
HP 11716A/B/C Interconnection Kit

Operating Note

HP part number: 11716-90004
Printed in USA
September 1997

Revision 2.0

Notice

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

Hewlett-Packard makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard 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.

Hewlett-Packard assumes no responsibility for the use or reliability of its software on equipment that is not furnished by Hewlett-Packard.

This document contains proprietary information which is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated to another language without prior written consent of Hewlett-Packard Company.

Restricted Rights Legend

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 for DOD agencies, and subparagraphs (c)(1) and (c)(2) of the Commercial Computer Software Restricted Rights clause at FAR 52.227-19 for other agencies.

Hewlett-Packard Company
Santa Rosa Systems Division
1400 Fountaingrove Parkway
Santa Rosa, CA 95403-1799, U.S.A.

© Copyright Hewlett-Packard Company 1994, 1996, 1997

Warranty

Certification

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

Warranty

This Hewlett-Packard system product is warranted against defects in materials and workmanship for a period corresponding to the individual warranty periods of its component products. Instruments are warranted for a period of one year. During the warranty period, Hewlett-Packard Company will, at its option, either repair or replace products that prove to be defective.

Warranty service for products installed by HP and certain other products designated by HP will be performed at Buyer's facility at no charge within HP service travel areas. Outside HP service travel areas, warranty service will be performed at Buyer's facility only upon HP's prior agreement and Buyer shall pay HP's round trip travel expenses. In all other areas, products must be returned to a service facility designated by HP.

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

HP warrants that its software and firmware designated by HP for use with an instrument will execute its programming instructions when properly installed on that instrument. HP does not warrant that the operation of the instrument, or 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 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. HP SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

EXCLUSIVE REMEDIES. THE REMEDIES PROVIDED HEREIN ARE BUYER'S SOLE AND EXCLUSIVE REMEDIES. HP 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 Hewlett-Packard products.

For assistance, call your local Hewlett-Packard Sales and Service Office (refer to "Support and Service").

Support and Service

Any adjustment, maintenance, or repair of this product must be performed by qualified personnel. Contact your local HP sales and service office.

US Field Operation Headquarters

Hewlett-Packard Company
19320 Pruneridge Avenue
Cupertino, CA 95014
USA
(800) 752-0900

Southern California

Hewlett-Packard Company
1421 South Manhattan Avenue
Fullerton, CA 92631
(714) 999-6700

Northern California

Hewlett-Packard Company
301 E. Evelyn
Mountain View, CA 94041
(415) 694-2000

Colorado

Hewlett-Packard Company
24 Inverness Place, East
Englewood, CO 80112
(303) 649-5000

Georgia

Hewlett-Packard Company
2000 South Park Place
Atlanta, GA 30339
(404) 9554-1500

Illinois

Hewlett-Packard Company
5201 Tollview Drive
Rolling Meadows, IL 60008
(708) 342-2000

New Jersey

Hewlett-Packard Company
West 120 Century Road
Paramus, NJ 07653
(201) 599-5000

Texas

Hewlett-Packard Company
930 E. Campbell Road
Richardson, TX 75081
(214) 231-6101

European Operations Headquarters

Hewlett-Packard S.A.
150, route du Nant-d'Avril
1217 Meyrin 2/Geneva
Switzerland
(41 22) 780.8111

France

Hewlett-Packard France
1 avenue du Canada
Zone d'Activite de Courtaboeuf
F-91947 Les Ulis Cedex
France
(33 1) 69 82 60 60

Germany

Hewlett-Packard GmbH
Hewlett-Packard-Strasse
61352 Bad Homburg
Germany
(+49 6172) 16-0

Great Britain

Hewlett-Packard Ltd.
Eskdale Road
Winnersh Triangle
Wokingham, Berkshire RG11 5DZ
England
(44 734) 696622

Intercon Operations Headquarters

Hewlett-Packard Company
3495 Deer Creek Road
Palo Alto, CA 94304-1316
USA
(415) 857-5027

Australia

Hewlett-Packard Australia, Ltd.
31-41 Joseph Street
Post Office Box 221
Blackburn, Victoria 3130
Australia
(61 3) 895-2895

Canada

Hewlett-Packard (Canada), Ltd.
17500 South Service Road
Trans-Canada Highway
Kirkland, Quebec H9J 2X8
Canada
(514) 697-4232

China

China Hewlett-Packard Co., Ltd.
38 Bei San Huan Road
Shuang Yu Shu
Hai Dian District, Beijing
China
(86 1) 256-6888

Japan

Yokogawa-Hewlett-Packard, Ltd.
1-27-15 Yabe
Sagamihara
Kanagawa 229
Japan
(81 427) 59-1311

Singapore

Hewlett-Packard Singapore (Pte.), Ltd.
Alexandra Post Office Box 87
Singapore 9115
(65) 271-9444

Taiwan

Hewlett-Packard Company
8th Floor
337 Fu Hsing North Road
Taipei
Taiwan
(866 2) 712-0404

Safety and Regulatory Information

Review this product and related documentation to familiarize yourself with safety markings and instructions before you operate the instrument. This product has been designed and tested in accordance with international standards.









WARNING

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

CAUTION

The **CAUTION** notice 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 the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

Instrument Markings

	When you see this symbol on your instrument, you should refer to the instrument's instruction manual for important information.
	This symbol indicates hazardous voltages.
	The laser radiation symbol is marked on products that have a laser output.
	This symbol indicates that the instrument requires alternating current (ac) input.
	The CE mark is a registered trademark of the European Community. If it is accompanied by a year, it indicates the year the design was proven.
	The CSA mark is a registered trademark of the Canadian Standards Association.
1SM1-A	This text indicates that the instrument is an Industrial Scientific and Medical Group 1 Class A product (CISPER 11, Clause 4).
	This symbol indicates that the power line switch is ON.
	This symbol indicates that the power line switch is OFF or in STANDBY position.



Safety Earth Ground

This is a Safety Class I product (provided with a protective earthing terminal). An uninterruptible safety earth ground must be provided from the main power source to the product input wiring terminals, power cord, or supplied power cord set. Whenever it is likely that the protection has been impaired, the product must be made inoperative and secured against any unintended operation.

Before Applying Power

Verify that the product is configured to match the available main power source as described in the input power configuration instructions in this manual. If this product is to be powered by autotransformer, make sure the common terminal is connected to the neutral (grounded) side of the ac power supply.

Safety and Regulatory Information

General Information

This operating note contains information for the HP 11716A, HP 11716B, and HP 11716C Interconnection Kits. Included in the note is a list of parts with part numbers and instructions for using the kit.

Description

The HP 11716A, HP 11716B, and HP 11716C Interconnection Kit provides the necessary parts to connect various HP attenuators in series. See Table 1 for possible combinations. The 11716A interconnection ridged cable has Type-N connectors, HP 11716B has APC-7 connectors, and HP 11716C has SMA connectors.

Interconnection Kit Matrix

Table 1 Interconnection Kit Parts

	HP 8494	HP 8495	HP 8496
HP 8494	Yes	Yes	Yes
HP 8495	Yes	No	Yes
HP 8496	Yes	Yes	Yes

General Information

Items Supplied

Parts included in the interconnection kits are listed in Table 2.

Table 2 *Interconnection Kit Parts*

Description	Qty	HP Part Number
Combining bracket	1	11716-00001
Base	1	11716-00002
Interconnect rigid cable		
Type-N male connectors 11716A	1	11716-20001
APC 7 connectors 11716B	1	11716-20002
SMA connectors 11716C	1	11716-20003
Felt feet	4	0403-0309
Screw 4-40 x 7.9 mm (0.312 inch)	4	2200-0105
Screw 4-40 x 9.5 mm (0.375 inch)	2	2220-0769

Installation

Initial Inspection

Inspect the shipping container for damage. Inspect the kit for any mechanical damage incurred in transit. If the shipping container or cushioning material is damaged, it should be kept until the contents of the shipment have been checked for completeness and the kit has been checked mechanically and electrically.

If the contents of this shipment are incomplete, or if there is mechanical damage or defect, notify the nearest Hewlett-Packard Office. If the shipping container is damaged, or the cushioning material shows signs of stress, notify the carrier as well as the Hewlett-Packard office. At Hewlett-Packard's option, the office will arrange for repair or replacement without waiting for claim settlement.

Installing Interconnection Kit

CAUTION

Do not allow connectors on the Interconnection Kit to bear torque or support weight.

To connect two attenuators using the kit:

1. Remove the pedestal bases of both attenuators.
2. Select the attenuator to be located on top and connect it to the outer bracket surface that has the three small holes. Use two of the 4-40 x 7.9 mm (0.312 inch) screws supplied.

NOTE

If one of the two attenuators is an HP 8495 70 dB attenuator, this physically shorter unit should be selected for the top location.

3. Fasten the remaining attenuator to the inside of the bracket, with or without the sheet metal base. The screws should pass through the two elongated holes. Do not tighten these screws at this time.

NOTE

The 4-40 x 9.5 mm (0.375 inch) screws are for fastening to a plastic attenuator pedestal base. The 4-40 x 7.9 mm (0.312 inch) are for fastening to the bracket.

Installation

4. Connect the rigid cable between the two attenuators. The lower attenuator should be adjusted laterally so that the rigid cable connects easily without strain.
5. Firmly tighten the two screws holding the lower attenuator to the bracket.
6. If no sheet metal base is being used, the adhesive-backed felt feet that are supplied may be attached to the underside of the bracket to prevent marring the surface on which the combined attenuators are set. Figure 1 shows how the interconnection kit is typically used.
7. When using the sheet metal base, use the .375 long screws to connect the attenuator bracket to the sheet metal base.

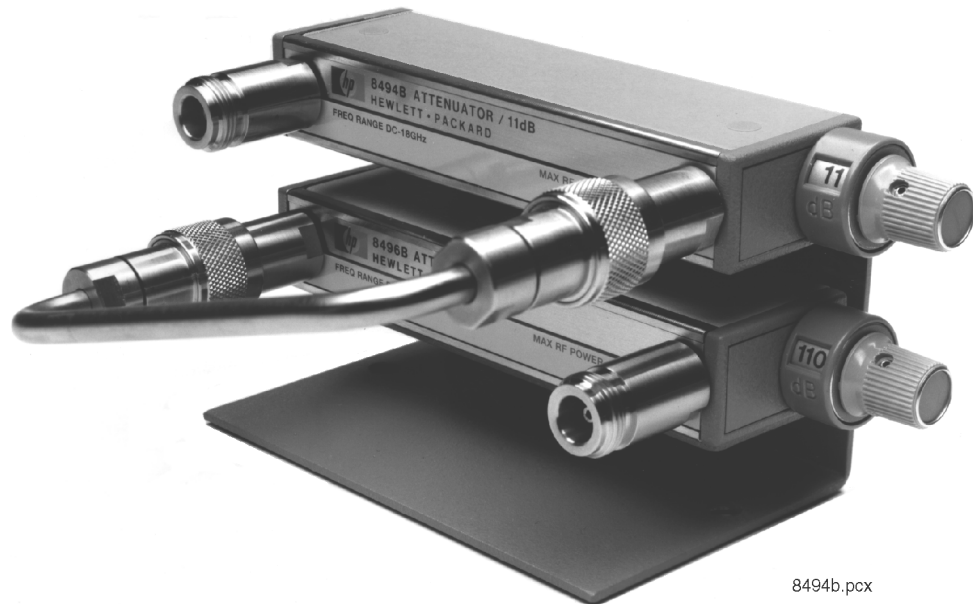


Figure 1 *Typical Installation*