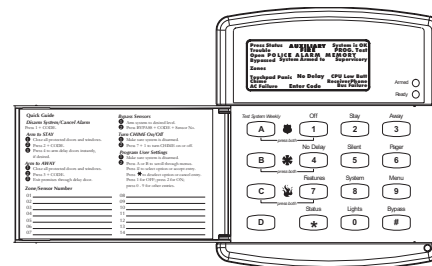


# SuperBus<sup>®</sup> 2000 Fixed Display Touchpad



Document Number: 466-1668 Rev. B  
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## Installation Instructions

### Product Summary

The SuperBus 2000 Fixed Display Touchpad lets users operate a Concord Express or Concord (software version 2.0 or newer) security system and change user programmable settings.

The display provides messages to system users that indicate system status during system operation and data-entry feedback while in user-programming mode. Display background brightness can be adjusted to accommodate for lighting conditions at the touchpad location.

Two LEDs provide arming and system trouble status. Refer to the specific panel *User's Guide/Owner's Manual* for LED function information.

A built-in speaker provides status and alarm tones. Chime and trouble beep tone frequency (pitch) can be changed to a more desirable or distinct tone, and to compensate for hearing impaired persons.

Police, fire, and auxiliary panic buttons can be activated anytime in case of an emergency.

A label on the inside of the touchpad door provides users with basic system commands for quick and easy reference of system operation and user programming.

Each touchpad is preset from the factory with an ID number (SuperBus 2000 technology), eliminating DIP switch settings and speeding up installation.

**Note**  
This touchpad cannot be used for installer programming. You must connect an alphanumeric touchpad to the panel to perform on-site programming, or use ToolBox Downloader (software version 5.1 or newer).

### Installation Guidelines

- ❑ Mount the touchpad in an environmentally controlled area (32°F to 120°F) (0°C to 49°C).
- ❑ For Concord Express systems, up to 4 bus devices can be connected to the panel.
- ❑ For Concord (software versions 2.0 and newer), up to 16 bus devices can be connected to the panel.
- ❑ Maximum current draw of the touchpad is 65 mA.
- ❑ Minimum current draw of the touchpad when the panel is operating on backup battery only, is 11 mA.
- ❑ Do not exceed the maximum available panel power when using panel power for bus devices and hardware detectors (see specific panel *Installation Instructions*).

- ❑ Follow the maximum wire length guidelines in Table 1.

**Table 1. Maximum Touchpad Wire Lengths**

| Wire Gauge (Unshielded or Shielded) | Maximum Wire Length Between Touchpad and Panel |
|-------------------------------------|--|
| 18                                  | 750 feet                                       |
| 22                                  | 300 feet                                       |

### Tools and Equipment Needed

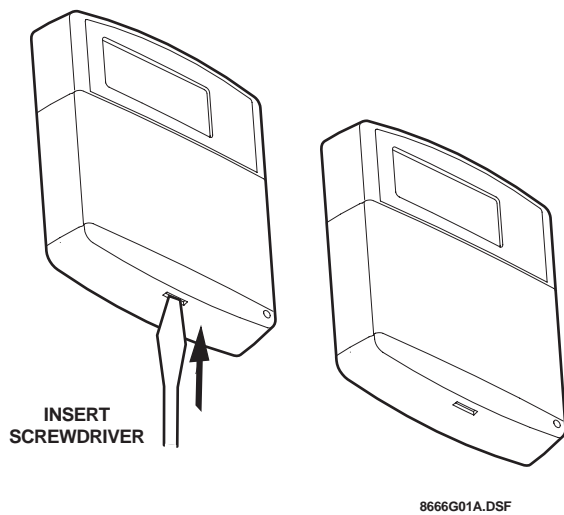
- ❑ 4-conductor, 22- or 18-gauge wire
- ❑ Screwdrivers
- ❑ Drill with bits
- ❑ #6 screws and anchors (included)
- ❑ Panhead screws for a gang box installation
- ❑ Saw or utility knife for cutting wallboard

### Installation

This section describes touchpad mounting and wiring.

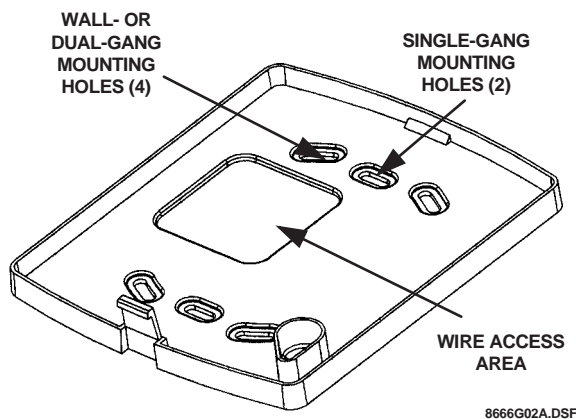
#### Installing the Mounting Plate

1. Insert the blade of a small screwdriver at the top of the slot, located on the bottom of the touchpad and gently press down until the mounting plate separates from the touchpad (see Figure 1).



**Figure 1. Separating the Touchpad from the Mounting Plate**

2. Remove the mounting plate and set the touchpad aside.
3. Place the mounting plate on the wall and mark the four mounting holes (see Figure 2).



**Figure 2. Marking the Mounting Holes**

4. Drill holes and insert anchors at marked locations where studs are not present.
5. Align the mounting plate wall-mount holes with the wall anchors and secure the back-plate to the wall using the screws provided.

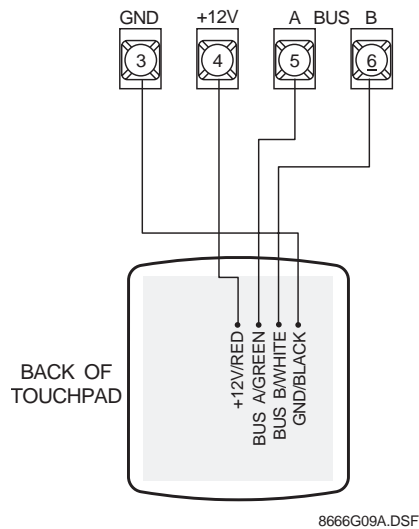
If installing the back-plate on an electrical gang box, align the appropriate gang box holes and secure the back-plate to the gang box using the panhead screws provided.

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

6. 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

1. Remove panel AC power and disconnect the 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 to the panel terminals as shown in Figure 3.



**Figure 3. Wiring the Touchpad to the Panel**

5. Set the top of the touchpad on top of the mounting plate (so it hangs), then press inward on the bottom portion of the touchpad until you hear the bottom latch click into place.

## 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 and automatically learns the unit number of each bus device.

**Note**  
If you plan on installing systems with no alphanumeric touchpads, it is recommended that you keep an alphanumeric touchpad with you, specifically for installer programming. This touchpad can be quickly connected and disconnected from the header pins on the lower-left portion of the panel, just above the terminal strip.

### 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. The touchpad should display *BUS SCAN*, then show a time display with the *PRESS STATUS* prompt in the upper-left corner.

#### Note

If the touchpad does not power up (show any display) or respond as described above, unplug the panel AC transformer and disconnect the backup battery. Proceed to the "Troubleshooting" section.

## Testing

Use the following procedures to test the touchpad for display function, button function and system operation.

### To test touchpad display function:

Press and hold the [4], [5], and [6] buttons together for about three seconds, then release them.

The touchpad cycles through all text messages, then returns to the time display.

### To test button function:

1. Press and hold the [7], [8], and [9] buttons together for about three seconds, then release them. The display should go blank.
2. Press each touchpad button to display a string of that button's number or letter. For example, *!!!!!!!!!!!!, A A A A A A A A A A A A*, etc.

Pressing [\*] displays Es and pressing [#] displays Fs.

After about 15 seconds of no touchpad activity, the touchpad returns to the time display.

### To test for system operation:



#### CAUTION

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

#### Note

The touchpad panic buttons must be enabled in order to activate them. Please see the panel *Installation Instructions* for more information.

Arm/disarm the system, activate the touchpad panics, bypass sensors, and turn chime on/off to verify correct operation.

Refer to the panel *User's Guide/Owner's Manual* for complete system operating instructions and user programming procedures.

## Adjusting Display Brightness

The background lighting (provided by yellow LEDs) of each touchpad can be adjusted individually to help compensate for lighting conditions at the touchpad location. The brightness adjustment lightens or darkens the display background and button lighting.

### To adjust display background brightness:

1. Enter user programming mode by pressing [9] + **system master** [C][0][0][E]. The display shows *SYSTEM MENU*, then *TIME - dATE*.
2. Press [A] or [B] until the display shows *OPTIONS*, then press [#]. The display shows *dOWnLd ON*.
3. Press [A] or [B] until the display shows *BRIgHT 2* (default setting).
4. Enter a setting from **0** (LEDs off) to **3** (brightest), then press [#]. The display shows the new setting.
5. Exit user programming by pressing
  - [\*] + [4] + [#] for Concord Express panels,
  - or [\*] + [0][0] + [#] for Concord panels.

## Changing Chime and Trouble Beep Tones

The frequency (pitch) of chime and trouble beep tones from each touchpad can be adjusted to a more desirable or distinct tone, and to compensate for hearing impaired persons.

#### Note

Chime and trouble beep tones sound (using the default frequency) during, or within 15 seconds of any button activity at that specific touchpad.

### To change status tone pitch:

1. Press and hold the [\*] and [0] buttons together until you hear a steady tone, then release the buttons.
2. Press and hold [1] to lower the pitch or press and hold [2] to raise the pitch.
3. Release the button when the desired pitch is heard.

After about 15 seconds of no touchpad activity, the steady tone stops sounding.

## Troubleshooting

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

**Table 2. Troubleshooting**

| Problem   | Action/Solution   |
|---|---|
| Touchpad doesn't power up (no display and no beeps when buttons are pressed). | <ol style="list-style-type: none"> <li>1. Check for correct wiring connections at touchpad and panel terminals.</li> <li>2. Make sure panel battery is connected correctly and that the panel transformer is plugged in.</li> <li>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.</li> </ol> |
| Touchpad display appears blank, but beeps sound when buttons are pressed.     | Check for correct bus wiring connections (green and white wires) at touchpad and panel terminals.   |

## Specifications

- Compatibility: Concord Express, Concord (software versions 2.0 or newer)
- Power Requirements: 12 VDC nominal, 65 mA (maximum)
- Operating Temperature: 32°F (0°C) to 120°F (49°C)
- Storage Temperature: -30°F (-34°C) to 140°F (60°C)
- Maximum Humidity: 90% relative, noncondensing
- Dimensions: 5.7" x 4.9" x 1.1" (H x W x D)
- UL Listings (see note): UL 985 Household Fire Warning System Units  
 UL 1023 Household Burglar-Alarm System Units  
 UL 1610 Central Station Burglar-Alarm Units

**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 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.



**Interactive Technologies, Inc.**  
 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

Security  
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