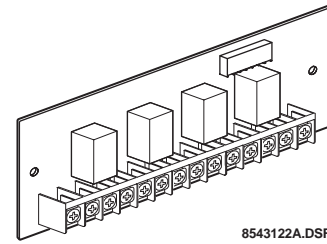


4 Output Expansion SnapCard

Document Number: 466-1366 Rev. C
November 2000



Installation Instructions

Product Summary

The Four Output Expansion SnapCard™ lets you control devices by adding hardware outputs to a Concord, Concord Express, or Advent panel.

This card can be installed into the Concord and Concord Express expansion connector. On Advent panels this card can be installed into the primary or secondary expansion connector and in combination with other expansion cards.

The card includes four “Form C” dry contact relays. The relays are controlled by a touchpad or a combination of states and events in the system.

Outputs may be programmed to turn on lights, open drapes and garage doors, turn on a closed-circuit-TV (CCTV) camera during a burglary alarm, turn exit lighting on during fire alarms, and activate backup cellular phones or long-range radios if primary communications are inoperable.

Installation Guidelines

- Refer to the specific panel *Installation Instructions* for wire length limits.
- Use 4-conductor, 22-gauge or larger stranded wire from the terminals to the devices.
- All Advent fire panel wiring shall be in accordance with NFPA codes and standards.

Important !
On Advent panels SnapCard expansion connectors must be used for either fire or burglary applications. Do not mix fire and burglary applications on SnapCard inputs and outputs.

Tools Needed (optional)

- Screwdrivers
- 22-gauge or larger stranded hookup wire
- Mounting screws (included)

Installation

Use the following instructions to install the card, wire the output devices, and program the panel.

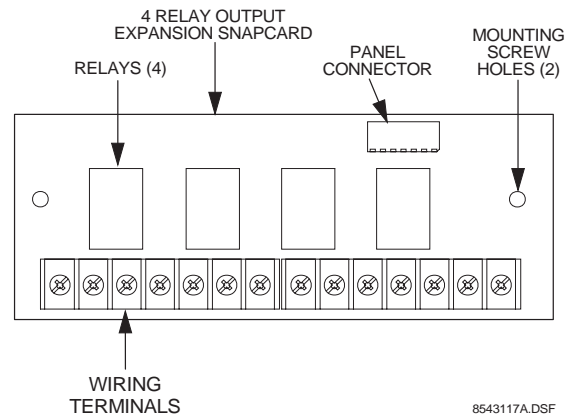




Figure 1. Card Components

 **CAUTION**
To prevent damaging the panel or card, disconnect the panel AC Power and the backup battery(s) before installation.

1. Unplug the panel AC power transformer and disconnect the backup battery(s).

 **CAUTION**
You must be free of all static electricity when handling electronic components. Touch a grounded bare metal surface before touching the circuit board.

2. Align the card holes with the standoffs and connector pins as shown in Figure 2, 3 or 4 (depending on panel type).

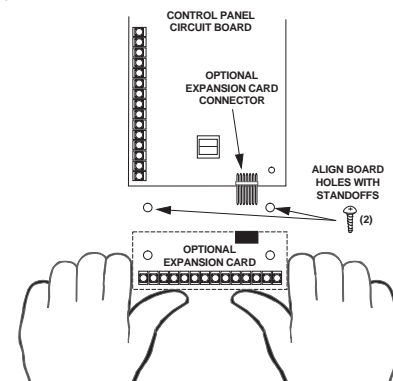


Figure 2. Installing the Card in a Concord Panel

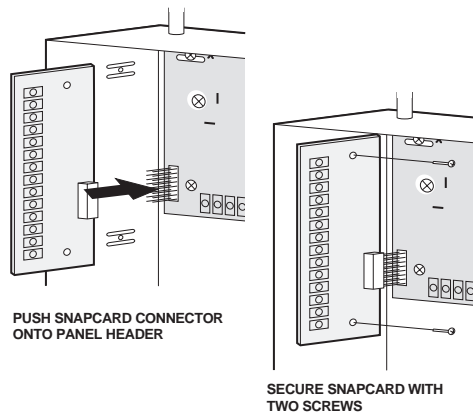


Figure 3. Installing the Card in a Concord Express Panel

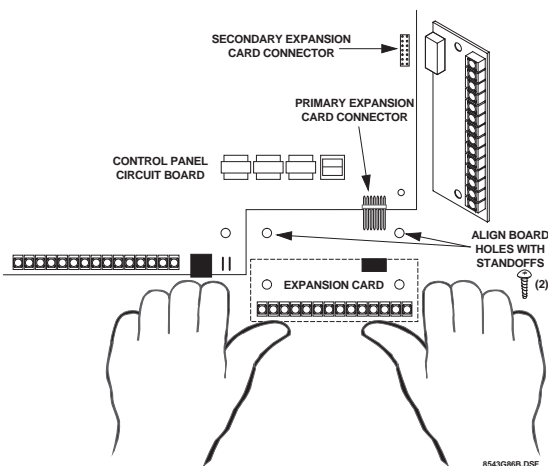


Figure 4. Installing the Card in Advent panel

3. Press firmly to secure the card to the connector.
4. Secure the card to the cabinet with the two supplied screws.

Wiring

Note

A) Class 2, Class 3, and power-limited fire alarm circuits must be installed using FPL, FPLR, FPLP, or substitute cable permitted by the National Electrical Code ANSI/NFPA 70. Wire that extends beyond the cable jacket must be separated from all other conductors by a minimum of 1/4-inch or by a nonconductive barrier.

OR

(B) Class 2, Class 3, and power-limited fire alarm circuit conductors must be installed as Class 1 or higher circuits.

Table 1 describes each SnapCard terminal. Terminals are numbered left to right. Figure 5 shows how to wire the card.

Note

All terminals are Class 2 power limited. Auxiliary power supplies must be power limited.

Table 1: Wiring Terminal Descriptions

Terminal Number	Description	Use
1	Relay 1 NC	Normally closed (N/C) (opens on activation) output 1 dry relay contact connection.
2	Relay 1 COM	Common (C) side of output 1 dry relay N/C and N/O contacts (terminals 1 and 3). Contacts rated 4A @ 24VDC, 4A @ 24VAC, 1A @ 70VAC maximum.
3	Relay 1 NO	Normally open (N/O) (closes on activation) output 1 dry relay contact connection.
4	Relay 2 NC	Normally closed (N/C) (opens on activation) output 2 dry relay contact connection.
5	Relay 2 COM	Common (C) side of output 2 dry relay N/C and N/O contacts (terminals 4 and 6). Contacts rated 4A @ 24VDC, 4A @ 24VAC, 1A @ 70VAC maximum.
6	Relay 2 NO	Normally open (N/O) (closes on activation) output 2 dry relay contact connection.
7	Relay 3 NC	Normally closed (N/C) (opens on activation) output 3 dry relay contact connection.
8	Relay 3 COM	Common (C) side of output 3 dry relay N/C and N/O contacts (terminals 7 and 9). Contacts rated 4A @ 24VDC, 4A @ 24VAC, 1A @ 70VAC maximum.
9	Relay 3 NO	Normally open (N/O) (closes on activation) output 3 dry relay contact connection.
10	Relay 4 NC	Normally closed (N/C) (opens on activation) output 4 dry relay contact connection.
11	Relay 4 COM	Common (C) side of output 4 dry relay N/C and N/O contacts (terminals 10 and 12). Contacts rated 4A @ 24VDC, 4A @ 24VAC, 1A @ 70VAC maximum.
12	Relay 4 NO	Normally open (N/O) (closes on activation) output 4 dry relay contact connection.

Table 1: Wiring Terminal Descriptions

Terminal Number	Description	Use
13	GND	Common ground return connection for 12 VDC supply output.
14	+12VDC	Auxiliary output regulated DC power supply. 12 VDC @ 0.5A maximum. Note: If this output is used, it will draw up to 500 mA from the panel. Remember to include this current draw when calculating total panel power.

To wire the card:

1. Unplug the panel AC power transformer and disconnect the backup battery(s).
2. Wire output devices to the card as shown in Figure 5.
3. Connect the backup battery(s) and plug in the panel AC power transformer.

Programming

Outputs must be programmed to communicate with the panel and to function as desired. For specific output programming information, refer to the panel *Installation Instructions*.

Testing

Once installed, the card becomes an integral part of the panel. We recommend that you test all hardwire output devices after programming is completed and whenever an output device-related problem occurs. Refer to the panel *Installation Instructions* or *User's Manual* for output testing information.

Troubleshooting (all panels)

Table 2: Troubleshooting Hardwire Outputs

Problem	Action/Solution
No outputs activate	<ol style="list-style-type: none"> 1. Check panel/card programming. 2. Check output wiring and connections. 3. Check panel/card power supplies. 4. If used, check the optional external supply powering the output devices.
One output never activates.	<ol style="list-style-type: none"> 1. Check panel/card programming for that output. 2. Check output wiring and connections. 3. Check that the output programmed trigger event actually occurs. 4. An output relay may have failed or been overloaded. Reprogram to use a different (unused) output or replace the card.
Wrong output activates.	<ol style="list-style-type: none"> 1. Check panel output programming. 2. Check output device wiring and connections.

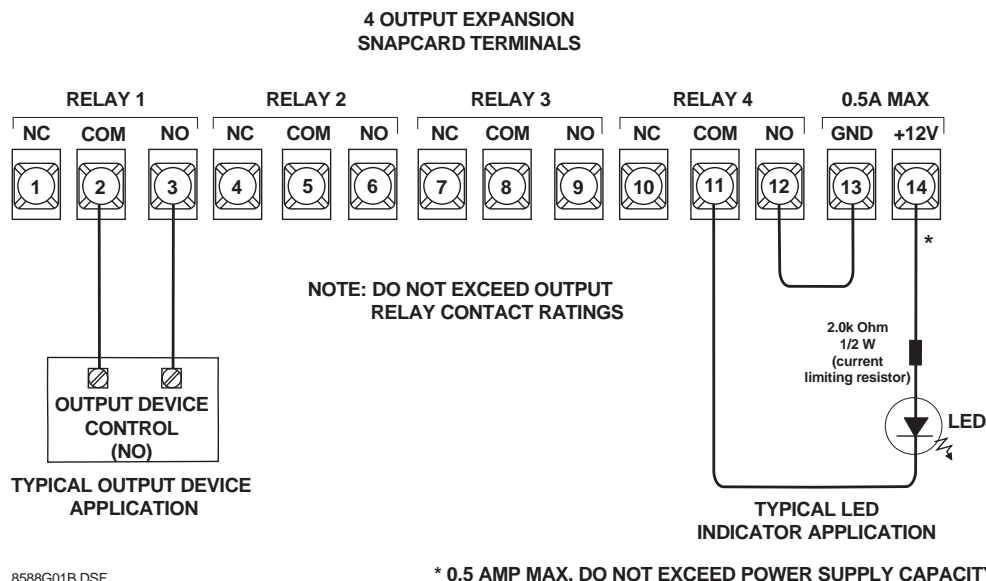


Figure 5. Typical 4 Output Expansion SnapCard Wiring

Specifications

Compatibility:	Concord, Concord Express, and Advent panels.
Power Requirements:	(From host panel/module) 12 VDC @ 142 mA typical with all relays energized (34 mA per relay energized).
Outputs:	Four, panel programmable outputs with "Form-C" relay contacts (COMMON, N/C, N/O). Relay contacts rated 4A @ 24VDC, 4A @ 24VAC, 1A @ 70VAC maximum. One 12 VDC, 500 mA regulated power output (from the panel) Power limited to 6 watts.
Storage Temp:	-40° to 140° F (-40° to 60° C).
Operating Temp:	32° to 140° F (0° to 60° C) under temporary conditions.
Maximum Humidity:	90% relative humidity, noncondensing.
Dimensions:	2.0" x 5.25" x 0.75" (H x W x D).
Installation:	In panel cabinet mounting.
Listings (for ancillary use only):	<p>UL 985 Household Fire Warning System Units</p> <p>UL 864 Control Units for Fire Protective Signaling Devices.</p> <p>UL 1023 Household Burglar-Alarm System Units</p> <p>UL 1610 Central-Station Burglar-Alarm Units (Commercial Burglary)</p> <p>ULC Canada Commercial Fire/Burglary Warning System</p> <p>CSFM California State Fire Marshall</p>

Note
See specific panel *Installation Instructions* for complete UL installation requirements for the system you are installing.

Notices

FCC Part 15 Information to the User

Changes or modifications not expressly approved by Interactive Technologies, Inc. can void the user's authority to operate the equipment.

FCC Part 15 Class A

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case users will be required to correct the interference at their own expense.

FCC Part 15 Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the affected equipment and the panel receiver to separate outlets, on different branch circuits.
- Consult the dealer or an experienced radio/TV technician for help.



2266 Second Street North
North Saint Paul, MN 55109-2900
T: 651/777-2690
F: 651/779-4890
1-800-777-1415
www.itii.com

interlogix  Security & Life Safety Group
Cameo | ISA | IBC | ITI | SureScan

© 2000 Interlogix™, inc. Interlogix, SnapCard, Concord, and Concord Express are trademarks of Interlogix, Inc. ITI, SuperBus, and Advent are registered trademarks of Interlogix, inc.