# **User's and Service Guide**

**11851B 50** $\Omega$  Type-N RF Cable Set



Part Number 11851-90007 Supersedes: September 1999 Printed in USA August 2001

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## **General Information**

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

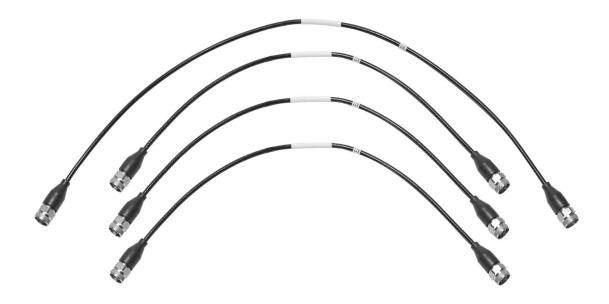
- Flex and straighten the cables as little and seldom as possible.
- Make connections carefully to avoid misalignment and connector damage or inaccurate measurements.
- Keep the connectors free of dirt and metallic particles.
- If you must clean the connectors, try clean compressed air first. Do not 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  $50\Omega$  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     | Phase-matched type-N 50 $\Omega$ cables Unmatched, longer type-N 50 $\Omega$ cable | 3   | 8120-4781   |
| Standard   |  | 1   | 8120-4780   |
| 11851B     | Unmatched type-N 50Ω cables  | 3   | 8120-8862   |
| Option B24 | Unmatched, longer type-N 50Ω cable   | 1   | 8121-0001   |

Figure 1. Model 11851B Cables, Option B24



# **Operating Characteristics**

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

## **Physical Characteristics**

|                        | 11851B<br>Standard | 11851B<br>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)      |

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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

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