

Specifications for the NI SCXI™-1163R

32 Channel Solid State Relay Multiplexer

This document lists specifications for the NI SCXI-1163R multiplexer module. All specifications are subject to change without notice. Visit ni.com/manuals for the most current specifications.

Configuration Octal 4x1 multiplexers

Each multiplexer is optically isolated and composed of four independently controlled form A relays with one common pole per bank.

Input Characteristics

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

Maximum switching voltage..... 240 V, CAT II
(channel-to-common)



Note Refer to the *NI Switches Getting Started Guide* for more information on measurement categories.

Maximum working voltage 450 V
(bank-to-bank and bank-to-ground)

Maximum switching current 200 mA
(per channel)

DC path resistance 8 Ω

Output capacitance 110 pF at 50 V, 1 MHz

Maximum leakage current 1 μ A
(per channel)

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Dynamic Characteristics

Relay turn-on time1.5 ms

Relay turn-off time0.25 ms



Note Actuation commands can only be used every 2 μ s.

Physical Characteristics

Relay typeSolid state relays

I/O connector48-pin DIN C male

Dimensions (W \times H \times D).....3.0 cm \times 17.3 cm \times 19.6 cm
(1.2 in. \times 6.7 in. \times 7.6 in.)

Weight625 g
(1 lb 6 oz)

Environment

Operating temperature0 °C to 50 °C

Storage temperature-40 °C to 125 °C

Relative humidity5% to 85% noncondensing

Pollution Degree2

Compliance and Certifications

Safety

This product is designed to meet the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 3111-1, UL 61010B-1
- CAN/CSA C22.2 No. 1010.1



Note For UL and other safety certifications, refer to the product label or to ni.com.

Electromagnetic Compatibility

Emissions	EN 55011 Class A at 10 m FCC Part 15A above 1 GHz
Immunity	EN 61326:1997 + A2:2001, Table 1
EMC/EMI.....	CE, C-Tick and FCC Part 15 (Class A) Compliant



Note For EMC compliance, you *must* operate this device with shielded cabling.

CE Compliance

This product meets the essential requirements of applicable European Directives, as amended for CE Marking, as follows:

Low-Voltage Directive (safety) 73/23/EEC

Electromagnetic Compatibility
Directive (EMC) 89/336/EEC



Note Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, click **Declarations of Conformity Information** at ni.com/hardref.nsf/.

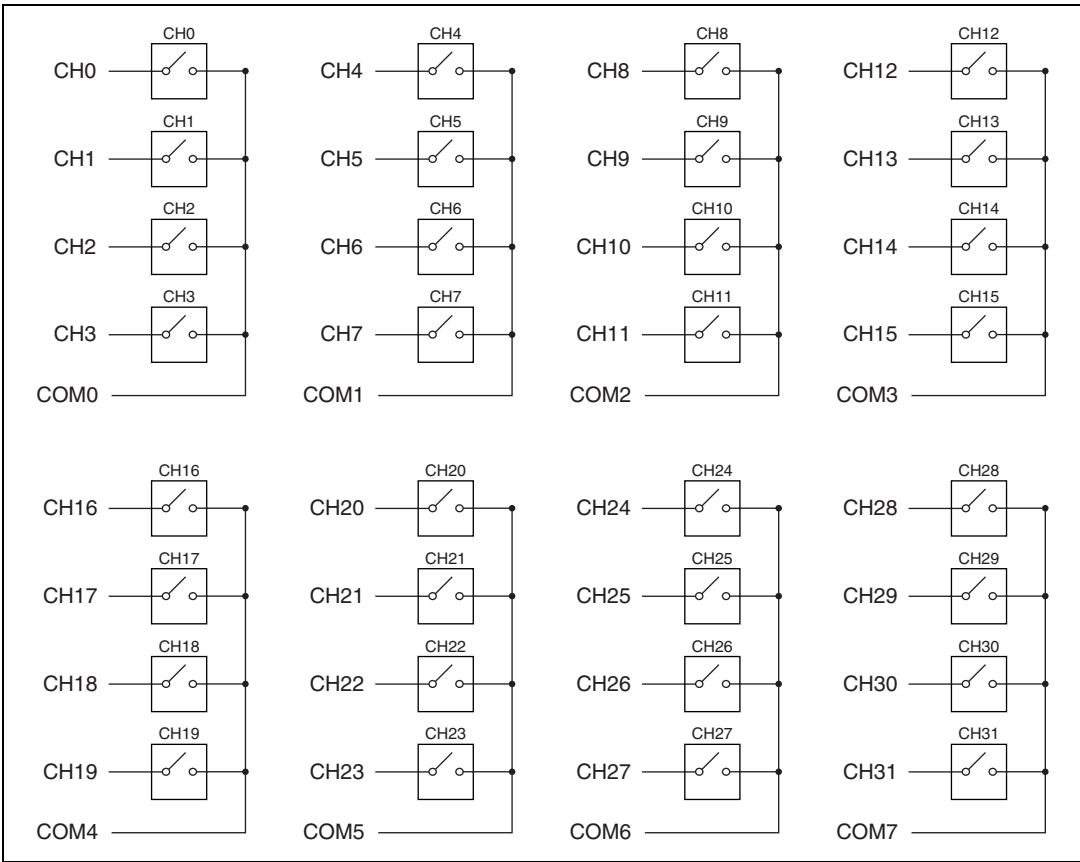


Figure 1. NI SCXI-1163R Octal 4x1 Multiplexer Topology