4-Output Expansion SnapCard™ Installation Instructions

Product summary

The 4-Output Expansion SnapCard™ allows you to control devices by adding hardwire outputs to Concord, Concord 4, Concord Express (v4), and Advent panel.

For all Concord panels, the expansion SnapCard can be installed on to the expansion connector. For Advent panels, the expansion SnapCard can be installed in combination with other cards on either the primary or secondary expansion slot.

The SnapCard uses four, “Form C” dry contact relays. The relays are controlled by a touchpad or by a combination of states and events within the security system.

Examples of programmed outputs include turning on a CCTV or camera during a burglary alarm; turning on exit lights during fire alarms; and activating backup cellular phones or long-range radios when primary communications are inoperable.

Installation guidelines

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

  Note: For Advent panels, SnapCard expansion connectors must be used for either fire or burglary applications. Do not combine fire and burglary applications on SnapCard inputs and outputs.

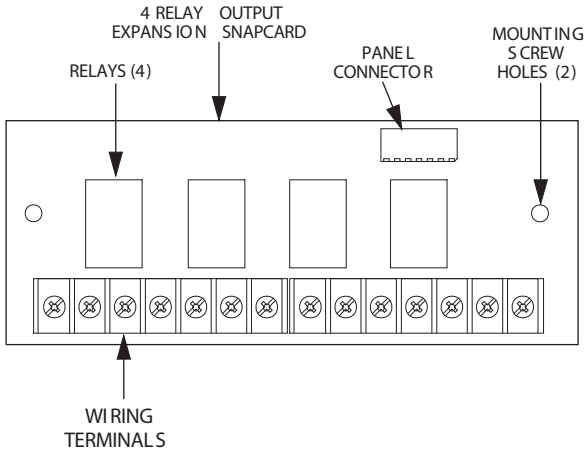
Tools needed

- Slotted and Phillips screwdrivers
- 22-gauge or larger diameter stranded wire
- Mounting screws (included)

Installation

Installation requires you to install the SnapCard, wire all output devices, and program the panel.

Figure 1. 4-Output expansion SnapCard components



Caution: You must be free of static electricity when handling electronic components. Touch a grounded, bare metal surface before touching the circuit board.

1. Disconnect panel AC power and any backup battery.
2. Align the SnapCard’s mounting holes with the panel’s standoffs and connector pins. Refer to Figure 2 for Concord, Concord Express V4, and Concord 4 panels; Figure 3 for Concord Express panels; and Figure 4 for Advent panels.

Figure 2. Concord, Concord 4, or Concord Express V4 SnapCard installation

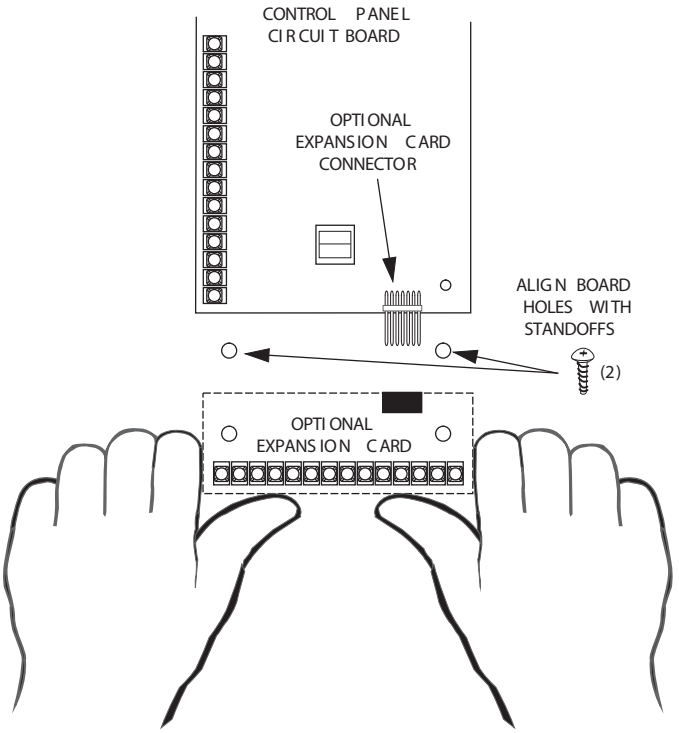


Figure 3. Concord Express SnapCard installation

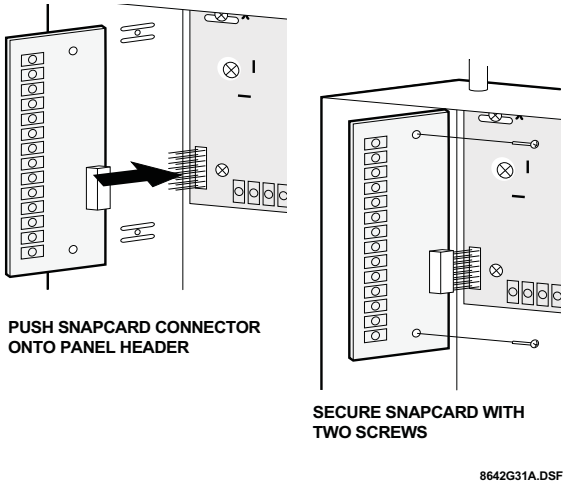
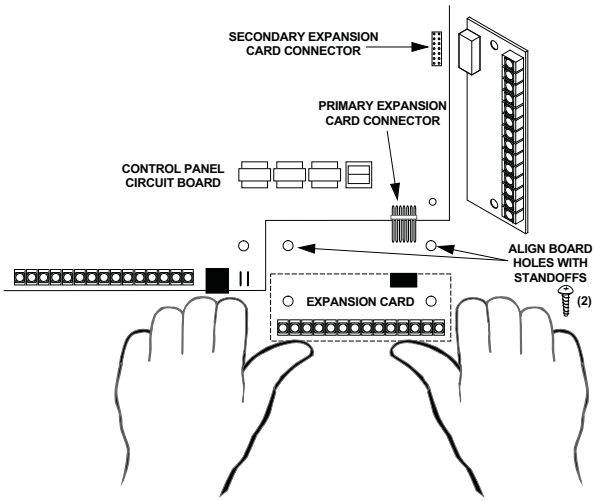


Figure 4. Advent SnapCard installation



3. To seat the card, firmly press it on to the connector.
4. Secure the card to the panel with the mounting screws.

Wiring

Note: Class 2, Class 3, and power-limited fire alarm circuits must be installed using FPL, FPLR, FPLP, or substitute cable as permitted by the National Electrical Code ANSI/NFPA 70. Wires that extend beyond the cable jacket must be separated from all other conductors by a minimum 1/4" or by a non-conductive barrier. Class 2, Class 3, and power-limited fire alarm circuit conductors must be installed as Class 1 or higher rated circuits.

Refer to Table 1 for a description of each SnapCard terminal. Terminals are numbered from left to right. Figure 5 (pg. 3) illustrates how to wire the expansion SnapCard.

Note: Each terminal listed in Table 1 is a Class 2 power-limited terminal

Table 1. SnapCard wiring terminal descriptions

Terminal number	Description	Use
1	Relay 1 NC	Normally closed (N/C) 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 @ 24V DC; 4A @ 24V AC; 1A @ 70V AC maximum.
3	Relay 1 NO	Normally open (N/O) Output 1 dry relay contact connection.
4	Relay 2 NC	Normally closed (N/C) 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 @ 24V DC; 4A @ 24V AC; 1A @ 70V AC maximum.
6	Relay 2 NO	Normally open (N/O) Output 2 dry relay contact connection.
7	Relay 3 NC	Normally closed (N/C) 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 @ 24V DC; 4A @ 24V AC; 1A @ 70V AC maximum.
9	Relay 3 NO	Normally open (N/O) Output 3 dry relay contact connection.
10	Relay 4 NC	Normally closed (N/C) 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 @ 24V DC; 4A @ 24V AC; 1A @ 70V AC maximum.
12	Relay 4 NO	Normally open (N/O) Output 4 dry relay contact connection.
13	GND	Common ground return connection for 12V DC supply output.
14	+12VDC	Auxiliary output regulated DC power supply. 12 VDC @ 0.5A maximum. This output draws 500 mA from the panel. Remember to include this current draw when calculating total panel power.

Wiring the SnapCard to a Panel

1. Disconnect panel AC power and any backup battery.
2. Wire each output device as shown in Figure 5.
3. Reconnect the backup battery and restore panel AC power.

Programming

In order for outputs to properly function, each output must be programmed into panel memory. Refer to specific panel *Installation Instructions* for programming information.

Testing

Once installed, the card becomes an integral operating component for the panel. It is recommended that you test each output device after programming is completed. Refer to specific panel *Installation Instructions* or *User's Manual* for output testing information.

Troubleshooting

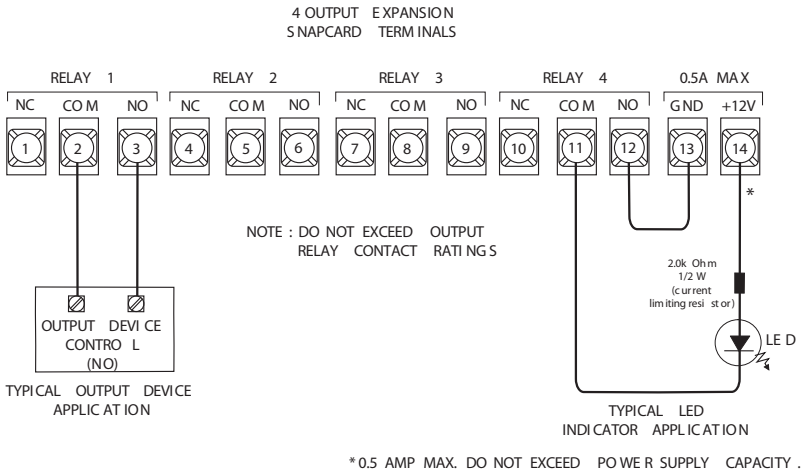
Table 2. Troubleshooting hardwire outputs

Problem	Action/Solution
Outputs do not activate	• Check panel/card programming. • Check output wiring connections. • Check panel/card power supplies. • Check optional external power supply to output devices.
One output fails to activate.	• Check specific panel/card programming outputs. • Check output wiring connections. • Check for programmed trigger events.
The wrong output activates.	• Check panel output programming. • Check output device wiring connections.

Specifications

Compatibility	Interlogix/GE Concord, Concord 4, Concord Express (v4), and Advent panels.
Power requirements	12V DC @ 142 mA typical with each 34 mA relay energized.
Outputs	Four panel-programmable outputs with Form-C relay contacts (Common, N/C, N/O). Relay contacts rated 4A @ 24V DC; 4A @24V AC; 1A @70V AC maximum. One 12V DC, 500 mA regulated power output from panel. 6 W maximum.
Storage temperature	-40° to 140°F (-40° to 60°C)
Operating temperature	32° to 140°F (0° to 60°C)
Maximum humidity	90% relative humidity, non-condensing
Dimensions	2.0" x 5.25" x 0.75" (H x W x D)
Installation	In-panel cabinet mounting.

Figure 5. 4-Output expansion SnapCard wiring diagram



Regulatory information

Manufacturer	UTC Fire & Security Americas Corporation, Inc. 1275 Red Fox Rd., Arden Hills, MN 55112-6943, USA

FCC compliance:

FCC Part 15 Information to the User

Changes or modifications not expressly approved by Interlogix 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

Contact information

For contact information, see www.utcfireandsecurity.com or www.interlogix.com.

For technical support, toll-free: 888.437.3287 in the US including Alaska, Hawaii, Puerto Rico, and Canada. Outside the tool-free area, contact your dealer.

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