

# NI PXI-2567 Specifications

## 64-Channel Relay Driver Module

This document lists specifications for the NI PXI-2567 relay driver module. All specifications are subject to change without notice. Visit [ni.com/manuals](http://ni.com/manuals) for the most current specifications.

Configuration ..... 64 channels, non-latching

Channels are in a bank arrangement, with 8 banks of 8 channels.



**Note** Using two channels per relay, the module also can control 32 two-coil latching relays.

## Input Characteristics

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Maximum drive voltage,  
external power..... 50 VDC

Maximum drive current

Per channel..... 600 mA

Per module ..... 25 A

Internal drive power ..... 5 V at 1.25 A, 12 V at 0.5 A

Per-channel protection circuitry

Over-voltage protection activates at 80 V maximum

Over-current protection activates at 1.5 A minimum

Over-temperature protection activates at 150 °C junction temperature

Internal drive power protection circuitry

The 5 V and 12 V internal power supplies have fuses for over-current protection. These fuses are customer replaceable. Refer to the [Accessories](#) section for fuse ratings.

# Dynamic Characteristics

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Single channel operate time  
(typical at 25 °C).....60  $\mu$ s



**Note** The operate time is measured from an input trigger to 90% activation of a 500  $\Omega$  resistor or between consecutive channel operations.

During power-on or reset, all relay drivers disconnect (power down).

# Trigger Characteristics

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## Input trigger

Sources .....PXI trigger lines 0–7,  
Front panel

Minimum pulse width.....150 ns

## Front panel input voltage

Minimum .....–0.5 V

VL maximum .....+0.7 V

VH minimum.....+2.0 V

Nominal .....+3.3 V

Maximum .....+5.5 V

## Output trigger

Destinations .....PXI trigger lines 0–7,  
Front panel

Pulse width .....Programmable (1  $\mu$ s to 62  $\mu$ s)

Front panel nominal voltage.....3.3 V TTL, 8 mA

# Physical Characteristics

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I/O connector.....	78-pin D-subminiature
Power requirement, including optional internal drive power .....	8 W at 5 V 0.5 W at 3.3 V 6 W at 12 V
Dimensions (W × H × D).....	2 cm × 10 cm × 16.6 cm (0.8 in. × 3.9 in. × 6.4 in.)
Weight.....	220 g (8 oz)

## Environment

Operating temperature.....	0 °C to 55 °C
Storage temperature .....	–20 °C to 70 °C
Relative humidity .....	5% to 85% noncondensing
Pollution Degree .....	2
Approved at altitudes up to	2,000 m.
Indoor use only.	

## Accessories

Visit [ni.com](http://ni.com) for more information about the following accessories.

The module comes with one mating connector and backshell kit. Replacement fuses and additional mating connectors are available through general electronics catalogs.

**Table 1.** Third-Party Accessories for the NI PXI-2567

Accessory	Rating	Manufacturer and Part Number
5 V Internal Supply Fuse	F2 A, 125 V	Littlefuse, NANO <sup>2</sup> , 154.002
12 V Internal Supply Fuse	F0.75 A, 125 V	Littlefuse, NANO <sup>2</sup> , 154.750
78-Pin D-subminiature, Female, Vertical or Right-Angle	60 V, 5 A	Any



# Compliance and Certifications

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## 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](http://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.

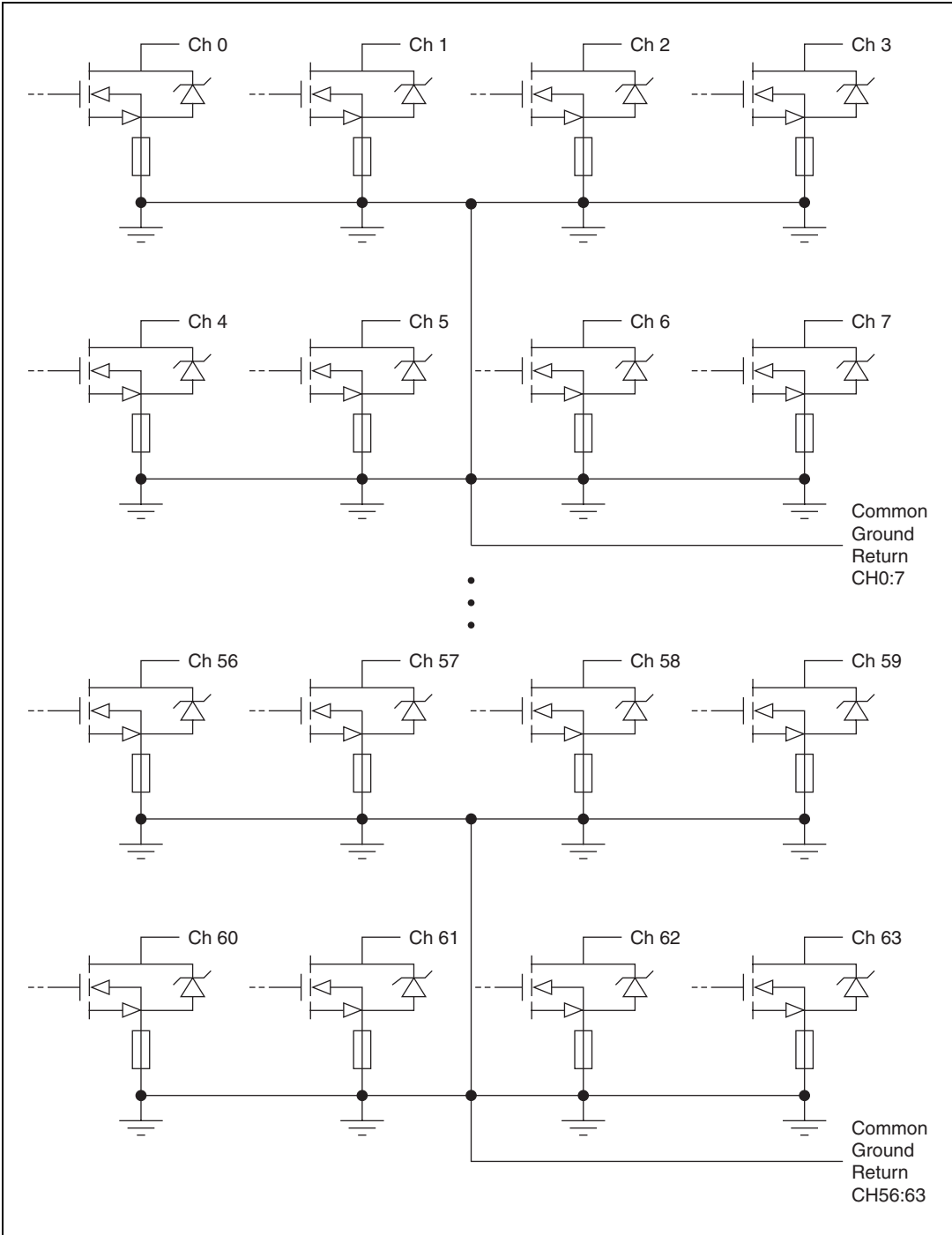
## CE Compliance

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, visit [ni.com/hardref.nsf](http://ni.com/hardref.nsf), search by model number or product line, and click the appropriate link in the Certification column.



**Figure 2.** PXI-2567 Relay Driver Output Topology

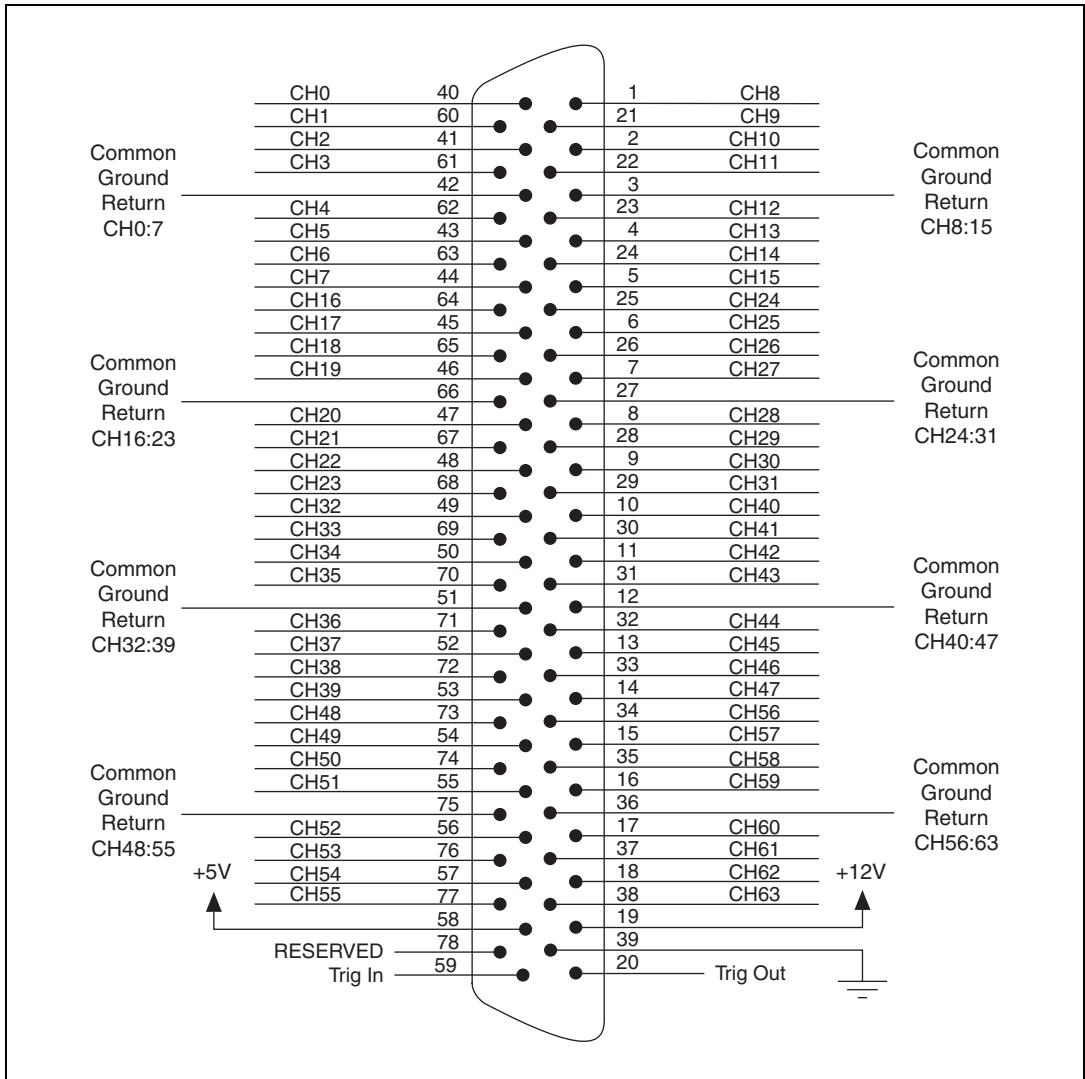


Figure 3. NI PXI-2567 Front Panel Pinout

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