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SCXI-1314

#### **USER GUIDE**

# NI 9949 RJ-50 to Screw-Terminal Accessory

This user guide describes the features of the National Instruments 9949 RJ-50 to Screw-Terminal Accessory. You can use the NI 9949 to provide screw-terminal access to devices that use RJ-50 cables, such as the NI 9237 with RJ-50 and the SCXI-1314T.

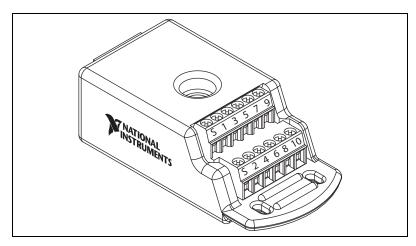


Figure 1. NI 9949 RJ-50 to Screw-Terminal Accessory

### What You Need to Get Started

To use the NI 9949, you need the following:

- ☐ Plastic tie strap for strain relief wrapped around the two front holes, as shown in Figure 3.
- ☐ M4x20 screw, or other hardware that fits in the 8.9 mm (0.35 in.) outer clearance hole and 4.6 mm (0.18 in.) inner clearance hole, as shown in Figure 3.



#### NI 9949 Dimensions

The NI 9949 has outer dimensions of  $65.6 \times 21.3 \times 31.5$  mm  $(2.58 \times 0.84 \times 1.24 \text{ in.})$ , as shown in Figures 2 and 3.

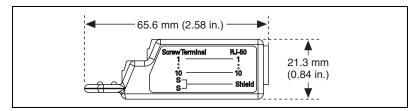


Figure 2. NI 9949 Dimensions

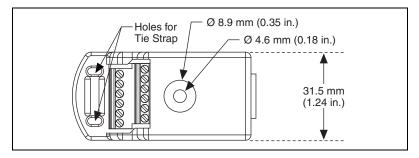


Figure 3. NI 9949 Dimensions and Hole Clearance

# Connecting the NI 9949

Use an RJ-50 cable to connect the NI 9949 to devices with RJ-50 receptacles, such as the NI 9237 with RJ-50 and the SCXI-1314T. The NI 9949 routes each pin of the RJ-50 receptacle to the corresponding screw terminal, where 1–10 represent the pin and terminal numbers and S represents the shield of the RJ-50 connector. For example, if you connect the NI 9949 to the NI 9237, pin 1 of the NI 9237 RJ-50 receptacle connects to terminal 1 of the NI 9949 screw-terminal connector. Refer to Figure 4 for a diagram of the RJ-50 and screw-terminal connectors on the NI 9949. Refer to the device manual for information about device pin assignments.



**Note** National Instruments does not recommend using an RJ-45 cable with the NI 9949 because it can physically damage pins 1 and 10 on the device, and thus permanently disable shunt calibration no matter what connector you use.



**Note** You must use 2-wire ferrules to create a secure connection when connecting more than one wire to a single terminal on the NI 9949.

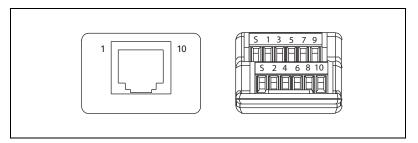


Figure 4. RJ-50 and Screw-Terminal Connectors on the NI 9949

# **Specifications**

Operating temperature......-40 to  $70~^{\circ}$ C

## Where to Go for Support

The National Instruments Web site is your complete resource for technical support. At ni.com/support you have access to everything from troubleshooting and application development self-help resources to email and phone assistance from NI Application Engineers.

National Instruments corporate headquarters is located at 11500 North Mopac Expressway, Austin, Texas, 78759-3504.

National Instruments also has offices located around the world to help address your support needs. For telephone support in the United States, create your service request at ni.com/support and follow the calling instructions or dial 512 795 8248. For telephone support outside the United States, contact your local branch office:

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