

# **INSTALLATION INSTRUCTIONS**

## **010 SERIES SOLID STATE HIGH SECURITY DOOR CONTACT**

### **Introduction**

The Model 010/1 High Security Door Contact is designed to be used where security is of paramount importance. It consists of two parts: a high-intensity magnet and a sensing unit. Both are mounted in similar ABS housings.

Within the sensing unit there is a Hall Effect Sensor which monitors the level of magnetic field incident upon it. The level of magnetic field is converted into a voltage by the Hall Effect Sensor. This is processed by electronic circuits within the sensor, not only for the level of magnetic field, but also for any attempts to tamper with the magnetic field in order to substitute magnets.

The Hall Effect Sensor and processing electronics are mounted in a tamper-proof housing. The tamper switch may be activated either from within the housing (i.e. separation of the top from the bottom), or from the mounting surface.

When in alarm, the yellow and green wires are open circuit and when clear there is a resistance of 1K. The tamper switch is connected between the blue and white wires.

### **INSTALLATION:**

#### **1. Fixing**

It is important that the site of fixing is chosen with some care. The effective sensitivity of the contact can be varied by moving the mounting position relative to the leading edge of the door. Mounting closer to the leading edge will increase the detection sensitivity of the unit while mounting closer to the hinge will decrease the sensitivity. For more information please refer to the Application Guide.

The magnet and sensor housings should be mounted so that the separation between the two units does not exceed 5mm. For optimum performance this should be 3mm.

The orientation of the two housings is important, the magnet and Hall Effect Sensor need to be in close proximity. Two faces are marked with stick-on labels and these two faces should face each other. Note the position of the tab on the base. If the tamper switch is required to operate off the mounting surface, break out the central section of the base of the sensor unit, ensuring that the tamper spring is free to operate.

#### **2. Connections**

RED: SUPPLY POSITIVE

BLACK: SUPPLY NEGATIVE

YELLOW: ALARM POSITIVE

GREEN: ALARM NEGATIVE

WHITE : TAMPER

BLUE: TAMPER

#### **3. Testing**

Ensure that the sensor generates an alarm as the door is opened and remains in alarm until it is closed.

Check that false alarms are not generated by movements in the door by shaking and banging the door.

Check operation of the tamper switch by removing, the replacing, the sensor housing cover.

Remove the stick-on labels.