

1130/1/2/4B InfiniiMax I Probes



Locate the user's guide

Download the comprehensive 1130/1/2/4B user's guide from the probe's product page at www.keysight.com. The user's guide is also available in Keysight's Probe Resource Center (PRC) which is available at www.keysight.com/find/PRC. The PRC is an application that runs on a PC, Mac, or iOS device.

Compatible Oscilloscopes

3000X, 4000X, 6000X, 5000A, 6000A, 7000A, S-series, 90000A series, 90000 V, X, Z, and Q series (with N5442A Adapter), 86100D (with N1022B adapter) 9000 H, 9000A, 8000A series

To connect the probe to the oscilloscope

1. Push the probe onto the BNC. As the probe is pushed onto the BNC, the lever moves to the left. 1

2. When the probe is fully seated, the lever returns to the locked position. 2



To disconnect the probe from the oscilloscope

To disconnect, push and hold the lever to the left **1** and pull the probe from the BNC. The lever then returns to the locked position. **2**



Probe safety information

- Maximum Input Voltage: 30V Peak (mains isolated circuits). Maximum non-destructive voltage on each input ground.
- To protect the probe from damage, read the Probe Handling section in the user's guide.
- Refer to the user's guide for additional safety and handling information.
- Probes are ESD sensitive devices particularly at the probe heads. Follow standard ESD precautions when handling.

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Recommended probe head configurations (listed in order of best performance)

1. MX0100A InfiniiMax micro probe head

1134B: 7 GHz BW 1132B · 5 GHz BW 1131B: 3.5 GHz BW 1130B: 1.5 GHz BW

MX0103A MX0100A bullet adapter

- Lowest input loading (0.17 pF differential).
- Light, flexible, small, and reusable.
- Micro solder-in head designed to access small geometry target devices.
- Accessory: MX0103A bullet adapter shipped with MX0100A for easy connection and disconnection from the probe amplifier.
- MX0102A soldering tool kit (available separately) with useful tools to make soldering easier.

3. E2678B differential socketed probe head



- Best socketed connection for differential and single-ended signals.
- Slightly higher capacitance than E2677B solder-in head.
- Resistors must be cut to proper lengths (see user's guide).

5. N5380B SMA probe head

1134B: 5.2 GHz BW 1132B: 4 GHz BW 1131B: ≅ 3.5 GHz BW 1130B: 1.5 GHz BW



- Preserves scope channels for measuring differential signals (vs. A-B).
- Inherent cable loss compensation.
- Common mode termination voltage can be supplied (-4V to +4V).
- Offset SMA cables adapt to variable spacing.

6. N2851A QuickTip probe head



BW with Infiniium: 1134B: 7 GHz 1132B: 5 GHz 1131B: 3.5 GHz

- 1130B: 1.5 GHz
- Easy, secure magnetic connection between head and tip.
- Use N2848A and N2849A with InfiniiMax III+ amp for Infiniimode function.
- Accessory: N2849A QuickTip tips (qty 4)

Recommended probe head configurations (continued) (listed in order of best performance)

7. E2679B single-ended solder-in probe head



- Smallest probe head for single-ended signals
- Lowest capacitance single-ended probe head
- Resistors must be cut to proper lengths (see user's quide)

8. E2676B single-ended browser probe head



- Smallest browser for single-ended signals.
- Slightly higher capacitance than configuration #4

9. E2677B diff. solder-in mid-BW probe head

- Resistors must be cut to proper lengths (see user's guide)

11. E2678B diff. socketed head with damped wire

1134B ≅ 1.2 GHz BW 1132B ≅ 1.2 GHz BW 1131B ≅ 1.2 GHz BW 1130B ≅ 1.2 GHz BW - Properly damped wires preserve fidelity at reduced

BW for widely spaced differential and single-ended signals

- 01131-85202 Solder-in socket allows connection to 25 mil square pins

Probe either differential or single-ended signals

(2)

01130-21303

160Ω damped

wire resistors

E2678B

10. E2679B single-ended solder-in mid-BW head

- for better span and reach for single-ended signals
- Slightly higher capacitance than configuration #1
- Resistors must be cut to proper lengths (see user's quide)

1134B ≅ 6 GHz BW F2675B

E2677B

Probe either differential or

single-ended signals

- Similar capacitance to configuration #2, E2678B

- Best hand (or probe holder) browser for differential and single-ended signals.

N2851A

N2849A

BW with InfiniiVision

is < 1.8 GHz

01131-62107 91Ω resistor probe tips (2)

Lever to adjust probe tip separation

differential socketed probe head.

1132B: 5 GHz BW 1131B: 3.5 GHz BW 1130B: 1.5 GHz BW

4. E2675B differential browser probe head

2. E2677B differential solder-in probe head

1134B: 7 GHz BW

1132B · 5 GHz BW

1131B: 3.5 GHz BW

1130B: 1.5 GHz BW

1NC3-1091

- Solder-in connection for differential and

- Resistors must be cut to proper lengths

91Ω mini-axial

lead resistors (2)

single-ended signals.

Lowest capacitance.

(see user's quide).