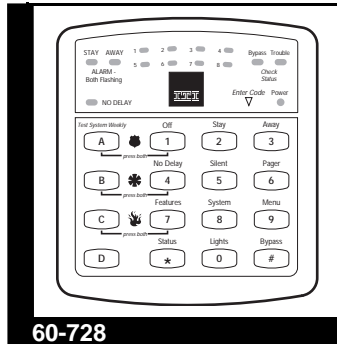# SuperBus™ 8Z LED Touchpad

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INSTALLATION INSTRUCTIONS

Product Summary

The SuperBus 8Z LED (light-emitting diode) Touchpad lets you control most system operations of a compatible security system (see the section "Specifications"). The LEDs provide a visual display of the systems' current status.

Additional features include the following:

- Built-in speaker for alarm and status sounds and button-press beeps
- Panic buttons for police, fire, and auxiliary emergencies

Installation Guidelines

- Mount the touchpad in an environmentally controlled area (40°F to 100°F).
- When mounting the touchpad's back plate, allow at least 4¼ inches on the left side for the Quick Guide slide-out card.
- For Concord™ systems, up to 16 SuperBus devices can be connected to the panel including SuperBus 2x16 LCD Alphanumeric Touchpads, SuperBus RF Receivers, HIM, HOM, ESM, etc.
- Up to 4 SuperBus 8Z LED Touchpads can be connected to Concord panels.
- Each SuperBus device must have a different device address to operate correctly. The touchpad

uses DIP switches for setting the device address (factory set to 3).

- Maximum current draw of the touchpad is 65 mA.
- Do not exceed the panel's maximum available power when using panel power for bus devices and hardwire detectors (see the specific panel's installation instructions for maximum available power.)
- Tables 1 and 2 describe the wiring limits for Concord security systems that include an LED touchpad.

Table 1. Maximum Touchpad Wire Lengths

Wire Gauge (Unshielded or Shielded)	Max. Touchpad Wire Length Between LED Touchpad and Concord Panel
18	700 feet
22	300 feet

Table 2. Combined Total of all Bus Device Wire Lengths

Wire Gauge	Combined Total of all Bus Device Wire Lengths for Concord Systems with LED Touchpad
18—unshielded 18—shielded	1,600 feet 900 feet
22—unshielded 22—shielded	2,000 feet 1,300 feet

Tools and Equipment Needed

- Screwdriver
- #6 screws and anchors (included)
- Panhead screws for a gang box installation
- Saw or utility knife for cutting wallboard
- SuperBus 2x16 LCD Alphanumeric Touchpad (for entering program mode)

Installation

The touchpad can be installed on a wall or electrical gang box, either single- or dual-gang.

Installing the Mounting Plate

1. Separate the mounting plate from the touchpad by pressing the tab at the bottom and sliding the mounting plate down (see Figure 1).
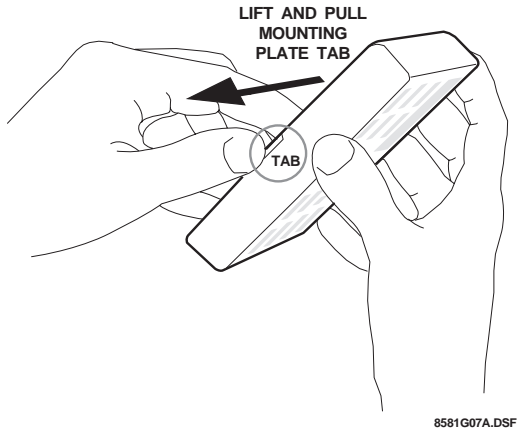

8581G07A.DSF

Figure 1. Separating the Touchpad from the Mounting Plate

2. Place the mounting plate on the wall and mark the four mounting holes (see Figure 2). Be sure to leave a 4¼ inch clearance on the left side to allow for the Quick Guide slide-out card.
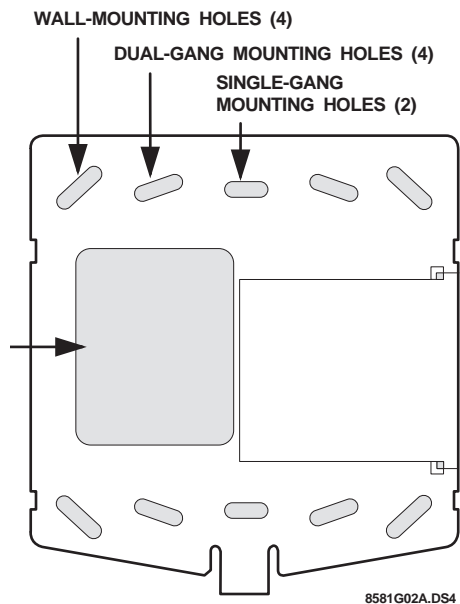

WALL-MOUNTING HOLES (4)
DUAL-GANG MOUNTING HOLES (4)
SINGLE-GANG MOUNTING HOLES (2)

8581G02A.DS4

Figure 2. Marking the Mounting Holes

3. Insert anchors at the marked locations where studs are not present.

4. Looking at the back side of the mounting plate, turn it so the tab is on the left (see **A** in Figure 3) and position the Quick Guide slide card into the slots on back of the mounting plate as shown in Figure 3 (**A**). Make sure the card is unfolded and the 'Zones' section is facing you.

5. Slide the card in the direction of the arrow in Figure 3 (**A**) until it snaps into the position shown in Figure 3 (**B**).

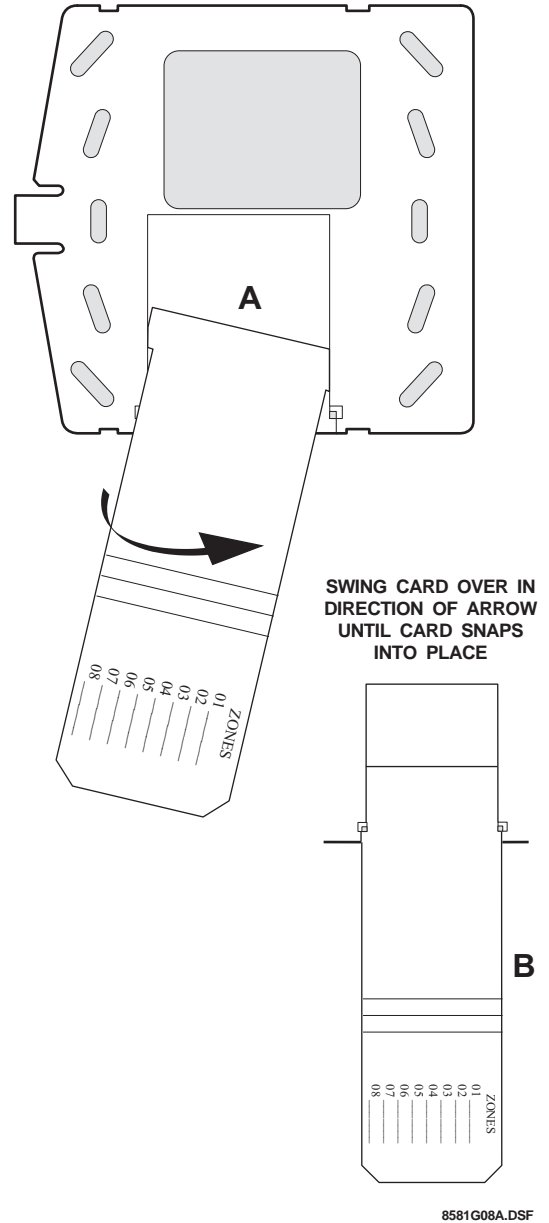SWING CARD OVER IN DIRECTION OF ARROW UNTIL CARD SNAPS INTO PLACE

8581G08A.DSF

Figure 3. Inserting the Quick Guide Slide Card into the Mounting Plate

6. Position the mounting plate in its normal mounting position (tab at the bottom) and fold the card toward you at all three scored lines. The "Zones" section should be facing you and the folds should create a tab to slide the card in and out.

7. Align the mounting plate wall-mount holes with the wall anchors and secure the back plate to the wall using the screws provided.

or-- If installing the backplate on an electrical gang box, line up the appropriate gang box holes on the mounting plate with the gang box holes and secure the back plate to the gang box using the screws provided.

Note: Do not overtighten screws or the back plate may bind and prevent the touchpad from mounting properly.

8. For wall-mounted installations, cut a hole in the wall in the wire access area of the mounting plate to pull your cable through for wiring.

Wiring

Wiring consists of connecting the touchpad to the panel terminals.

Wiring the Touchpad to Concord Panels

1. Disconnect the panel's transformer and backup battery.
2. Run a 4-conductor, 18- to 22-gauge wire from the panel to the touchpad location.
3. Splice the 4-conductor cable wires to the red, black, green, and white wires located on the back of the touchpad.

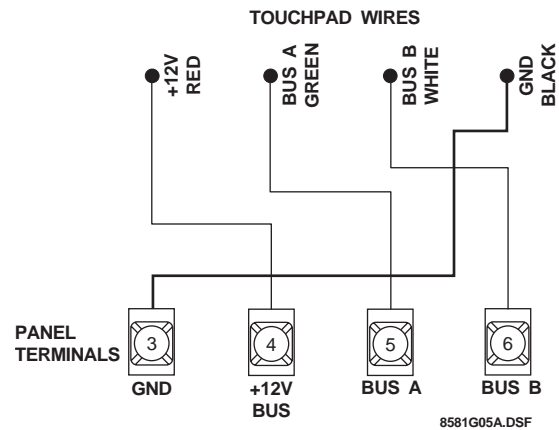4. Connect the touchpad wiring to the panel terminals as shown in Figure 4

Figure 4. Wiring the Touchpad to Concord Panels

Setting the Touchpad's Device Address

Before powering up the panel, the touchpad's DIP switches must be set to a device address different from all other bus devices to ensure correct operation and avoid bus conflicts. In most installations, the default setting of 3 (both DIP switches on) should work.

Use the following guidelines to avoid communication conflicts between bus devices and the panel:

■ All bus devices with address DIP switches (LED Touchpad, ESM, HIM, etc.) must be set to the desired address before applying power and entering the program mode.

■ Whenever possible, assign touchpad addresses before all other panel programming.

To set the touchpad's unit number:

1. Locate the DIP switches on the back of the touchpad, at the upper-left corner.
2. Set the DIP switches to an address different from all other bus devices connected to the panel. Figure 5 shows the possible touchpad unit number settings.
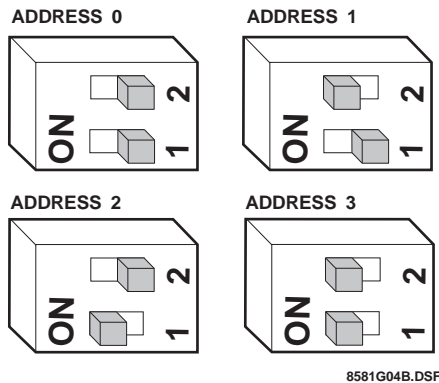
Figure 5. Setting the Touchpad's Device Address

Attaching the Touchpad to the Mounting Plate

1. Align the four slots on the touchpad with the four tabs on the mounting plate.
2. Slide the keypad down until you hear the latch on the mounting plate click into place.

Power Up and Bus Communication

After making all wiring connections from the touchpad to the panel and setting the device address, you are ready to power up the panel. The panel automatically learns the address of each bus device when you apply power. However, only alphanumeric touchpads can be used to enter installer programming mode. LED touchpads have only user programming capabilities.

If you plan on installing systems with no alphanumeric touchpads, it is recommended that you keep an alphanumeric touchpad with you, specifically for programming.

To power up the panel and verify bus communication:

1. Verify that all wiring between the panel and touchpad is correct.
2. Connect the panel battery and plug in the panel transformer. Alphanumeric touchpads should show a date and time display.
3. At an alphanumeric touchpad, enter program mode by pressing **8** + **installer CODE (default = 4321) + 0 + 0**. The touchpad should display *SYSTEM PROGRAMMING*.
4. Press **#** and the display shows *SECURITY*.

5. Press **A** or **B** until the display shows *ACCESSORY MODULES*, then press **#**. The display should read *BUS DEVICES*.
6. Press #. The display shows the lowest address and its device name. For example, an alphanumeric touchpad address display looks like this:
   UNIT - TYPE
      01 - ATP
7. Press **A** or **B** to cycle through all bus devices until the LED touchpad (identified as LTP) appears. For example:
   UNIT - TYPE
      03 - LTP
8. After verifying the touchpad address, press ***** repeatedly until the display shows *SYSTEM PROGRAMMING*.
9. Press **A** or **B** until the display shows *EXIT PROGRAMMING*.
10. Press **#** to exit program mode. The display shows the date and time display.

Changing the Touchpad's Device Address

Use the following guidelines when changing unit number assignments to avoid communication conflicts between bus devices and the panel:

■ All bus devices with DIP switches (LED Touchpad, ESM, HIM, etc.) must be set to the desired address before applying power and entering the program mode.

■ Whenever possible, assign touchpad addresses before all other panel programming.

To change the touchpad's device address:

1. Remove AC and backup battery power from the panel.
2. Change the DIP switch setting on the back of the LED touchpad (see Figure 5). Remember, the setting must be different from all other bus devices.
3. Apply AC and backup battery power to the panel. The panel automatically scans all bus devices and learns any new settings.
4. The system may still indicate a bus failure if the panel learned an address that is no longer assigned to any bus device. To clear the failure, enter program mode, locate the address (under *BUS DEVICES*) and delete it by pressing **D**.
5. Exit from program mode. The touchpad and all other bus devices should operate correctly and any bus failures should be cleared.

Testing

Test the touchpad by arming/disarming the system, activating the touchpad panics, bypassing sensors, and by turning chime and lights on/off to verify correct operation. Refer to the panel's *Owner's Manual* for system operating instructions.

CAUTION: **Contact the central monitoring station *before* activating alarms, to avoid dispatching local police and fire departments.**

Troubleshooting

Table 2 describes what to do if the touchpad does not operate correctly.

Table 3. Troubleshooting

Problem	Action/Solution
Touchpad doesn't power up (no LEDs turn on and buttons don't beep when pressed).	1. Check for correct wiring connections at touchpad and panel terminals. 2. Make sure panel battery is connected correctly and that the panel transformer is plugged in. 3. Make sure panel transformer is not plugged into an electrical outlet controlled by a switch. Relocate transformer to an unswitched outlet location, if necessary.
No LEDs turn on but beeps sound when buttons are pressed.	1. Check for correct bus wiring connections (green and white wires) at touchpad and panel terminals. 2. Make sure touchpad DIP switches are set to a different address than all other bus devices. If necessary, change DIP switch setting by removing panel power, changing the DIP switch settings, then re-apply power to the panel.

Table 3. Troubleshooting

Problem	Action/Solution
Touchpad TROUBLE LED is flashing rapidly and system doesn't respond to commands from touchpad.	1. Check for correct bus wiring connections (green and white wires) at touchpad and panel terminals. 2. Make sure touchpad DIP switches are set to a different address than all other bus devices. If necessary, change DIP switch setting by removing panel power, changing the DIP switch settings, then re-apply power to the panel.

Specifications

Compatibility: Concord and Custom Versions

Power Requirements: 12 VDC nominal (8 - 14 VDC), 65 mA (maximum)

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

Maximum Humidity: 70% relative, noncondensing

Dimensions: 5.0" H x 4.50" W x .92" D

Notices

This equipment 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.

This equipment has been tested and found to comply with the limits for a class B device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful 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 on the radio or TV.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

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