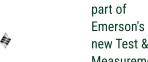
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# C Series with Screw Terminal Front Connection: I/O Cable & Accessory Guide

Updated Dec 30, 2022

### Overview

Use this guide to match your NI C Series Modules with screw terminal front connection with a compatible cable and accessory to meet the needs of your application, whether you are creating a new configuration, replacing or expanding your current configuration, or verifying that existing parts can be used in a different configuration.

This page is part of the C Series I/O Cable and Accessory Compatibility Guide.

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- Using this C Series I/O Cable and Accessory Guide
- Finding Your C Series Module
- <u>Cable and Accessory Compatibility Tables</u>
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### Using this C Series I/O Cable and Accessory Guide

This guide is intended to cover connectors and cables for use with C Series Modules. It does not explicitly cover other NI product families such as <u>DAQ Multifunction I/O</u>, <u>Digital Waveform Instruments (formerly HSDIO</u>), or R Series. It also does not cover legacy or End of Life (EOL) parts or products. Additionally, these products are supported in cRIO and/or cDAQ chassis, but this guide does not cover chassis accessories.

**Note:** Using the page search functionality in your browser to locate your model may speed up this process. This is typically CTRL+F on Windows or #+F on MacOS.

#### Finding Your C Series Module

This page is arranged by first having you identify the connector type on your C Series Module, locating the information for your specific model, and then choosing the accessory or cable combination that best fits your needs.

How to identify the model number of your C Series Module:

The model number of the C Series Module is printed on the faceplate of the module and also in the Getting Started that ships with the module.

## **Cable and Accessory Compatibility Tables**

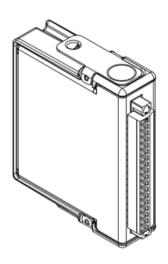


Figure 1: C Series with **Screw Terminal** Front Connection

**Note:** All C Series Modules with screw terminal front connection ship with the one unit of the recommended screw terminal block. This guide provides accessory guidance for the screw terminals to assist with replacements or the purchasing of additional screw terminal blocks.

Note: N/A= Not Applicable

| Modules            | Number of Pins | Screw Terminal<br>Block                    | Strain Relief &<br>Operator<br>Protection         | DIN Rail Mount<br>Terminal Block | Cable |
|--------------------|----------------|--|---|----------------------------------|-------|
| NI-9266<br>NI-9252 | 18             | 18-pos Screw<br>Terminal<br>P/N: 787568-01 | NI 9928 18-pos<br>Strain Relief<br>P/N: 784819-01 | N/A                              | N/A   |

| Modules  | Number of Pins | Screw Terminal<br>Block                                   | Strain Relief &<br>Operator<br>Protection                | DIN Rail Mount<br>Terminal Block | Cable |
|--|----------------|---|--|----------------------------------|-------|
| NI-9217<br>NI-9224<br>NI-9228<br>NI-9422<br>NI-9436<br>NI-9485 | 16             | NI 9975 16-pos<br>Screw Terminal<br>P/N: <u>196741-01</u> | NI 9939 16-pos<br>Strain Relief<br>P/N: <u>192692-01</u> | N/A                              | N/A   |

| Modules | Number of Pins | Screw Terminal<br>Block                          | Strain Relief &<br>Operator<br>Protection  | DIN Rail Mount<br>Terminal Block | Cable |
|---------|----------------|--|--|----------------------------------|-------|
| NI-9326 | 12             | 12-pos Screw<br>Terminal Block<br>P/N: 785992-01 | NI-9929 Backshell<br>Kit<br>P/N: 787149-01 | N/A                              | N/A   |

| Modules  | Number<br>of Pins | Screw Terminal<br>Block                                  | Strain Relief &<br>Operator Protection                                     | DIN Rail Mount<br>Terminal Block                           | Cable   |
|--|-------------------|--|--|--|---|
| NI-9201<br>NI-9203<br>NI-9215<br>NI-9221<br>NI-9263<br>NI-9265<br>NI-9421<br>NI-9423<br>NI-9435<br>NI-9437<br>NI-9472<br>NI-9474<br>NI-9481<br>NI-9482 | 10                | cRIO-9936 10-<br>pos Screw<br>Terminal<br>P/N: 779105-01 | NI 9927 10-pos Strain<br>Relief & Operator<br>Protection<br>P/N: 782715-01 | 25-pos D-Sub to<br>Screw Terminal<br>P/N: <u>781081-01</u> | SH25M-10F Cable 10-Pin<br>Screw Terminal to 25-Pin D-<br>Sub, 1m  P/N: 190654-01  10-Pin Screw Terminal to 25-<br>Pin D-Sub, 2m  P/N: 190654-02 |
| NI-9211  | 10                | N/A  | NI 9932 10-pos Screw<br>Terminal<br>P/N: <u>779017-01</u>                  | N/A  | N/A   |

| Modules | Number of Pins | Screw Terminal<br>Block | Strain Relief & Operator Protection  | DIN Rail<br>Mount<br>Terminal Block | Cable |
|---------|----------------|-------------------------|--|-------------------------------------|-------|
| NI-9242 | 4              | N/A                     | NI 9967 4-pos<br>Strain Relief &<br>Operator<br>Protection<br>P/N: <b>783094-01</b> <sup>1</sup> | N/A                                 | N/A   |
| NI-9244 | 4              | N/A                     | NI 9969 4-pos<br>Strain Relief &<br>Operator<br>Protection<br>P/N: 781354-01 <sup>1</sup>        | N/A                                 | N/A   |

 $<sup>^{1}\</sup>mbox{Accessory}$  is included in the C Series Module shipping kit

| Modules  | Number of Pins | Screw Terminal<br>Block                                  | Strain Relief &<br>Operator<br>Protection                                    | DIN Rail Mount<br>Terminal Block | Cable |  |
|--|----------------|--|--|----------------------------------|-------|--|
| NI-9222<br>NI-9223<br>NI-9225<br>NI-9227<br>NI-9229<br>NI-9230<br>NI-9232<br>NI-9238<br>NI-9239<br>NI-9269 | 2              | NI 9976 2-pos<br>Screw Terminal<br>P/N: <u>196739-01</u> | NI 9971 2-pos<br>Strain Relief &<br>Operator<br>Protection<br>P/N: 196375-01 | N/A                              | N/A   |  |

## **Ordering Information**

For more information on any of the listed NI orderable parts, please visit <a href="http://www.ni.com/contact-us/">http://www.ni.com/contact-us/</a> to contact an NI representative. Most NI orderable parts listed in this guide without a product page can still be purchased by contacting NI.

### **Glossary of Terms Used**

- Backshell A component that provides Strain Relief and Operator Protection. These terms are synonymous. Click here for an example.
- EMI Suppression Ferrite Passive electrical component clamped around a cable to reduce Electromagnetic Interference (EMI) on the line. <u>Click here for an example.</u>
- Strain Relief and Operator Protection Surrounds the male or female cable connector to protect the cable connections and to provide cable strain relief. Click here for an example.
- Screw Terminal Block A type of connector block that uses screw terminals as the method for connecting wires to your sensor. Click here for an example.
- DIN Rail Mount Terminal Block A type of connector block that allows you to mount the block to a DIN rail. Click here for an example.
- Front Mount Terminal Block A type of connector block that connects to the front of the module. Click here for an example.
- Spring Terminal Block A type of connector block that uses spring terminals as the method for connecting wires to you sensor. <u>Click here for an example.</u>

### **Additional Resources**

- C Series I/O Cable & Accessory Compatibility Guide
- C Series Module Compatibility Chart
- Shop for C Series Terminal Blocks
- Where to Find NI-DAQmx Device Pinouts or Pin Mappings