

HSM2208 v1.1 Installation Instructions

8 Low-Current Output Expander Module

Use this Installation sheet with the Installation Manual of the equipment with which the HSM2208 is used, such as the alarm controller, power supply, etc. Use the HSM2208 module to add up to eight low-current programmable outputs to the compatible alarm controller models. This module is compatible with PowerSeries Neo (HS2016, HS2032, HS2064, HS2128) and PowerSeries Pro (HS3032, HS3128) panels.

Specifications

- Temperature range: -10°C to +55°C (0°C to +49°C for UL/ULC listed systems).
- Relative Humidity: Max. 93% relative humidity non-condensing.
- Input rating: 10.8 VDC to 12.5 VDC/700 mA (includes 250 mA AUX maximum plus 50 mA for each of the 8 outputs).
- Maximum loading is shared with compatible alarm panel or power supply AUX output.
- Board current draw: 60 mA (set and unset state/alarm and non-alarm state).
- Board dimensions: 45 mm x 92 mm, weight 35 g.
- AUX output ratings: 10.8 VDC to 12.5 VDC, -15% / + 15% when Input voltage is between 85% to 110% of rated value and output current is between 0 mA to 250 mA max.
- PGM outputs: Open collector, switched to ground, 50 mA max.
- Resettable fuse (PTC) used on circuit board instead of replaceable fuses. There are no serviceable parts.
- Maximum wire length from alarm panel: 1,000 ft/305 m.

Terminal Descriptions

TMP- Used to tamper the cabinet in which the HSM2208 is mounted. Connect a normally closed (NC) switch across TMP and BLK. If the tamper is not being used, connect a piece of wire across TMP and BLK to remove the trouble condition.

NOTE:

- There is a built-in tamper switch on the expander module located in the top left corner of the circuit board. If the cabinet in which the HSM2208 is mounted has the hardware required to depress this tamper switch, do not connect anything to the TMP terminal.
- Tamper protect is required for UL/ULC commercial/residential burglary installations.

AUX+ - There are two terminals for AUX power to provide easier wiring. These terminals are used to provide power for devices. Maximum current draw must not exceed 250 mA. Connect the positive lead of powered devices to either AUX+ and the negative to the proper output terminal (O1 to O8).

CORBUS - The 4-wire Corbus connection is used by the panel to communicate with the module. Connect the RED, BLK, YEL and GRN terminals to the Corbus terminals on the main control panel.

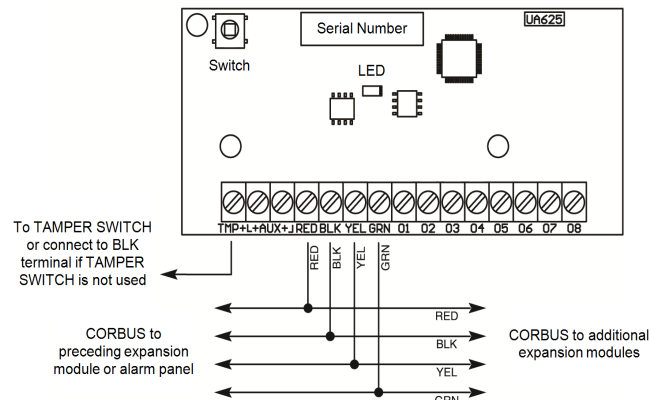


Figure 1: Terminal Descriptions

O1 to O8 - Wire the positive lead of the device to either AUX terminal and the negative lead to the required output terminal (O1 to O8).

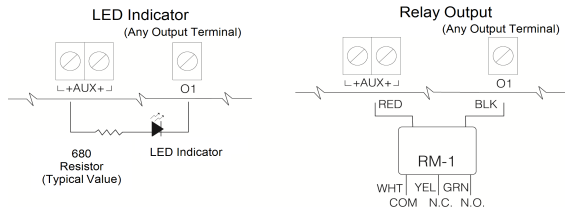


Figure 2: Led indicator and relay output

Enclosures

You must install the HSM2208 in the same metallic cabinet as the alarm controller/power supply or in a separate enclosure. Internal and/or external wiring for this module must be routed, supported, clamped or secured to reduce the possibility of: excessive strain on wire and on terminal connections, loosening of terminal connections, and damage of conductor insulation.

You must install the HSM2208 in the metal enclosures listed below. You can install tamper protection switches on all enclosures, including door opening protection and/or removal from the mounting position. Secure the doors using screws or a keylock.

PowerSeries Pro enclosures:

- Model HSC3010C (hinged door) made of 18 Ga steel, painted white, dimensions 372 mm x 412 mm x 114 mm.
- Model HSC3010CR (hinged door) made of 18 Ga steel, painted red, dimensions 372 mm x 412 mm x 114 mm.
- Model HSC3030CAR (hinged door) made of 18 Ga steel (base) and 16 Ga (door), painted white, dimensions 375 mm x 412 mm x 114 mm.
- Model HSC3020C (removable door) made of 18 Ga steel, painted white, dimensions 459 mm x 414 mm x 103 mm.
- Model HSC3020CP (removable door) made of PC-ABS, color white, dimensions 368 mm x 489 mm x 108 mm.

PowerSeries Neo enclosures:

- Model PC5003C (removable door)
- Model PC5003C (hinged door)
- Model Power UC1
- Model PC4003C
- Model CMC-1
- Model PC4050CAR (commercial burglary)
- Model PC4050CR (ULC--S559)

NOTE: Use HSC3010C, PC4003C or PC5003C for UL/ULC installations.

Automatically Enrolling on the Alarm Panel

To enroll the HSM2208, complete the following steps:

1. Ensure that the system is not powered.
2. Connect the HSM2208 to the Corbus.
3. Power up the system.
4. Enter section [902] [000] and wait 1 minute.
5. To verify that the module is supervised, enter section [903] [003].

Manually Enrolling on the Alarm Panel

To enroll the HSM2208, complete the following steps:

1. Ensure that the system is not powered.
2. Connect the HSM2208 to the Corbus.
3. Power up the system.
4. Enter section [902] [001].
5. Enter the module serial number.
6. Enter section [903] [003] to verify that the module is supervised.

Status LED

The HSM2208 is equipped with a status LED to indicate the current condition of the module. If the HSM2208 is operating correctly, the status LED flashes briefly every 10 seconds. When a trouble condition is present, the status LED displays a series of flashes then remains blank for 1.5 seconds. The number of flashes indicates the trouble condition, as outlined below.

Number of Flashes	Trouble Condition
1	Module not enrolled
2	Alarm Panel supervision trouble
3	CORBUS low voltage

Table 1: Status LED

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CAUTION: Changes or modifications not expressly approved by DSC could void your authority to use this equipment.

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for Class B device in accordance with the specifications in Subpart "B" of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in any residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to television or radio reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna
- Relocate the alarm control with respect to the receiver
- Move the alarm control away from the receiver
- Connect the alarm control into a different outlet so that alarm control and receiver are on different circuits.

If necessary, the user should contact the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock #F 004-000-00345-4.

Industry Canada

CAN 1 CES-3(9) NMB-3(B)

EN CERTIFICATION

The Model HSM2208 Output Module has been certified by Telecommunication according to EN50131-1:2006 + A1:2009 and EN50131-3:2009 Type A for Grade 2, Class 1 when installed in the PC5003C enclosure.

HSM2208 v1.1 - Instructions d'installation

Module d'extension de 8 sorties à faible courant

Cette fiche d'installation doit être utilisée avec le manuel d'installation de l'équipement qui alimente le HSM2208, tel que le contrôleur d'alarme, l'alimentation électrique, etc. Utilisez le module HSM2208 pour ajouter jusqu'à huit sorties programmables à faible courant sur les modèles de contrôleur d'alarme compatibles. Ce module est compatible avec les centrales PowerSeries Neo (HS2016, HS2032, HS2064, HS2128) et PowerSeries Pro (HS3032, HS3128).

Caractéristiques

- Plage de température : -10 °C à +55 °C (0 °C à +49 °C pour les systèmes homologués UL/ULC)
- Humidité relative : 93 % d'humidité relative maximale, sans condensation.



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