

Agilent Technologies E5850A Time Correlation Fixture

Quick Start Guide

The Agilent E5850A time correlation fixture allows you to make time-correlated measurements between a 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 under test) 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.

Set Up a Point-to-Point Network Connection

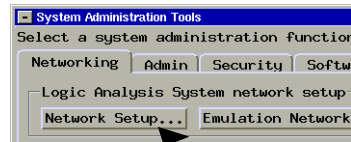
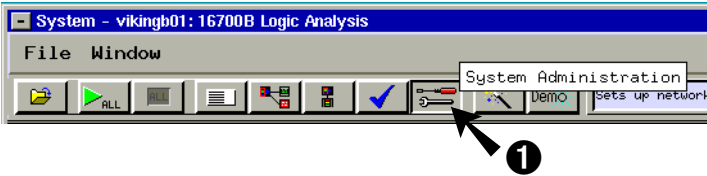
If your oscilloscope and logic analyzer are both already connected to a LAN, you can skip this step.

Connect the Point-to-Point LAN Cable

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 1670x logic analysis system and the other end to the network interface on your 548xx Infiniium oscilloscope. You will need to configure the networking software on both systems.

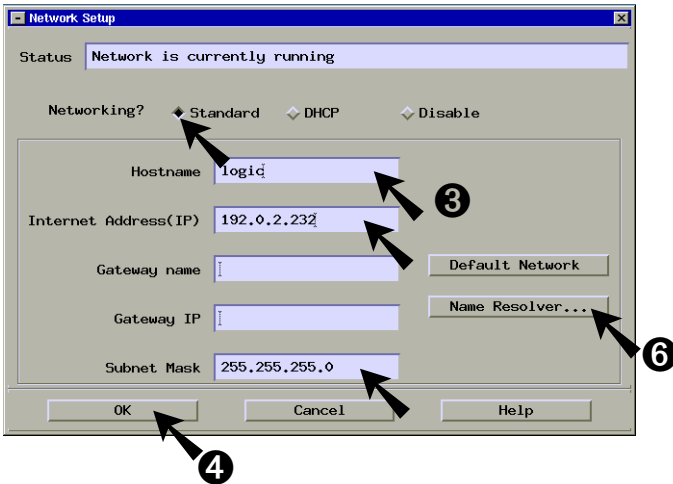


Logic Analyzer Point-to-Point Connection



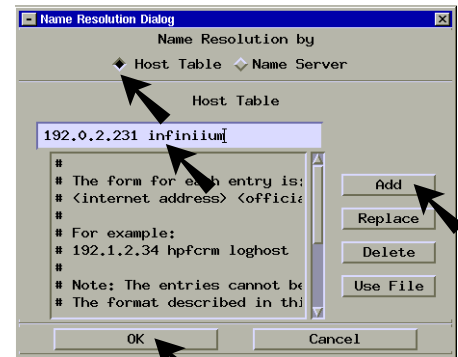
2 5

Go into the **Network Setup...** dialog twice: once to turn on the networking and set up the IP address, and once again to set up the name resolver.



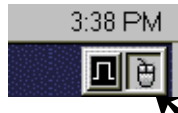
Make sure **Host Table** is selected. Enter: **192.0.2.231 infinium**. Select **Add** and **OK**. Select **OK** to close the Network Setup dialog.

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

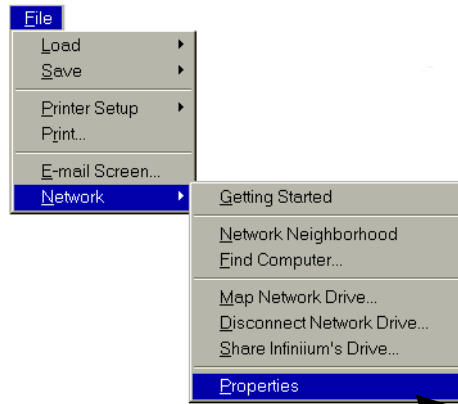


7

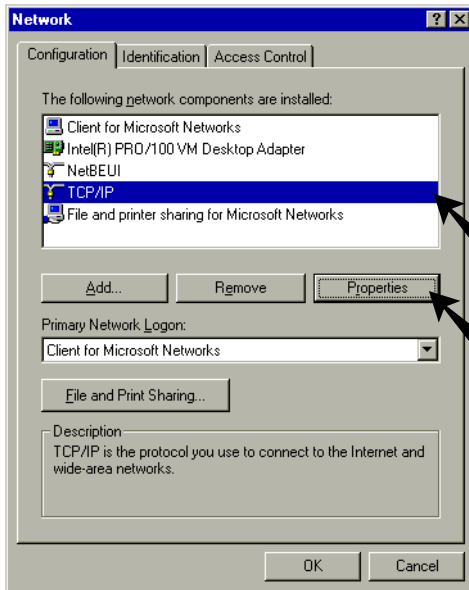
Infiniium Point-to-Point Connection



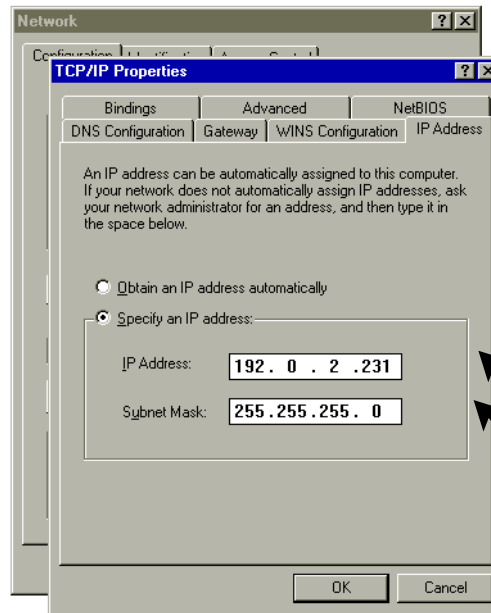
1 If necessary, turn on the oscilloscope's graphical interface.



2



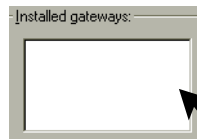
3 Check that the TCP/IP component is installed, then select **Properties**.



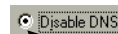
5 In the **IP Address** tab, set the IP Address and Subnet Mask.



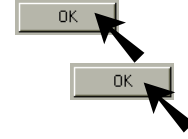
6 In the **WINS Configuration** tab, select **Disable WINS Resolution**.



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



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



9 Close the dialogs.

Install the Software on the Logic Analyzer

If you purchased the 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.



System Administration Tools

Select a system administration function to perform.

Networking Admin Security **Software Install**

Install/Update or Remove a software component

Install... Remove...

List the

List...

Software Install

Package "AUXILIARY-SW" selected.

Media

CD-ROM Path /logic/

Apply

CD-ROM(1) Packages

Package	Version	Title
AUXILIARY-SW	+ A.02.XX	Agilent Logic Analysis additional
HP1660X-70XA	A.02.XX	Agilent Logic Analyzer System S
PROC-SUPPORT	A.02.XX	

Install Details...

Software Install

Select a software package.

Media

CD-ROM Path /logic/

Apply

CD-ROM(1) Packages

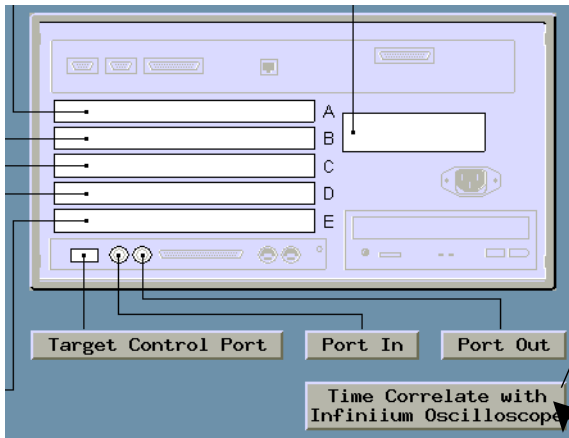
Package	Version	Title
E5850A	A.02.XX	Infinium Tool

Install Details... Options...

Double-click to open the AUXILIARY-SW directory.

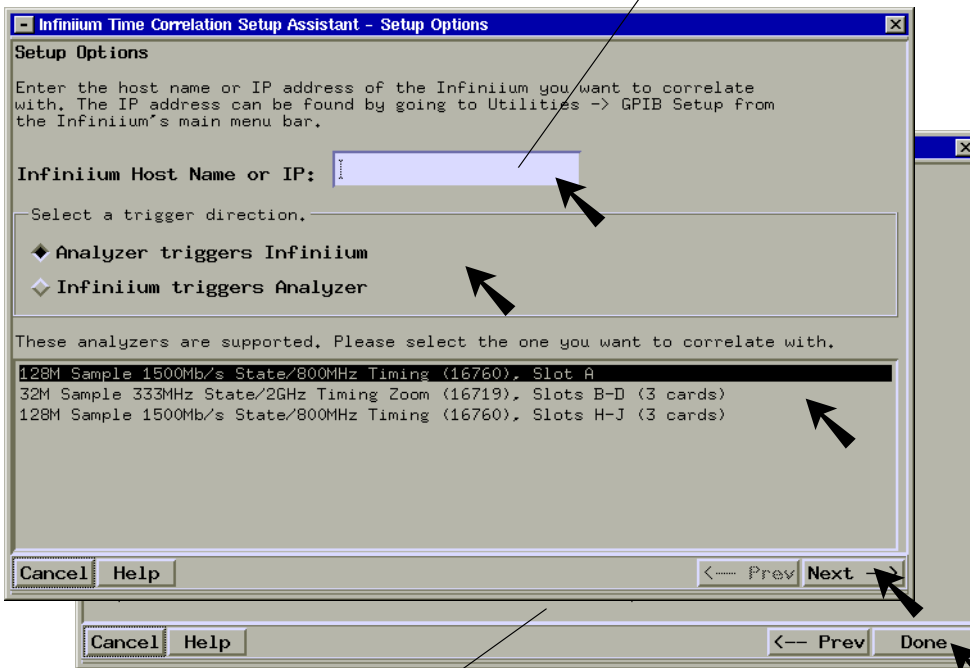
Click E5850A.

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.



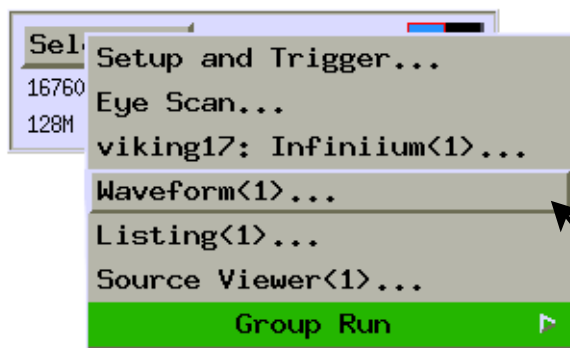
Follow the instructions displayed by the Setup Assistant to connect the cables.

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*.

Begin Making Measurements

- 1 Connect the oscilloscope probe and the logic analyzer leads to the device under test.

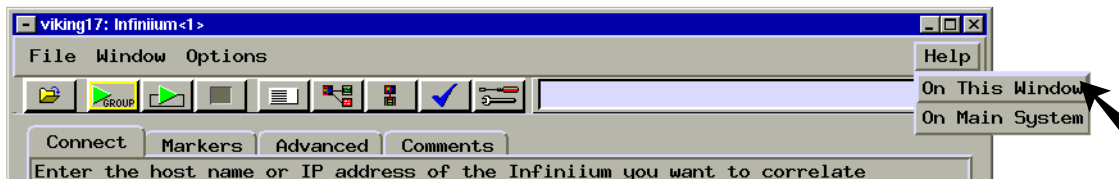


- 2 Open the Waveform display for the logic analyzer card you are using.

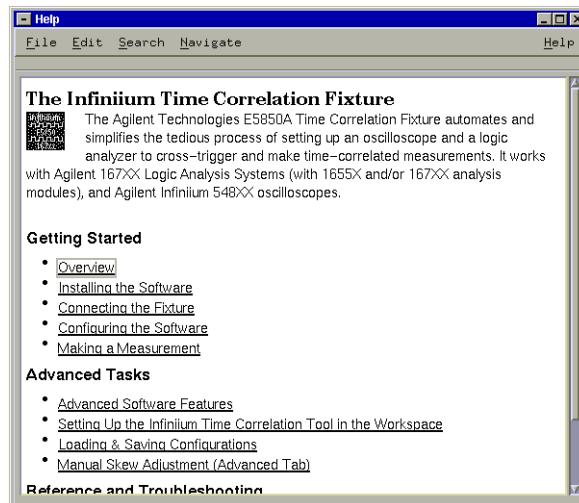


- 3 Run the measurement from the logic analyzer.

For More Information



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





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 IEC 61000-4-2:1995+A1:1998 / EN 61000-4-2:1995 IEC 61000-4-3:1995 / EN 61000-4-3:1995 IEC 61000-4-4:1995 / EN 61000-4-4:1995 IEC 61000-4-6:1996 / EN 61000-4-6:1996 Canada: ICES-001:1998 Australia/New Zealand: AS/NZS 2064.1	Group 1 Class A ^[1] 4kV CD, 8kV AD 3V/m, 80-1000 MHz 0.5kV signal lines, 1kV power lines 3V, 0.15-80 MHz
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	A
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 - Normal 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

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Document Warranty

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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 or 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 gases 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.

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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*.

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E5850-97001, November, 2001

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E5850-97000

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.

