

## VXI-TB-196/296 TERMINAL BLOCK

This guide describes how to connect signals and install the VXI-TB-196 and VXI-TB-296 (196/296) terminal blocks with your VXI-MIO and VXI-DIO modules.

### Introduction

---

The VXI-TB-196/296 terminal block has a shielded board with either 96 or 192 screw terminals for connection to the VXI-MIO and VXI-DIO front panel connectors, respectively. The VXI-TB-196/296 can easily accommodate thermocouples, RTDs, strain gauges, thermistors, millivolt sources, volt sources, and current-loop receivers.

### What You Need to Get Started

---

You need the following to set up and use your VXI-TB-196/296 terminal block:

- ☐ One or more of the following terminal blocks:
  - VXI-TB-196
  - VXI-TB-296
- ☐ *VXI-TB-196/296 Terminal Block Installation Guide*
- ☐ VXIbus chassis
- ☐ One or more VXI-DAQ module(s) and documentation
- ☐ Phillips-head number 1 and number 2 screwdrivers
- ☐ 0.09 in. flathead screwdriver
- ☐ Long-nose pliers
- ☐ Wire cutter
- ☐ Wire insulation stripper

---

*National Instruments™ and The Software is the Instrument™ are trademarks of National Instruments Corporation. Product and company names are trademarks or trade names of their respective companies.*

# Signal Connection

---

Perform the following steps to connect the signals to the terminal block. The called-out numbers refer to items in Figure 1.

1. To access the screw terminals (9), remove the terminal block cover (5) by loosening the three cover screws (6) with a Phillips-head number 1 screwdriver. These screws stay attached to the cover without falling out.
2. Choose the wire opening (Figure 2) through which your signal wires will pass and loosen the appropriate strain-relief bar screws (11) with a Phillips-head number 2 screwdriver. You can completely remove the strain-relief bar (12) for easier access.
3. Use a wire cutter and wire insulation stripper to strip the wire ends as necessary to connect them to screw terminals.
4. Loosen the screws in the screw terminals (9) with a 0.09 in. flathead screwdriver.
5. To connect the wires to the screw terminals, insert the stripped wires into the screw terminals. Tighten the screws with a 0.09 in. flathead screwdriver.
6. Replace the strain-relief bar, if necessary, and tighten the strain-relief bar screws.



**Note:** *If the strain-relief bar screws protrude past the bottom of the terminal block, replace the screws with 6-32 Phillips panhead screws that are shorter than 3/4 in.*

7. Replace the terminal block cover and tighten the cover screws.

Figure 1 shows the VXI-TB-196 terminal block parts locator diagram. The VXI-TB-296 will have two screw terminal boards inside, instead of the single board shown in the VXI-TB-196.

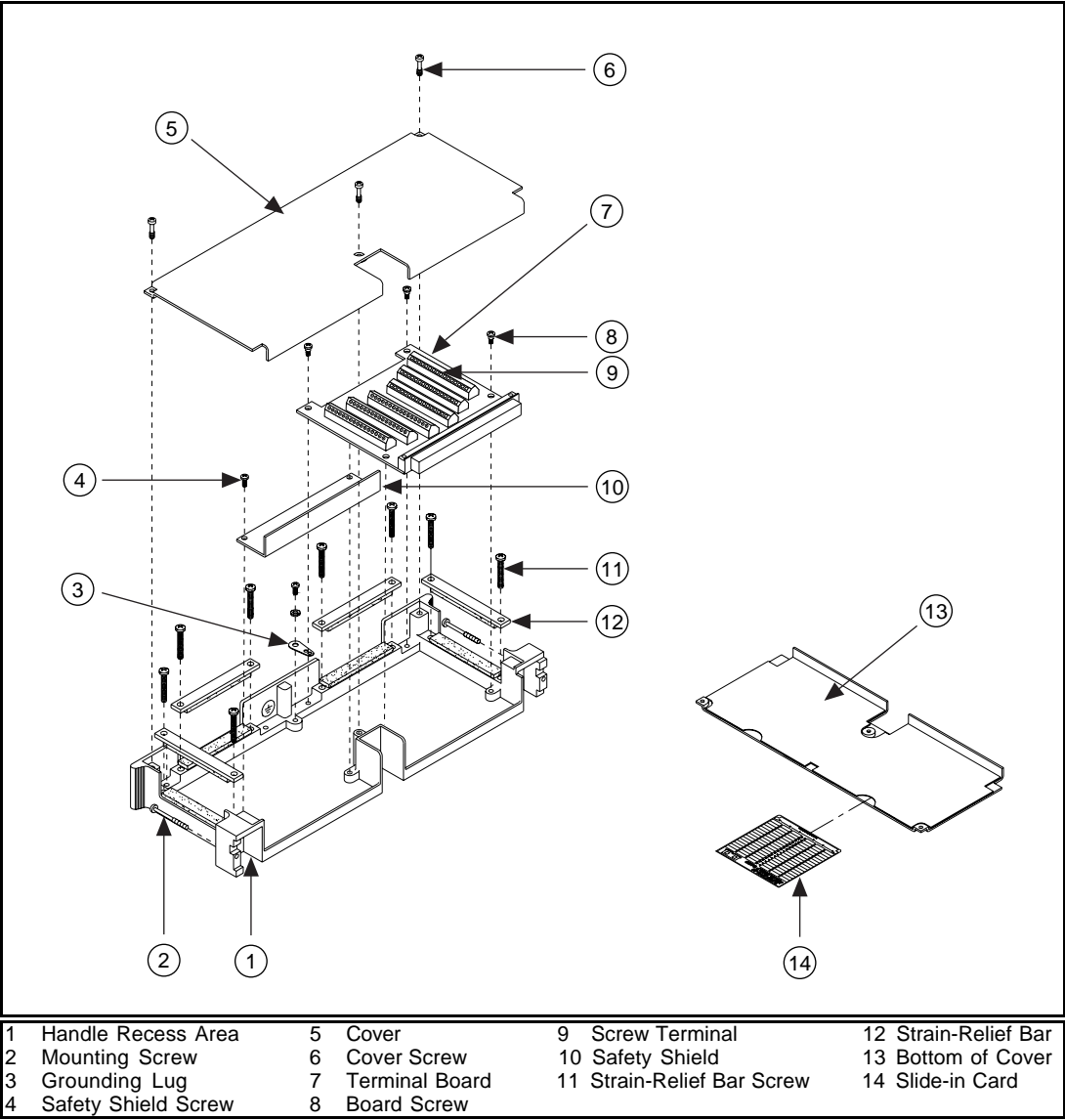


Figure 1. VXI-TB-196 Parts Locator Diagram

Figure 2 shows the screw terminal board inside the uncovered VXI-TB-196 terminal block. The VXI-TB-296 will have two screw terminal boards inside, instead of the single board shown in the VXI-TB-196.

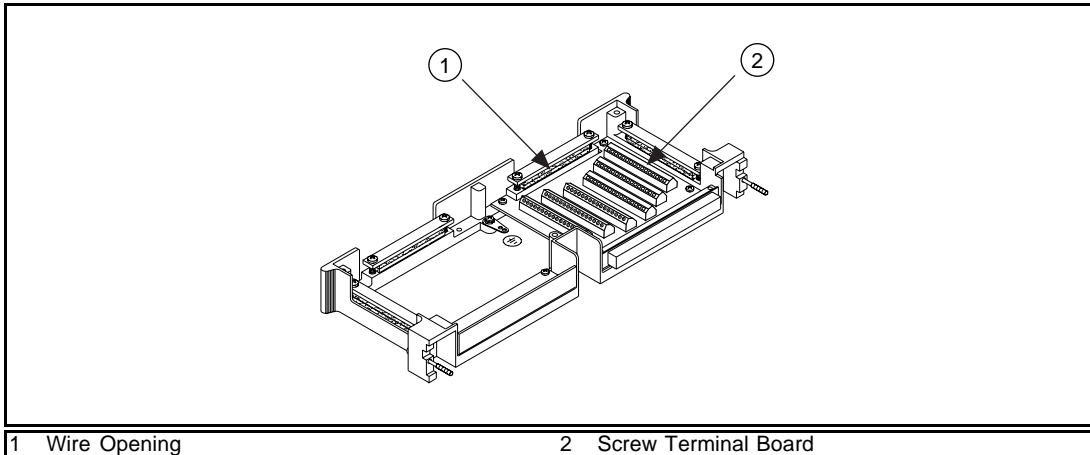


Figure 2. VXI-TB-196 Screw Terminal Board

You can now connect the terminal block to the VXI-DAQ module front panel connector.

## Installing Your Terminal Block

Perform the following steps to connect the terminal block to the VXI-DAQ module front panel connector. The called-out numbers refer to items in Figure 3.

1. Make sure that the VXI-DAQ module attachment screws (1) are tightened to the VXIbus chassis.
2. Guide the terminal block onto the VXI-DAQ module front panel connector (7) by aligning the terminal block handle recess area (3) to the ejector handles (2) on the VXI-DAQ module.
3. Connect the VXI-DAQ module front panel connector to its mating connector (6) on the terminal block.
4. Tighten the top and bottom mounting screws (5) on the back of the terminal block to hold it securely in place.

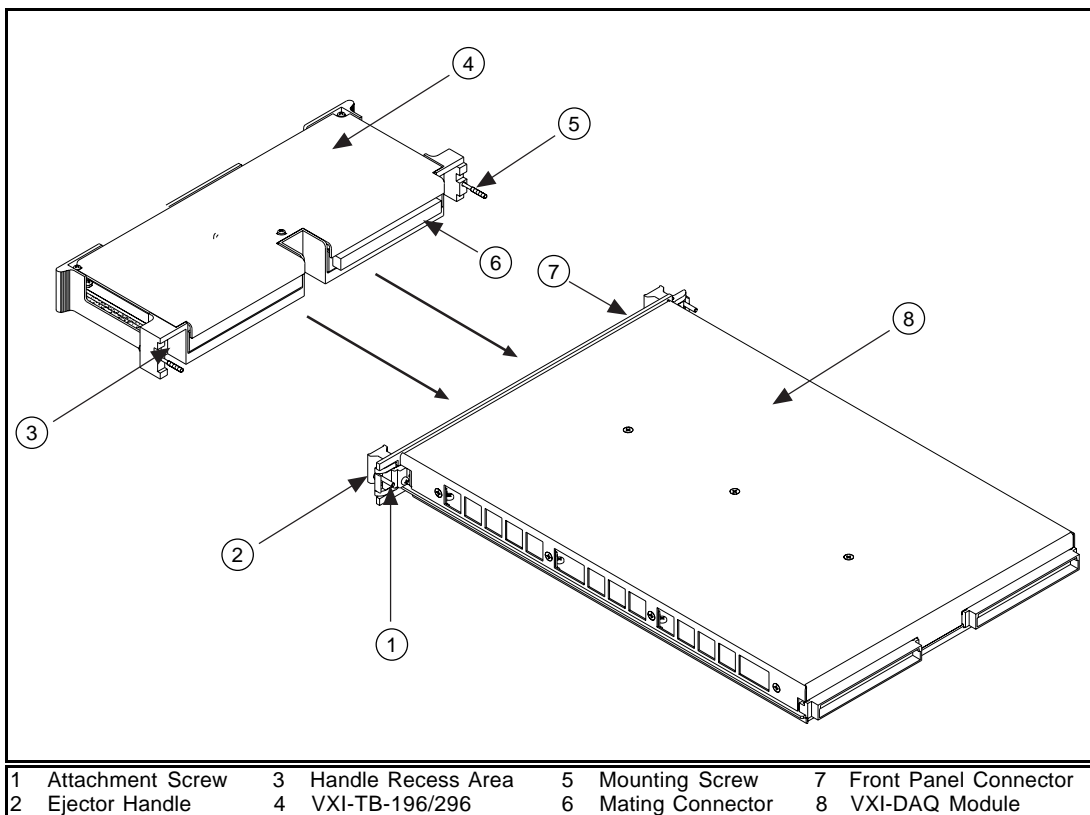


Figure 3. Installing the Terminal Block on the VXI-DAQ Module