

INSTALLATION INSTRUCTIONS

NI TB-2676

Introduction

This guide describes how to install and connect signals to the National Instruments TB-2676 terminal block. Use the ribbon cable headers of the NI TB-2676 to access all channels of the NI PXI-2576 multiplexer for all configurations.

Refer to the *NI Switches Getting Started Guide* to determine when to install the NI TB-2676.

To set up and use the NI TB-2676 terminal block, make sure you have the following items:

- NI TB-2676 terminal block
- NI PXI-2576 switch module
- 1/8 in. flathead screwdriver
- #1 Phillips screwdriver
- Eight 0.100 in. pitch 2 × 10 ribbon cable assemblies, or wire wrap cable and tools

Connecting Signals



Caution Ensure that power has not been applied to signals prior to connection. Only trained and qualified service personnel should install and connect signals.

To connect signals to the terminal block, refer to Figure 1 and complete the following steps:

1. Remove the terminal block top cover screw.
2. Gently lift the top cover off the terminal block.

3. Loosen the two screws on the strain-relief assembly and remove the top strain-relief bar.
4. Connect the safety earth ground to a safety ground lug.
5. Connect the ribbon cables or wire wraps to the ribbon cable headers. When connecting a signal, refer to the terminal reference diagram in Figure 2.
6. Pull the cables through the strain-relief opening to remove the slack in the wiring.
7. Replace the strain-relief bar and tighten the two screws on the strain-relief assembly to secure the cables.
8. Replace the terminal block top cover.
9. Secure the terminal block top cover with the top cover screw.

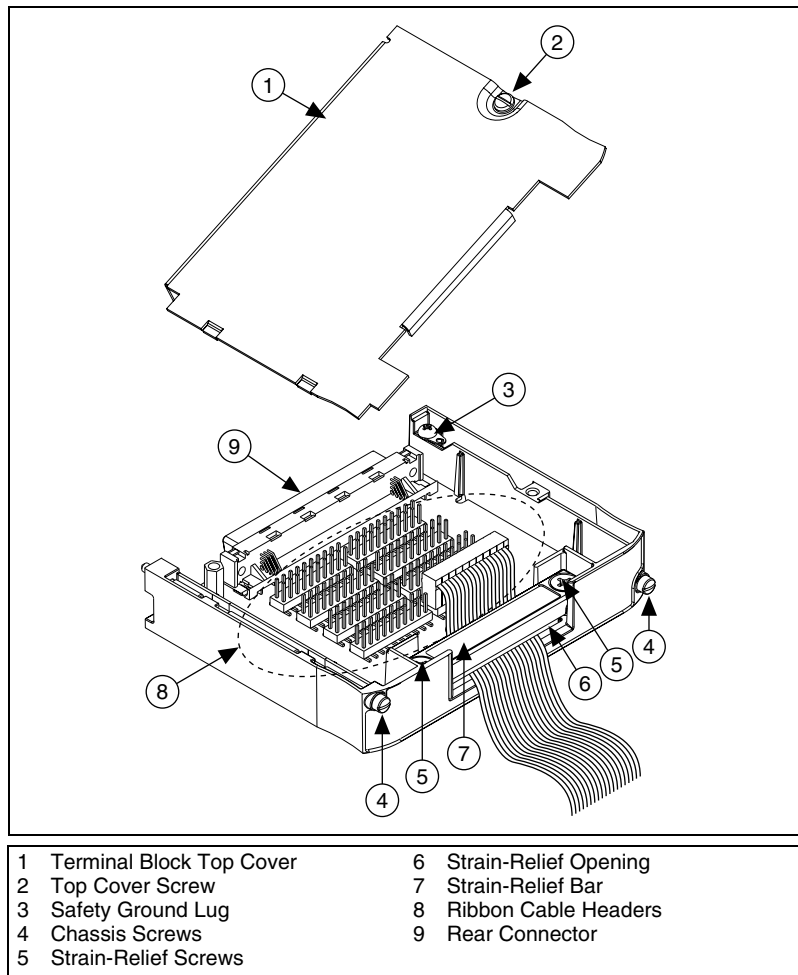
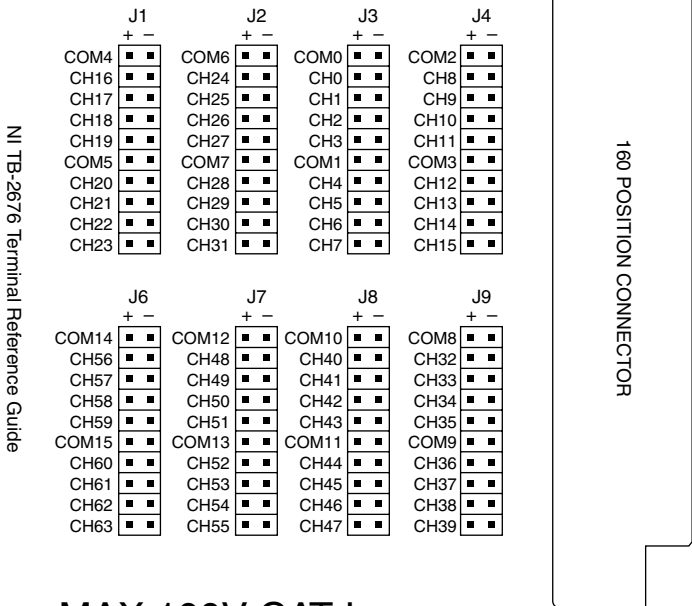


Figure 1. NI TB-2676 Terminal Block



MAX 100V CAT I

WARNING: IF HAZARDOUS VOLTAGE IS PRESENT, TERMINAL BLOCK MUST BE SECURELY MOUNTED TO THE PXI-2576 USING THE TWO CAPTIVE SCREWS.

Figure 2. NI TB-2676 Terminal Reference Diagram

Table 1 shows the COM configurations for each topology.

Table 1. COM Configuration per Topology

Bank	Octal 8 × 1	Quad 16 × 1	Dual 32 × 1	64 × 1
0–1	COM 0	COM 0	COM 0	COM 0
2–3	COM 2			
4–5	COM 4			
6–7	COM 6	COM 8	COM 8	COM 0
8–9	COM 8			
10–11	COM 10			
12–13	COM 12	COM 12	COM 8	COM 0
14–15	COM 14			

Accessories

Visit ni.com for more information about the following accessory.

Table 2. Accessory for the NI TB-2676

Accessory	Manufacturer	Part Number
Set of eight 0.100 in. pitch 2 × 10 ribbon cable assemblies, 36 in. long, socket-to-socket.	National Instruments	779669-01

Specifications

This section lists additional specifications for the NI TB-2676 when used with the NI PXI-2576. All specifications are subject to change without notice. Visit ni.com/manuals for the most current specifications.

Input Characteristics

All input characteristics are DC, AC_{rms}, or a combination unless otherwise specified.

Maximum switching voltage

Channel-to-channel..... 100 V

Channel-to-earth..... 100 V, CAT I



Caution When hazardous voltages ($>42.4 V_{pk}/60 VDC$) are present on any relay terminal, all terminals must be considered hazardous. Ensure that external wiring or any circuits connected to the device are properly insulated from human contact.

National Instruments, NI, ni.com, and LabVIEW are trademarks of National Instruments Corporation. Refer to the *Terms of Use* section on ni.com/legal for more information about National Instruments trademarks. Other product and company names mentioned herein are trademarks or trade names of their respective companies. For patents covering National Instruments products, refer to the appropriate location: **Help»Patents** in your software, the `patents.txt` file on your CD, or ni.com/patents.