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# **Installation Guide**

**TBX Rack-Mount Kit** 

This guide describes how to install the TBX rack-mount kit.

#### Introduction

Use the TBX rack-mount kit to mount TBX terminal blocks, the CB-50, and other DIN rail-mountable equipment in a standard 19-inch rack.

#### What You Need to Get Started

TBX rack-mount kit Rack-mount assembly TBX Rack-Mount Kit Installation Guide Four 10–32 screws
No. 1 Phillips-head screwdriver
No. 2 Phillips-head screwdriver
<sup>1</sup> / <sub>4</sub> in. flathead screwdriver

### **Rack-Mount Kit Installation**

Perform the following steps to install the TBX rack-mount kit in a standard 19-inch rack. Refer to Figure 1 as needed.

- 1. Secure the TBX rack-mount kit into position in your 19-inch rack with the four 10-32 screws.
- 2. If you plan to use an SCXI chassis with your TBX rack-mount kit, for a clean installation, be sure to leave a 1 U (1.75 in.) space between the SCXI chassis and the TBX rack-mount to route cables to the back side of the TBX rack-mount.

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- a. Install the SCXI chassis in a recessed position in your 19-inch rack using the appropriate SCXI chassis rack-mount kit.
- b. You can cover the 1 U space between the two mounts with a 1 U filler panel.

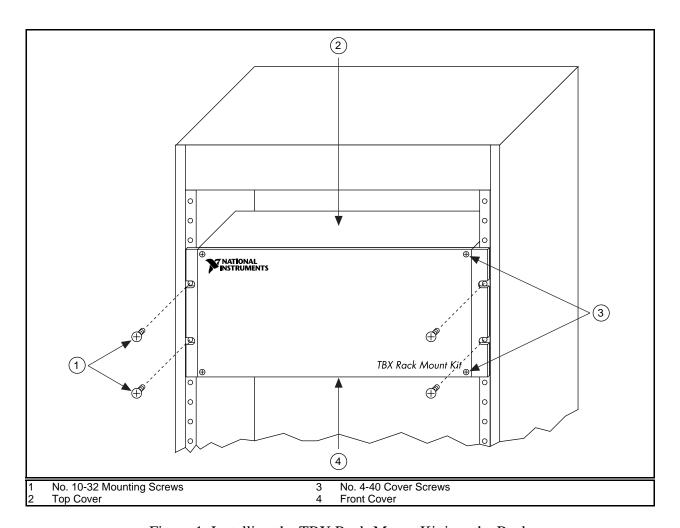


Figure 1. Installing the TBX Rack-Mount Kit into the Rack

# **TBX Terminal Block Installation and Removal**

Follow these steps to install TBX terminal blocks into the TBX rack-mount kit.

- 1. Remove the front cover of the rack-mount kit by unscrewing the four 4-40 Phillips-head cover screws. Refer to Figure 1 to locate the 4-40 screws and the top and bottom covers.
- 2. Pull out the top and bottom covers.

#### Grounding

Warning:

Always attach a Safety Earth Ground wire to the grounding screw before introducing any high voltages (see Figure 2). National Instruments is NOT liable for any damages or injuries resulting from signal connections that exceed any of the ratings specified in each TBX terminal block installation guide.

3. Snap the TBX terminal block onto the DIN rail with a firm push. See Figure 2 for an example of how the TBX terminal block looks when properly installed.

To remove the terminal block from the DIN rail, place a flathead screwdriver into the slot above the terminal block base and pry it from the DIN rail.

#### **Cabling and Field Wiring**

Cable assembly entry and exit openings are located in the back of the rack-mount bracket, as shown in Figure 2. Refer to your TBX terminal block installation guide for detailed instructions on cabling.

Perform the following steps to route your field wiring, referring to Figure 2 as necessary:

- 1. Remove the wire duct cover (item 8).
- 2. Route the field wiring through the field wire ducts (item 7). Refer to your TBX terminal block installation guide for detailed information on field wiring.
- 3. Tie-wrap your field wires together within the wire duct to help secure the wires.

After connecting cabling and field wiring to your terminal block, refer to Figure 1 to reattach the rack-mount covers, if necessary (cover use is optional).

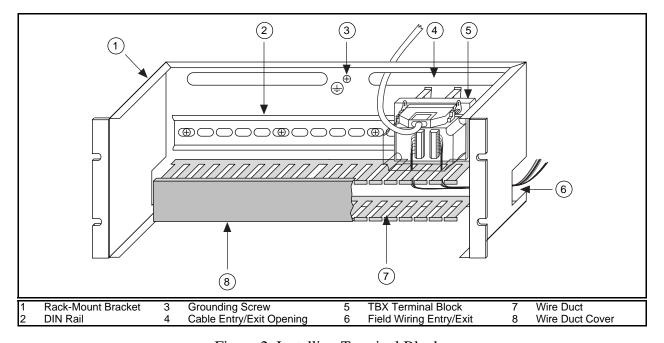


Figure 2. Installing Terminal Blocks

## **Other Installations**

In addition to TBX terminal blocks, you can also install the CB-50 and other DIN rail-mountable equipment into your 19-inch rack using the TBX rack-mount kit. To install this equipment, refer to the installation guides included with each specific product.

Figure 3 shows the dimensions of the TBX rack-mount kit.

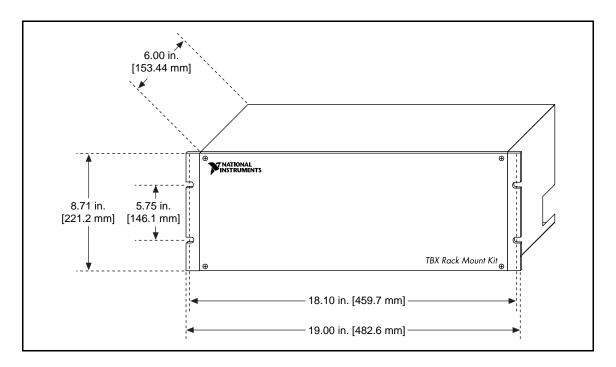


Figure 3. TBX Rack-Mount Kit Dimensions