

## Description

The DMP 670, 770, and 771 Security Command keypads provide an attractive, user friendly control with optional 2-button Panic keys for use with DMP Command Processor™ panels. Each keypad provides supervised or unsupervised operation, an easy to read 16 character fluorescent blue display, AC LED, backlit keyboard, low profile styling, and choice of designer colors to compliment a variety of room decors.

The 770 and 771 keypads also provide four programmable expansion zones to which you can connect a variety of burglary and non-powered fire devices. The 771 additionally provides an internal Form C door strike relay for controlling magnetic locks or electric door strikes on protected entrances.

## 2-Button Panic Keys

The 670, 770, and 771 keypads also provide an optional Panic key function that lets users easily send a Panic, Emergency, or Fire report to the central station. The user just presses and holds two top row Select keys for two seconds until a beep from the keypad is heard.

At the beep, the panel sends the following zone alarm reports to the central station: **Panic** (left two Select keys) - Zone 19, non-medical **Emergency** (center Select keys) - Zone 29, and **Fire** (right two Select keys) - Zone 39. For 1912XR panels, version 111 or higher firmware is required for this feature.

The Panic key function is active as soon as you apply power to the keypad. No additional zone programming is necessary. If the system owner intends to use the Panic keys, install the supplied icon label below the top row of Select keys.

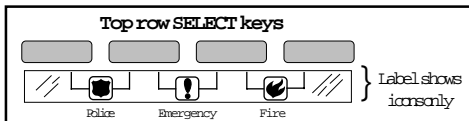


Figure 1: Panic key label placement

To disable the 2-Button Panic keys, cut the jumper labeled "J8" on the bottom left side of the keypad circuit board.

## 7/0 Panic Keys

The Security Command keypads also allow the user to initiate a Panic alarm by pressing the 7 and 0 (zero) keys simultaneously when zone one on the assigned keypad address is programmed as a Panic type zone.

For the Model 770 and 771 keypads, place a 1k Ω End of Line resistor across the White/Brown pair of zone wires (zone one).

To disable the 7/0 Panic key feature, cut the jumper labeled "J7" on the bottom left side of the keypad circuit board.

## Unsupervised Operation

The 670, 770, and 771 Security Command keypads also allow **unsupervised** operation for connecting multiple keypads to one of the panel's available keypad addresses. See Address Programming below. This feature greatly expands the number of keypads you can install to give users the maximum flexibility in operating their system. Unsupervised keypads respond to the panel only when keys are pressed by the user and work on all DMP panels and 1912XR panels with firmware version 111 or higher.

## Address Programming

Use the slide switches numbered 1, 2, and 3 on the left side of the circuit board to set the keypad to one of the panel's eight available addresses. See Figure 2.

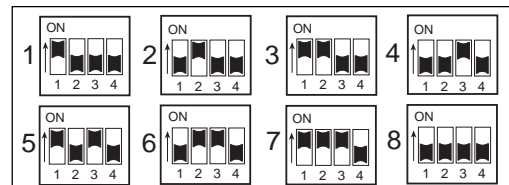


Figure 2: Supervised keypad addresses

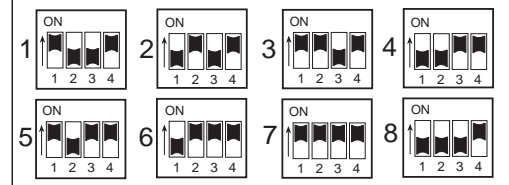


Figure 3: Unsupervised keypad addresses

Move slide switch number 4 *down* for supervised operation and *up* for unsupervised operation. Multiple unsupervised keypads can be assigned the same address.

## Harness Color Code

### Wiring to Panel

- Red - Auxiliary Power
- Yellow - Data Transmit
- Green - Data Receive
- Black - Ground

### 770/771 Zone Wiring

- White/Brown - Zone 1
- White/Red - Zone 2
- White/Orange - Zone 3
- White/Yellow - Zone 4

## Dimming the Keypad Display

Pressing and holding the Command and back arrow keys for two or more seconds turns off the vacuum fluorescent display, keyboard backlighting, and Power LED as an added customer convenience. These indicators are restored whenever the keypad speaker is turned on or any key on the keyboard is pressed.

The keyboard backlighting turns off automatically after 30 seconds if no keys are pressed and the trouble buzzer is not active.



## Self-Test Diagnostics

The 670, 770, and 771 keypads allow you to test all system keypad functions. To test the keypads:

- Disconnect the red (+12 VDC), yellow, and green keypad wires from the panel.
- Twist the yellow and green keypad wires together. Reconnect the red wire to the panel.

### TEST 1 DISPLAY TEST

This test begins immediately and scrolls a series of characters across the display allowing you to visually inspect each display segment.

To go to the next test, press the COMMAND key. To repeat a test, press the ARROW key.

### TEST 2 KEY TEST

This allows you to check each key for proper operation. The display shows: **PRESS KEY—**. As you press and hold each key, its name is displayed.

### TEST 3 ZONE TEST (Not available on the 670 keypad)

This allows you to check each keypad zone for proper operation. The display shows: **L1 L2 L3 L4**.

Following each zone number is the status of the zone. (**O**) = Open, (**-**) = OKAY, and (**S**) = Short.

### TEST 4 FUNCTION TEST

This allows you to check the AC LED and keypad tone for proper operation. The display reads: **LED RLY TONE**. To test each function, press the select key beneath its name. The keyboard backlight turns off during this test. The **RLY** (relay) function is only available on 771 keypads.

### TEST 5 ADDRESS TEST

This test displays the address selection of the keypad. The display **ADDRESS 3 U** indicates the keypad being tested is set to address 3 and is also unsupervised. Supervised keypads show only the address number. To end the Address Test, press COMMAND.

### Reconnecting the keypad wiring

Disconnect the red wire from the panel. Separate the yellow and green keypad wires and reconnect them to the panel. Connect the red wire to the panel. Press COMMAND to start the keypad's normal operation.

### Additional Diagnostics

If a key is pressed and the keypad has not been polled by the panel within the past 5 seconds, the keypad displays **SYSTEM BUSY**.

Also, if at any time during normal operation a supervised keypad cannot detect polling from the panel for 90 seconds, the display shows: **SYSTEM TROUBLE**. This could indicate a broken green wire, reset jumper installed, or a problem with the keypad.

If a supervised keypad detects polling, but its particular address is not being polled, the display shows: **NON-POLLED ADDR**. To clear this display, check the address selection on the keypad or the number of keypad addresses you've assigned during system programming.

## Additional Power Supply

If current draw for all keypads connected to the panel exceeds the panel's output, you can provide additional current by adding an auxiliary power supply. Connect all keypad Ground (common) wires to the negative terminal of the power supply.

Run a jumper wire from the power supply's negative terminal to terminal 10 of the panel. Connect all keypad power (+12 VDC) wires to the positive terminal of the power supply. Do NOT connect the positive terminal of the power supply to any terminal of the panel.

### AC LED

The keypads contain an AC LED that's off when AC power to the panel is off or while the panel is resetting.

### 771 Door Strike Relay

The 771 provides one Form C (dry contact) relay output for controlling magnetic locks or electric door strikes on protected doors. These devices connect to the Violet (N/C), Gray (Common), and Orange (N/O) conductors on the harness supplied with the 771 keypad. The relay contacts are rated for 1 Amp at 24 VDC.

## Electrical Specifications

The keypads operate on 8 to 16 VDC at 100mA when idle with the display lit, 110mA with the keyboard and display lit, and up to 120mA with the buzzer on steady and all lighting on. The 771 keypad's internal relay can draw an additional 25mA when a door strike is activated.

You can install individual keypads on wire runs of up to 500' using 22 gauge wire or up to 1,000' using 18 gauge wire.

## Mounting Options

For mounting the keypads on solid or uneven walls, you can use the DMP Model 776 Metal Keypad Backbox. The 776 is 1/2" deep with a baked enamel finish and provides 1/4" wire entry holes on the back and sides for convenient wiring.

For applications where conduit is required to the keypad, use the DMP Model 775 Metal Keypad Backbox. The 775 is 1-1/2" deep with three 1/2" x 3/4" knockouts for connecting conduit.

To provide additional protection for the keypad against tampering or unauthorized use, you can install the DMP Model 777 Plastic Keypad Cover that provides a wall-mounted clear 1/8" thick polycarbonate housing with lifting cover and integral locking mechanism.