

INSTALLATION INSTRUCTIONS

DB8F-40A Cable

このドキュメントには、日本語ページも含まれています。

This guide describes how to connect and use the National Instruments DB8F-40A cable, which has a maximum voltage rating of 50 VDC, 30 VAC_{rms}, CAT I. Use the cable to connect either the NI PXI/PXIe-2512 or the NI PXI/PXIe-2514 switch module to your application.

The DB8F-40A cable is available in two configurations:

- 8-pin female D-SUB to 8-pin female D-SUB (DB8F-DB8F-40A, 781092-01)
- 8-pin female D-SUB to bare wire (DB8F-BARE WIRE-40A, 781092-02)

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Conventions

The following conventions are used in this guide:

» The » symbol leads you through nested menu items and dialog box options to a final action. The sequence **Options»Settings»General** directs you to pull down the **Options** menu, select the **Settings** item, and select **General** from the last dialog box.



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. Italic text also denotes text that is a placeholder for a word or value that you must supply.

monospace

Text in this font denotes text or characters that you should enter from the keyboard, sections of code, programming examples, and syntax examples. This font is also used for the proper names of disk drives, paths, directories, programs, subprograms, subroutines, device names, functions, operations, variables, filenames, and extensions.

What You Need to Get Started

To use the cable, you need the following items:

- DB8F-40A cable
- NI PXI/PXIe-2512 or NI PXI/PXIe-2514 switch module and documentation

Getting Started with the DB8F-40A Cable

Complete the following steps to connect the cable to the switch module and your application. Refer to Figures 1 through 3 for illustrations of the cable, and to Figure 4 for an illustration of the connector.

1. Connect the DB8F connector to one of the two DSUB front connectors on the switch module as shown in Figure 1.

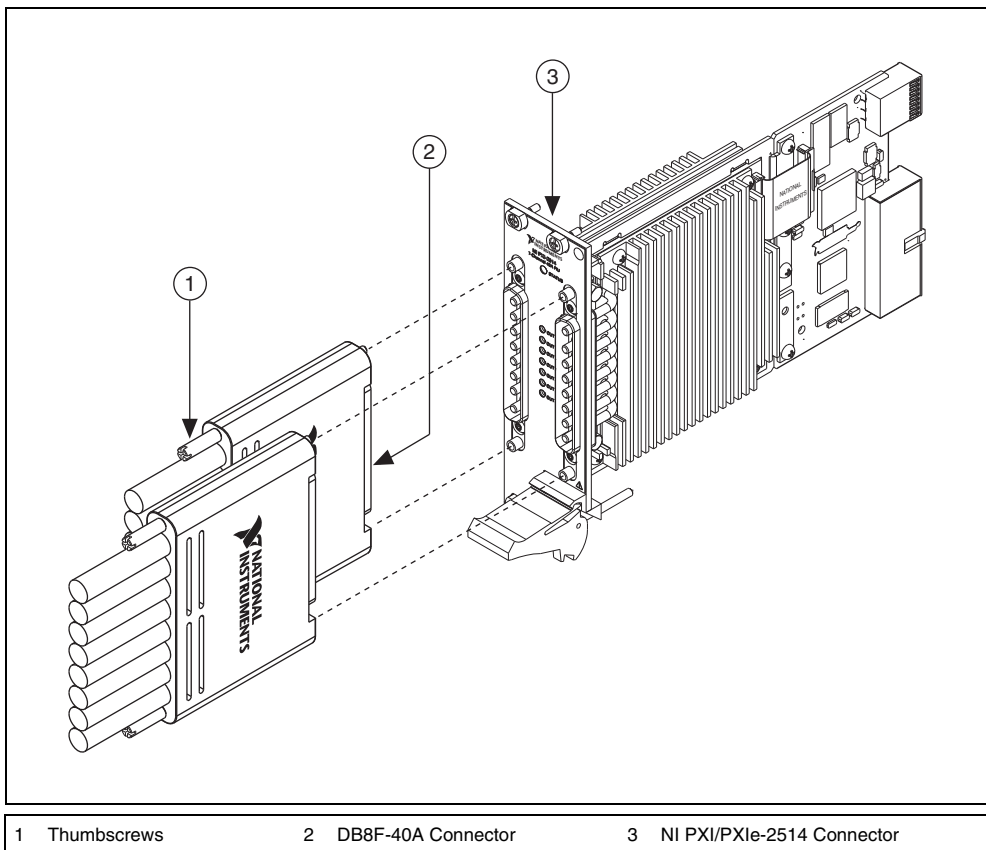


Figure 1. Connecting the Cable to the NI PXI/PXIe-2514

2. Tighten the thumb screws on the cable.

3. Complete one of the following steps and refer to Tables 1 and 2 in the *Cable Configurations* section to determine how to connect signals to your application.
 - Connect the second DB8F connector on the cable to your application. Refer to Figure 2.
 - Connect the unterminated wires to your application. Refer to Figure 3.

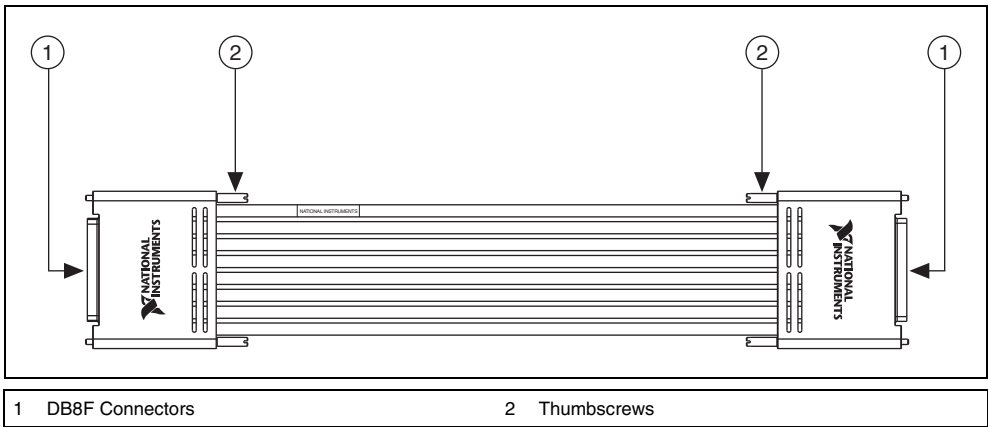


Figure 2. DB8F-DB8F-40A Cable

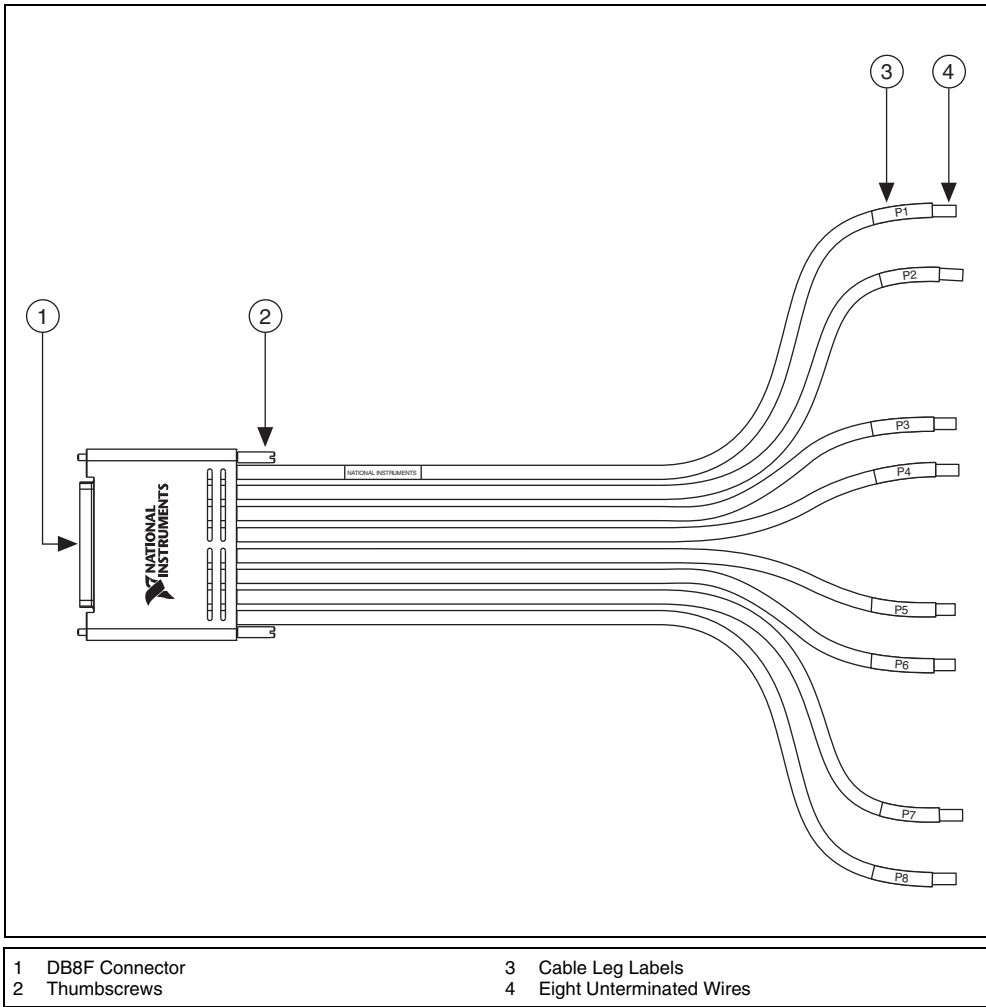


Figure 3. DB8F-BARE WIRE-40A Cable

Connectors

The cable connects an 8-pin female DSUB connector (DB8F connector) to a second DB8F connector or eight unterminated wires. The DB8F connector provides connection to the switch module. The second DB8F connector and unterminated cables provide connection to your application. Figure 4 shows the pinout for the DB8F connector.

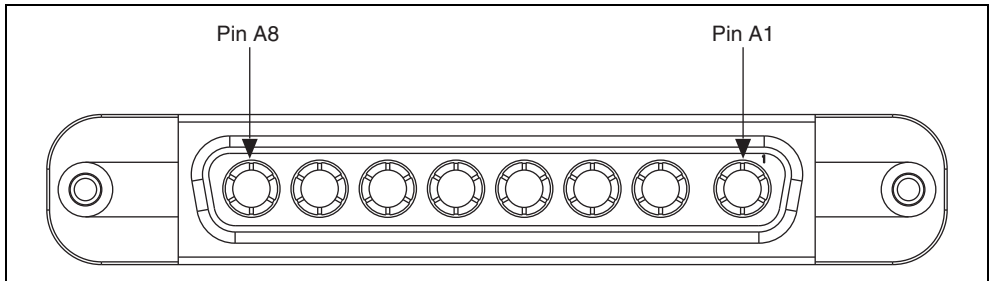


Figure 4. DB8F Mating Connector

Cable Configurations

The DB8F-40A cable is available in two configurations:

- DB8F-DB8F-40A
- DB8F-BARE WIRE-40A

The following sections describe each of the configurations.

DB8F-DB8F-40A Cable

The DB8F-DB8F-40A cable is recommended for connecting the switch module to your system.

Use the pinouts and the pin assignments listed in Table 1 to determine how to connect signals to your application using the DB8F-DB8F-40A cable.

Refer to the *NI Switches Help* for a complete listing of channel names and pinouts.

Table 1. Pin Assignment for DB8F-DB8F-40A Cable

DB8F P1/P2 Pin	NI PXI/PXIe-2512/2514 Left Connector Channel	NI PXI/PXIe-2512/2514 Right Connector Channel
A1	CH3	CH4
A2	DUT3	DUT4
A3	CH2	CH5
A4	DUT2	DUT5
A5	CH1	CH6
A6	DUT1	DUT6
A7	CH0	BUSA
A8	DUT0	BUSB

DB8F-BARE WIRE-40A Cable

The DB8F-BARE WIRE-40A cable is recommended for connecting the switch module to your system if termination other than a DB8F connector is required. One end of the cable terminates with a DB8F connector. The other end of the cable has eight shielded, 8AWG stranded, unterminated wires.

Use the pinouts and the pin assignments listed in Table 2 to determine how to connect signals to your application.

Table 2. Pin Assignment for DB8F-BARE WIRE-40A Cable

DB8F Pin	Wire Label	NI PXI/PXIe-2512/2514 Left Connector Channel	NI PXI/PXIe-2512/2514 Right Connector Channel
A1	P1	CH3	CH4
A2	P2	DUT3	DUT4
A3	P3	CH2	CH5
A4	P4	DUT2	DUT5
A5	P5	CH1	CH6
A6	P6	DUT1	DUT6
A7	P7	CH0	BUSA
A8	P8	DUT0	BUSB

Specifications

Maximum voltage50 VDC, 30 VAC_{rms}, CAT I

Maximum current40 A per wire or pin



Caution Do not connect to MAINs supply circuits (e.g., wall outlets) of 115 or 230 VAC. Refer to the *Read Me First: Safety and Electromagnetic Compatibility* document at ni.com/manuals for more information about Measurement Categories.

Weight

DB8F-DB8F-40A1462 g (51.6 oz)

DB8F-BARE WIRE-40A1372 g (48.4 oz)

Environment

Operating temperature0 °C to 50 °C

Storage temperature-20 °C to 70 °C

Relative humidity5% to 85%, noncondensing

Pollution Degree2

Maximum altitude2,000 m

Indoor use only.

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