.5 mm SMA Head



- ◆ BW up to 28 GHz
- ◆ Connect two 2.92 mm, 3.5 mm, SMA cables to make a differential measurement on a single oscilloscope channel.
- ◆ Accessory: N5448A 2.92 mm flexible cables (25 cm) to extend the cable length.

5 N2836A InfiniiMode Solder-In Probe Head



- ◆ InfiniiMode. Differential, common mode, single-ended measurements without changing connections.
- ◆ BW up to 26 GHz, variable span
- ◆ Economical, semi-permanent connection
- ◆ Replacement axial resistors: N2836-68701

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