Getting Started
with the
Agilent N4917A
Optical Receiver Stress Test

You only need a few minutes to get started with the N4917A Optical Receiver Stress Test software.

This Getting Started Brochure helps you to quickly install the N4917A Optical Receiver Stress Test software and connect the instruments.

If you need more detailed information on the N4917A, refer to the Online Help.

Agilent Technologies

Notice

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Safety Summary

General Safety Precautions

Refer to the safety istructions of the instruments used in the setup.

Naming Convention

From this point onwards, the instruments will be referred to by the following names:

- N4903A/B High Performance Serial **BERT**
- 86100C **DCA-J** or 86100D **DCA-X** as **DCA**
- 8163 A/B as **LMS frame**
- 8164 A/B as **LMS frame**

Installing the Agilent N4917A

Inspect Shipment

Check if the Agilent N4917A Optical Receiver Stress Test
shipping container contains the following standard deliverables:

a) Receiver Stress Test Conditioning Unit
b) The CD with the software
c) This Getting Started Guide

If the contents are incomplete, if there is mechanical damage, or if the instrument does not work within its specifications, notify the nearest Agilent office. The Agilent office will arrange for repair or replacement without awaiting settlement.

Installing the Agilent N4917A Optical Receiver Stress Test Software

The software can either be installed on a J-BERT (For N4903A, software revision 4.8 or later) or on another computer fulfilling the minimum system requirements as defined below:

Minimum System Requirements:
- VGA (640 x 480)
- MS Windows® XP, SP2
- Internet Explorer
- Agilent N490X IVI–COM Driver 1.2
  www.agilent.com/find/jbert
- Agilent IO Libraries Suite rev. 15.5
  www.agilent.com/find/iosuite

We recommend to install N4917A software on a separate PC.

To install the software, double-click on setup.exe and follow the instructions.
For the latest Software Revision, go to www.agilent.com/find/optical_stress.

N**OTE:** Please remove all previous versions of the Agilent N4917A Optical Receiver Stress Test software before installation. Ensure that all drivers and IO Library should be installed before installing N4917A software.

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Check the Software Status of the J-BERT, the DCA, and the LMS frames.

1 You may wish to connect a keyboard and mouse to your J-BERT and/or DCA. This is not mandatory but convenient and should be done when the instrument is switched off.

2 Switch on the J-BERT, DCA and LMS frames or stand-alone attenuator.

3 On the J-BERT, open the *Help* menu and click *About*.

The N4903A software revision must be 4.8 or later. If it is lower, you need to update the software. For details refer to the User Guide.
The Optical Receiver Stress Test can be installed on J-BERT if software revision is above 4.8.

4 On the DCA, open the *Help* menu and click *About*.

For 86100C, the software revision must be 7.0 or later. If it is lower, you need to update the software. For details refer to the User Guide.

For 86100D, the software revision must be 10.0 or later.

5 On the LMS frame, press the Config button and select 'About Mainframe'.

The software revision must be 5.0 or later. If it is lower, you need to update the software. For details refer to the User Guide.

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Establish the GPIB Connection

1 Connect the J-BERT, DCA, attenuator, and the LMS frame to the GPIB.

NOTES:

Make sure to connect the instruments sequentially.
Do not create branches in the cabling of the GPIB.

2 Inspect the *Agilent IO Control* icon in the Windows task bar.

If you see this icon, the revision of the Agilent IO Libraries Suite is M.01.

You can use *IO Config* for configuring the N4917A.

If you see this icon, the revision of the Agilent IO Libraries Suite is 15.5 or later.

You can use the *Agilent Connection Expert* which makes it easy to configure USB instruments.

NOTE: Please refer to Page 6 for more information on Agilent IO control icon.

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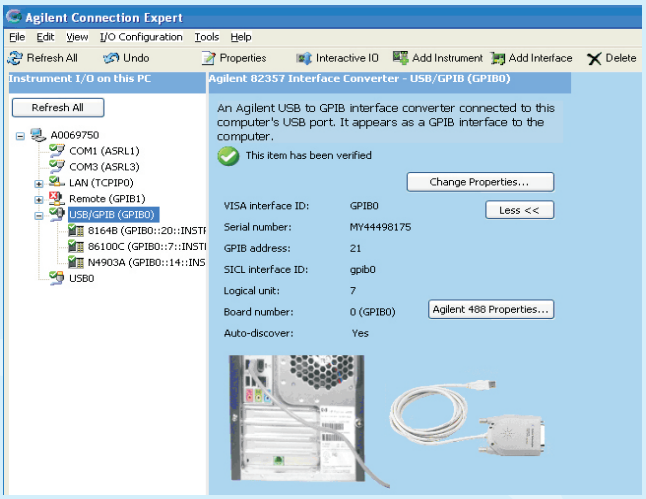
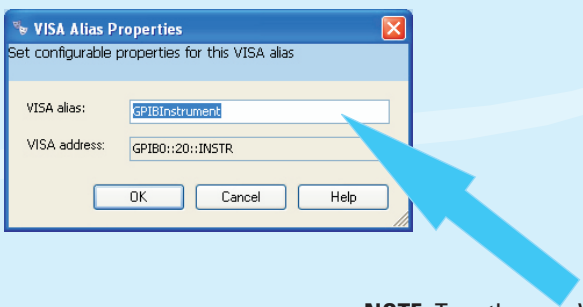
Assign VISA Alias Names to the Instruments of the N4917A setup

The use of Alias names is recommended, but not mandatory.

1 Click the *Agilent IO Control* icon in the Windows task bar and start the Agilent Connection Expert from the menu.



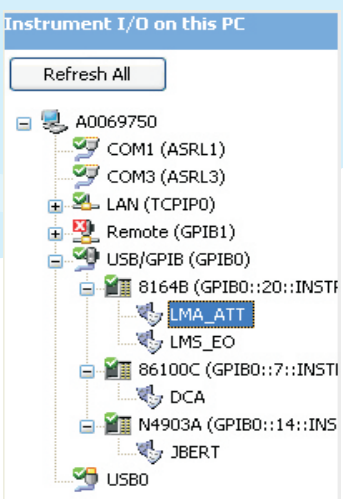
2 Right-click on the instrument in the left side panel, and select 'Add VISA alias'.



NOTE: Type the new VISA alias name here.

Use the following alias names:
a) J-BERT : JBERT
b) DCA-J or DCA-X : DCA
c) LMS Frame with E/O module : LMS_EO
d) LMS Frame with Attenuator module or N77 Series Attenuator : LMS_ATT

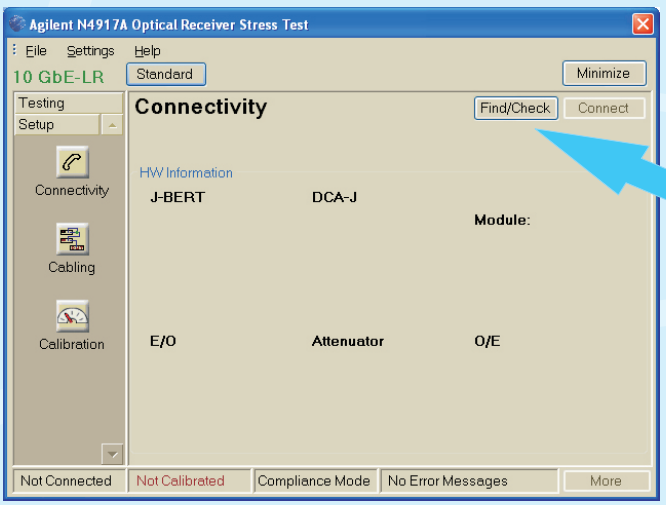
3 When done, the *Agilent Connection Expert* shows a window like this:



Installing the Agilent N4917A

First Steps using the N4917A

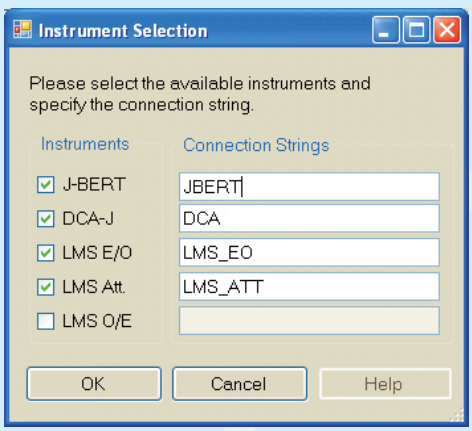
1 Start the N4917A Optical Receiver Stress Test software.



2 Click **Find/Check** to find the instruments.

3 Select the instruments used in your setup and verify the connection strings.

If you have setup the VISA alias names as described on Page 6 of this document, then the correct names will automatically appear upon selecting the instrument.



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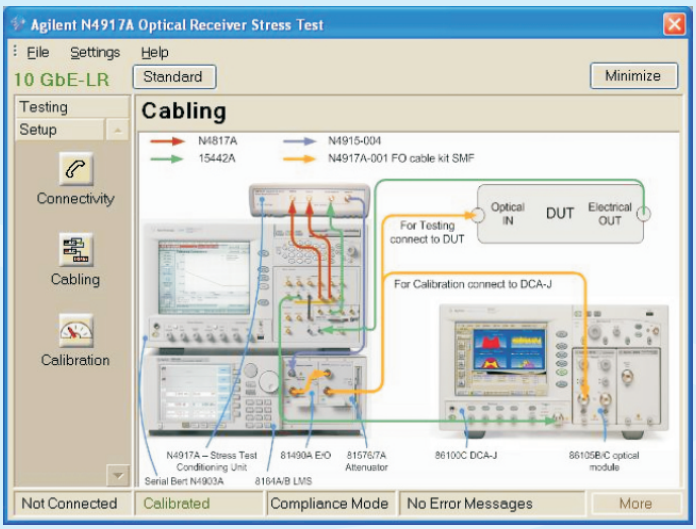
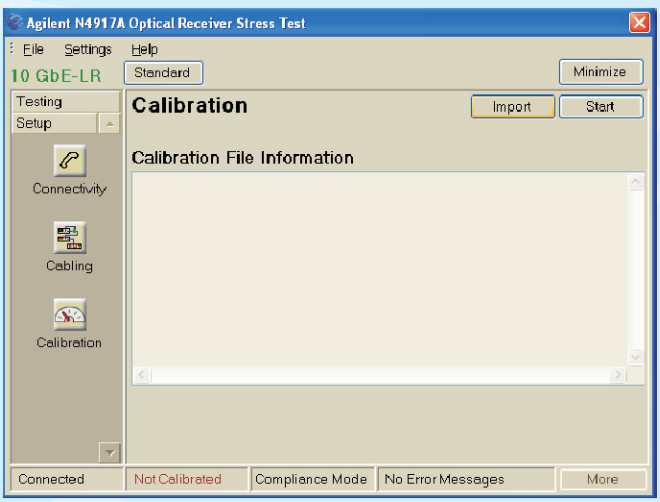
4 From the list menu given on the left side, press **Cabling** for support on the signal path connection.



5 The setup has to be calibrated before any testing can be done.
Select Calibration from the list menu given on the left side of the window.
Click 'Start' to perform calibration.



NOTES:

- For calibration, all instruments are mandatory.
- For testing, all instruments except the DCA are mandatory.
- For more information, refer to the Online Help available on the software.

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