



## **USER MANUAL**

### **4 CHANNEL OMRON MECHANICAL RELAY MODULE**

#### **USAGE NOTICE**

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## 1. Introduction

4 channels Relay Board is a Simple and Convenient way to interface 4 Relays for switching application in your project. Very compact design that can fit in small area, mainly this board is made for low voltage applications.



## 2. Features

- Input supply 12V/24V Coil Voltage @170 mA
- Output Four SPDT Relay / Mechanical Power Relay
- Relay specification 10A/24 DC
- Trigger level 2~5 VDC
- Header Connector for connecting power and trigger voltage
- LED on each channel indicates relay status
- Power Battery Terminal (PBT) for easy output and aux power connection
- Four mounting holes of 3.2 mm each.
- Screw Terminal s for control and contacts (12V-24AWG wire)
- Compatible with standard DIO cards/ Arduino / Raspberry pi/ PIC / PLC
- DIN rail mount

## 3. Application

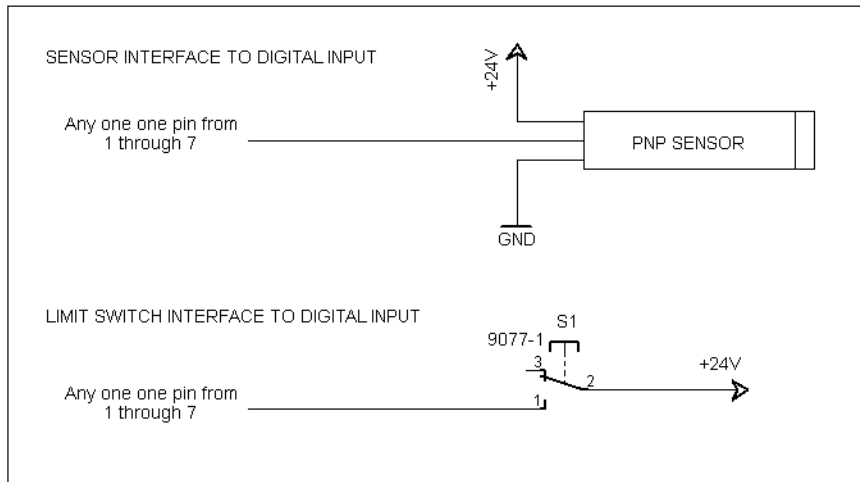
- Test Equipment
- Industrial
- Home Automation
- Robotics

### ORDERING NOTES

1. If rail mountable channel is required, add -RAIL suffix to ordering code.
2. If you need only 4 channels instead of 8, specify 4 in place of 8 while ordering.

## 4. Connection Diagram for Input

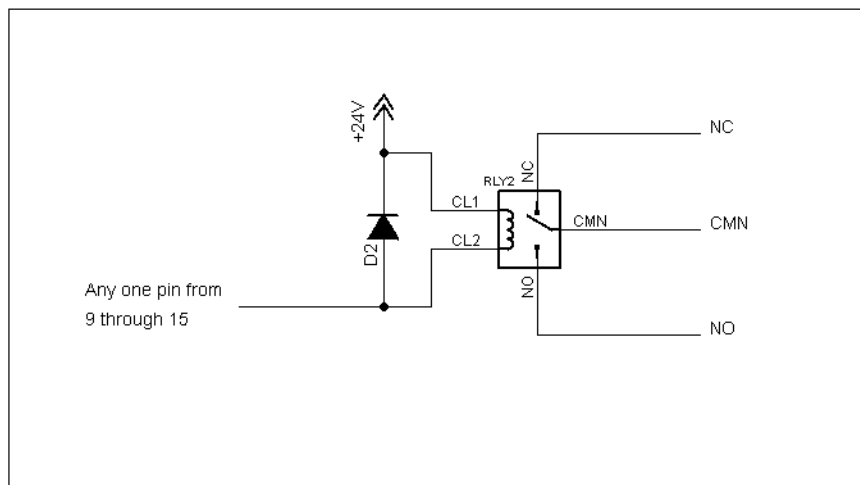
1. UN - Universal input (5V to 24V)
2. PL - Sourced from PLC (24V)
3. NK - Open collector (Potential free)



## 7. Connection Diagram for output

1. UN - Sourced positive (Voltage same as supplied power on output side. Can be +5V to +24V DC) Approx 100mA source capacity per channel

2. NK - Open collector (Potential free) Approx 150mA sink capacity per channel



## 8. Warranty Statement

The unit specified in this document is covered under warranty for a period of 12 months against manufacturing defects, workmanship and malfunction under normal operating conditions. The warranty is subject to the terms and conditions mentioned below.

1. The warranty commences from the date of sale for a period of 12 months irrespective of the actual installation date.
2. The warranty is against manufacturing defects and any subsequent malfunction of the instrument during the normal operation. The warranty shall not be applicable in case of accidental damage, damage due to wrong operation, connection or conditions that are out of normal operating specifications.
3. KARL PL, at its discretion may repair or replace the product depending on the condition of instrument, availability of spare parts and type of failure.
4. In case of warranty claim, the warranty period will not be extended and remains same as stated earlier from the date of sale.
5. Maximum liability of KARL PL remains up to repair or replacement of the product only. Any damages or losses raised out of use of the instrument are not covered by this warranty. In any case, cost of the product will not be refunded.
6. In case of warranty claim, the product should be sent over to KARL PL immediately after noticing the defect or failure. A detailed note of operating conditions in which fault occurred will be helpful in rectifying the defect.
7. Do not try to open or repair the instrument on your own. Warranty will stand null and void in such case. Products with tampered warranty seal will not be considered for warranty claims and regular service charges will be applicable.
8. In all claims, the company's decision will be final and legally binding.
9. Any and all disputes are subject to pune jurisdiction only.

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