

# DATA SHEET

## Manual Points Module MD-001

The MD-001 manual points module provides simple points operation for your model railway track system. The module is used to control solenoid operated points by the use of a simple single pole single throw (SPST) toggle switch. The module provides an accurately timed pulse to operate the solenoid without the need for a separate capacitor discharge unit to protect the solenoids. The switch position can be used to indicate the points position.

### Specifications:

- Controls one set of solenoid actuated points
- Input Voltage – 12 – 14 Volts DC
- Maximum Output Current – 4 A (instantaneous)

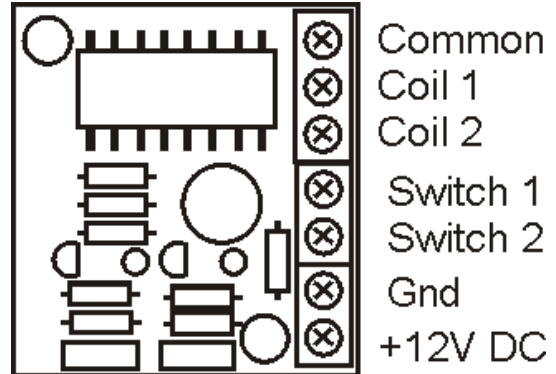


Figure 1 Manual Points Module

### INSTALLATION

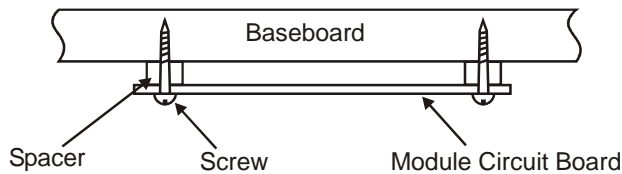


Figure 2 Module Mounting

Mount the Module in a position near the points to be controlled. Use the screw holes provided in the board to mount it but do not fix the screws too tightly or the board may be damaged.

The use of spacers as shown in Figure 2 is recommended.

**Caution** – Take when making power connections as incorrect connection will permanently damage the module.

**Caution** – Only use a regulated power supply. Unregulated transformers and wall plug units can under certain conditions deliver far more than their rated voltage. Voltages in excess of that specified will permanently damage the module.

Connect power (12 – 14 V DC) to the power input terminals, refer to Figure 1, taking care to make sure that the positive and negative (ground) wires are inserted in the correct terminals.

Connect the switch to the terminals marked Switch 1 and Switch 2, refer to Figure 1.

Join the wire from one end of each solenoid coil together and connect them to the terminal marked Common, refer to Figure 1.

Connect the other end of each coil to the terminals marked Coil 1 and Coil 2, refer to Figure 1.

## **OPERATION**

**Caution - The unit is designed to operate points infrequently in a prototypical fashion. If the points are operated repeatedly and rapidly the transistors may overheat and this could cause damage to the unit.**

To operate the points, move the toggle switch and the points will change to the opposite position. The switch is left in the set position until the points need to be changed again.

To make the points position matches the switch position it may be necessary to swap the Coil 1 and Coil 2 connections or rotate the switch 180°.