COMPREHENSIVE SERVICES

We offer competitive repair and calibration services, as well as easily accessible documentation and free downloadable resources.

SELL YOUR SURPLUS

We buy new, used, decommissioned, and surplus parts from every NI series. We work out the best solution to suit your individual needs.

Sell For Cash Get Credit Receive a Trade-In Deal

OBSOLETE NI HARDWARE IN STOCK & READY TO SHIP

We stock New, New Surplus, Refurbished, and Reconditioned NI Hardware.



Bridging the gap between the manufacturer and your legacy test system.

0

1-800-915-6216

www.apexwaves.com

sales@apexwaves.com

All trademarks, brands, and brand names are the property of their respective owners.

Request a Quote

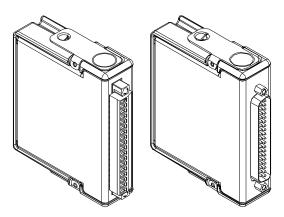


NI-9252

GETTING STARTED GUIDE

NI 9252

8 AI, ±10 V, 24 bit, 50 kS/s/ch Simultaneous





This document explains how to connect to the NI 9252. In this document, the NI 9252 with screw terminal and the NI 9252 with DSUB are referred to inclusively as the NI 9252.



Note Before you begin, complete the software and hardware installation procedures in your chassis documentation.



Note The guidelines in this document are specific to the NI 9252. The other components in the system might not meet the same safety ratings. Refer to the documentation for each component in the system to determine the safety and EMC ratings for the entire system.

NI 9252 Pinout

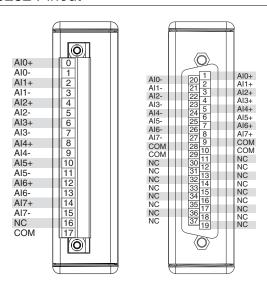
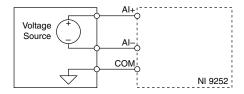


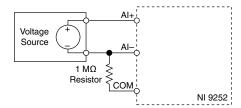
Table 1. Signal Descriptions

Signal	Description
AI+	Positive analog input signal connection
AI-	Negative analog input signal connection
COM	Common reference connection to isolated ground
NC	No connection

Grounded Differential Connections

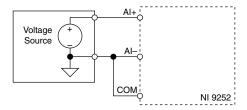


Floating Differential Connections



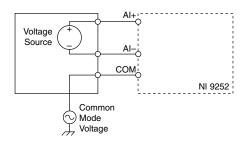
Connect the negative lead to COM through a 1 $M\Omega$ resistor to keep the signal source within the common-mode voltage range. The NI 9252 does not read data accurately if the signal source is outside of the common-mode voltage range.

Single-Ended Connections



Connect the ground signal to COM to keep the signal source within the common-mode voltage range.

Differential Connections with Common Mode Voltage



NI 9252 Connection Guidelines

- Make sure that devices you connect to the NI 9252 are compatible with the module specifications.
- You must use 2-wire ferrules to create a secure connection when connecting more than one wire to a single terminal on the NI 9252 with screw terminal.

Wiring for High-Vibration Applications

If your application is subject to high vibration, NI recommends that you follow these guidelines to protect connections to the NI 9252 with screw terminal:

- Use ferrules to terminate wires to the detachable connector.
- Use the NI 9928 backshell kit.

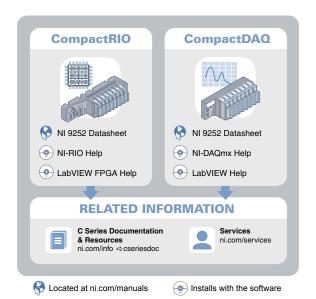
Overvoltage Protection

The NI 9252 provides overvoltage protection for each channel.



Note Refer to the device datasheet on *ni.com/manuals* for more information about overvoltage protection.

Where to Go Next



Worldwide Support and Services

The NI website is your complete resource for technical support. At *ni.com/support*, you have access to everything from troubleshooting and application development self-help resources to email and phone assistance from NI Application Engineers.

Visit *ni.com/services* for information about the services NI offers.

Visit *ni.com/register* to register your NI product. Product registration facilitates technical support and ensures that you receive important information updates from NI.

NI corporate headquarters is located at 11500 North Mopac Expressway, Austin, Texas, 78759-3504. NI also has offices located around the world. For support in the United States, create your service request at *ni.com/support* or dial 1 866 ASK MYNI (275 6964). For support outside the United States, visit the *Worldwide Offices* section of *ni.com/niglobal* to access the branch office websites, which provide upto-date contact information.

Information is subject to change without notice. Refer to the NI Trademarks and Logo Guidelines at ni.com/trademarks for information on NI trademarks. Other product and company names mentioned herein are trademarks of trade names of their respective companies. For patents covering NI products/technology, refer to the appropriate location: Help»Patents in your software, the patents.txt file on your media, or the National Instruments Patent Notice at ni.com/patents.You can find information about end-user license agreements (EULAs) and third-party legal notices in the readme file for your NI product. Refer to the Export Compliance Information at ni.com/legal/export-compliance for the NI global trade compliance policy and how to obtain relevant HTS codes, ECCNs, and other import/export data. NI MAKES NO EXPRESS OR IMPLIED WARRANTIES AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN AND SHALL NOT BE LIABLE FOR ANY ERRORS. U.S. Government Customers: The data contained in this manual was developed at private expense and is subject to the applicable limited rights and restricted data rights as set forth in FAR 52.227-14, DFAR 252.227-7014, and DFAR 252.227-7015.

© 2019 National Instruments. All rights reserved.

378058A-01 February 1, 2019