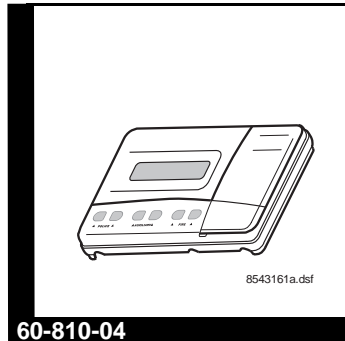


Fire SuperBus® 2000 2X20 VFD Alphanumeric Touchpad

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Installation Instructions

Product Summary

The ITI® Fire SuperBus® 2000 2x20 VFD (vacuum fluorescent display) Alphanumeric Touchpad gives you complete on-site system programming and operation control of Advent® fire/security systems.

A two-line by 20-character display provides visual status messages for each system partition. The display identifies by name any programmed location so the user can determine where an alarm, trouble, or open-zone/sensor condition exists. Up to 40 characters can be displayed without scrolling.

Zone/sensor names are stored in the panel and not in the touchpad, eliminating the need for downloading text display data from one touchpad to another.

Touchpad buttons light up after the first button press for easy night viewing. This lighting automatically turns off after approximately 15 seconds of no touchpad activity.

On SuperBus 2000 compatible systems such as Advent, there is no need for manual setting of SuperBus device unit ID numbers. The panel automatically reads and sets all connected device unit ID settings. The panel also automatically resolves any unit ID setting conflicts.

Additional features include the following:

- Built-in sounder for alarm and status tones and button-press beeps
- Accidental activation resistant operating buttons
- Built-in supervised local hardwire (touchpad enable keyswitch) input
- Large, bright, easy-to-read display
- Simple “telephone-type” numeric touchpad
- Wall hugging, low profile case
- Built-in door covers seldom used buttons
- Supports both manual and automatic SuperBus unit ID number addressing
- Premises Lights On/Off buttons
- During normal idle conditions, the touchpad can display custom text with date and time.
- On multi-partition systems, each touchpad can display all currently open zones/sensors in its partition.
- You can assign zone/sensor names text from a preprogrammed list or create custom names to suit each customer.

Installation Guidelines

- Advent systems support up to 62 SuperBus 2000 devices (31 on each panel connector).
- Do not exceed the panel total power output capacity when using panel power for bus devices and hardwire sensors (see the panel *Installation Instructions*).
- The maximum current draw from the panel for each touchpad is 120 mA.
- Mount the touchpad in a dry, environmentally controlled location (40°F to 100°F).
- If you use the touchpad hardwire input, mount the touchpad near the device connected to the input.
- When mounting the touchpad’s back plate, allow a 1-inch clearance on all sides, since the touchpad is somewhat larger than the back plate.

- Use 4-conductor, 22-gauge or larger stranded wire from the display to the control panel.
- Use 2-conductor, 22-gauge or larger stranded wire for the local touchpad hardwire input.

The following must be observed in UL installations:

- The touchpad hardwire input can be configured for normally closed or normally open keyswitches.
- Only UL-listed keyswitches may be connected to the touchpad hardwire input.
- A 2K ohm EOL resistor (49-467) must be connected at the keyswitch terminals.

Tools Needed

- Medium blade screwdriver
- #6 screws and anchors (included)
- Panhead screws for a gang box installation
- Saw or utility knife for cutting wallboard

Note: Do not use screws larger than #6 or the display will not seat properly onto the back plate.

Installation

The touchpad can be installed on a wall or gang box.

To mount the touchpad on a wall:

1. Separate the mounting bracket from the back plate by loosening the two bottom screws and unlatching the tabs from the mounting slots (see Figure 1).
2. Place the back plate on the wall and mark the four mounting holes and the wire access hole (see Figure 2). Be sure to leave a 1-inch clearance on all sides of the back plate.
3. Insert anchors at the marked locations.
4. Align the back plate wall-mount holes and wall anchors.
5. Secure the back plate.
6. Cut a hole in the wall at the center of the mounting plate for the wiring cable.

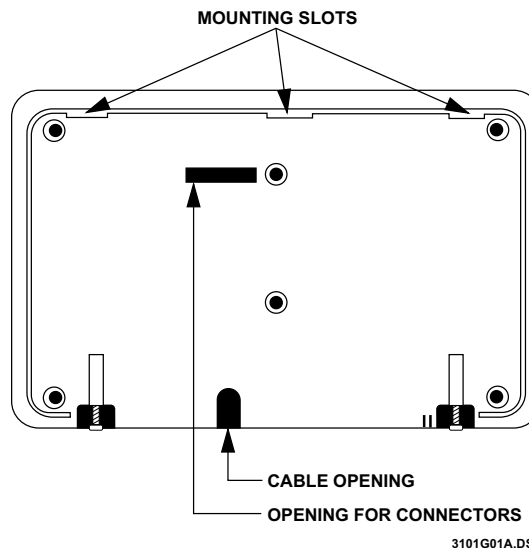


Figure 1. Touchpad Mounting Slots

To mount the touchpad on a gang box:

1. Separate the mounting bracket from the back plate by loosening the screws and unlatching the tabs from the mounting slots (see Figure 1).
2. Line up the gang box mounting holes with the gang box holes (see Figure 2).
3. Secure the back plate to the gang box with pan-head screws.

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

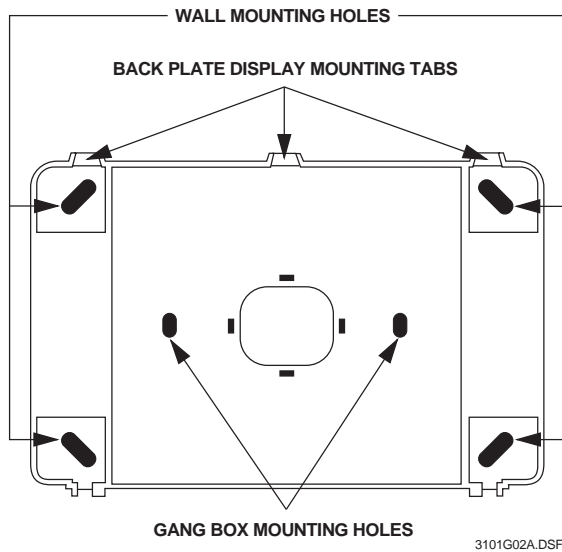


Figure 2. Back Plate and Mounting Holes

Wiring

Wiring consists of connecting the touchpad wiring harness to the panel data bus terminals and connecting an optional hardwire sensor to the touchpad hardwire input wires.

Wiring to Advent Panels

The following instructions describe wiring for an Advent system.

1. Disconnect the AC power transformer and backup battery(s) from the panel.
2. Run a 4-conductor, 22-gauge wire cable from the panel to the touchpad location.
3. Splice the 4-conductor cable wires to the red, black, green, and white touchpad wiring harness wires located on the back of the touchpad.
4. Splice the touchpad wiring to the panel SuperBus wiring harness as shown in Figure 3. Wire multiple touchpads in parallel.

If an optional touchpad enable keyswitch is used, wire a 2K ohm EOL resistor (49-467) in series with normally closed switches and in parallel with normally open switches. Mount the EOL resistor as close as possible to the switch.

5. Insert the wiring touchpad wiring harness connector onto the pins located on the rear of the unit. Make sure the yellow (hard wire input) wires are to the left.

6. Align the slots on the touchpad with the slots on the back plate. Insert the mounting tabs into the mounting slots and press the keypad toward the wall.
7. Tighten the two bottom screws.

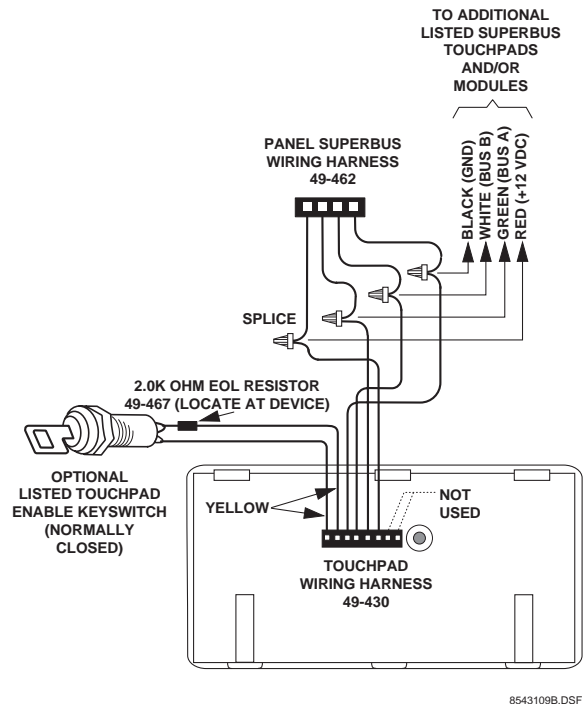


Figure 3. Wiring the Touchpad to Advent Panel

Power Up and Bus Communication

To add the touchpad to Advent:

1. Press **8** to select *SYSTEM MENU*.
2. Press **0** to select *ENTER PROGRAM MODE*.
3. Enter your install access code (**0123** is default).
4. Enter feature number **48001** (*ADD [learn] SUPERBUS DEVICES*).
5. The system automatically adds (learns) all connected and powered SuperBus devices

Note: All SuperBus devices are added to partition 1 initially. Use feature number 48004 (Bus Partition) to assign devices to different partitions once added.

6. Press ***** to exit this menu.

To delete a touchpad module from the panel:

1. Press **8** to select *SYSTEM MENU*.
2. Press **0** to select *ENTER PROGRAM MODE*.
3. Enter your install access code (**0123** is default).
4. Enter feature number **48002** (*DELETE BUS DEVICES*).
5. Enter the bus device unique ID number (see device label) and press **#**.
6. Press **0** to delete and then press **#**.
7. Repeat steps 5 and 6 for all system touchpads you want to delete.
8. When finished, press ***** to exit this menu.

Adjusting the Advent Display Brightness Level

The fire touchpad (60-810-04) display is preset to full brightness and is not adjustable.

Testing

Test the touchpad by using it to operate the system and by verifying correct operation. Refer to the panel *User's Guide* for system operating instructions.

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

Panel Programming

An alphanumeric touchpad must be used to program the panel. For a complete description of programming commands, refer to the specific panel *Installation Instructions*.

Refer to the specific panel's *User's Guide* for operational instructions.

Troubleshooting

Table 1 describes actions you can take to correct problems you may experience when connecting bus devices to the panel.

Table 1. Advent Troubleshooting

Problem	Action/Solution
Touchpad displays ***** and does not respond to buttons.	<ol style="list-style-type: none"> 1. Wait a few minutes for panel to reestablish touchpad communications. 2. Remove panel power and restore if necessary. 3. Check for SuperBus miswiring. 4. If there is only one system touchpad and all else fails, clear panel memory (Caution: Panel will require reprogramming).
Touchpad appears "dead" (no display or response to buttons).	<ol style="list-style-type: none"> 1. Check that the wiring connector is plugged into the back of the touchpad. 2. Check for SuperBus miswiring, opens, or shorts. 3. Check panel power.

Specifications

Touchpad/Panel Compatibility:

Advent (and Custom Versions) fire/security panels.

Power Requirements: 8 to 15 VDC (12 VDC nominal), 120 mA maximum (from panel).

Display: 2-line by 20-character, alphanumeric vacuum fluorescent display.

Zone Input: One supervised hardwire zone (touchpad enable keyswitch) input.

Data I/O: 4-wire ITI SuperBus 2000 auto addressing, digital data bus.

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

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

Maximum Humidity: 90% relative humidity, noncondensing.

Standards/Listings:

FCC Part 15

UL 365 for Police Connected Burglar Alarm Units and Systems

UL 609 for Local Burglar Alarm Units and Systems

UL 864 for Control Units for Fire-Protective Signaling Systems

UL 985 for Household Fire Warning System Units

UL 1023 for Household Burglar Alarm System Units

UL 1637 for Home Health Care Signaling Equipment

ULC Canada Commercial Fire/Burglary Warning System (applied for)

CSFM California State Fire Marshall (applied for)

DOD Sensitive Compartment Information Fac. (applied for)

FM Factory Mutual (applied for)

MEA New York City Material Equipment Acceptance (applied for)

Dimensions: 4.60" x 7.75" x 1.2" (H x W x D).

Installation: Wall or gang-box mounting.

Chassis Material: High-impact ABS plastic.

Case Color: Belgian gray with red imprints.

Notices

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.



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