

Installation Instructions

1.0 Introduction

The D208 provides eight hard wired expansion points for use with the Bosch Security Systems D2212 Control/Communicator. Each point functions independently and does not interfere with the operation of the others. This document describes how to install, program and test the D208.

2.0 Specifications

Dimensions (H x W x D)	¾ in. x 3.0 in. x 5.3 in. (19 mm x 76 mm x 13 cm)
Operating Voltage	Nominal 12 VDC supplied by the control/communicator auxiliary power supply.
Current Requirement	50 mA Standby; 75 mA Active
Operating Temperature	+32°F to +122°F (0°C to +50°C)
Non-condensing Relative Humidity	5% to 85% at +86°F (+30°C)

3.0 Installation

3.1 Mounting the D208

1. Mount the D208 in its own enclosure. To mount the unit in the same enclosure as the panel, order the D208LC, which comes without the D208 enclosure but with the standard Bosch Security Systems three-hole mounting pattern. You cannot mount the D208LC inside a D2103 enclosure.
2. Mount the D208 as shown in *Figure 1*. If using the D208 enclosure, loosen the three screws attaching the board to the enclosure no more than 1/4 turn to allow board removal at a later time.

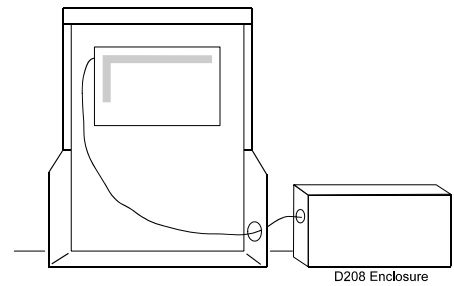


Figure 1: Mounting the D208 in the D208 Enclosure

3.2 Wiring the D208 to the D2212

1. If you are mounting the D208 outside of the panel, route data wire runs to the D2212 away from electrical, telephone or other data wiring. The maximum combined length for all wires connected to D2212 terminal 8 is 500 ft. (152 m). The minimum is 5 ft. (2 m).
2. Wire the D208 to the D2212 as shown in *Figure 2*.

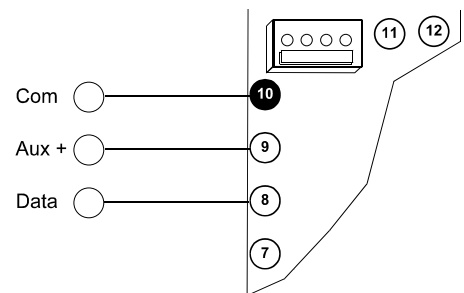


Figure 2: Wiring the D208 to the D2212

3.3 Wiring and Programming the D208 Protective Points

Note: Each point is supervised with a 1 k Ω end-of-line resistor (Bosch Security Systems D105BL, eight supplied with the unit). Connect dry contact sensing devices in series (normally closed) or in parallel (normally open) to any of these points (see Figure 3 on page 2). Be sure to insulate all exposed splices with tape so that they do not short to one another. Each point can detect open circuit, closed circuit and normal circuit conditions. The voltage range at the points for open, normal and shorted loops are 3.4 to 5.0 VDC (Open), 1.8 to 3.2 VDC (Normal) and 0.0 to 1.6 VDC (Shorted).

1. Route the wire from points of protection to the D208. See the panel's installation guide for information about the maximum length of point cables and wire resistance. Route wires away from electrical, telephone and other data wiring.



2. Program the panel with a point code for each protective point. The point codes determine how each point responds to faults. Remember to use the correct device address (digit 4 of the point code) for each point you are programming. See “Point Codes” in the *D2212 Program Entry Guide* (P/N: 74-07386-000) for programming details.

4.0 Assigning the D208 to a Device Address

1. Before you begin, be sure that the panel’s standby pin is locked down to prevent missing point reports being sent. Use *Table 1* to set the D208’s dip switches to the desired address.
2. *The panel’s program affects the D208’s address.* Select Point Expander for the device type at the chosen address. For more information, see “Address Configuration” in the *D2212 Program Entry Guide* (P/N: 74-07386-000).

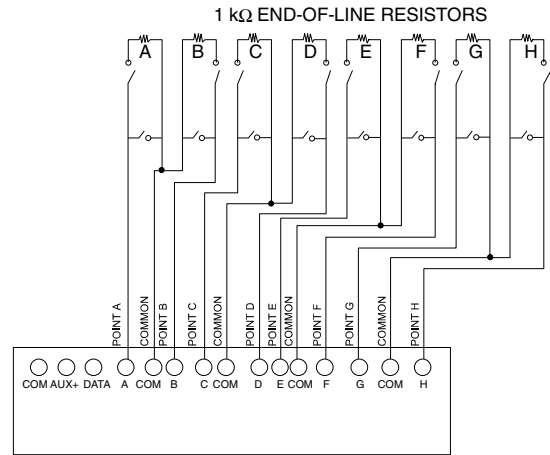


Figure 3: Wiring Protective Points

Device Address	Switch 1	Switch 2	Switch 3
1	Off	Off	Off
2	Off	Off	On
3	Off	On	Off
4	Off	On	On
5	On	Off	Off
6	On	Off	On
7	On	On	Off
8	On	On	On

Table 1: Device Addresses and Switch Settings

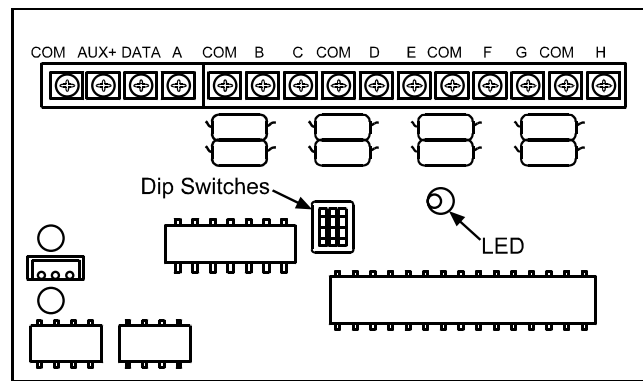


Figure 4: D208