

# RP2000LCD KEYPAD

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Design Pats. Pending

WI500B 5/91

## DESCRIPTION

The RP2000LCD is a user-friendly backlit keypad designed for Napco's UL-listed MA2600-Series control panels. A large alphanumeric liquid-crystal display (LCD) functions as a readout for control-panel information and zone identification, and can also serve to display messages downloaded from a central monitoring station. The keypad functions as a programmer as well in its secondary mode of operation. Installation is quick and easy on only four wires.

This manual provides installation information only. Refer to the accompanying User's Guide (OI137) for keypad functions and operation, and to the manual furnished with the control panel for panel installation and dealer programming information.

## SPECIFICATIONS

**Operating Voltage:** 9.0-13.0Vdc (supplied by control panel)  
**Current:** 64mA typ., normal backlighting  
**Dimensions:** 4-3/8" x 5-7/8" x 1-1/16" (HxWxD)

## MOUNTING

**Opening the Keypad.** There are two slots along the bottom edge of the keypad about 1 inch from each side. To open, insert a medium screwdriver into either slot and push up with a slight twisting motion to release the retainer tab. Repeat for the other slot. Pull out at the bottom and lift off the two hooks at the top.

This keypad features a handy pull-up reference label. *Before mounting the keypad onto the wall*, push the Sliding Label Plate (with label and felt backing affixed and handle facing forward) down the guides at the rear of the keypad until it snaps into place. Once installed, the Sliding Label Plate cannot be removed without first removing the keypad from the wall.

When installing the rear case, be sure that the words "TOP" and "UP" (molded into the case) are properly oriented. The rear case is provided with a variety of holes to accommodate virtually any mounting situation. The four angled elongated holes are for mounting directly into a wall using appropriate screws; these holes will allow levelling adjustment. If installing into a double-gang box, insert mounting screws through the vertical elongated holes on the left side of the case and into the box. If the box is visible when viewed from the front, adjust the keypad vertically, then tighten the screws. Then, using hardware suitable for the mounting surface, add one or two screws at the right side of the keypad case directly into the

wall to ensure a secure installation.

## WIRING

**Caution:** Before connecting keypad, remove both ac and battery power. Check keypad wiring to panel: red is "+"; black is "-".

Wire the keypad to the control panel according to the following table.

Keypad Wire Color Code	Control-Panel Terminal
Black (-)	43
Red (+)	44
Yellow	45
Green	46

**Table 1. Keypad wiring to control panel.**

**Note:** If using a soldering iron, be careful not to splash solder onto the keypad circuit board or components, as damage could result.

**Remote Emergency Buttons.** For remote emergency (police panic) buttons, install momentary-contact switches to Terminals 42 and 43 on the control panel.

**Backlighting.** Backlighting requires no additional wiring. In normal use, the keypad is always dimly backlit. Pressing any key will increase the brightness to facilitate code entry, but after 30 seconds of keypad inactivity, brightness will again be reduced. To disable backlighting, see **JUMPER OPTIONS**.

## JUMPER OPTIONS

Several white jumpers provide a wide variety of options. They are conveniently located around the perimeter of the board for easy access. To identify the location of the jumpers, refer to the label (LA809) affixed to the fishpaper on the back of the board. (**Note:** Jumper C is not an option; it must be intact at all times.)

**Disable Keypad Panic.** Cut Jumper A to disable the keypad panic buttons (Police Emergency), Keys [\*] and [C]. **Note:** This will also disable the Copy Text function in the Zone-Description Program Mode (see User's Guide, OI137). Therefore, if disabling keypad panic, cut Jumper A *after* programming zone descriptions.

**Disable Tactile Beep.** Cut Jumper B to silence the tone that sounds whenever a keypad button is pressed.

**Disable Keypad Fire.** Cut Jumper D to disable the keypad fire buttons (Fire Emergency), Keys [\*] and [A].

**Disable LCD Backlight.** Cut Jumper W2 to disable LCD display back lighting.

**Disable Touchpad Backlight.** Cut Jumpers W1 and W3 to disable touchpad backlighting.

**Keypad Assignment.** Up to 7 keypads may be connected to the panel. If more than one keypad is installed, (a) each must be assigned its own unique keypad address number (that is, no two keypads may be numbered alike); (b) keypads must be numbered consecutively (that is, missing numbers are not permitted); and (c) only Keypad No. 1 can be used for programming.

In multiple keypad configurations, the total number of keypads must be programmed into the control panel in address 995. The number in address 995 must agree with the total number of keypads in the system, or a [KEYPAD FAIL XX] system trouble will result.

RP2000LCD No.	Address Jumper			
	3	2	1	P*
1	:	:	[:]	[:]
2	:	[:]	:	[:]
3	:	[:]	[:]	:
4	[:]	:	:	[:]
5	[:]	:	[:]	:
6	[:]	[:]	:	:
7	[:]	[:]	[:]	:

\*Parking position for unused jumper(s) (located nearest the corner).

[:] = Jumper on (shorted);      : = Jumper off (open)

**Table 2. Address Jumper settings.**

RP2000LCD address numbers are “programmed” by selection of the *Address Jumpers*, the four-block jumper strip at the extreme lower-right corner of the board (viewed from the inside bottom, see Fig. 1). Referring to Table 2, program the keypad address by *shorting* the respective pair(s) of terminals with a jumper, as indicated by “[:]” (jumper on); “:” indicates *open* (jumper off).

#### UL REQUIREMENTS

In UL installations, *do not program*

- Auto Bypass
- Swinger Shutdown
- Any downloading option.

#### LCD ADJUSTMENT

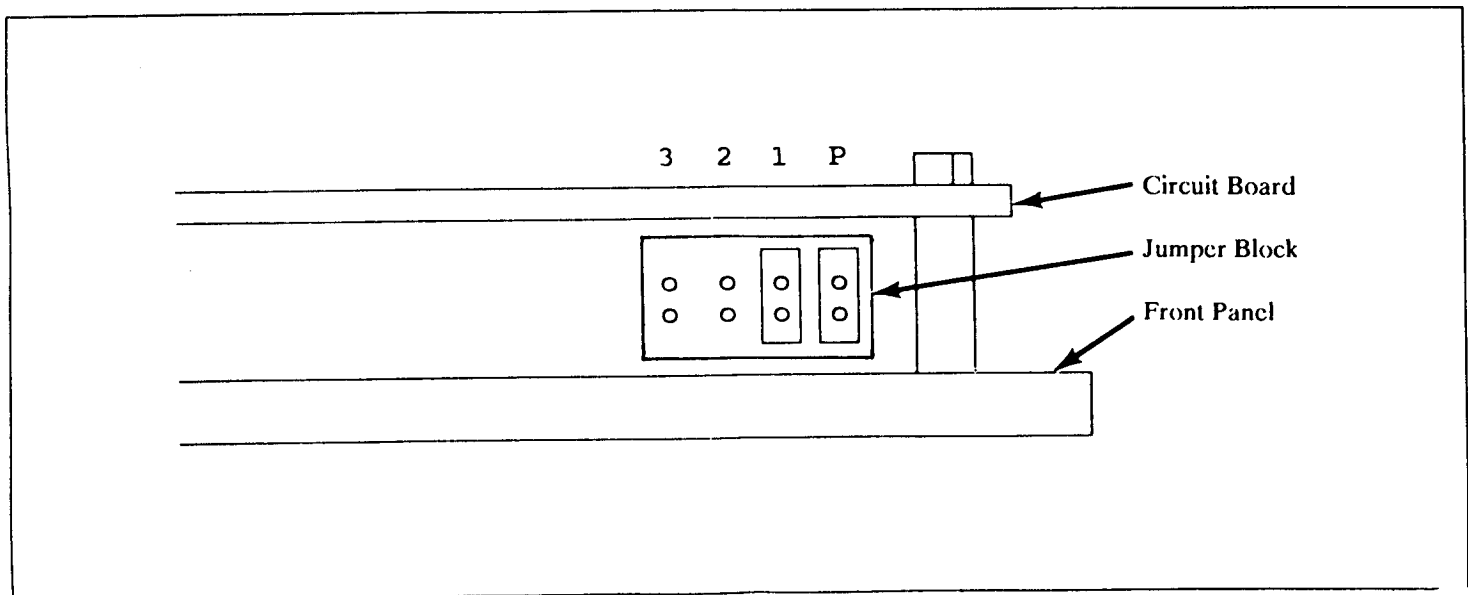
The viewing angle for the LCD display is adjustable by means of the LCD ADJUST screwdriver control on the back of the circuit board (refer to Label LA809 affixed to the board). Viewing the board at its normal mounting height, turn the control clockwise or counterclockwise for optimum contrast.

#### TESTING THE KEYPAD

To test the keypad after installation, simultaneously press Keys [\*] and [3]. This will initiate a test that checks all LCD elements, the sounder, and both LEDs. Repeatedly pressing these keys will change the pattern displayed on the LCD. To terminate the test, press the [RESET] Button.

#### COMPLETING THE INSTALLATION

To reassemble the keypad after installation, hang the top of the front panel onto the hooks in the rear case and push in firmly at the bottom until the retainer tabs snap into place. If difficulty is encountered, push the retainer tabs up slightly using a screwdriver, as when removing.)



**Fig. 1. Address jumpers as viewed from the inside bottom. RP2000LCD No. 1 is shown.**

## KEYPAD FUNCTIONS

Keypad functions are selected by means of the [FUNCTION] Key and executed by the [ON/OFF] Button. Repeatedly pressing the [FUNCTION] Key will scroll the display forward. In the Function Mode, the [BYPASS] Key may be used to scroll the Function Menu backward. The 18 available functions are scrolled in the following order:

DISPLAY STATUS	Displays all zones in fault condition.
DIRECTORY	Scrolls through all zones, identifying each.
DISPLAY BYPASSED	Scrolls through manually-bypassed zones.
DISPLAY FIRE	Displays the status of Fire Circuits 1 and 2.
DISPLAY SYS TBL	Displays system trouble(s).
DISPLAY HISTORY	Displays Alarm History.
SENSOR ACTIVITY	Displays PIR-Zone activity.
FAULT FIND*	Activates the Fault-Find Mode.
TELCO TEST*	Tests the telephone lines (if enabled).
BELL TEST*	Activates the bell test.
ACTIVATE SERVICE*	Activates the Service Code after arming.
ACTIVATE WATCH*	Activates all Day Zones simultaneously (Watch Mode); a "W" will appear in the display.
ACTIVATE CHIME*	Activates the Chime feature.
ACTIVATE LOCATE*	Activates the Locate feature.
START EXIT TIME	Starts exit time without ringback.
ACTIVATE PROGRAM*	Allows access to Program Mode. Enter Program Code to access Program Mode.
RESET SENSOR MSG	Clears <i>PIR ACTIVITY FAILURE</i> message.
DOWNLOAD*	Activates Manual Download.
*****EXIT*****	Exits the Function Menu (or press [RESET]).

When the panel is armed, the selected function will display as *XX-N/A WhenArmed*, indicating that the function is not available when the panel is armed.

## NOTES

## DEALER PROGRAM MODE

### First Enter Dealer Program Mode

- Select Function 16 (ACTIVATE PROGRAM); press [ON/OFF].
- Enter Dealer Program Code; press [ON/OFF].

### To Access an Address

- Use [← CURSOR] and [CURSOR →] to move cursor.
- Use [UP] and [DOWN] to change address.
- Press [READ].

### To Change Data

- Use [← CURSOR] and [CURSOR →] to move cursor.
- Use [UP] and [DOWN] to change entry.
- Press [SAVE].

### To Increment/Decrement Address

- Use [PRIOR] and [NEXT].

### To Exit Dealer Program Mode

- Press [RESET].

CHARACTER NO. ----> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

A D D R =	D A T A =
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FUNCTION	1	2	3	S A V E	ON	INTERIOR
FUNCTN UP	← CURSOR	CURSOR →	TEST		/	PRIOR
BYPASS	4	5	6		OFF	INSTANT
FUNCTN DN	UP	BLANK	WORDS			NEXT
RESET	7 A	8 B	9 C	0	*	
EXIT	DOWN	COPY FROM	COPY TO	READ		

## USER PROGRAM MODE

### To Enter User Program Mode

- Select Function 16; press [ON/OFF].
- Enter User Program Code; press [ON/OFF].

### To Program Zone Description

- Use [PRIOR] and [NEXT] to select zone.
- Use [LEFT] and [RIGHT] to move cursor.
- Use [UP] and [DOWN] to change entry.
- Press [SAVE] to store entry.

### To Copy Zone Description

- Display source zone; press [\*] and [COPY FROM].
- Display target zone; press [\*] and [COPY TO].
- Press [SAVE].

### To Move Zone Text (All text to right of cursor)

- Left: Press [\*] and [← CURSOR].
- Right: Press [\*] and [CURSOR →].

### To Exit User Program Mode

- Press [RESET].