

# NI 4021 Kit

The NI 4021 switch controller provides all of the essential SCXI communication lines needed for control of modules in an SCXI chassis. The NI 4021 controls switch devices such as SCXI-1102/B/C, SCXI-1124, SCXI-1127/1128, SCXI-116X family, and SCXI-1190/1191. This controller is especially useful in production tests where you need an SCXI controller to route signals through a switch to existing data acquisition devices. The NI 4021 is compatible with the SCXI-1357/1358 high-voltage backplane adapters and the SCXI-1362 low-voltage adapter.

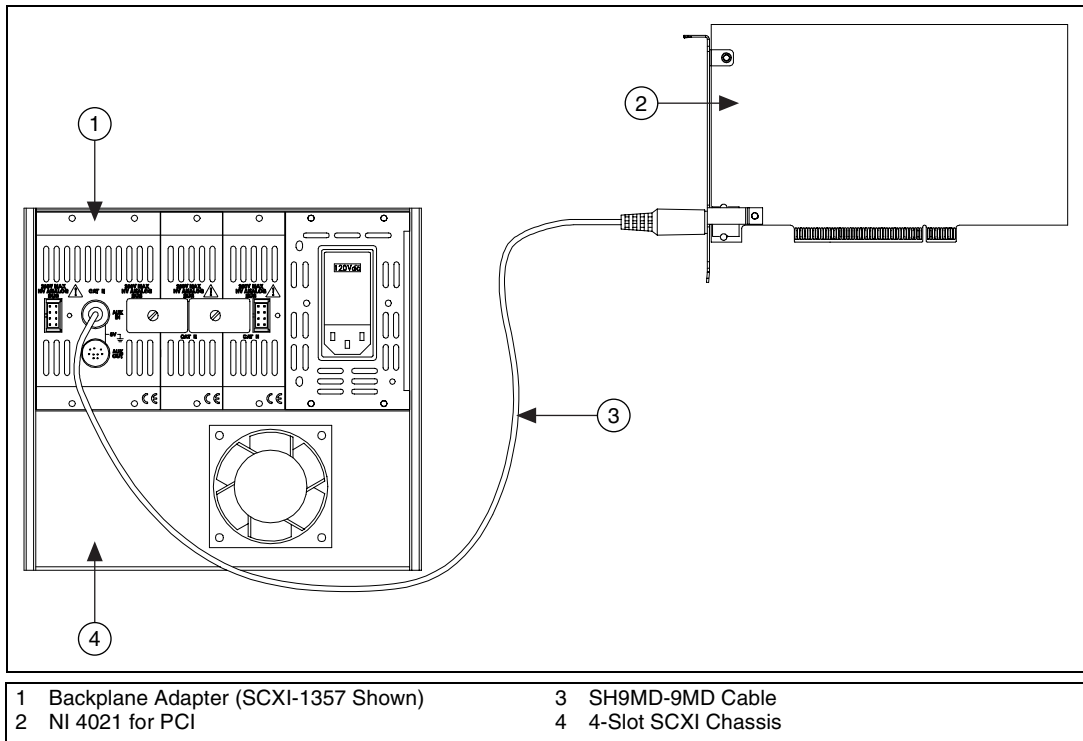
With the NI 4021 kit, you can control an SCXI module via a high-voltage backplane or low-voltage adapter that has a 9-pin round mini-DIN connector. The NI 4021 kit consists of the following components:

- One NI 4021 for PCI or NI 4021 for PXI
- SH9MD-9MD cable
- This document

In addition to the NI 4021 kit contents, you will also need an SCXI chassis, an SCXI module, a computer, NI-SWITCH software, and an adapter such as the SCXI-1357/1358 high-voltage backplane adapter or the SCXI-1362 low-voltage adapter.

# Installing the NI 4021

The following figure shows the components of your SCXI system and how to connect them.



Perform the following steps to install the NI 4021 kit:

1. Power off your computer, SCXI chassis, and PXI chassis, if applicable.
2. Install your SCXI modules in the SCXI chassis according to the instructions in your module user manual.
3. Connect an adapter that has the 9-pin round AUX connector into the rear signal connector (marked as AUX IN) of an SCXI module according to the adapter installation guide.
4. Install the NI 4021 into the computer if you are using the NI 4021 for PCI or into the appropriate PXI slot if you are using the NI 4021 for PXI.
5. Connect one end of the SH9MD-9MD cable to the 9-pin round AUX connector of the NI 4021.
6. Connect the other end of the cable to the AUX IN connector of the adapter in the SCXI chassis.
7. Power on the computer and chassis.

# Pin Designations

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The following table lists the pin designations for the 9-pin AUX connector. Refer to the next figure for location of pins.

<b>9-Pin AUX Connector Pin Numbers</b>	<b>Signal Names</b>
1	VCC (+5 V)
2	GROUND
3	SYNC
4	SERCLKIN
5	SERDATAOUT (MISO)
6	DAQSCANCLK
7	SERDATAIN (MOSI)
8	DAQD*/A
9	SLOT0SEL*

