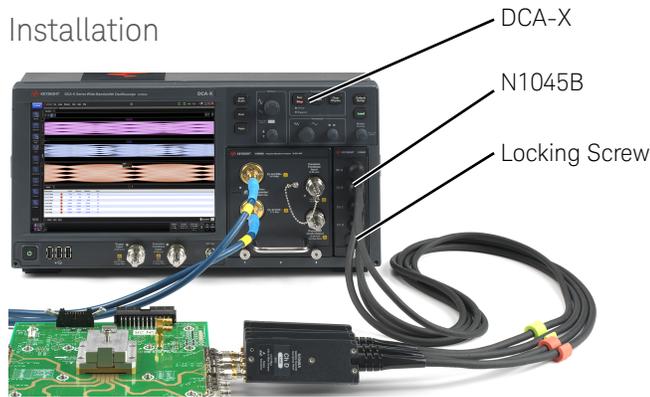


Keysight N1045B 60 GHz Remote Sampling Head

Installation



1. If required, install the DCA-X's firmware upgrade.

NOTE Minimum Required FlexDCA Firmware Version is A.06.00. Download firmware at www.keysight.com/comms/dca

3. Insert the N1045B into any of the four front-panel DCA-X slots.
4. Finger tighten the front-panel knurled locking screw.

The N1045B documentation is located in the DCA-X's online help. To open the help system, start the DCA-X and click Help > Contents.



Cautions

CAUTION Maximum input voltage: +2V

CAUTION Maximum RF Input Connector Torque: 5 lb-in.

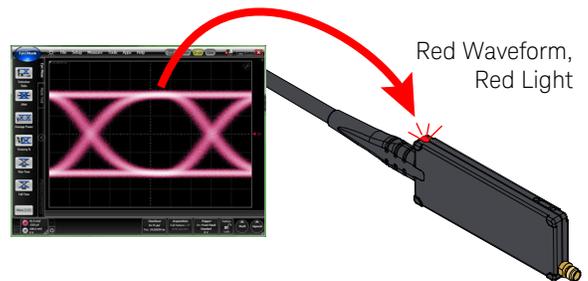
CAUTION Electrical channel input circuits can be damaged by electrostatic discharge (ESD). Therefore, avoid applying static discharges to the remote head's input connectors. Prior to connecting any coaxial cable to the connectors, momentarily short the center and outer conductors of the cable together. Avoid touching the front-panel input connectors without first touching the frame of the instrument.



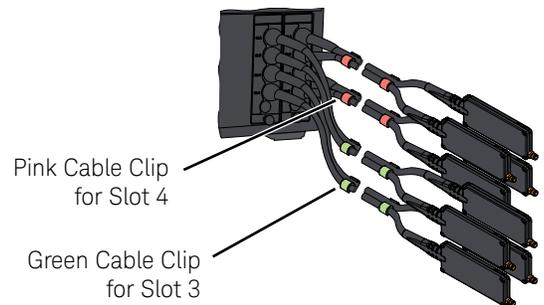
Test setup tips

Stay organized with these N1045B accessories, features, and tips:

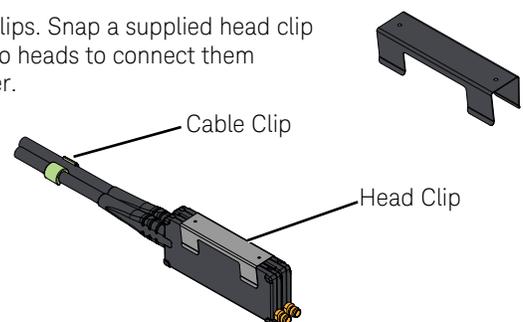
LED. The color of the head's LED matches the color of the associated channel waveform. (Slight color differences may be observed.)



Cable Management Clips. Clips two cables together to reduce tangling. Use the clip's color to associate with a module slot.



Head Clips. Snap a supplied head clip over two heads to connect them together.



ESD Tape. To minimize phase shift of a signal due to cable movement, consider taping the remote head cables to the work surface. (ESD tape is not provided with the N1045A.)

Making RF connections

The remote head's 1.85 mm RF connectors requires proper handling for long service life and accurate measurements. For detailed connection techniques and care, refer to the DCA-X online help.

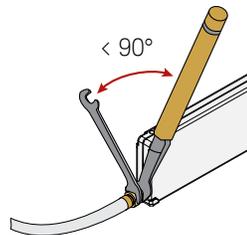
CAUTION Failure to follow the guidelines for proper connector handling and avoiding electrostatic discharge (ESD) can result in severe damage to the product. The 1.85 mm connector is an integral part of the electrical sampler device, therefore, by using improper cleaning and handling techniques, you risk expensive instrument repairs.

NOTE The RF connector is compatible with 2.4 mm adapters and cables.

To Make an RF Connection

1. Work at an ESD workstation.
2. Clean the connectors, if needed.
3. Align the connectors and push the connectors straight together.
4. Gently finger tighten the connectors so that outer conductors make gentle contact at all points on both mating surfaces. Very light finger pressure (no more than 2 inch-pounds of torque) is enough.
5. Use an open-end wrench and a torque wrench to torque the 1.85 mm connector to 56 N-cm (5 lb-in.). Use the open-end wrench to keep the body of the device from turning.

Position both wrenches within 90° of each other before applying force. Wrenches opposing each other more than 90° will cause a lifting action, which can misalign and damage the connection.



CAUTION Do not twist one connector into the other (like inserting a light bulb). This happens if you turn the device body rather than the connector nut. Major damage to the center conductor can occur if the device body is twisted.

CAUTION This 5 lb-in torque setting is less than the 8 lb-in typically specified for 1.85 mm connectors. A maximum torque of 5 lb-in is required to avoid damage to sensitive internal microcircuits used in the remote head.

CAUTION You don't have to "fully break" the handle of the torque wrench to reach the specified torque; doing so can cause the handle to kick back and loosen the connection. Any give at all in the handle is sufficient torque.

Supplied accessories

Accessory	Quantity supplied	Replacement part number
Cable Management Clips	24	N1027A-1CL
Head Clips	2	N1027A-2CL
RF Shipping Caps (1.85 mm)		
N1045A-02F	2	N1027A-1CF. Protective cap for 1.85 mm female connector.
N1045A-04F	4	
N1045A-02M	2	N1027A-1CM. Protective cap for 1.85 mm male connector.
N1045A-04M	4	

For information on available accessories, refer to the N1045B topic located in the DCA-X online help.

Safety considerations

This product has been designed and tested in accordance with IEC Publication 1010, Safety Requirements for Electronic Measuring Apparatus, and has been supplied in a safe condition. The instruction documentation contains information and warnings which must be followed by the user to ensure safe operation and to maintain the product in a safe condition.

Install the plug-in module according to the enclosure protection provided.

This instrument does not protect against the ingress of water. This instrument protects against finger access to hazardous parts within the enclosure.

WARNING If this product is not used as specified, the protection provided by the equipment could be impaired. This product must be used in a normal condition (in which all means for protection are intact) only.

WARNING To prevent electrical shock, disconnect the instrument from mains before cleaning. Use a dry cloth or one slightly dampened with water to clean the external case parts. Do not attempt to clean internally.

WARNING No operator serviceable parts inside. Refer servicing to qualified service personnel. To prevent electrical shock do not remove covers.

CAUTION This product is designed for use in Installation Category II and Pollution Degree 2 per IEC 1010 and respectively.

© Keysight Technologies 2018
Printed in Malaysia. September, 2018
N1045-90005

