# TB-2715 Terminal Block

This installation guide describes how to install and connect signals to the TB-2715 terminal block for use with PXI-653*X* and PXI-660*X* modules.

Use the TB-2715 terminal block to connect to the signals of a PXI-653*X* or PXI-660*X* module. Connect your signals to the screw terminals housed in the terminal block then install the TB-2715 to the PXI front panel.

## What You Need to Get Started

To set up and use the TB-2715, you will need the following:

- ❑ TB-2715 terminal block
- ❑ Quick-reference labels for PXI-653*X* and PXI-660*X*
- ❑ One of the following:
  - PXI-653*X* module
  - PXI-660*X* module
- ❑ *653X User Manual* or *660X User Manual*
- ❑ 0.10 in. slotted screwdriver
- ❑ Number 1 Phillips screwdriver
- ❑ Wire cutters
- ❑ Wire insulation stripper

## Connecting Signals to Your Terminal Block

Refer to Figure 1 as you perform the following steps to connect signals from the peripheral device to the TB-2715. For more information about connecting signals to your terminal block, see your *653X User Manual* or *660X User Manual.*

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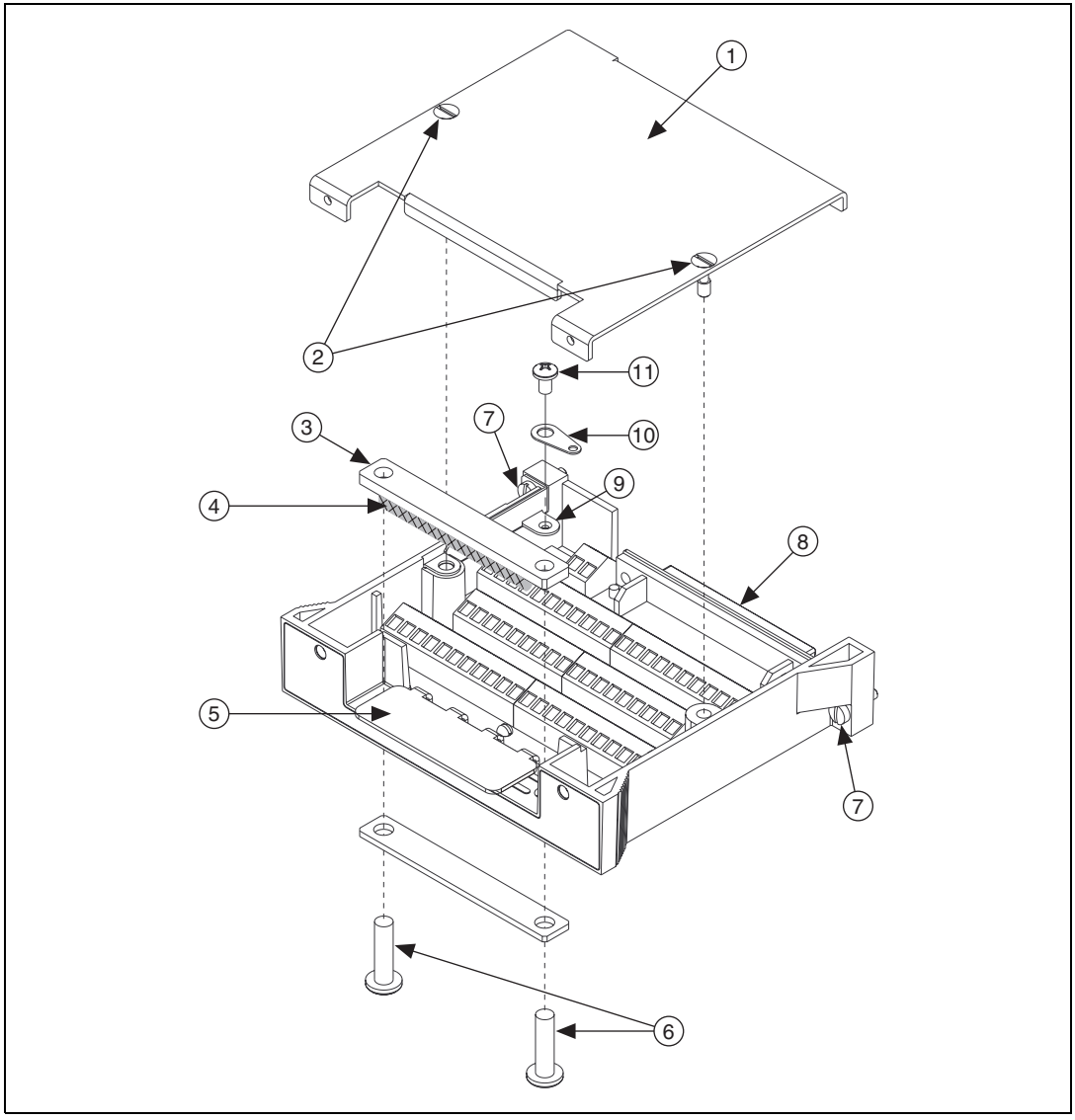



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Cover | 4 | EMI Gasket | 7 | Terminal Block Mounting Screws | 10 | Ground Solder Lug |
| 2 | Cover Screws | 5 | APD Shield | 8 | PXI Module Connector | 11 | Ground Lug Screw |
| 3 | Strain-Relief Bar | 6 | Strain-Relief Screws | 9 | Chassis Ground Tab | | |

**Figure 1.** TB-2715 Parts Locator Diagram

1. Remove the terminal block cover by unscrewing the two cover screws using the 0.10 in. slotted screwdriver.
2. Apply the appropriate quick reference label to the inside of the top cover as shown in Figure 2. This label provides the corresponding signal names on the PXI module for each pin number.

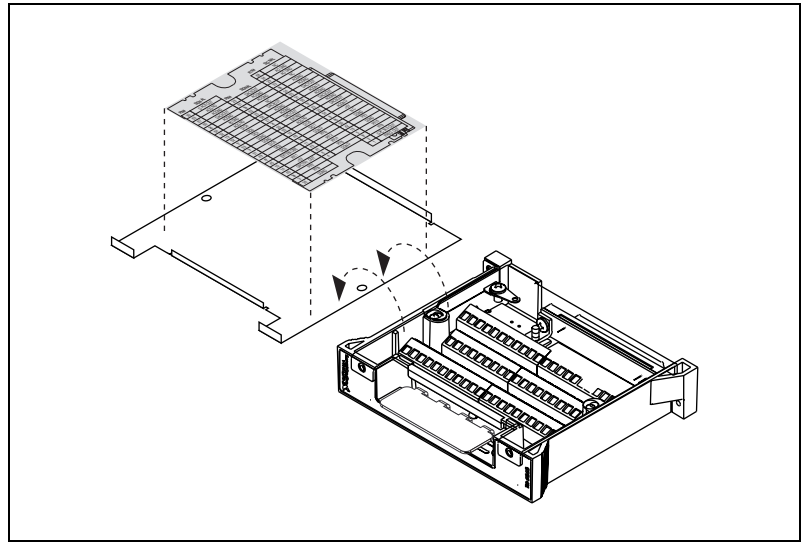


**Figure 2.** Inserting the Quick-Reference Label

3. Loosen or remove the strain-relief bar by loosening the two strain-relief screws with a Number 1 Phillips screwdriver.
4. Use wire cutters and wire insulation strippers to strip no more than 7 mm of insulation from the wire ends.
5. Use Figures 3 and 4 to find the 653*X* and 660*X* signals that correspond to the screw terminals on the TB-2715. Please note that lines 19, 35, 43, and 56 are not connected.

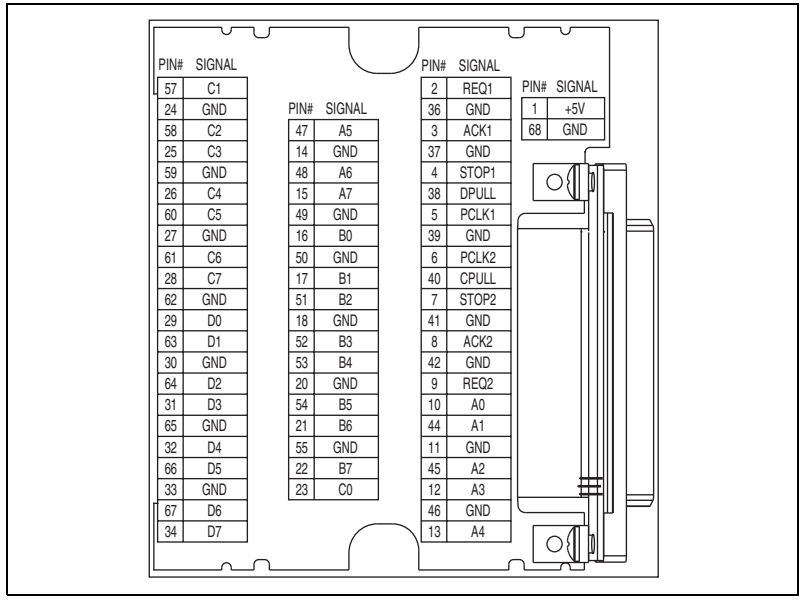



**Figure 3.** Pinout Diagram for PXI-653*X* Modules

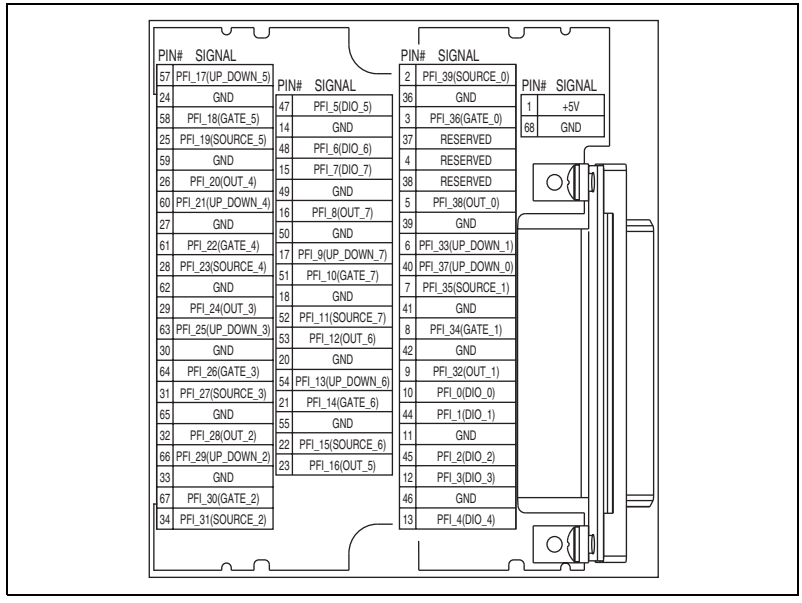


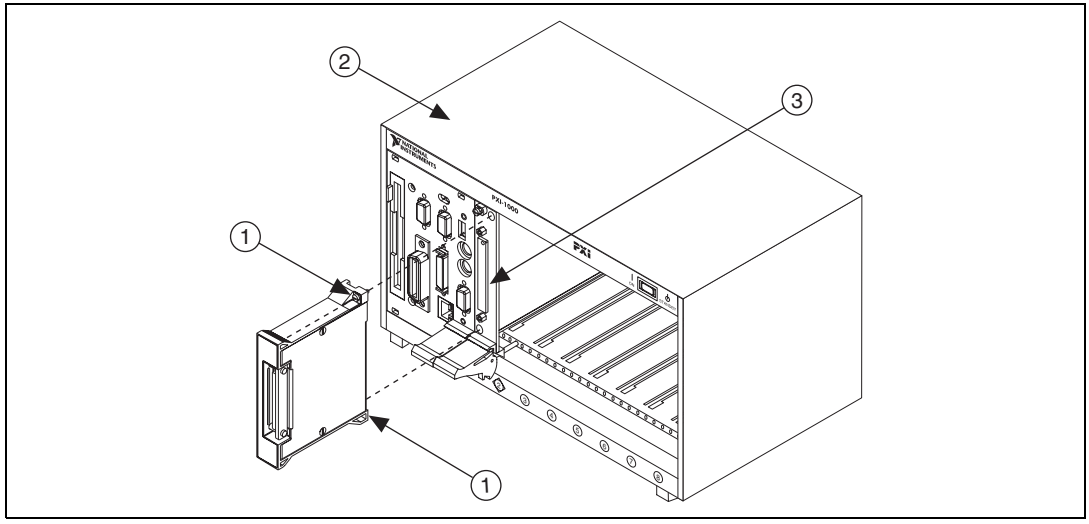

**Figure 4.** Pinout Diagram for PXI-660*X* Modules

6. Loosen the screws in the screw terminals with the 0.10 in. slotted screwdriver.

7. Insert the stripped wires into the screw terminals. If you are using a shielded cable, expose the shield and allow it to make contact with the EMI gasket.
8. Tighten the screws with the 0.10 in. slotted screwdriver.
9. Connect safety ground or shield wires to the chassis ground connection tab using the provided solder lug and ground lug screw.
10. Tighten or replace the strain-relief screws.
11. Replace the terminal block cover and tighten the cover screws.

# Connecting the TB-2715 to Your PXI Module

Refer to Figure 5 as you perform the following steps to connect the terminal block to your PXI module.




1 Terminal Block Mounting Screws
2 PXI Chassis
3 PXI Module Connector

**Figure 5.** Connecting the TB-2715 to Your PXI Module

1. Install your PXI module into the chassis and tighten the two module screws. You *must* install the PXI module in the PXI chassis before the TB-2715 is connected to the PXI module.
2. Guide the terminal block onto the module connector.
3. Tighten the two terminal block mounting screws.

**Caution** Insert the terminal block as shown in Figure 5. The TB-2715 can be attached to a PXI module only one way. Do not force the terminal block when attaching or removing it to avoid damaging the TB-2715 or PXI module.

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