

Keysight N1024B TDR Calibration Kit

User's Guide

Notices

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Manual Part Number

N1024-90004

Edition

First Edition, August 2011

Published in USA

Published by:
Keysight Technologies, Inc.
1400 Fountaingrove Parkway
Santa Rosa, CA, 95403

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Safety Notices

CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

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A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood and met.

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Keysight N1024B TDR Calibration Kit
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Keysight N1024B—At a Glance

The Keysight N1024B TDR calibration kit provides high-quality cables, adapters, and terminations that are needed to calibrate TDR and TDT measurements with the 86100-series wide-bandwidth oscilloscopes.

The following table lists the items provided with the kit. The information on the actual shipping list is more accurate and should supersede the information in this list. To order the parts listed in the table, search for “Parts” at www.Keysight.com/Find/Parts.

Table 1 TDR Calibration Kit Parts

Description	Qty	Part Number
Coaxial Cable, 1m long	4	8120-4948
3.5 mm Short (f)	2	1250-1834
BNC Adapter. BNC (m) to SMA (f)	1	1250-1700
3.5 mm Adapter. 3.5 mm (f) - (f)	2	5061-5311
SMA Short (m)	2	0960-0055
Torque Wrench	1	8710-1765
3.5 mm Termination (f)	2	00902-60004
3.5 mm Termination (m)	2	00902-60003

This symbol indicates the Environmental Protection Use Period (EPUP) for the product's toxic substances for the China RoHS requirements.



Connector Care

Advances in measurement capabilities make connectors and connection techniques more important than ever. Observing simple precautions can ensure accurate and reliable measurements.

Handling and storage

- Keep connectors clean
- Extend sleeve or connector nut
- Use plastic endcaps during storage
- Do not touch mating plane surfaces
- Do not set connectors contact-end down

Visual inspection

- Inspect all connectors carefully before every connection
- Look for metal particles, scratches, and dents
- Do not use damaged connectors

Cleaning

- Clean with compressed air first
- Clean the connector threads
- Do not use abrasives
- Do not get liquid onto the plastic support beads

Making connections

- Align connectors carefully
- Make preliminary connection lightly
- To tighten, turn connector nut only
- Do not apply bending force to connection
- Do not over tighten preliminary connection
- Do not twist or screw in connectors

- Use a torque wrench, and do not tighten past the "break" point of the torque wrench

Using Connector Savers

Connector savers are useful in prolonging instrument life and ensuring better quality measurements. Refer to the 86100C's online help for a list of commonly used connector savers.

3.5 mm and SMA Connectors

Precision 3.5 mm microwave connectors are compatible with an SMA connector within its specification. Due to the variable quality of the SMA connector, mating with an SMA can sometimes cause severe damage to the 3.5 mm connector. You can use SMA connectors if special care is taken when mating the connectors, and all connectors are undamaged and clean. Before each use, check the mechanical dimensions of all connectors with a connector gauge to make sure that the center conductors are positioned correctly.

CAUTION

An SMA male connector pin that is too long can smash or break the delicate fingers on the precision 3.5 mm female connector.

CAUTION

Some precision 3.5 mm female connector fingers are very tight and can pull the center pin of their mates out past specifications when the connectors are disconnected. If such a male pin is inserted into a female connector, it can cause considerable damage by pushing the female center conductor back too far. Be aware of this possibility and check all connectors before mating them again.

Returning the N1024B to Keysight

For technical assistance, contact your local Keysight Call Center. Please notify the service office before returning the kit for service. Any special arrangements for the kit can be discussed at this time. This will help the Agilent service office repair and return your instrument as quickly as possible.

- In the Americas, call 1 (800) 829-4444
- Visit <http://www.Keysight.com/find/assist>

NOTE

Please notify the service office before returning your kit.

Preparing the kit for shipping

- 1 Write a complete reason for returning the kit and attach it to the instrument. Include any specific performance details related to the problem.
- 2 Pack the kit. Use original packaging or comparable. Original materials are available through any Keysight office. Or, follow these recommendations:
 - Use a double-walled, corrugated cardboard carton of 159 kg (350 lb) test strength. The carton must allow approximately 7 cm (3 inches) on all sides of the kit for packing material and be strong enough to accommodate the weight of the kit.
 - Surround the kit with approximately 7 cm (3 inches) of packing material, to protect the kit and prevent it from moving in the carton. If packing foam is not available, the best alternative is S.D-240 Air Cap™ from Sealed Air Corporation (Commerce, California 90001). Air Cap looks like a plastic sheet filled with air bubbles. Use the pink (antistatic) Air Cap™ to reduce static electricity. Wrapping the kit several times in this material will protect the kit and prevent it from moving in the carton.
- 3 Seal the carton with strong nylon adhesive tape.
- 4 Mark the carton "FRAGILE, HANDLE WITH CARE".
- 5 Retain copies of all shipping papers.

Contacting Keysight Technologies

For technical assistance, contact your local Keysight Call Center.

- In the Americas, call 1 (800) 829-4444
- In other regions, visit <http://www.keysight.com/find/assist>
- Before returning an instrument for service, you must first call the Call Center at 1 (800) 829-4444.

