

SCXI™-1349 SHIELDED CABLE ADAPTER

This guide describes how to connect an SCXI system using the SCXI-1349 shielded cable adapter.

Introduction

Using the SCXI-1349, you can connect an SCXI system to your data acquisition (DAQ) device. The SCXI-1349 connects any 68-pin E Series DAQ device, excluding 61XXE devices, to any SCXI module, excluding SCXI switch modules.

The SCXI-1349 is a connector assembly with three connectors:

- A 68-pin male connector on the front panel of the adapter
- A 50-pin male breakout connector on the printed-circuit board of the adapter
- A 50-pin bracket-mounted female connector on the rear of the adapter

All three connectors are shown in Figure 1.

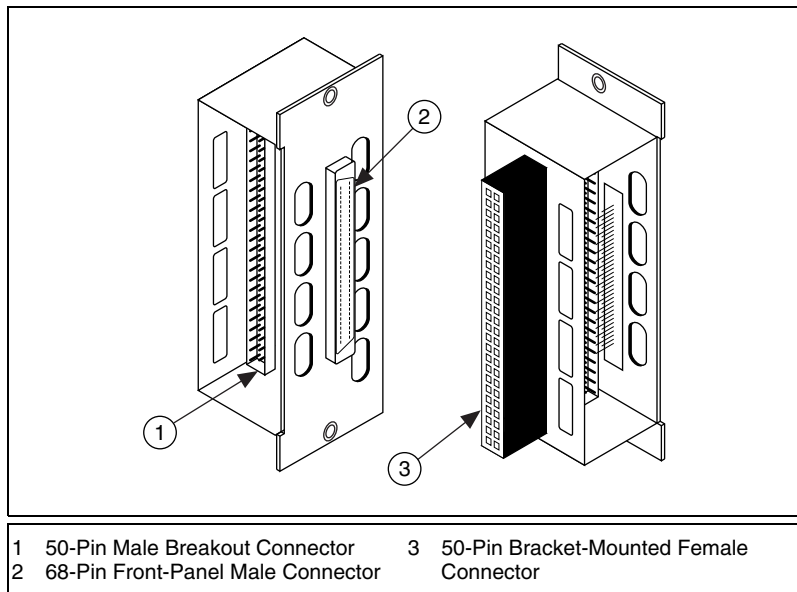


Figure 1. SCXI-1349 Adapter Connectors

What You Need to Get Started

To set up and use your SCXI-1349, you need the following items:

- Computer
- SCXI-1349 Shielded Cable Adapter Installation Guide*
- One 68-pin E Series DAQ device
- SCXI-1000, SCXI-1001, or SCXI-1000DC chassis
- At least one SCXI module (excluding SCXI switch modules)
- SCXI-1349 shielded cable assembly (cable adapter and 68-pin shielded cable)
- Small flathead screwdriver

Conventions

The following conventions are used in this document:



This icon denotes a caution, which advises you of precautions to take to avoid injury, data loss, or a system crash.

italic

Italic text denotes variables, emphasis, a cross reference, or an introduction to a key concept. This font also denotes text that is a placeholder for a word or value that you must supply.

monospace

Text in this font denotes text or characters that you should enter from the keyboard, sections of code, programming examples, and syntax examples. This font is also used for the proper names of disk drives, paths, directories, programs, subprograms, subroutines, device names, functions, operations, variables, filenames and extensions, and code excerpts.

Safety Information



Cautions Do *not* operate the device in an explosive atmosphere or where there may be flammable gases or fumes.

Do *not* operate damaged equipment. The safety protection features built into this device can become impaired if the device becomes damaged in any way. If the device is damaged, turn the device off and do *not* use it until service-trained personnel can check its safety. If necessary, return the device to National Instruments for service and repair to ensure that its safety is not compromised.

Do *not* operate this equipment in a manner that contradicts the information specified in this document. Misuse of this equipment could result in a shock hazard.

Do *not* substitute parts or modify equipment. Because of the danger of introducing additional hazards, do *not* install unauthorized parts or modify the device. Return the device to National Instruments for service and repair to ensure that its safety features are not compromised.

You *must* insulate all of your signal connections to the highest voltage with which the SCXI-1349 can come in contact.

Connections, including power signals to ground and vice versa, that exceed any of the maximum signal ratings on the SCXI device can create a shock or fire hazard, or can damage any or all of the boards connected to the SCXI chassis, the host computer, and the SCXI device. National Instruments is *not* liable for any damages or injuries resulting from incorrect signal connections.

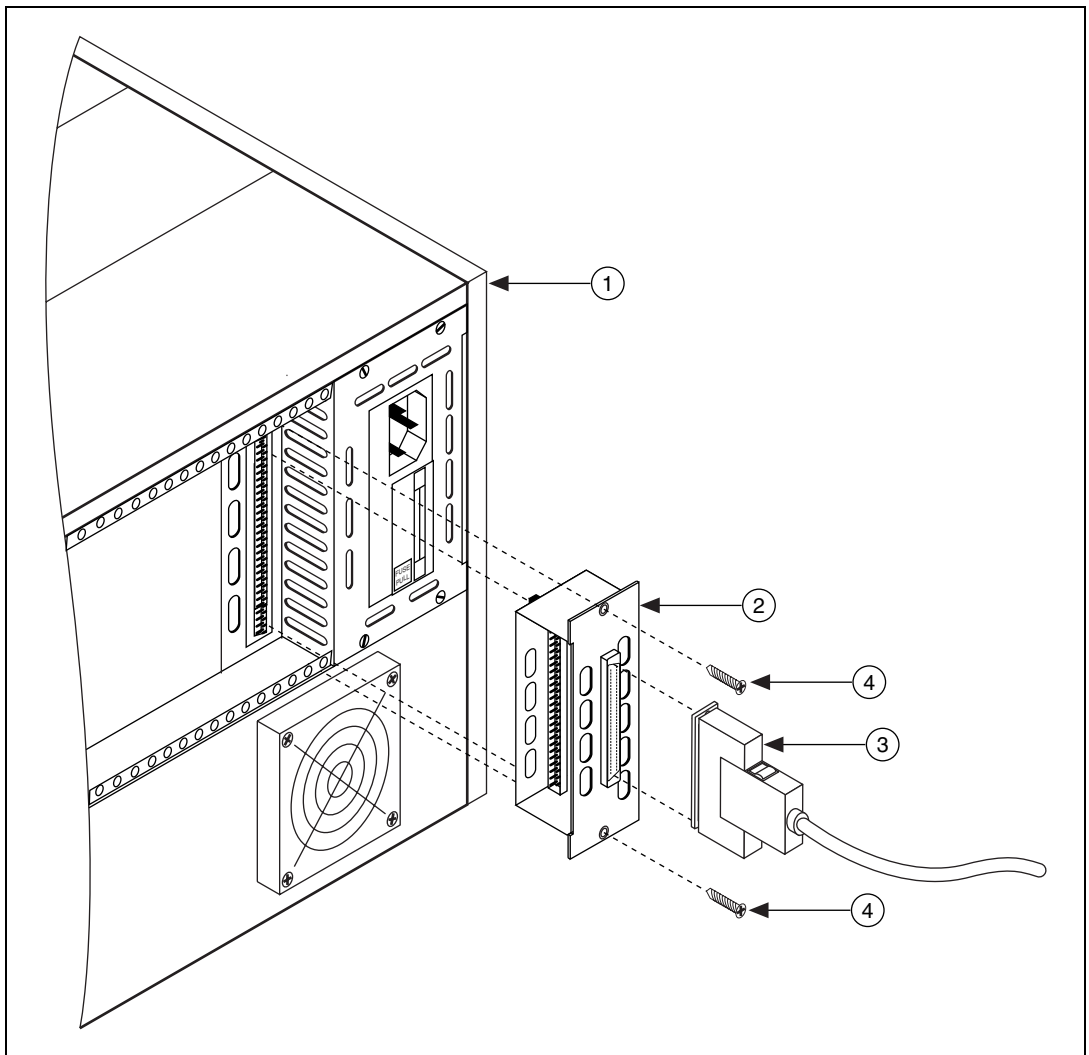
Clean the cable adapter by brushing off light dust with a soft non-metallic brush. Remove other contaminants with a stiff non-metallic brush. The unit *must* be completely dry and free from contaminants before returning it to service.

The cable adapter *must* be used with a UL-listed SCXI chassis.

Installing Modules in Your SCXI Chassis

Follow these steps to prepare the chassis for integration into the system while referring to Figure 2 and 3:

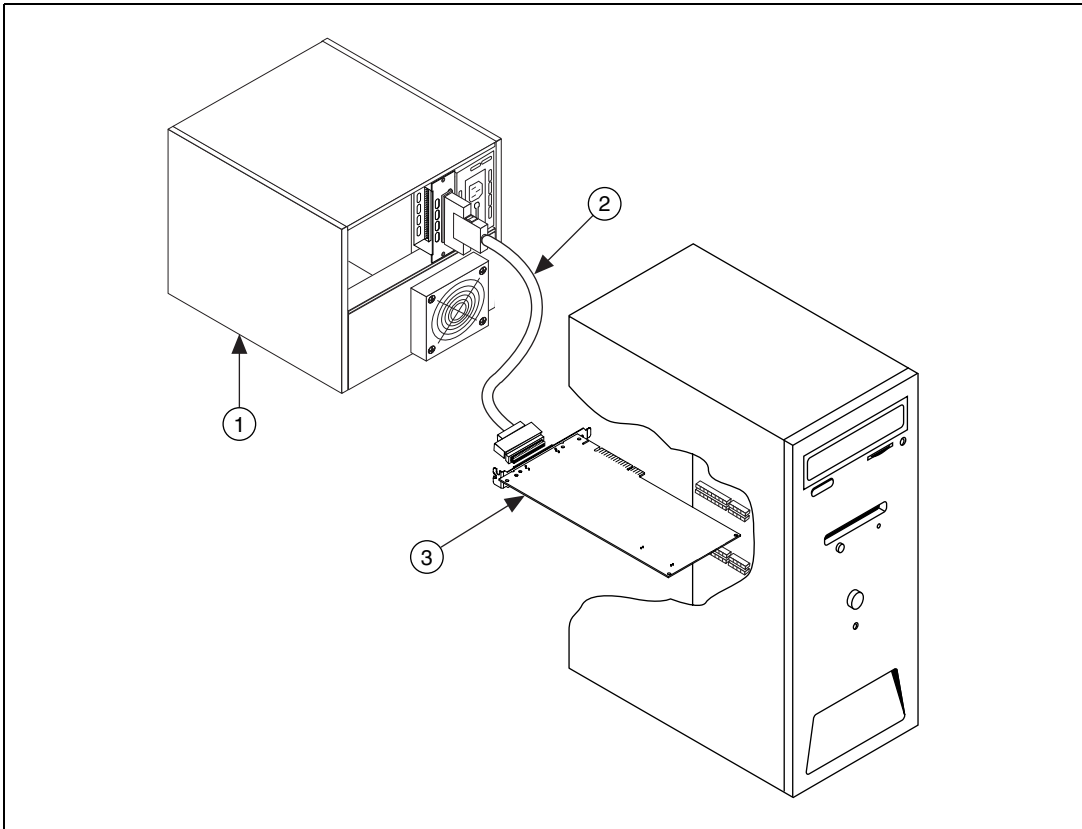
1. Turn the power off and unplug the SCXI chassis.
2. Install the SCXI modules into the chassis—refer to your module/chassis documentation for instructions.
3. Within the SCXI chassis, identify the appropriate SCXI module to connect to the cable adapter. Refer to the *SCXI Quick Start Guide* to determine the appropriate module.
4. Insert the 50-pin female connection on the rear of the SCXI-1349 into the 50-pin male connector on the rear of the appropriate SCXI module.
5. Using the two screws provided with the SCXI-1349 chassis adapter, fasten the adapter to the rear of the SCXI chassis.
6. Connect either end of the 68-pin shielded cable to the SCXI-1349 adapter.



- | | |
|--|-------------------------|
| 1 SCXI-1000, SCXI-1001, or SCXI-1000DC Chassis | 3 68-Pin Shielded Cable |
| 2 SCXI-1349 Cable Adapter | 4 Screws |

Figure 2. SCXI-1349 Cable Assembly

7. Connect the other end of the 68-pin shielded cable to the DAQ device.



1 SCXI-1000, SCXI-1001, or SCXI-1000DC Chassis

2 Shielded Cable Connected to SCXI-1349 Cable Adapter
3 68-Pin E Series DAQ Device

Figure 3. Complete SCXI System

Specifications

This section lists the specifications of the SCXI-1349 shielded cable adapter. These ratings are typical at 25 °C unless otherwise stated.

Analog Input

Maximum working voltage30 V_{rms}, 42 V_{pk}, 60 VDC
(signal + common-mode)

Environmental

Operating temperature.....	0 to 50 °C
Storage temperature	-20 to 70 °C
Relative humidity	10 to 90% noncondensing

Safety

Designed in accordance with IEC 61010-1, UL 3111-1, and CAN/CSA C22.2 No. 1010.1 for electrical measuring and test equipment.
For use at altitudes up to 2000 meters.
Installation Category I¹
Pollution degree 2

Electromagnetic Compatibility

EMC/EMI.....	CE, C-Tick, and FCC Part 15 (Class A) Compliant
Electrical emissions.....	EN 55011 Class A at 10 m FCC Part 15A above 1 GHz
Electrical immunity	Evaluated to EN 61326-1:1997 A1:1998, Table 1



Note For full EMC and EMI compliance, you must operate this device with shielded cabling. See the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, click **Declaration of Conformity** at ni.com/hardref.nsf/ This website lists the DoCs by product family. Select the appropriate product family, followed by your product, and a link to the DoC (in Adobe Acrobat format) appears. Click the Acrobat icon to download or read the DoC.

¹ Category I is signal level, such as voltages on a pwb on the secondary of an isolation transformer.

Technical Support Resources

NI Web Support

National Instruments Web support is your first stop for help in solving installation, configuration, and application problems and questions. Online problem-solving and diagnostic resources include frequently asked questions, knowledge bases, product-specific troubleshooting wizards, manuals, drivers, software updates, and more. Web support is available through the Technical Support section of ni.com

Worldwide Support

National Instruments has offices located around the world to help address your support needs. You can access our branch office Web sites from the Worldwide Offices section of ni.com. Branch office Web sites provide up-to-date contact information, support phone numbers, e-mail addresses, and current events.

If you have searched the technical support resources on our Web site and still cannot find the answers you need, contact your local office or National Instruments corporate. For telephone support in the United States, dial 512 795 8248. For telephone support outside the United States, contact your local branch office:

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Canada (Toronto) 905 785 0085, China (Shanghai) 021 6555 7838,
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Greece 30 1 42 96 427, Hong Kong 2645 3186, India 91805275406,
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Sweden 08 587 895 00, Switzerland 056 200 51 51,
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