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Find the *National Instruments SCXI-1166* at our website: *Click HERE*

NI SCXI™-1366 Installation Guide

Terminal Block for the NI SCXI-1166

This guide describes how to install and connect signals to the National Instruments SCXI-1366 terminal block. Refer to the *NI Switches Getting Started Guide* to determine when to install the terminal block.

Introduction

The SCXI-1366 terminal block installs in front of the SCXI-1166 switch module and has screw terminals that provide access to each of the 32 relays. Connections for the trigger output and trigger input signals also are available.

Caution This terminal block is rated for Measurement Category I and intended to carry signal voltages no greater than 150 V. This module can withstand up to 800 V impulse voltage. Do not use this module for connection to signals or for measurements within Categories II, III, or IV. Do not connect to MAINS supply circuits (e.g., wall outlets) of 115 or 230 VAC. Refer to the *NI Switches Getting Started Guide* for more information on measurement categories.

When hazardous voltages (>42.4 V_{pk}/60 VDC) are present on any relay terminal, safety low-voltage (≤42.4 V_{pk}/60 VDC) cannot be connected to any other relay terminal.

Conventions

The following conventions are used in this guide:

This icon denotes a note, which alerts you to important information.

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.

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1. Unpack the Terminal Block

The terminal block is shipped in an antistatic package to prevent electrostatic damage (ESD) that can damage several components in the terminal block. To avoid such damage when you handle the terminal block, take the following precautions:

Caution *Never* touch the exposed pins of connectors.

- Ground yourself using a grounding strap or by holding a grounded object.
- Touch the antistatic package to a metal part of the chassis before you remove the terminal block from the package.

Remove the terminal block from the package and inspect the terminal block for loose components or any sign of damage. Notify NI if the terminal block appears damaged in any way. Do *not* install a damaged terminal block on a switch terminal block.

Store the terminal block in the antistatic package when not in use.

2. Verify the Components

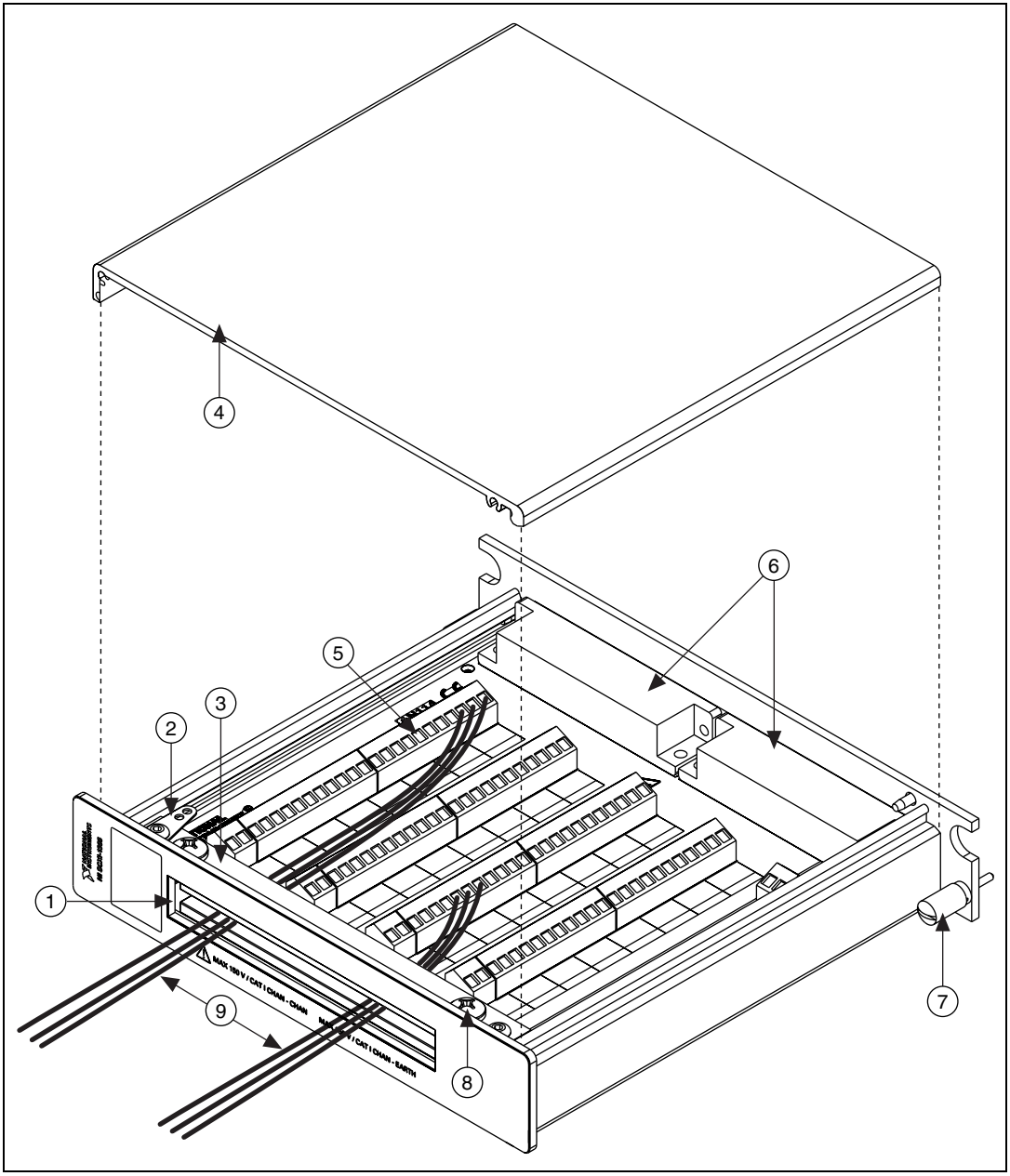
Make sure you have the following:

- ❑ SCXI-1366 terminal block
- ❑ SCXI chassis
- ❑ SCXI-1166 switch module
- ❑ Number 2 Phillips-head screwdriver
- ❑ 1/8 inch flathead screwdriver
- ❑ Wire cutter
- ❑ Wire insulation stripper

3. Connect Signals

To connect signals to the terminal block, complete the following steps:

1. Prepare the signal wire by stripping the insulation no more than 3/16 of an inch.
2. Gently pry the terminal block top cover off with a flathead screwdriver.
3. Loosen the two 10-32 × 3/4 inch screws on the strain-relief bar, leaving plenty of space for the signal cables.
4. Pull the signal cables at least one foot through the strain-relief opening shown in Figure 1.
5. Connect the safety earth ground to the safety ground lug.
6. Connect the wires to the terminals by inserting the stripped end of the wire into the terminal. Secure the connection by tightening the screw for each terminal. When connecting the signals, refer to the connection diagram in Figure 2.
7. Tighten the two 10-32 × 3/4 inch screws on the strain-relief bar, leaving enough space for the signal wires.
8. Snap the top cover onto the base.



1 Strain-Relief Opening	6 Rear Connector
2 Safety Ground Lug	7 Thumbscrews
3 Strain-Relief Bar	8 10-32 × 3/4 Inch Screw
4 Terminal Block Top Cover	9 Signal Wires
5 Screw Terminals	

Figure 1. SCXI-1366 Terminal Block

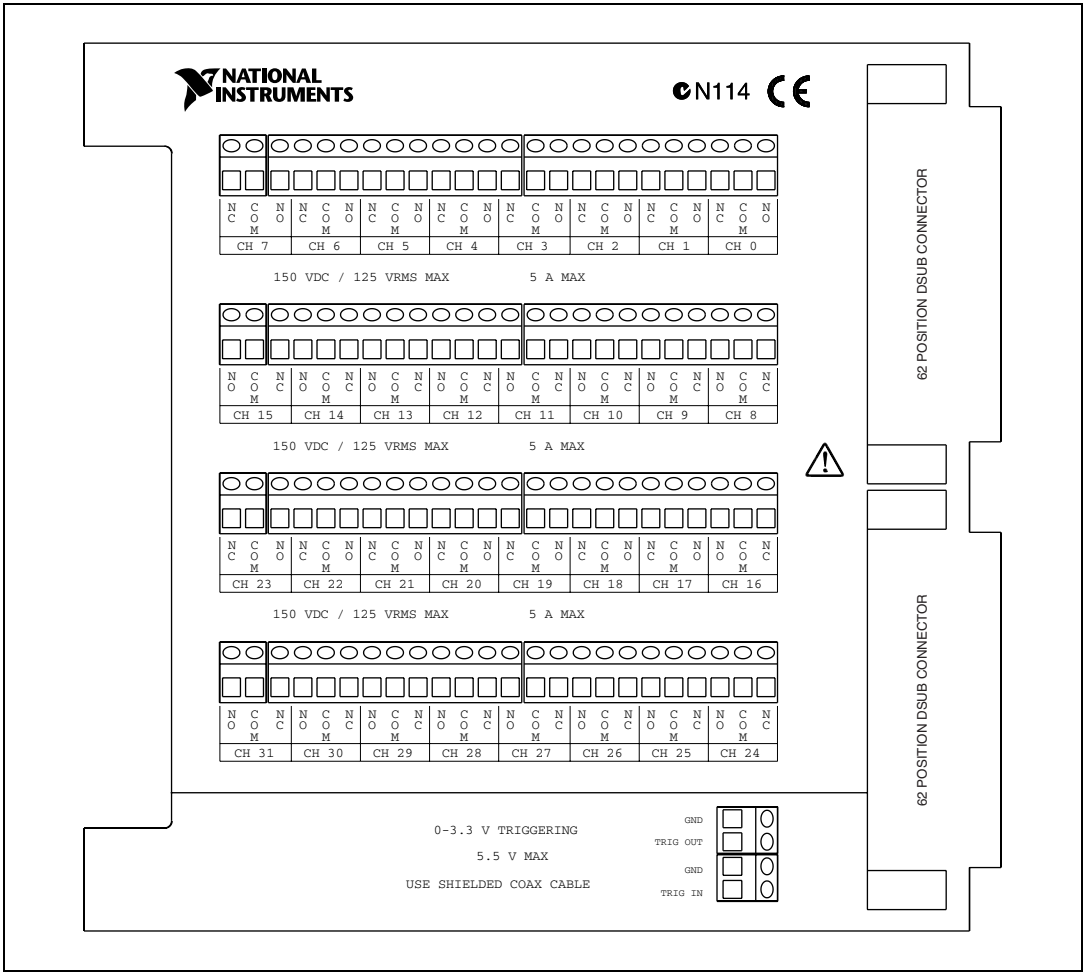
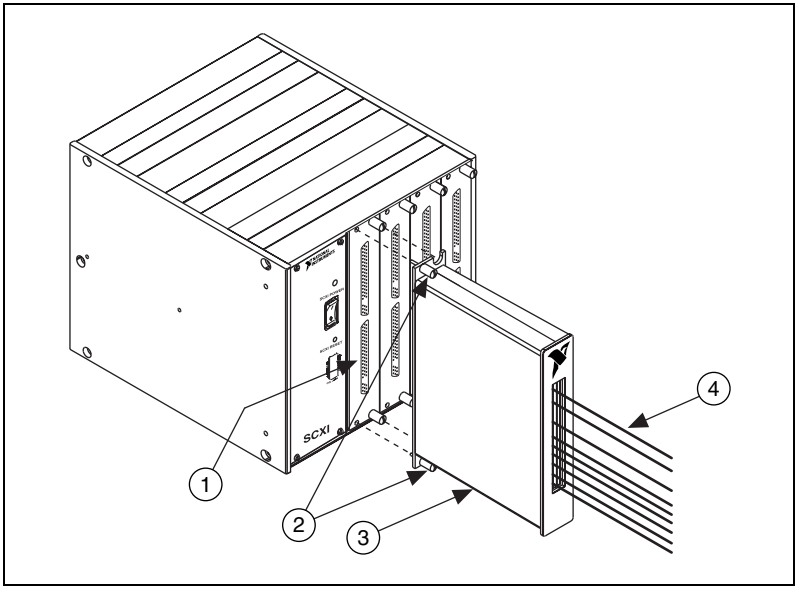


Figure 2. SCXI-1366 Terminal Block Signal Connections

4. Install the Terminal Block

To connect the SCXI-1366 terminal block to the SCXI-1166 front panel, complete the following steps:

1. Connect the terminal block front connectors to its mating connectors on the terminal block.
2. Tighten the top and bottom thumbscrews on the back of the terminal block rear panel to hold it securely in place.



1	SCXI-1166	3	SCXI-1366 Terminal Block
2	Thumbscrews	4	Signal Wires

Figure 3. Installing the SCXI-1366 Terminal Block

Compliance and Certifications

Safety

This product is designed to meet the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 3111-1, UL 61010B-1
- CAN/CSA C22.2 No. 1010.1

Note For UL and other safety certifications refer to the product label or visit `ni.com`.

Electromagnetic Compatibility

Emissions	EN 55011 Class A at 10 m FCC Part 15A above 1 GHz
Immunity	EN 61326:1997 + A2:2001, Table 1
EMC/EMI	CE, C-Tick, and FCC Part 15 (Class A) Compliant

Note For EMC compliance, you *must* operate this device with shielded cabling.

CE Compliance

This product meets the essential requirements of applicable European Directives, as amended for CE marking, as follows:

Low-Voltage Directive (safety)	73/23/EEC
Electromagnetic Compatibility Directive (EMC)	89/336/EEC

Note Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, click **Declarations of Conformity Information** at `ni.com/hardref.nsf/`.

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