

DSC HSM2208 8 Low-Current Output Expander Module Instruction Manual

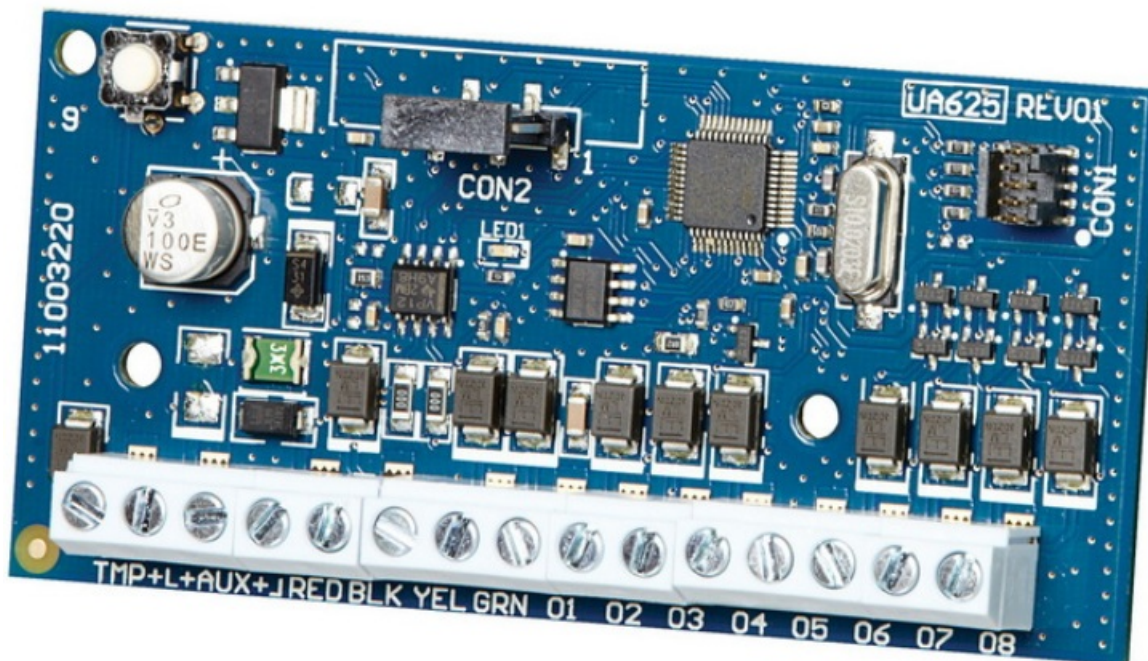
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DSC

DSC HSM2208 8 Low-Current Output Expander Module



HSM2208 v1.1 Installation Instructions

The HSM2208 module is an 8 low-current output expander that can be used to add up to 8 low-current programmable outputs to the compatible DSC alarm controller models HS2016, HS2032, HS2064, and HS2128. This installation sheet should be used in conjunction with the installation manual of the DSC equipment to which the HSM2208 is connected or powered from (e.g. alarm controller, power supply, etc.).

Specifications

- Maximum loading is shared with compatible alarm panel or power supply AUX output.
- Board current draw: 60mA (set and unset state/alarm and non-alarm state)
- Board dimensions: 45mm x 92mm, Weight 35g
- AUX output ratings: 10.8 to 12.5VDC, -15%/ +15% when Input voltage is between 85% to 110% of rated value and output current is between 0mA – 250mA max.
- PGM outputs: Open collector, switched to ground, 50mA 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'/305m

Terminal Descriptions

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

Enclosures

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

Automatically Enrolling on the Alarm Panel

To enroll the HSM2208, follow these 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. Enter section [903] [003] to verify that the module is supervised.

Manually Enrolling on the Alarm Panel

To enroll the HSM2208, follow these 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

8 Low-Current Output Expander Module

This Installation sheet shall be used in conjunction with the Installation Manual of the DSC equipment to which the HSM2208 is connected or powered from (e.g. alarm controller, power supply, etc.). The HSM2208 module can be used to add up to 8 low-current programmable out-puts to the compatible DSC alarm controller models HS2016, HS2032, HS2064 and HS2128.

Product Specifications

- Temperature range: -10°C to + 55°C (0°C to +49°C for UL/ULC listed systems)
- Relative Humidity: 93% non condensing
- Input rating: 10.8 to 12.5VDC/700mA (includes 250mA AUX maximum plus 50mA for each of the 8 outputs).
- Maximum loading is shared with compatible alarm panel or power supply AUX output.
- Board current draw: 60mA (set and unset state/alarm and non-alarm state)
- Board dimensions: 45mm x 92mm, Weight 35g
- AUX output ratings: 10.8 to 12.5VDC, -15%/ +15% when Input voltage is between 85% to 110% of rated value and output current is between 0mA – 250mA max.

- PGM outputs: Open collector, switched to ground, 50mA 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'/305m

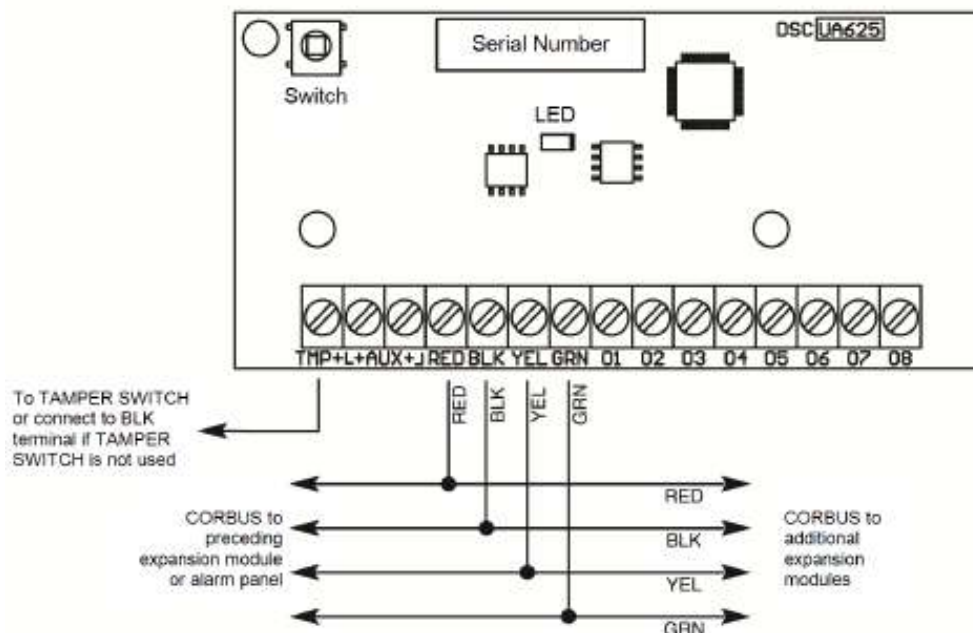
Descriptions

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

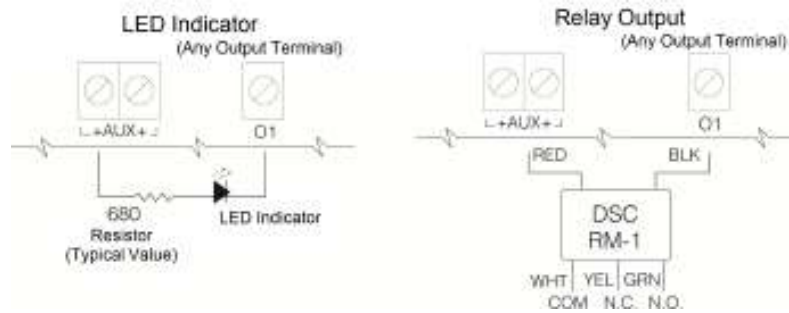
NOTE: There is a built-in tamper switch on the expander module located in the top left corner of the circuit board. If the cabinet in which the HSM2208 is mounted has the hardware required to depress this tamper switch, do not connect anything to the TAM terminal.

NOTE: 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 is not to 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 HS2016, HS2032, HS2064, or HS2128 main control.



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).



Enclosures Information

The HSM2208 may be installed within the same metallic cabinet as the alarm controller/power supply (model Power UC1, PC5003C) or in a separate enclosure (model PC4003C). Internal and/or external wiring for this module shall be routed, supported, clamped or secured in a manner that reduces the likelihood of: excessive strain on wire and on terminal connections, loosening of terminal connections, and damage of conductor insulation.

The HSM2208 can be installed in the metal enclosures listed below. Tamper protection switches can be installed on all enclosures, including door opening protection and/or removal from the mounting position. Doors can be secured using screws or keylock.

- 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 PC4003C, PC5003C, CMC-1, PC4050CAR, or PC4050CR for UL/ULC installations.

Automatically Enrolling on the Alarm Panel

To enroll the HSM2208 follow these 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. Enter section [903] [003] to verify that the module is supervised.

Manually Enrolling on the Alarm Panel

To enroll the HSM2208 follow these 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

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possible for this SOFTWARE PRODUCT to fail to perform as expected.

FCC COMPLIANCE STATEMENT

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 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 consult 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 #004-000-00345-4.

Industry Canada

CAN ICES-3(B)/NMB-3(B)


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 II when installed in the PC5003C enclosure..

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Documents / Resources

	DSC HSM2208 8 Low-Current Output Expander Module [pdf] Instruction Manual HSM2208 8 Low-Current Output Expander Module, HSM2208, 8 Low-Current Output Expander Module, Output Expander Module, Expander Module, Module
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References

-  **DSC**