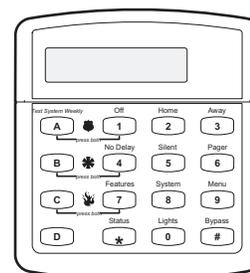# Multilingual SuperBus® 2000 2x16 LCD Alphanumeric Touchpad

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Installation Instructions

Product Summary

The Multilingual SuperBus 2000 2x16 LCD (liquid-crystal display) Alphanumeric Touchpad lets you control all programming and operation of the International Concord security system.

The 2-line, 16-character display provides messages to indicate the current status of the system. The touchpad includes police, fire, and auxiliary panic buttons that can be activated anytime. A built-in speaker provides alarm, status, and button-press sounds.

This touchpad can be quickly connected and disconnected from the panel circuit board, as described later in this document. If you plan on installing systems with no alphanumeric touchpads, you may want to keep one of these touchpads with you for programming.

Installation Guidelines

❑ Mount the touchpad in an environmentally controlled area (4°C to 38°C or 40°F to 100°F).

❑ When mounting the touchpad, allow at least 4¼ inches on the left side for the Quick Guide slide-out card.

❑ Do not exceed the maximum available power. See the panel installation instructions for maximum available power when using panel power for bus devices and hardwire devices.

> **Important !**
> If separate power supplies are necessary to accomodate bus devices and hardwire devices, safety standards require that each power supply be prominently marked with adequate instructions for removing all power from the unit.

❑ Table 1 describes the power used by the touchpad.

❑ Table 2 describes the maximum wire lengths allowed between the touchpad and the panel.

❑ Up to 16 SuperBus 2000 devices can be connected to and addressed by an International Concord panel.

❑ Language and bus device address settings are automatic for International Concord systems.

Table 1. Touchpad Power Usage

Current (mA)	Conditions
115	Maximum alarm current with the buzzer sounding and the keypad illuminated from a keypad press
90	Maximum alarm current with the buzzer sounding or a keypad press, but not both.
57	Typical operation
12	Standby current (no AC power)

Table 2. Maximum Touchpad Wire Lengths

Wire Gauge (Unshielded or Shielded)	Max. Touchpad Wire Length Between Touchpad and Panel
18	750 feet
22	300 feet

Tools and Equipment Needed

❑ 4-conductor, 22- or 18-gauge wire

❑ Screwdriver

❑ #6 screws and anchors (included)

❑ Panhead screws for gang box installation
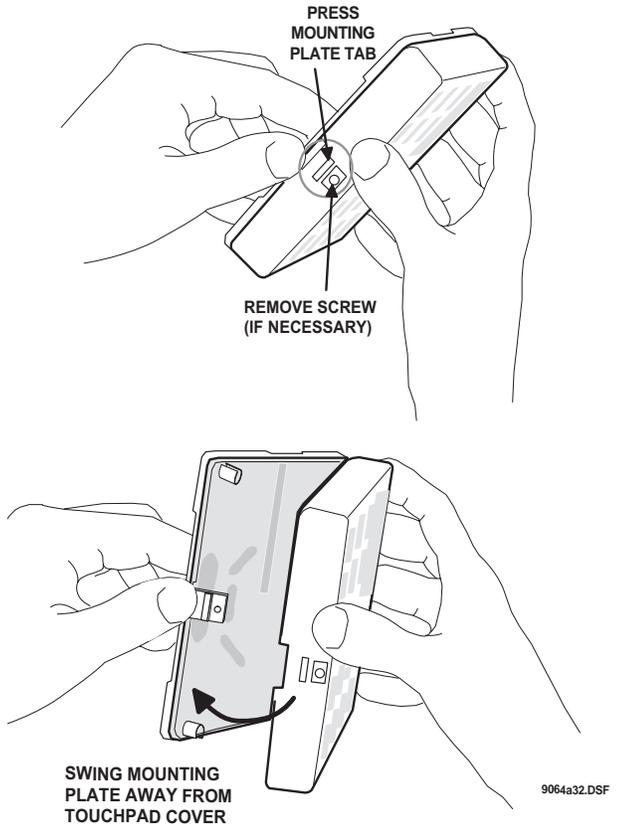
❑ Saw or utility knife for cutting wallboard

Figure 1. Separating the Touchpad from the Mounting Plate

Figure 2. Marking the Mounting Holes

Installation

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

To comply with safety standards, the touchpad must be secured to the building structure before operation.

Installing the Mounting Plate

1. Separate the mounting plate from the touchpad by first removing the screw, if necessary. Then press in the tab at the bottom and swing the mounting plate away from the touchpad cover (see Figure 1).

2. For wall-mount installations, place the mounting plate on the wall. Mark the wall at the break-away tamper hole and the 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. Insert anchors into the wall at the marked locations where studs are not present.

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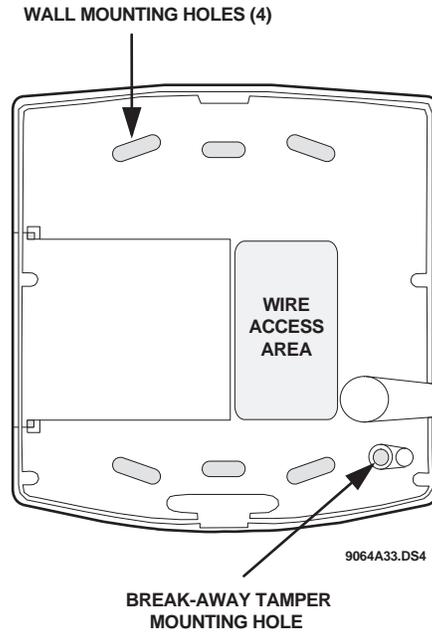
4. Slide the card in the direction of the arrow until it snaps into the position shown.

5. 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.

6. Align the mounting plate holes with the wall or gang box screw holes and secure the back plate using the screws provided.

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

7. For wall-mount installations, cut a hole in the wall in the wire access area of the mounting plate to pull the wiring cable through.
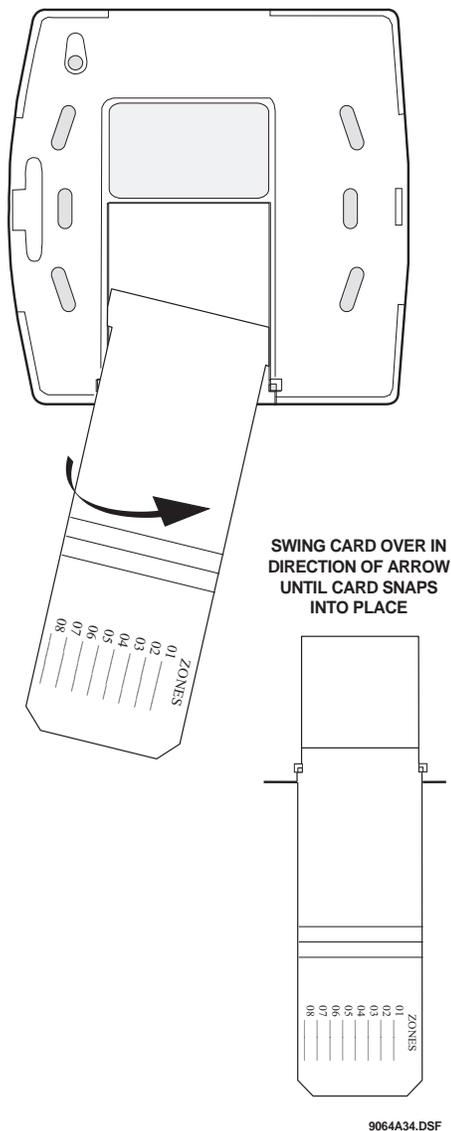
**SWING CARD OVER IN
DIRECTION OF ARROW
UNTIL CARD SNAPS
INTO PLACE**

ZONES
01 02 03 04 05 06 07 08

ZONES
01 02 03 04 05 06 07 08

9064A34.DSF

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

Wiring

Wiring consists of connecting the touchpad to the panel terminals.

Wiring the Touchpad to International Concord Panels

1. Remove power from the panel and disconnect the backup battery.

2. Run a 4-conductor, 18- to 22-gauge wire from the panel to the touchpad location (see Table 2).

3. Connect the 4-conductor cable wires to the +12V, A, B, and GND terminals on the back of the touchpad.

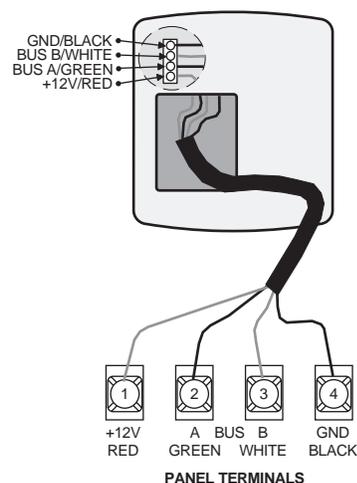4. Connect the touchpad wiring to the panel terminals as shown in Figure 4.

GND/BLACK
BUS B/WHITE
BUS A/GREEN
+12V/RED

1	2	3	4
+12V RED	A GREEN	BUS B WHITE	GND BLACK

PANEL TERMINALS

Figure 4. Wiring the Touchpad to Panel Terminals

Attaching the Touchpad to the Mounting Plate

Align the tab at the top of the touchpad with the slot on the mounting plate and swing the touchpad down until you hear the latch on the mounting plate click into place. Install the screw into the bottom of the touchpad.

Power Up and Bus Communication

After making all wiring connections from the touchpad to the panel, you are ready to power up the panel and verify correct communication between the touchpad and the panel. Upon power up, the panel scans the bus for connected devices, assigns a unit number to each bus device, and automatically learns the device ID number of each bus device.

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 restore AC power. Alphanumeric touchpads briefly show *SCANNING BUS DEVICES,* then display date and time.

   Note
   Steps 3 through 10 are optional.

3. At the touchpad, enter program mode by pressing ⑧ + **installer/dealer code (default** = ⑤④③②①) + ⓪ + ⓪. The touchpad should display *SYSTEM PROGRAMMING*.

4. Press ⌗ and the display shows *SECURITY*.

5. Press Ⓐ or Ⓑ until the display shows *ACCESSORY MODULES*, then press ⌗. The display should read *BUS DEVICES*.

6. Press #. The display shows the lowest device address and its ID. The following example shows what the International Concord device address display may look like:
    UNIT - ID
    0—02110185*
    *The 8-digit SuperBus ID number is also located on a label on back of the touchpad.

7. Press Ⓐ or Ⓑ to cycle through all bus device addresses until the touchpad appears.

8. After verifying the touchpad device ID, press ✶ repeatedly until the display shows *SYSTEM PROGRAMMING*.

9. Press Ⓐ or Ⓑ until the display shows *EXIT PROGRAMMING READY*, then press #. The touchpad should show the date and time display.

Programming

To progam options for the newly installed touchpad (such as key beeps and display brightness) see the panel installation instructions.

Connecting the Touchpad for System Programming Only

For system programming of installations that don't include an alphanumeric touchpad as a permanent part of the system, you can temporarily connect the touchpad to the panel.

To do this, you must first connect a Programming Touchpad Cable (60-858) to the touchpad wires (see the installation instructions included with the cable). Then connect the cable to the Programming Touchpad Header on the panel.

> **Note**
> Be aware that the "partition jumping" feature is not available to users when a temporary programming touchpad is connected to the International Concord panel Programming Touchpad Header.
>
> If you need to use partition jumping while the touchpad is connected to the Programming Touchpad Header, you must add the touchpad to panel memory as if it were a permanent touchpad. To do this, you must remove power from the panel before connecting the Programming Touchpad Cable to the panel. Then use the procedure described earlier in this manual under "Power Up and Bus Communication."

To connect a programming touchpad to an International Concord panel:

1. *With the panel powered up,* connect the cable onto a panel Programming Touchpad Header (see Figure 5).

    > **Note**
    > If you connect the touchpad before the panel is powered up, the panel will add the touchpad to system memory when power is applied. You will then need to delete the touchpad from the panel memory before you disconnect it to prevent a bus failure. See the panel installation instructions for more information.

2. Enable the programming (or service) touchpad by pressing Ⓑ + **installer or dealer code** + Ⓞ + Ⓩ. While the service touchpad is active, the touchpad will show a flashing star and trouble beeps will sound (5 beeps per minute).

3. Enter programming mode by pressing Ⓑ + **installer or dealer code** + Ⓞ + Ⓞ and program the panel using the panel *installation instructions.*

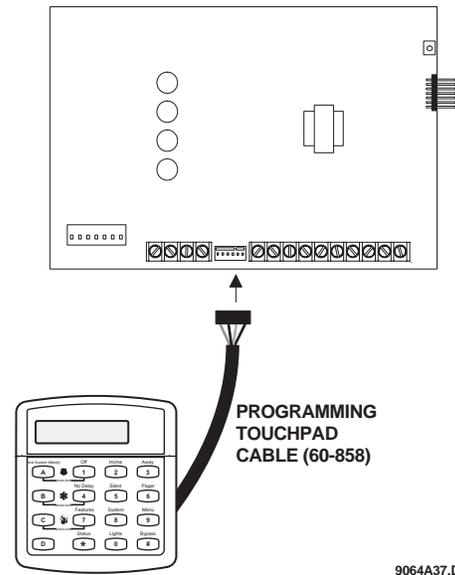4. When programming is completed, simply disconnect the programming touchpad.

Figure 5. Where to Connect a Programming Touchpad

Testing

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

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 *User's Manual* for complete system operating instructions.

Adjusting Display Contrast

The touchpad display contrast can be adjusted for easier viewing to help compensate for lighting conditions in the touchpad location. The contrast adjustment lightens or darkens the text.

To adjust display contrast:

1. Enter configuration mode by pressing the ⌨ and ⑥ buttons together for at least two seconds. The display shows *DA nnn*.
2. Press and release the ① and ② buttons together repeatedly, until the desired contrast level is displayed.
3. Press ✳ and the display briefly shows *DONE*, then shows the time and date.

Troubleshooting

Table 3 describes what to do if the touchpad does not operate correctly.

Table 3: Troubleshooting

Problem	Action/Solution
Touchpad doesn't power up (no display and no beeps when buttons are pressed).	1. Check for correct wiring connections at touchpad and panel terminals. 2. Make sure panel battery is connected correctly and that AC power is present.
Touchpad display appears blank, but beeps sound when buttons are pressed.	Check the touchpad display contrast setting.
Touchpad display shows a flashing *, indicating a trouble condition and system doesn't respond to commands from touchpad.	Check for correct bus wiring connections (green and white wires) at touchpad and panel terminals.

Specifications

Compatibility: International Concord

Power Requirements: 12 VDC nominal (8 - 15.4 VDC), 115 mA (maximum), see Table 1.

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

Maximum Humidity: 70% relative, noncondensing

Dimensions: 5" (127 mm) x 4.5"(114 mm) x 1" (25 mm)

Notices

This Intruder Alarm System Accessory (Security Grade 2, Environmental Class II) has been manufactured to comply with the following European directives:

[i] EMC Directive 89/336/EEC amending directive 92/31/EEC & 93/68 EEC as per

EN 50081: 1992
EN 50130-04: 1995

[ii] Low Voltage Directive (Safety) 73/23/EEC as per

EN 60950: 1997-A11

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

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