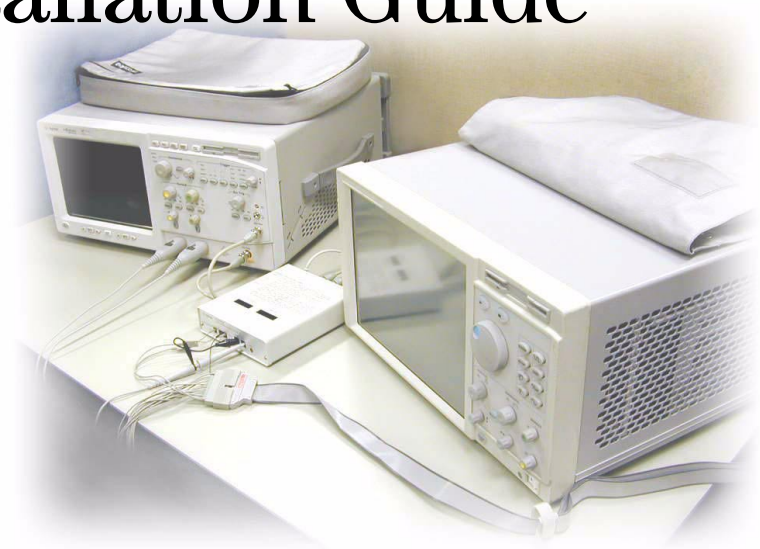
Agilent Technologies
E5850A Time Correlation Fixture

Quick Start/Installation Guide



The Agilent E5850A time correlation fixture allows you to make time-correlated measurements between a 1680/90 or 16700 logic analyzer and an Agilent 548XX series Infiniium oscilloscope. The instruments communicate with one another through a LAN connection and through the time correlation fixture. The instruments connect to your target system (device undertest) through separate probes, just as when they are used independently. Waveforms acquired by the oscilloscope can be displayed on the logic analyzer.

Equipment Supplied

Point-to-point cable
5061-7342

E5850A time correlation fixture

Power supply and power cord

BNC cables (4)
8120-1840
You may use your own BNC cables or combine two short cables into a longer one using the provided connector.

CD-ROMs:
16700 software
Infiniium software update
Documentation

⚠ **WARNING** Shock hazard. Use only the 0950-2546 power supply
Caution Equipment damage. Use only the 0950-2546 power supply and cord.
If the cord you received is not appropriate for your electrical power outlet type, contact your Agilent Technologies sales and service office.

Equipment Required

Agilent 16700-series logic analysis system, software version 2.50 or later.

Agilent 548xx Infiniium oscilloscope, with a probe. 548xxA models require software version 4.00 or later.

Agilent 1680/90-series logic analysis system, software version 1.40 or later.

Note: The E5850A Time Correlation Fixture requires a 548xx Infiniium oscilloscope and either a 16700-series logic analysis system or a 1680/90-series logic analysis system.

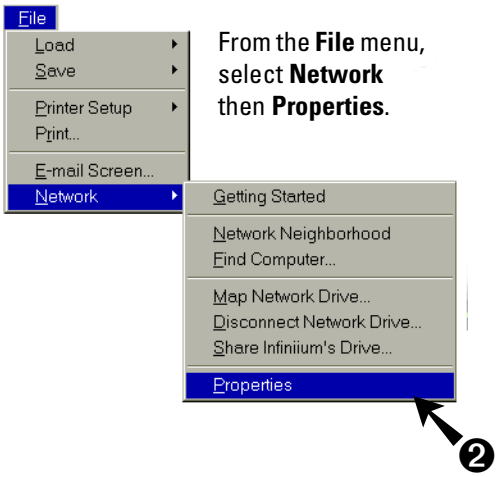
Infiniium 548XX-series Oscilloscope

If your oscilloscope and logic analyzer are both already connected to a LAN, you can skip this step.

If your oscilloscope and logic analyzer are not already connected to a LAN, a simple point-to-point connection may be the most convenient connection between the instruments. **Use the cross-over (blue) cable provided with your E5850A.** Connect one end of the cable to the network interface on your Infiniium 548xx oscilloscope the and the other end to the network interface on logic analysis system. You will need to configure the networking software on both systems.

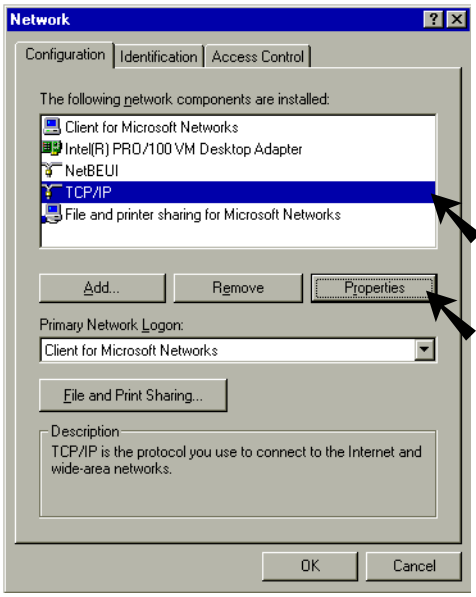
Point-to-Point Network Set Up

❶ If necessary, turn on the oscilloscope's graphical interface.

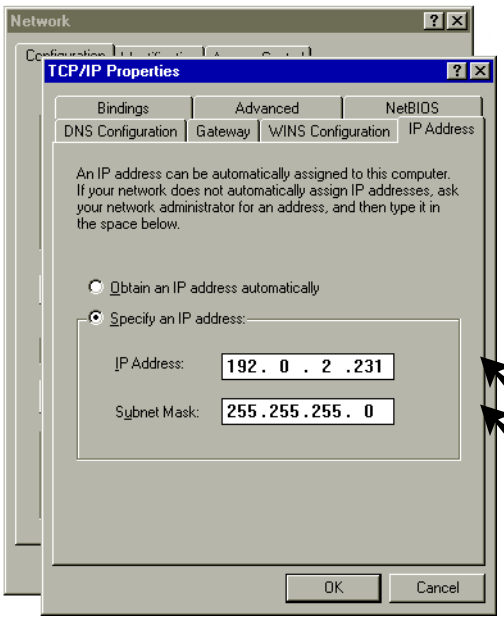


From the **File** menu, select **Network** then **Properties**.

❷



❸ Check that the TCP/IP component is installed, then select **Properties**.

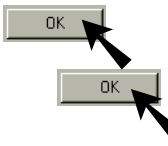


❹ In the **IP Address** tab, set the IP Address and Subnet Mask.

❺ In the **WINS Configuration** tab, select Disable WINS Resolution.

❻ In the **Gateway** tab, remove any installed gateways.

❼ In the **DNS Configuration** tab, select Disable DNS.



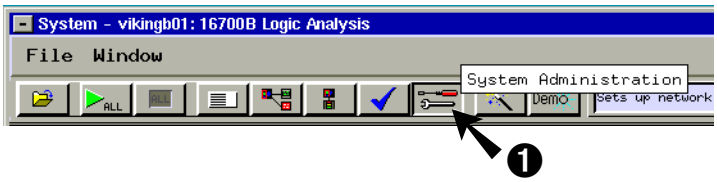
❽ Close the dialogs. Click **Yes** when asked to reboot.

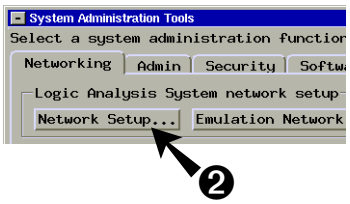
16700-series Logic Analyzer System

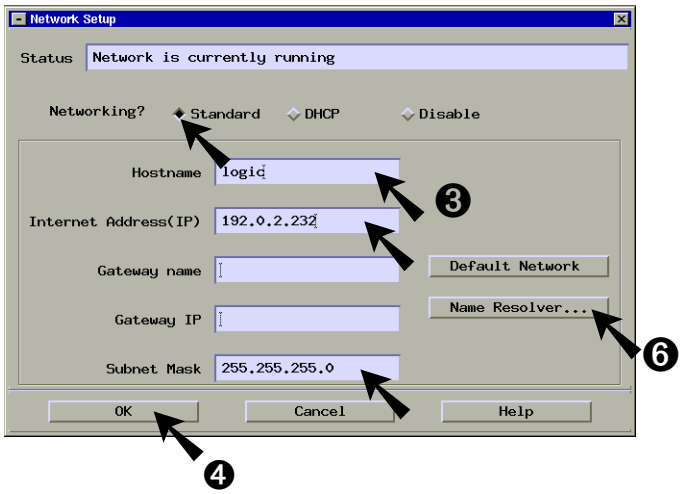
If your logic analyzer and oscilloscope are both already connected to a LAN, you can skip this step.

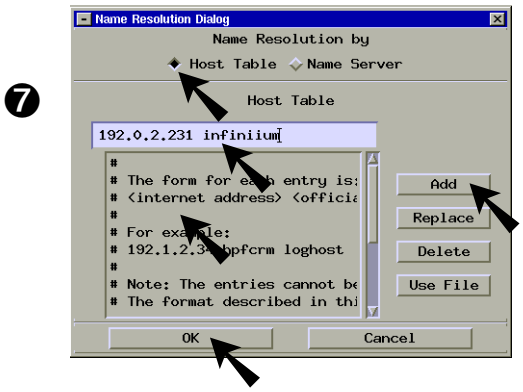
If your oscilloscope and logic analyzer are not already connected to a LAN, a simple point-to-point connection may be the most convenient connection between the instruments. You will need to configure the networking software on both systems.

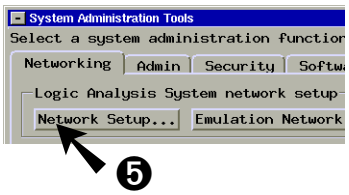
Point-to-Point Network Set Up











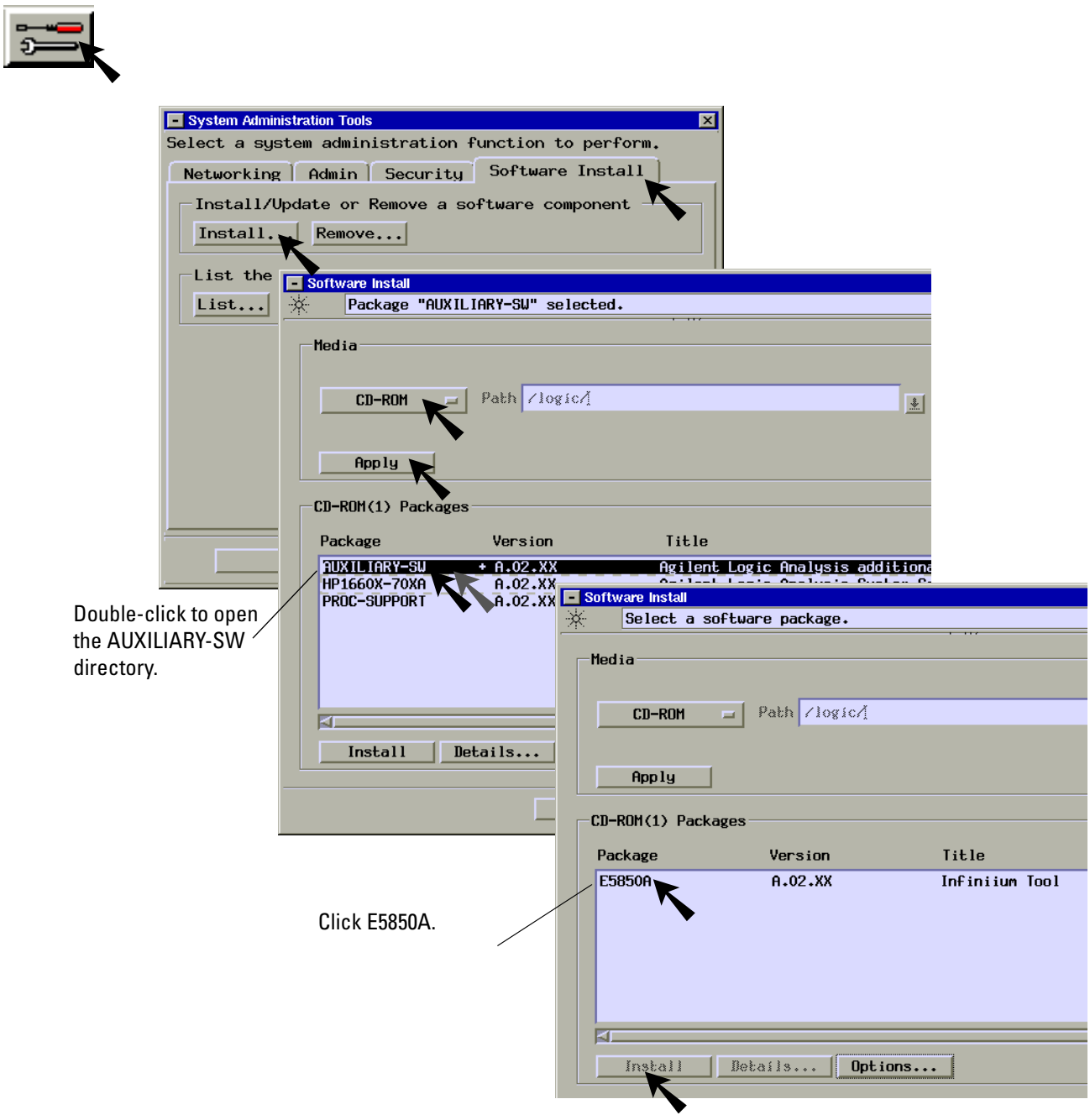
Make sure **Host Table** is selected.
Enter: **192.0.2.231 infiniium.**
Select **Add** and **OK**.
Select **OK** to close the Network Setup dialog.

Now when you use the E5850A software, you can enter either infiniium or 192.0.2.231 as the Infiniium Host Name or IP.

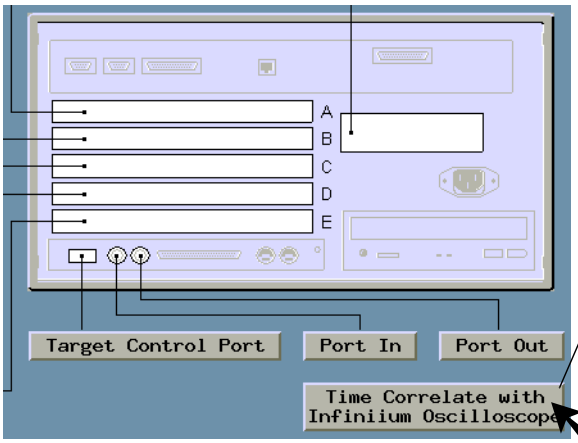
Install the Software

If you purchased a 16700-series logic analyzer with the E5850 time correlation fixture, you can skip this step.

Insert the 16700 Software CD into the logic analysis system. Click on the following fields to install the E5850A tool software.

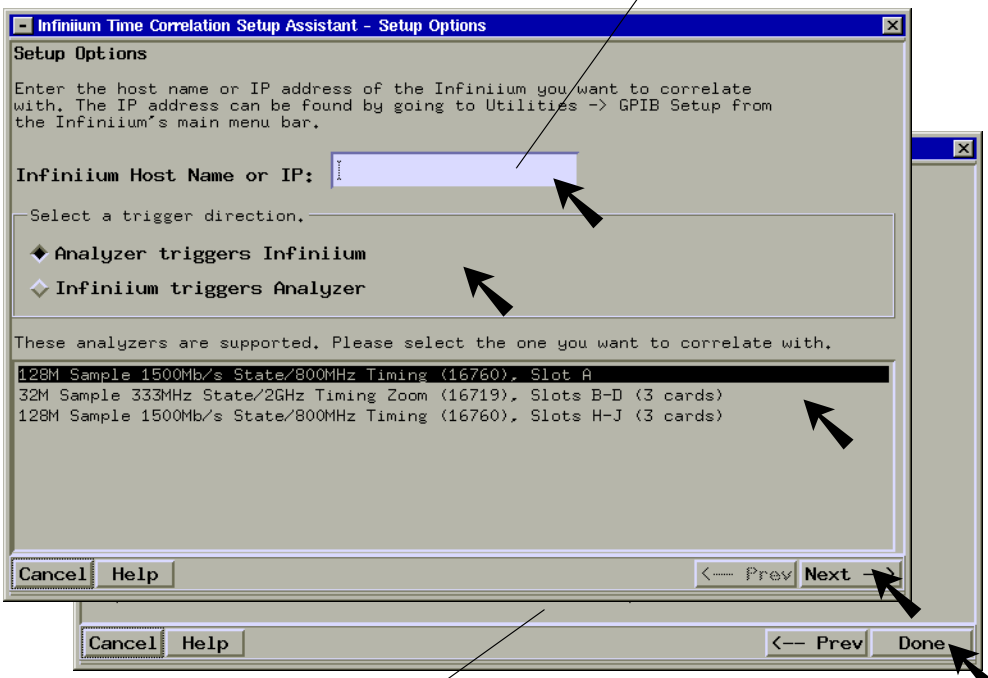


Start the Correlation Tool Software



Start the Time Correlation setup wizard from the logic analyzer System window.

Enter the Infiniium IP address here. (**192.0.2.231** or **infiniium** for a point-to-point connection.) Then select a trigger direction and select which analyzer to use.



Follow the instructions displayed by the Setup Assistant to connect the cables.

Click **Done** to add the Infiniium tool to the 1670x workspace window and run the deskew calibration process.

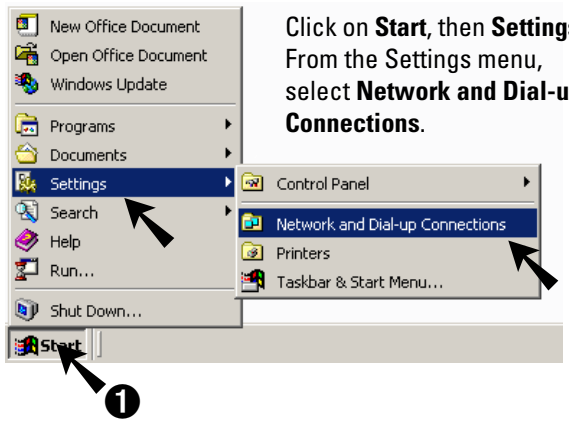
When the calibration is complete, disconnect the scope probe and the logic analyzer leads from the time correlation fixture, but *do not disconnect the BNC connections*.

1680/90-series Logic Analyzer System

If your logic analyzer and oscilloscope are both already connected to a LAN, you can skip this step.

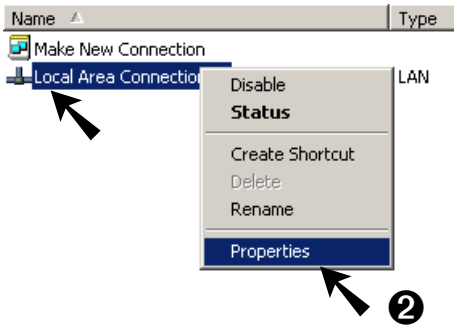
If your logic analyzer and oscilloscope are not already connected to a LAN, a simple point-to-point connection may be the most convenient connection between the instruments. You will need to configure the networking software on both systems.

Point-to-Point Network Set Up



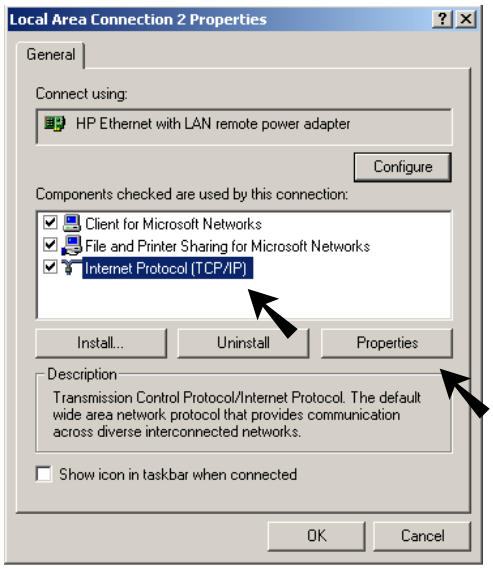
Click on **Start**, then **Settings**. From the Settings menu, select **Network and Dial-up Connections**.

❶

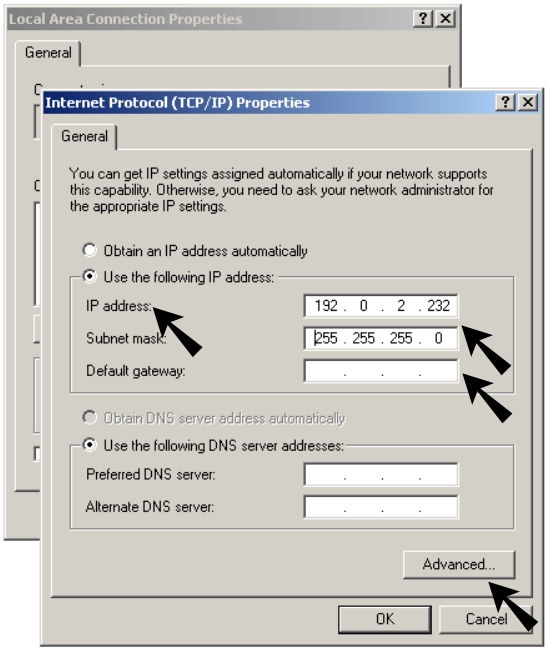


Right-click on **Local Area Connection** and select **Properties**.

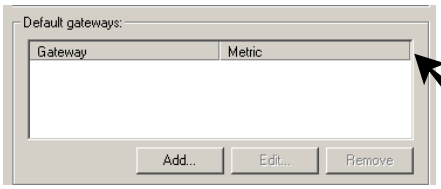
❷



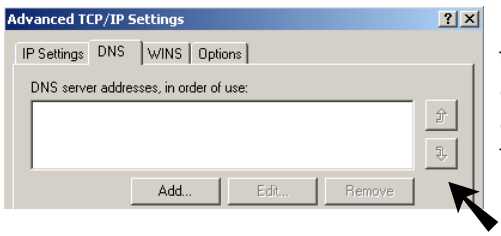
❸ Check that the TCP/IP component is installed, then select **Properties**.



❹ In the **Properties** Dialog, set the IP Address and Subnet Mask. Remove any DNS server addresses, then select **Advanced**.

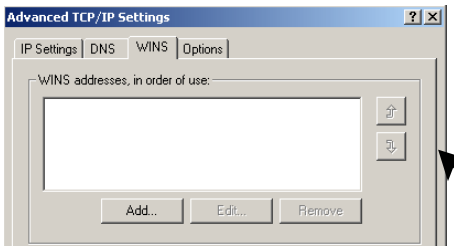


❺ In the **IP Settings** tab, remove any installed gateways.

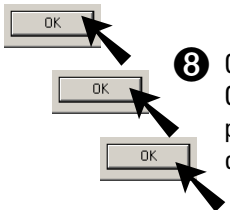


In the **DNS** tab, remove all DNS addresses from the list.

❻

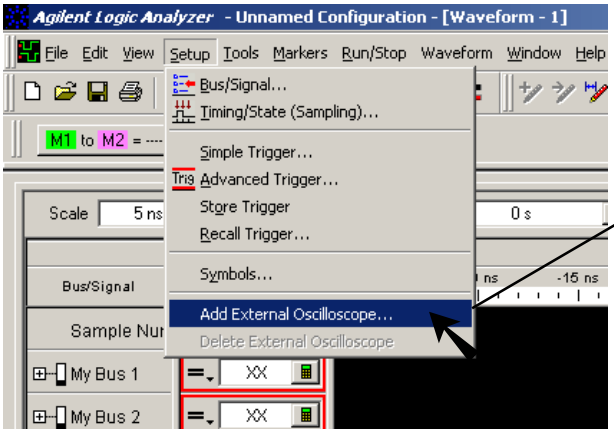


❼ In the **WINS** tab, remove all WINS addresses from the list.

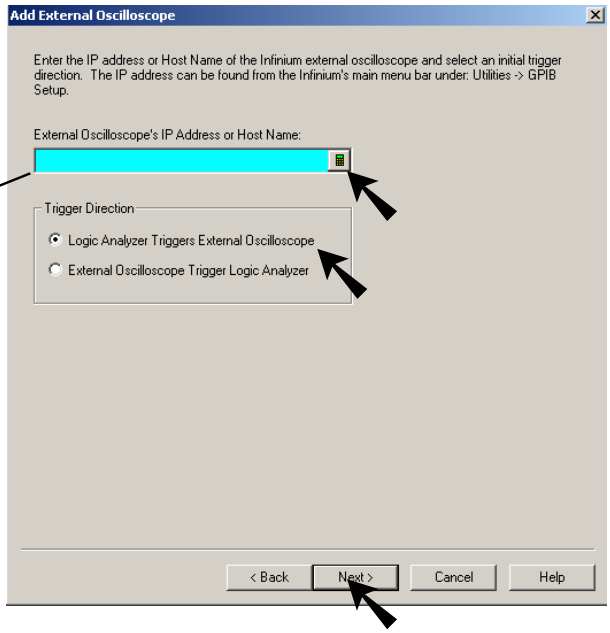


❽ Close the dialogs. Click on **Yes** if prompted to continue.

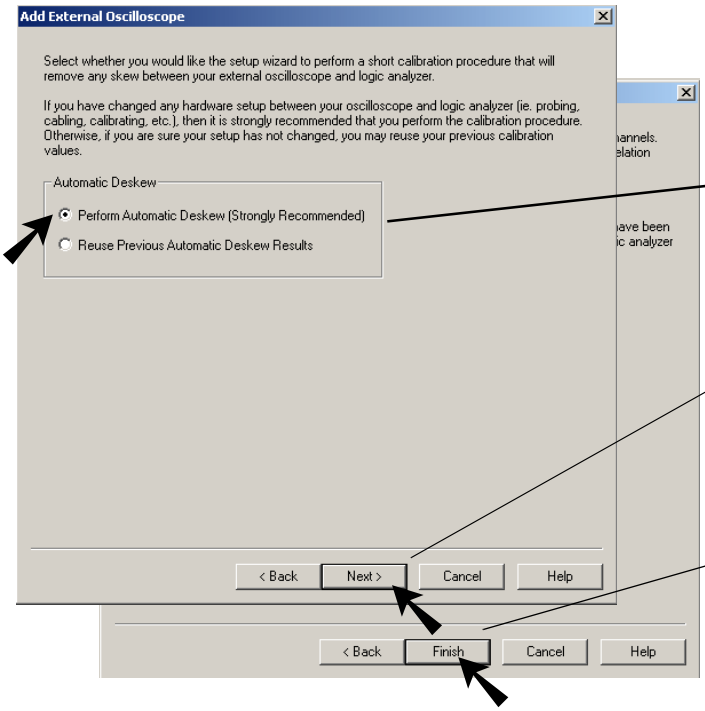
Start the Correlation Tool Software



Start the Time Correlation setup wizard from the logic analyzer Setup menu. In the Add External Oscilloscope wizard, select **Next**.



Enter the Infiniium IP address (**192.0.2.231** for a point-to-point connection). Select a trigger direction, then select **Next**.



Select Automatic Deskew.

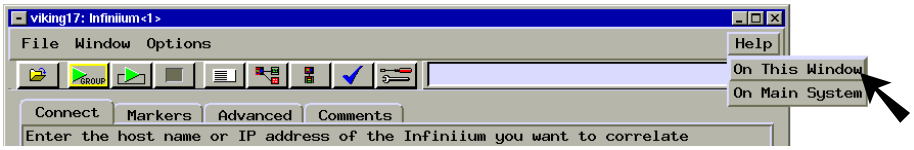
Follow the instructions displayed by the wizard to connect the cables.

Click **Finish** to add the Infiniium tool to the 1680/90 Overview window.

When the calibration is complete, disconnect the scope probe and the logic analyzer leads from the time correlation fixture, but *do not disconnect the BNC connections*.

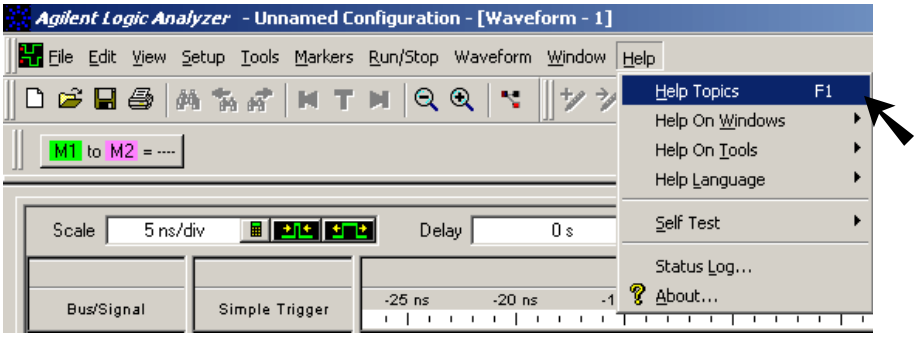
For More Information

16700-series Logic Analyzer Help



Open the Time Correlation Fixture Help from the Infiniium window in the logic analysis system.

1680/90-series Logic Analyzer Help



Agilent

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

Manufacturer's Name: Agilent Technologies, Inc.
Manufacturer's Address: 1900 Garden of the Gods Road
Colorado Springs, Colorado
80907 U.S.A.

Declares, that the product

Product Name: Time Correlation Fixture

Model Number: E5850A

Product Options: This declaration covers all options of the above product(s).

Conforms with the following product standards:

EMC	Standard	Limit
	IEC 61326-1:1997+A1:1998 / EN 61326-1:1997+A1:1998	
	CISPR 11:1990 / EN 55011:1991	Group 1 Class A [1]
	IEC 61000-4-2:1995+A1:1998 / EN 61000-4-2:1995	4kV CD, 8kV AD
	IEC 61000-4-3:1995 / EN 61000-4-3:1995	3V/m, 80-1000 MHz
	IEC 61000-4-4:1995 / EN 61000-4-4:1995	0.5kV signal lines, 1kV power lines
	IEC 61000-4-6:1996 / EN 61000-4-6:1996	3V, 0.15-80 MHz
	Canada: ICES-001:1998	
	Australia/New Zealand: AS/NZS 2064.1	
Safety	IEC 61010-1:1990+A1:1992+A2:1995 / EN 61010-1:1993+A2:1995	
	Canada: CSA C22.2 No. 1010.1:1992	

Conformity / Supplemental Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

[1] The product was tested in a typical configuration with Agilent Technologies test systems.

Date: 11/22/2000

Name

Ken Wyatt / Product Regulations Manager

For further information, please contact your local Agilent Technologies sales office, agent or distributor.

Electrical characteristics: power supply

Input: 100-240 V, 9.75 A, 50/60 Hz, IEC 320 connector.

Output: +5 V, 2.0 A

Accessory output: 100-240 V, 9.5 A, 50/60 Hz

Cat I (Mains isolated). Pollution degree 2.

Environmental characteristics

Temperature: Operating, +0 C to +40 C (+32 to +104 F); nonoperating, -40 to +60 C (-40 to +140 F)

Altitude: Operating/nonoperating 4600 m (15 000 ft).

Relative humidity: 15% to 95%.

For indoor use only.

Product Regulations

EMC		Performance Criteria [2]
	IEC 61326-1:1997+A1:1998 / EN 61326-1:1997+A1:1998	
	CISPR 11:1990 / EN 55011:1991	
	IEC 61000-4-2:1995+A1:1998 / EN 61000-4-2:1995	A
	IEC 61000-4-3:1995 / EN 61000-4-3:1995	A
	IEC 61000-4-4:1995 / EN 61000-4-4:1995	A
	IEC 61000-4-6:1996 / EN 61000-4-6:1996	A
	Canada: ICES-001:1998	
Safety	IEC 61010-1:1990+A1:1992+A2:1995 / EN 61010-1:1994+A2:1995	
	Canada: CSA C22.2 No. 1010.1:1992	

Additional Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Performance Criteria:
A Pass - Norman operation, no effect.
B Pass - Temporary degradation, self recoverable.
C Pass - Temporary degradation, operator intervention required.
D Fail - Not recoverable, component damage.

Notes:

Sound Pressure Level N/A

Regulatory Information for Canada

ICES/NMB-001

This ISM device complies with Canadian ICES-001.
Cet appareil ISM est confomre à la norme NMB-001 du Canada.

Regulatory Information for Australia/New Zealand

This ISM device complies with Australian/New Zealand AS/NZS 2064.1

N10149

Agilent Technologies Inc.
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Colorado Springs, CO 80901-2197, U.S.A.

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Document Warranty

The information contained in this document is subject to change without notice.

Agilent Technologies makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose.

Agilent Technologies shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Safety

This apparatus has been designed and tested in accordance with IEC Publication 1010, Safety Requirements for Measuring Apparatus, and has been supplied in a safe condition. This is a Safety Class I instrument (provided with terminal for protective earthing). Before applying power, verify that the correct safety precautions are taken (see the following warnings). In addition, note the external markings on the instrument that are described under "Safety Symbols."

Warning

• Before turning on the instrument, you must connect the protective earth terminal of the instrument to the protective conductor of the (mains) power cord. The mains plug shall only be inserted in a socket outlet provided with a protective earth contact. You must not negate the protective action by using an extension cord (power cable) without a protective conductor (grounding). Grounding one conductor of a two-conductor outlet is not sufficient protection.

• Only fuses with the required rated current, voltage, and specified type (normal blow, time delay, etc.) should be used. Do not use repaired fuses or short-circuited fuseholders. To do so could cause a shock of fire hazard.

• Service instructions are for trained service personnel. To avoid dangerous electric shock, do not perform any service unless qualified to do so. Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

• If you energize this instrument by an auto transformer (for voltage reduction), make sure the common terminal is connected to the earth terminal of the power source.

• Whenever it is likely that the ground protection is impaired, you must make the instrument inoperative and secure it against any unintended operation.

• Do not operate the instrument in the presence of flammable gasses or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

• Do not install substitute parts or perform any unauthorized modification to the instrument.

• Capacitors inside the instrument may retain a charge even if the instrument is disconnected from its source of supply.

Cleaning Instructions

If the instrument requires cleaning:

• Remove power from the instrument.

• Clean the instrument with a soft cloth dampened with a mixture of mild detergent and water.

• Make sure that the instrument is completely dry before reconnecting it to a power source.

Safety Symbols

Instruction manual symbol: the product is marked with this symbol when it is necessary for you to refer to the instruction manual in order to protect against damage to the product.

Hazardous voltage symbol.

Earth terminal symbol: Used to indicate a circuit common connected to grounded chassis.

WARNING

The Warning sign denotes a hazard. It calls attention to a procedure, practice, or the like, which, if not correctly performed or adhered to, could result in personal injury. Do not proceed beyond a Warning sign until the indicated conditions are fully understood and met.

CAUTION

The Caution sign denotes a hazard. It calls attention to an operating procedure, practice, or the like, which, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product. Do not proceed beyond a Caution symbol until the indicated conditions are fully understood or met.

Product Warranty

This Agilent Technologies product has a warranty against defects in material and workmanship for a period of one year from date of shipment. During the warranty period, Agilent Technologies will, at its option, either repair or replace products that prove to be defective.

For warranty service or repair, this product must be returned to a service facility designated by Agilent Technologies.

For products returned to Agilent Technologies for warranty service, the Buyer shall prepay shipping charges to Agilent Technologies and Agilent Technologies shall pay shipping charges to return the product to the Buyer. However, the Buyer shall pay all shipping charges, duties, and taxes for products returned to Agilent Technologies from another country.

Agilent Technologies warrants that its software and firmware designated by Agilent Technologies for use with an instrument will execute its programming instructions when properly installed on that instrument. Agilent Technologies does not warrant that the operation of the instrument software, or firmware will be uninterrupted or error free.

Limitation of Warranty

The foregoing warranty shall not apply to defects resulting from improper or inadequate maintenance by the Buyer, Buyer- supplied software or interfacing, unauthorized modification or misuse, operation outside of the environmental specifications for the product, or improper site preparation or maintenance.

No other warranty is expressed or implied. Agilent Technologies specifically disclaims the implied warranties of merchantability or fitness for a particular purpose.

Exclusive Remedies

The remedies provided herein are the buyer's sole and exclusive remedies. Agilent Technologies shall not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory.

Assistance

Product maintenance agreements and other customer assistance agreements are available for Agilent Technologies products. For any assistance, contact your nearest Agilent Technologies Sales Office.

Certification

Agilent Technologies Company certifies that this product met its published specifications at the time of shipment from the factory. Agilent Technologies further certifies that its calibration measurements are traceable to the United States National Institute of Standards and Technology, to the extent allowed by the Institute's calibration facility, and to the calibration facilities of other International Standards Organization members.

About this edition

This is the *E5850A Time Correlation Fixture Quick Start Guide*.

Publication number
E5850-97002, September, 2002

Print history:

E5850-97001, November 2001
E5850-97000, January 2001

Many product updates do not require manual changes, and manual corrections may be done without accompanying product changes. Therefore, do not expect a one-to-one correspondence between product updates and manual updates.

Manual Part Number E5850-97002 Printed in USA