

User's and Service Guide

11851B 50 Ω Type-N RF Cable Set



Part Number 11851-90007 Supersedes: September 1999

Printed in USA August 2001

Notice.

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 and 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.

General Information

To obtain optimum performance from this cable set, observe these simple precautions:

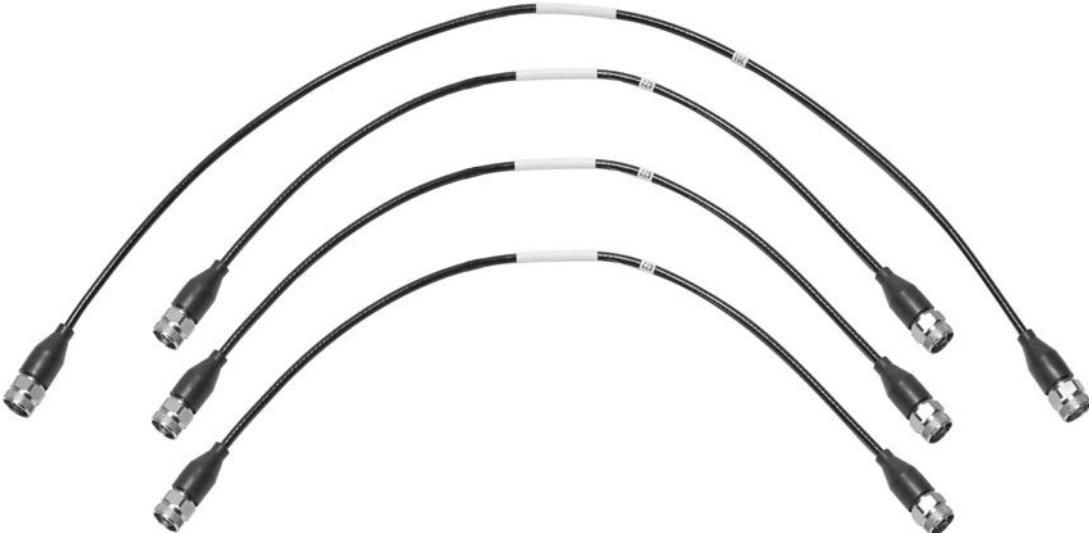
- Flex and straighten the cables as little and seldom as possible.
- Make connections carefully to avoid misalignment and connector damage or inaccurate measurements.
- Keep the connectors free of dirt and metallic particles.
- If you must clean the connectors, try clean compressed air first. Do not use abrasives. With a plastic swab, apply *only* liquid Freon (trichlorotrifluoroethane) as a solvent.
- Type-N (male) outer conductor shoulder, dielectric recession, or center conductor step: 0.208 inch minimum.

Description

The 11851B RF cable set consists of four type-N 50Ω cables, specified from 300 kHz to 3 GHz. This set provides the shielded RF connections required when using network analyzers with test sets or power splitters. The cables can be ordered as either phase-matched (three phase matched cables, plus one longer unmatched cable) or unmatched.

Model	Description	Qty	Part Number
11851B Standard	Phase-matched type-N 50Ω cables	3	8120-4781
	Unmatched, longer type-N 50Ω cable	1	8120-4780
11851B Option B24	Unmatched type-N 50Ω cables	3	8120-8862
	Unmatched, longer type-N 50Ω cable	1	8121-0001

Figure 1. Model 11851B Cables, Option B24



Operating Characteristics

	11851B Standard	11851B Option B24
Impedance	50Ω (nominal)	50Ω (nominal)
Connectors	Type-N, male	Type-N, male
Phase Match	≤ 4° (at 2 GHz) (n/a for the 1 unmatched cable)	n/a
Return Loss	≥ 24 dB (300 kHz to 2 GHz) ≥ 22 dB (2 GHz to 3 GHz)	≥ 24 dB (300 kHz to 2 GHz) ≥ 22 dB (2 GHz to 3 GHz)

Physical Characteristics

	11851B Standard	11851B Option B24
Length:		
3 shorter cables	61 cm (24 inches)	61 cm (24 inches)
1 longer cable	86 cm (34 inches)	86 cm (34 inches)
Weight (all 4 cables):		
Net	0.91 kg (2 lbs)	0.91 kg (2 lbs)
Shipping	1.36 kg (2 lbs)	1.36 kg (2 lbs)

Warranty

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

For warranty service or repair, this product must be returned to a service facility designated by Agilent Technologies. Buyer shall prepay shipping charges to Agilent Technologies and Agilent Technologies shall pay shipping charges to return the product to Buyer. However, 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, or software, or firmware will be uninterrupted or error free.

Limitation of Warranty

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

No other warranty is expressed or implied. Agilent Technologies 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. 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 and Service Office. Refer to the Contacting Agilent table on the following page.

Table 1-1. Contacting Agilent

Online assistance: www.agilent.com/find/assist

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