Installation Note

Option 099 Firmware Upgrade Kit

For All PNA Series Network Analyzers

Agilent Technologies

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About the Upgrade Kit

Products affected:	All PNA series network analyzers and all options
Installation to be performed by:	Agilent service center, personnel qualified by Agilent, or customer
Estimated installation time:	20 minutes

Description of Option 099

Option 099 provides a CD-ROM that contains a firmware upgrade for your network analyzer.

Occasionally the analyzer's internal firmware is modified at the factory to enhance the operation of the analyzer or to add features. Your network analyzer's firmware can be upgraded to include these enhancements or features by using this firmware upgrade, Option 099.

If you have access to the Internet, this firmware upgrade information is also available at: http://www.agilent.com/find/pna.

Items Included in the Upgrade Kit

Table 1 lists the parts included in this upgrade kit, Agilent part number E8356-60103. Check the contents of your kit against this list.

Table 1   Contents of Option 099 Upgrade Kit (E8356-60103)

Quantity	Description	Part Number
1	Installation note (this document)	E8356-90023
1	CD-ROM	E8356-10006

Help

For additional help with configuring the network analyzer and PC system, mapping and sharing disk drives, and connecting external disk drives, refer to Agilent product note, "Introduction to Application Development with the Agilent PNA Series of Network Analyzers", literature part number, 5980-2666ENUS.

Help is also available as Embedded Help in the network analyzer. This is accessed from within the network analyzer function.

If you have access to the Internet, information specific to PNA series network analyzers is available at: http://www.agilent.com/find/pna.

Contacting Agilent

By internet, phone, or fax, get assistance from Agilent Technologies with all your test and measurement needs.

Table 2   Contacting Agilent

Online assistance: www.agilent.com/find/assist		
United States *(tel)* 1 800 452 4844	**Latin America** *(tel)* (305) 269 7500 *(fax)* (305) 269 7599	**Canada** *(tel)* 1 877 894 4414 *(fax)* (905) 282-6495
Europe *(tel)* (+31) 20 547 2323 *(fax)* (+31) 20 547 2390	**Australia** *(tel)* 1 800 629 485 (fax) (+61) 3 9210 5947	**New Zealand** *(tel)* 0 800 738 378 *(fax)* (+64) 4 495 8950
Japan (tel) (+81) 426 56 7832 (fax) (+81) 426 56 7840	**Singapore** *(tel)* 1 800 375 8100 *(fax)* (65) 836 0252	**Malaysia** *(tel)* 1 800 828 848 *(fax)* 1 800 801 664
India *(tel)* 1 600 11 2929 *(fax)* 000 800 650 1101	**Hong Kong** *(tel)* 800 930 871 *(fax)* (852) 2506 9233	**Taiwan** *(tel)* 0800 047 866 *(fax)* (886) 2 25456723
Philippines *(tel)* (632) 8426802 *(tel) (PLDT subscriber only)* 1 800 16510170 *(fax)* (632) 8426809 *(fax) (PLDT subscriber only)* 1 800 16510288	**Thailand** *(tel) (outside Bangkok)* (088) 226 008 *(tel) (within Bangkok)* (662) 661 3999 *(fax)* (66) 1 661 3714	**People's Republic of China** *(tel) (preferred)* 800 810 0189 *(tel) (alternate)* 10800 650 0021 *(fax)* 10800 650 0121

Installation Procedure for the Upgrade Kit

Two procedures are provided for updating the analyzer firmware:

- Downloading from a USB CD drive connected directly to the analyzer.

- Downloading from a shared CD drive over the Local Area Network (LAN).

Installation Requirements

- The network analyzer must be in proper working condition prior to installing this option. Any necessary repairs must be made before proceeding with this installation.

- This installation does not require removal of the analyzer's protective outer covers.

- The analyzer must be powered up and operating to perform this installation.

Downloading from a USB CD Drive Connected to the Analyzer

Installation Requirements

- A mouse and a keyboard must be connected to the network analyzer.

- A CD drive must be connected to the network analyzer.

NOTE	The following procedure has been verified using the CD drive supplied with PNA Option AM8. It has not been verified using other USB CD drives. Addition of a USB CD drive necessitates the use of a USB hub to allow connection of all three USB devices: mouse, keyboard, and CD drive.

Installation Procedure

1. Exit all applications; the analyzer display should show the PC desktop icons.

2. Insert the upgrade CD into your analyzer's CD drive.

3. Click **My Computer**, and then click your analyzer's CD drive.

4. On the CD drive menu, click on the program file listed, to begin the installation.

5. Follow the instructions as they appear. Select your network analyzer's hard disk drive as the destination for the files being installed.
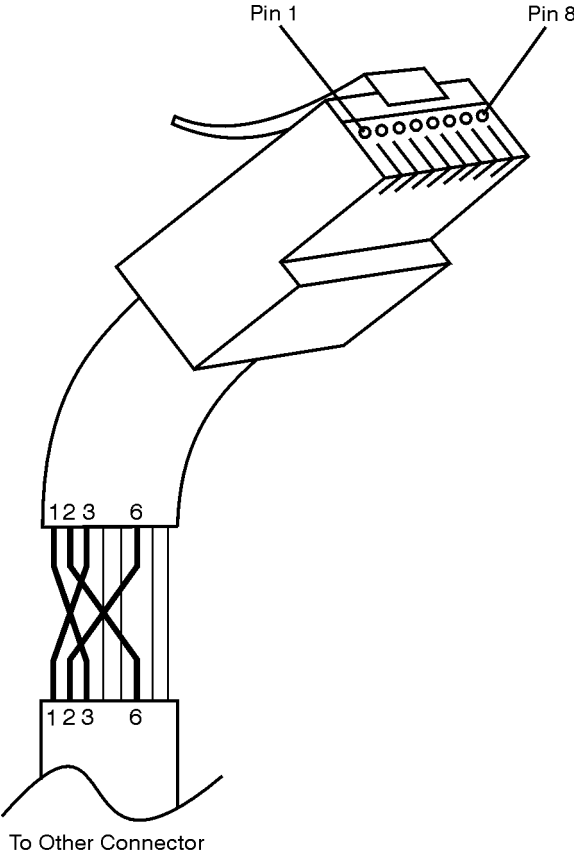
Downloading From a Shared CD Drive Over the LAN

- If your PC and your network analyzer are both connected to the same LAN, proceed to "Downloading Over the LAN" on page 8.

- If your PC and your network analyzer are NOT connected to a LAN, you can connect them using a crossover cable. A crossover cable can be purchased or can be constructed from a standard LAN cable (instructions are included here).

Constructing a Crossover Cable

The following procedure describes how to construct a crossover cable using a standard LAN cable. Refer to Figure 1 on page 7 during this procedure.

1. Strip away a few inches of the outside jacket insulation from the middle of a standard LAN cable that has an RJ-45 connector on each end.

2. Cut the wires going to pins 1, 2, 3, and 6. Strip away a small amount of insulation from each of the eight cut ends.

   a. Connect the wire from pin 1 on one end of the cable to the wire from pin 3 on the other end of the cable.

   b. Connect the wire from pin 3 on one end of the cable to the wire from pin 1 on the other end of the cable.

   c. Connect the wire from pin 2 on one end of the cable to the wire from pin 6 on the other end of the cable.

   d. Connect the wire from pin 6 on one end of the cable to the wire from pin 2 on the other end of the cable.

3. Insulate all exposed wires so that they cannot short together. Label this as a crossover cable so that it cannot be confused with a standard LAN cable.

4. Proceed to "Downloading Over the LAN" on page 8.

Figure 1   Construction of a Crossover Cable

Pin 1

Pin 8

1 2 3   6

1 2 3   6

To Other Connector

sd623c

Downloading Over the LAN

This procedure assumes that the network analyzer and the computer are both connected to the same LAN or are connected using a crossover cable.

This procedure is valid for a PC with Windows® 95, 98, and NT 4.0 or higher operating system. This installation note was developed on a PC with Windows NT 4.0 and a PNA series network analyzer with Windows® 2000 Professional. However, the procedural steps will be similar for Windows 95 and 98.

From your PC:

1. Insert the upgrade CD in your PC's CD drive.

2. Right click on **Network Neighborhood**, and then click **Properties**. Record the **Computer Name** here: _____ . Click **Cancel**.

3. Double-click **My Computer**. Click on your PC's CD drive. On the **File** menu, click **Sharing**. Under the **Sharing** tab, click **Share as**. Type a **Share Name** and record it here: _____ . *Do not use the default letter that is displayed.* Click **Cancel** to close the dialog box.

From your network analyzer:

4. On the PC desktop, click **My Computer**, click **Tools**, and then click **Map Network Drive**.

5. The network analyzer will choose the next available drive letter. Record this drive letter here: _____ .

6. In the **Map Network Drive** window, click the **Folder** box (this is the **Path** box on the PC) and type the path of your PC's CD drive in the form \\computername\sharename. You recorded the computername in step 2 and the sharename in step 3.

NOTE   If you are logged onto the analyzer using the same logon as for your PC, it is not necessary to select "Connect using **a different user name**". If, however, you are not logged onto your analyzer using the same logon or you prefer to connect under a different user name, click this hyperlink and type the user name and password. If the user name is in a different domain, use the format: domain\username.

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7. To automatically connect to the shared drive each time you log on, check **Reconnect at logon**.

8. Click **Finish**.

9. Your PC's CD drive will now be visible on the display as the drive letter you recorded in step 5 with the share name you assigned in step 3.

10. A window listing the contents of the CD installed in your PC's CD drive will be displayed.

11. On the CD drive menu, click on the program file listed, to begin the installation.

12. Follow the instructions as they appear. Select your network analyzer's hard disk drive as the destination for the files being installed.

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