

DSP/OMNI-LIA101

Permanent Link Adapter

Instruction Sheet

The DSP/OMNI-LIA101 Permanent Link Interface Adapter lets you connect a DSP/OMNI test tool to an installed permanent link to verify that the link's transmission performance complies with proposed TIA Cat 6 standards.

The link interface adapter features 1 meter of proprietary, high-performance cable terminated with a removable personality module. The personality module ensures electrical compatibility with a particular manufacturer's jack.

The standard module is designed for use with various jacks. Refer to the PMxx module list included for applications of available modules. For the most recent list of available modules, visit the Fluke Networks website at **www.flukenetworks.com**.

The adapter's minimal effect on test results ensures that your results exceed the accuracy and repeatability specifications given in the proposed TIA-568-B standards. For additional accuracy, you can calibrate the adapter with the optional DSP/OMNI-PLCAL automated calibration kit. (See "Calibrating for Maximum Accuracy" for general information.)

Handling and Operational Information

Caution

- To avoid damaging the adapter and to ensure maximum accuracy of test results, never pinch, kink, or crush the adapter's cable. Never use the cable as a handle to pick up the test tool. Follow the handling guidelines given in Figure 1.

- **Never connect the adapters to telephone lines of any type, including ISDN lines. Doing so can damage the adapters and the test tool.**
- **Always turn on the test tool before connecting it to a link. Doing so activates the tool's input protection circuitry.**
- **Before using a DSP/OMNI test tool, read the complete list of safety and operational information given in the product's documentation.**

To avoid latent or immediate damage due to electrostatic discharge:

- **Before handling a module or an adapter with no module attached, ground yourself when possible by touching a grounded, conductive surface.**
- **Always remove the adapter from the test tool before changing the personality module.**
- **Always keep a personality module attached to the adapter cable.**
- **Always store the personality module in its original, static protection bag when not in use.**

Changing the Personality Module

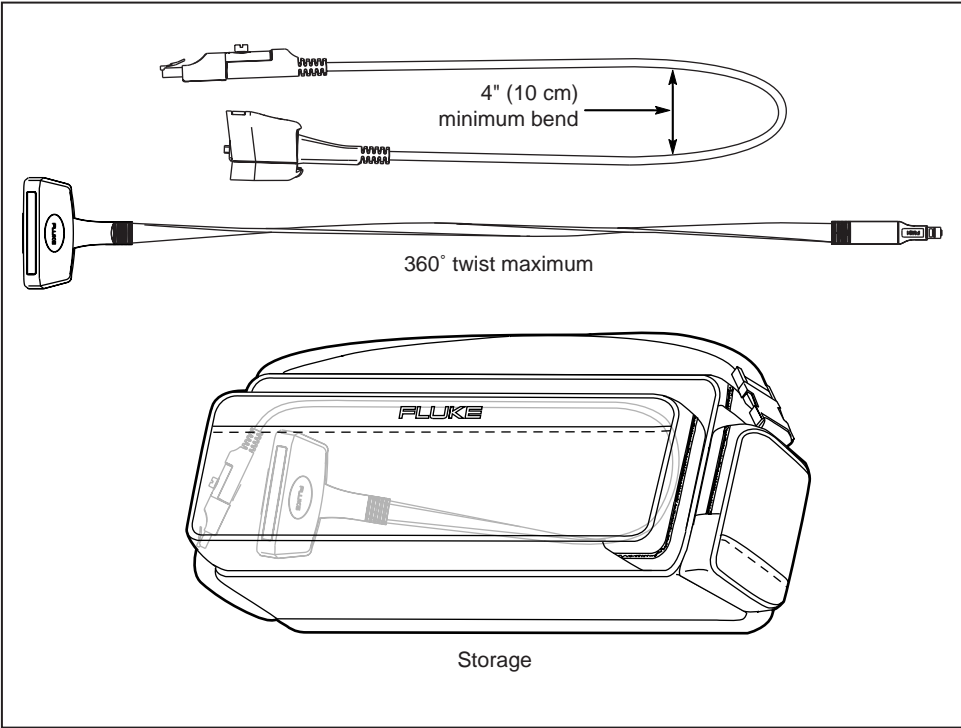
You can change the personality module to make the adapter compatible with a certain manufacturer's jack. Visit the Fluke Networks website for the most recent list of available personality modules.

Replace the module as follows (refer to Figure 2):

1. Ground yourself by touching a grounded, conductive surface.
2. Remove the link interface adapter from the test tool.
3. Use your fingers to unscrew the screw on the personality module. If necessary, you can use a flat-blade screwdriver to loosen the screw.
4. Remove the module; then store it in its original, static protection bag.
5. Put the new module in place and tighten the screw with your fingers.

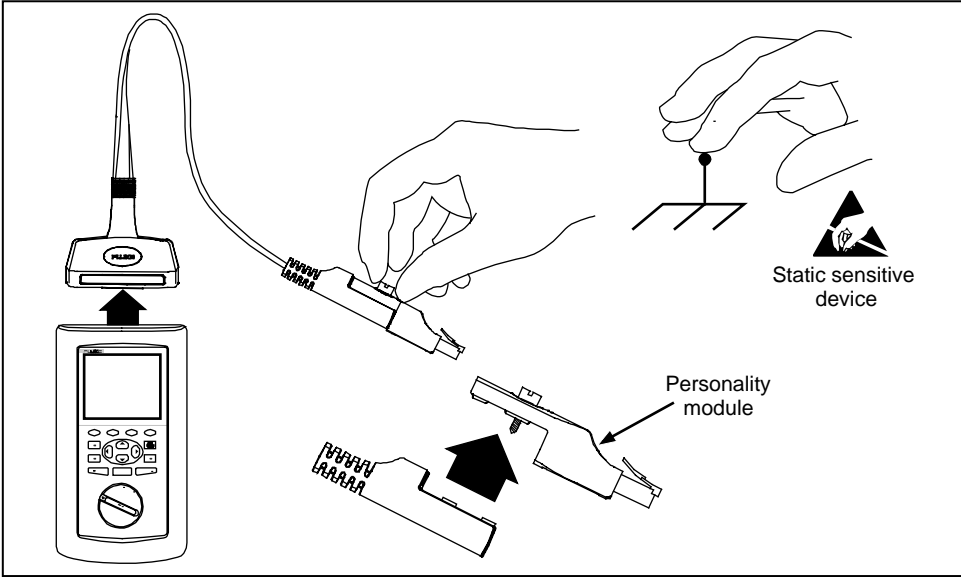
Caution

Tighten the screw snugly with your fingers only. Do not overtighten. Doing so can damage the module or the end of the cable.



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Figure 1. Handling Guidelines



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Figure 2. Changing the Personality Module

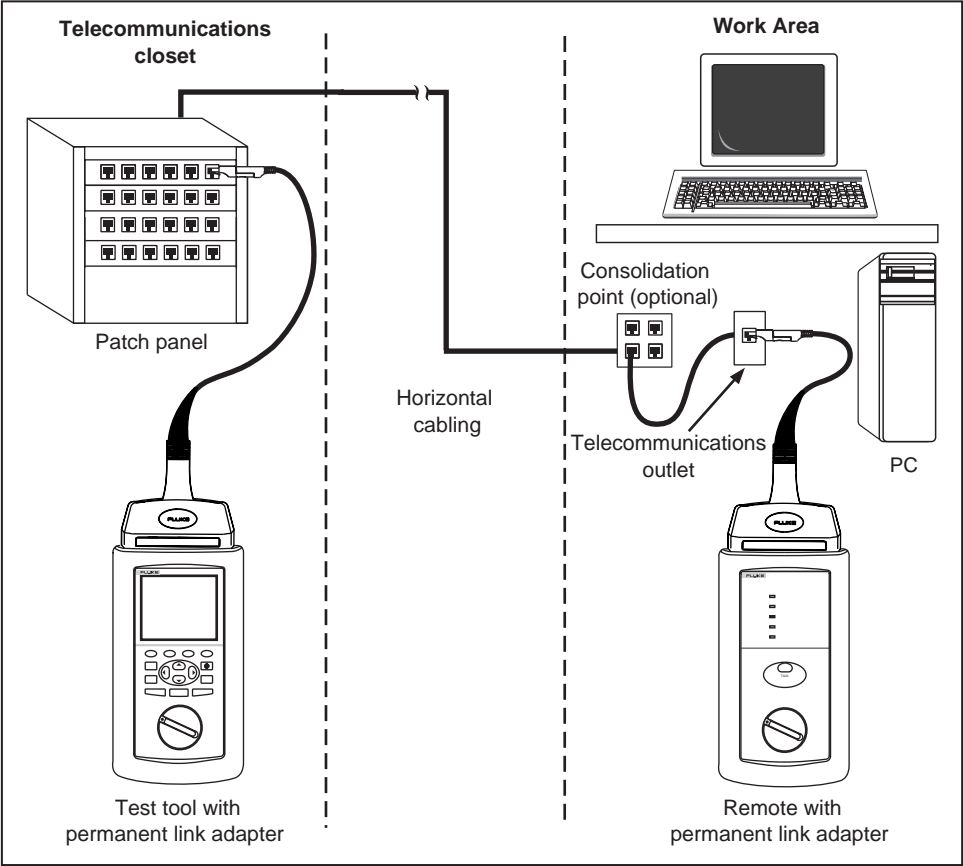
Using the Permanent Link Adapters

Figure 3 shows typical connections to a permanent link. Be sure to select the test standard appropriate for the link under test. If a permanent link standard is not listed, you will need to upgrade the test tool's software. You can download new software from the Fluke Networks website. Refer to the test tool's users manual or contact Fluke Networks for additional information.

Note

For the best accuracy, keep the adapter's cable as straight as possible during testing.

The model number of the personality module used is saved with your test results and appears on printed reports.



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Figure 3. Connecting to a Permanent Link

Calibrating for Maximum Accuracy

The optional DSP/OMNI-PLCAL automated calibration kit lets you calibrate your permanent link adapters to meet enhanced accuracy specifications. Calibration compensates for physical changes that occur over time to the adapter's cable and other components. Regular calibration helps eliminate false fail results and helps ensure that test results represent the link's actual performance.

Fluke Networks recommends that you use the DSP/OMNI-PLCAL kit to calibrate your adapters after the first 40 hours of use. Thereafter, calibrate the adapters at least every 6 months.

Contact Fluke Networks for more information on the DSP/OMNI-PLCAL kit.

Maintenance and Service

Clean the adapter with a soft cloth dampened with water or water and a mild soap. Do not use abrasives, solvents, or alcohol.

For the most current test standards, new features, and other enhancements, keep your test tool's software up to date. The latest version of software is available on the Fluke Networks website.

If an adapter does not work properly, check for damage to the connectors or cable. Verify that the adapter is securely latched to the test tool.

The adapters should be serviced only by a qualified technician. Contact Fluke Networks for the location of the nearest service center.

Contacting Fluke Networks

Visit the Fluke Networks website at **www.flukenetworks.com**. Send email to **fluke-assist@flukenetworks.com**.

To order accessories or get the location of the nearest Fluke Networks distributor or service center, call:

- USA: 1-888-993-5853
- Canada: 1-800-363-5853
- Europe: +31-402-678-200
- Japan: +81-3-3434-0181
- Singapore: +65-738-5655
- Anywhere in the world: +1-425-446-4519

For operating assistance in the USA, call 1-800-283-5853.

Specifications

The DSP/OMNI-LIA101 Permanent Link Adapter meets all measurement accuracy specifications for Level III test equipment with a permanent link adapter. Visit the Fluke Networks website for performance characteristics and additional information.

Life of module contacts (typical): >10,000 cycles

Certifications:   _{C US}

Dimensions: 4.57 in x 2.13 in x 1.81 in (11.6 cm x 5.4 cm x 4.6 cm) with 3 ft (1 m) cable

Weight: 6.6 oz (187 g)

LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke Networks product will be free from defects in material and workmanship for one (1) year from the date of purchase. This warranty does not cover personality modules or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke Networks' behalf. To obtain service during the warranty period, contact your nearest Fluke Networks authorized service center to obtain return authorization information.

Fluke Networks' warranty obligation is limited, at Fluke Networks' option, to refund of the purchase price, or free of charge repair or replacement of a defective product that is returned to an authorized Fluke Networks Service Center within the warranty period.

Warranty service is available outside the United States only if product was purchased through a Fluke Networks Authorized Sales Outlet in the country of use or the applicable Fluke Networks international price was paid.

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