

DPDT Relay Board TM

OPERATIONS MANUAL

Version 1.0a



INTRODUCTION

The Model Train Technology™ *DPDT Relay Board™* provides a simple way to connect the MTT Precision Sensor to trigger a DPDT (Double-Pole, Double Throw) relay.

You can use this setup automatically turn Motorized turnouts or to show a bi-color LED on a panel in synchronization with any action that is triggered by our *Precision Detector*.

This relay circuit is purpose build for our detector and may not work with other sensor systems unless they have an ACTIVE LOW signal.

The relay contacts are rated to 1A.

Use the same 12VDC power source to power the Precision Detector and the DPDT Relay Board. You may connect the Precision Detector yellow signal wires to BOTH this relay board AND any Signal Controller in our product lineup.

INSTALLATION

The Precision Detector, the Relay Adapter and the Relay all use 12VDC as the input power. They must be connected to the SAME power source for this to work properly. As shown in the diagram, you connect 12 VDC power to the Relay Adapter Board and connect it to the terminals on the relay. Then, for each Precision Detector simply connect the yellow signal wire to the green input terminal on the Relay Adapter board.

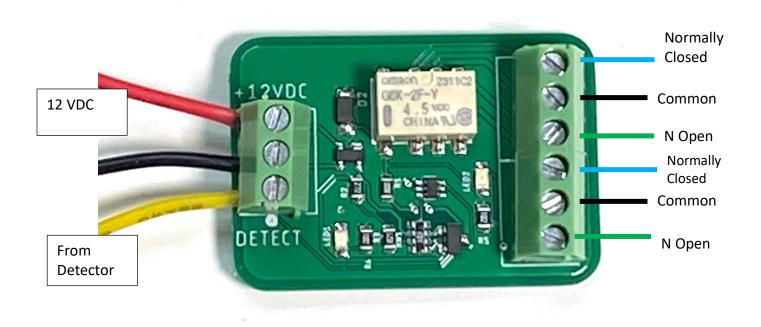
The POWER wires to the DPDT relay board can be connected either polarity direction.

<u>WARNING – BE CAREFUL NOT TO CONNECT POWER TO THE</u> <u>DETECT TERMINAL</u>

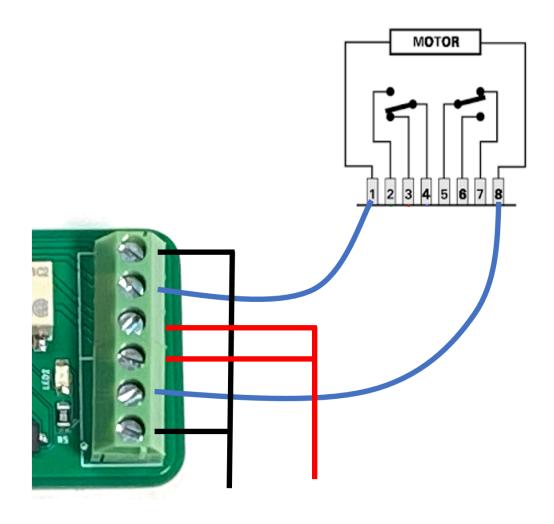
When powered properly, the blue LED will light.

When the relay is tripped (ON) by a Precision Detector, the green light will light.

DPDT Relay Board Connections



MOTORIZED TURNOUT HOOKUP



ELECTRONICS AND STATIC ELECTRICITY

Electricity can be dangerous. Static electricity can cause component failure. Scuffing along a carpet and then touching one of the component connectors can cause a static spark. These components are fairly rugged – some designed for the automotive industry. Just be mindful of the risk. The current on the board will not harm you if the board is powered and operated as per the instructions.

ONE YEAR MANUFACTURER WARRANTY:

We warrant this **product** to be free from defects in workmanship and materials, under normal residential use and conditions, for a period of one (1) year for the original invoice date. Shipping and handling fees are to be paid for by the customer.

LIMITATION OF LIABILITY

UNDER NO CIRCUMSTANCE SHALL COMPANY OR ITS AFFILIATES, PARTNERS, SUPPLIERS OR LICENSORS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENCIAL, SPECIAL OR EXEMPLARY DAMAGES ARRISING OUT OF OR IN CONNECTION WITH YOUR USE, OR INABILITY TO USE THE PRODUCT, WHETHER OR NOT THE DAMAGES WERE FORESEEABLE AND WHETHER OR NOT COMPANY WAS ADVISED OF THE POSSIBLITY OF SUCH DAMAGES, WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, COMPANY'S AGGREGATE LIABILITY TO YOU SHALL NOT EXCEED THE AMOUNT OF THE PRODUCT. THE FOREGOING LIMITATION WILL APPLY EVEN IF THE ABOVE STATED REMEDY FAILS OF ITS ESSENTIAL PURPOSE.



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