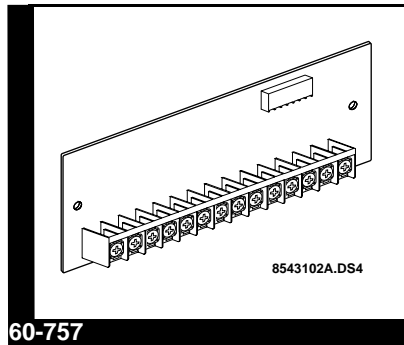


# 8Z Input Expansion SnapCard™

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## INSTALLATION INSTRUCTIONS

### Product Summary

The Eight Zone Input Expansion SnapCard™ enables you to add hardwire input devices to wireless Concord™ panels and additional hardwire input devices to Advent™ panels and to SuperBus™ 80Z Input/16 Output Modules.

The card includes the following:

- Two 12V two-wire smoke detector loops that provide power (100mA) to Style B (Class B) smoke detectors.
- Six supervised UL Fire rated hardwire loops (2k ohm EOLR required) that can be used for any hardwire device including:  
Four-wire smoke detectors, fire pulls, water flow detector switches, gate valve switches, control valve supervisory switches, butterfly valve switches, rate-of-rise detectors, carbon monoxide gas detectors, assorted other gas detectors and standard burglar devices.
- False alarm prevention.  
When the panel receives an alarm from a smoke detector, the panel briefly interrupts power to the smoke loop. The smoke detectors reset and recheck the alarm.

On Advent™ panels and SuperBus™ 80Z Input/16 Output Modules, this card may be installed into the primary or secondary expansion slot and in combination with other cards.

## Installation Guidelines

- Install a 2k ohm EOL resistor for each supervised hardwire loop.
- Plug the expansion card into the Concord™ panel expansion slot or either the primary or secondary expansion slot of the Advent™ panel or SuperBus™ 80Z Input/16 Output Module.
- Use 4-conductor, 22-gauge or larger stranded wire from the terminals to the devices.

## Tools Needed (optional)

- Small and medium size screwdrivers
- 22-gauge or larger stranded hookup wire
- Self-tapping metal screws (included)
- 2K ohm end-of-line (EOL) resistors (included)

## Installation

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

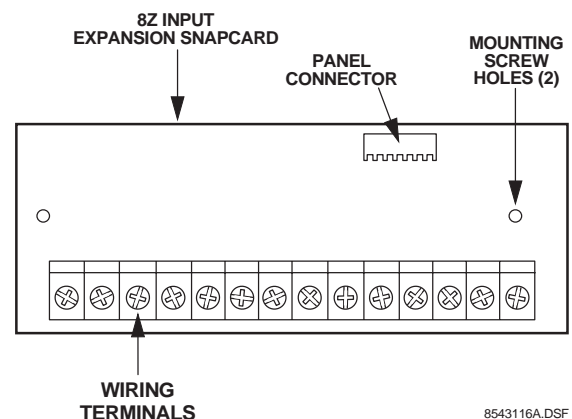
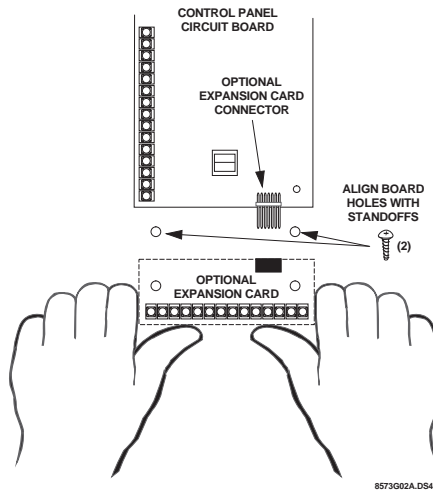
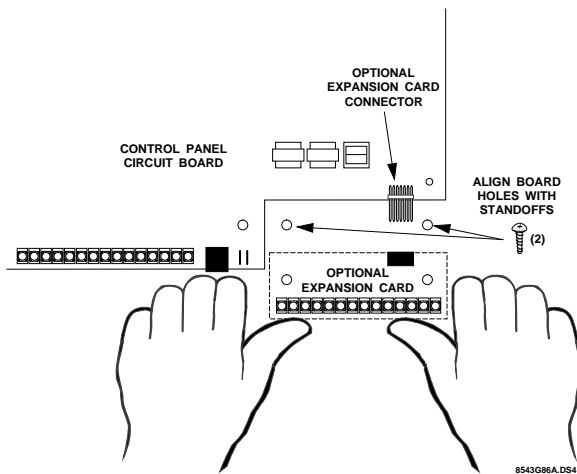


Figure 1. 8Z Input SnapCard Components



**Figure 2.** Installing the Card in Concord Panel



**Figure 3.** Installing the Card in Advent Panel and SuperBus 80Z Input/16 Output Module

**CAUTION:** To prevent damaging the panel or card, always remove panel AC power and disconnect backup battery before installation.

1. Remove panel AC power and disconnect backup battery.



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

2. Align the card holes with the panel standoffs and connector pins as shown in figure 2 or 3.

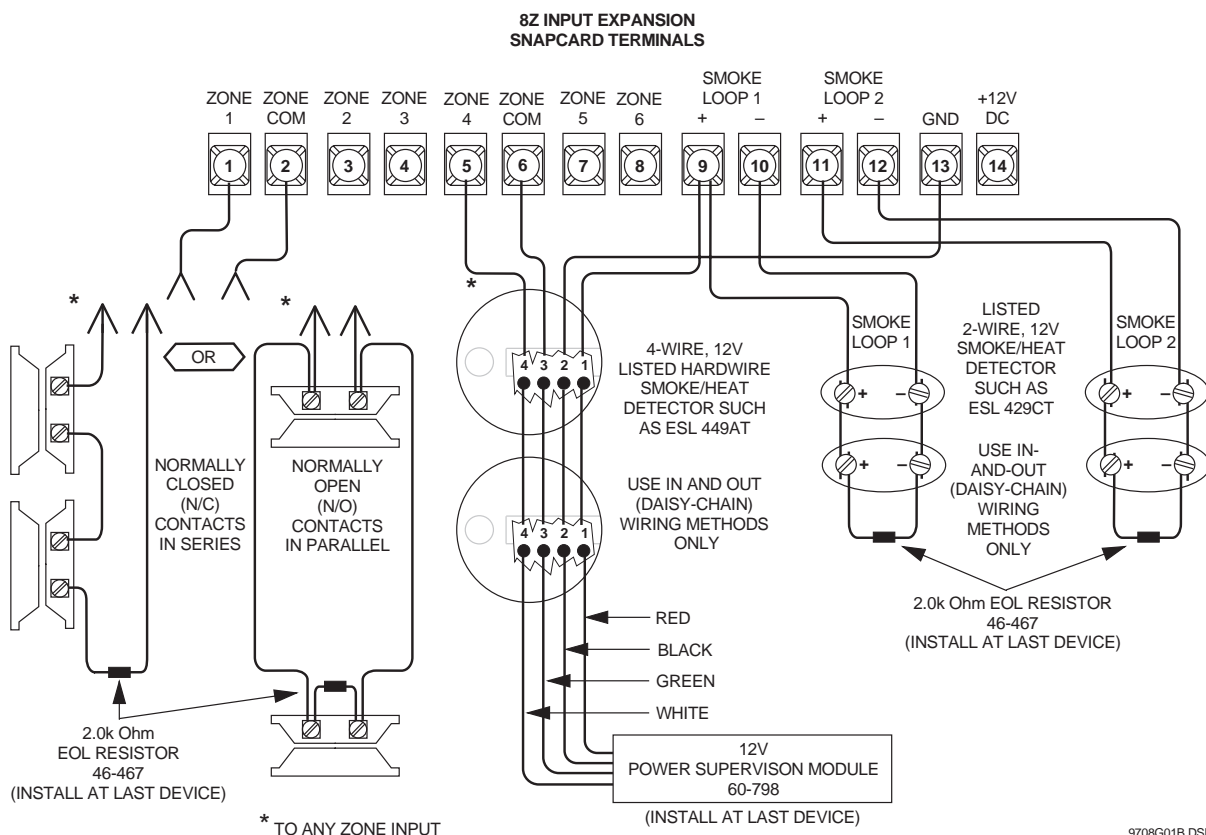
3. Press firmly to seat the board onto the connector
4. Secure the card to the panel cabinet with the two supplied self-tapping screws.

## Wiring

The following table and figure shows you how to wire the card. Terminals are numbered left to right

**Table 1. Wiring Terminal Descriptions**

Terminal Number	Description	Use
1	Zone 1	Hardwire Input zone 1
2	Zone COM	Common for zones 1, 2, & 3
3	Zone 2	Hardwire Input zone 2
4	Zone 3	Hardwire Input zone 3
5	Zone 4	Hardwire Input zone 4
6	Zone COM	Common for zones 4, 5, & 6
7	Zone 5	Hardwire Input zone 5
8	Zone 6	Hardwire Input zone 6
9	12V Smoke Loop 1 (Positive)	Positive side of 2-wire 12V smoke loop 1. Connect up to 20 12V class B smoke detectors between terminals 9 and 10. (Terminal also supplies +12 VDC switched power to 4-wire smoke detectors.)
10	12V Smoke Loop 1 (Negative)	Negative side of 2-wire 12V smoke loop 1.
11	12V Smoke Loop 2 (Positive)	Positive side of 2-wire 12V smoke loop 2. Connect up to 20 12V class B smoke detectors between terminals 11 and 12. (Terminal also supplies +12 VDC switched power to 4-wire smoke detectors.)
12	12V Smoke Loop 2 (Negative)	Negative side of 2-wire 12V smoke loop 2.
13	GND	Auxiliary power supply ground return.
14	+12V Out	Auxiliary regulated DC power supply. 12VDC @0.5A maximum.



**Figure 4. Typical Card Wiring**

**To wire the card (all panels):**

1. Wire the input devices or smoke detectors as shown in figure 3.
  - Use terminals 9 and 10 for the first two-wire 12V smoke detector loop. (You can connect up to 20 two-wire smoke detectors on this loop.)
  - Use terminals 11 and 12 for the second two-wire 12V smoke detector loop if needed.
2. Use EOL resistors on all hardwire loops as shown.
3. Reconnect the panel backup battery and restore panel AC power.

## Programming

Input zones must be programmed to communicate with the panel and to function as desired. For zone 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 input and output zones after all programming is completed and whenever a sensor or output related problem occurs. Refer to the panel *Installation Instructions* and *User's Manual* for sensor/zone testing information.

**Note:** While the sensor test is a valuable installation and service tool, it only tests sensor operation for the current conditions. You should perform a sensor test after any change in environment, equipment, or programming.

## Troubleshooting (all panels)

The following instructions help you diagnose and fix problems.

### No inputs detected.

1. Check panel programming of all inputs and outputs.
2. Check input device wiring and connections.

### One input is never detected.

1. Check panel programming of all inputs and outputs.
2. Check input device operation.
3. Check input device wiring and connections.

### Wrong input is detected.

1. Check panel input programming for that input.
2. Check input device wiring and connections.

### Sensor Trouble is indicated.

1. Check that the 2.0K ohm end-of-line resistor is correctly installed in the zone loop circuit.
2. Check normally open (N/O) input circuit for a break in the wires.
3. Check normally closed (N/C) input circuit for a short in the wires.

4. Check input circuit for wires shorted to ground.
5. Check that ZONE COM (terminals 2,5, & 8) are used for input zone commons and not GND (terminal 13).

## Specifications

**Compatibility:** Concord™ and Custom Versions panels, Advent™ and Custom Versions panels, Super-Bus™ 80Z Input/16 Output Module.

**Power Source:** 12 VDC @ 230 ma maximum (from panel and panel backup battery)

**Storage Temperature:** -30° to 120° F (-34° to 49° C)

**Operating Temperature:** 40° to 100° F (4° to 38° C)

**Maximum Humidity:** 70% relative humidity, noncondensing

**Inputs:** Six supervised UL Fire rated hardwire loops.

Two 12V two-wire smoke detector loops that provide power (100mA) to Style B (Class B) smoke detectors.

**Outputs:** One regulated 12V at 0.5A maximum auxiliary power supply.

**Dimensions:** 2.0" x 5.25" x 0.75" (H x W x D)

## Notices

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

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



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