

PROGRAMMING

The Ranger 8980E can be placed into the "Program" mode by use of the **9075 Smart Programmer**, the 8950 programmer, or for Keypad programming, by utilizing the 9050 LCD Keypad or the 8601 LED Keypad. These methods are described below:

Using a Programmer

Plug the optional 8950 Programmer into the 4-pin male outlet marked "PROGRAMMER" on the Ranger 8980E PC Board and the control will enter the program mode. The 8950 will program locations "000" through "255" of the 8980E control (See using the LED Keypad below.) When using a 9075 Smart Programmer, please refer to the 9075 Manual.

Using The LCD Keypad

The most straightforward method of Keypad programming is to utilize the 9050 LCD Keypad in the programming mode. To access the programming mode enter [C]-[0]-[0], followed by the four digit "Go To Program" access code which is factory default [9]-[0]-[5]-[0] (this code can be reprogrammed), and follow the Keypad prompts. (See using the LED Keypad below.)

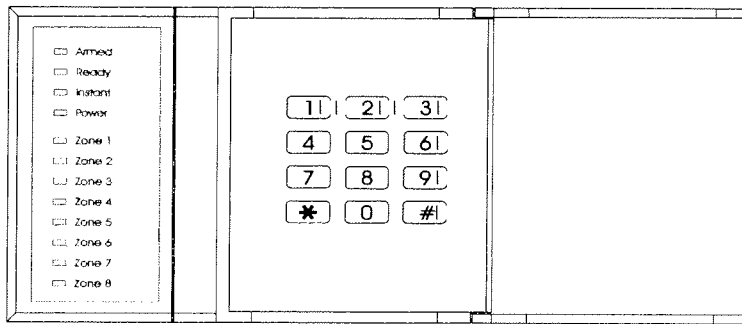
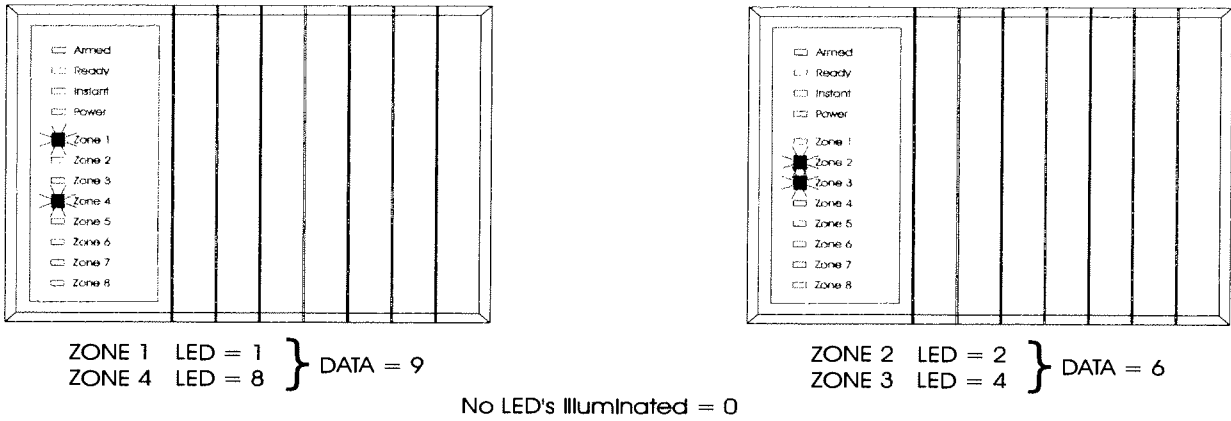
Using The LED Keypad

The 8980E can also be programmed by the standard binary method of Keypad programming described below. When the 8601 LED Keypad is used for programming, enter the factory default four digit "Go To Program" access code of [9]-[7]-[1]-[3]. NOTE: The 8980E must be disarmed to gain access to programming with this code. After entry of this code, the 8980E will be in the "Program" mode, and the yellow LED's will display the data in location 000. The data is displayed using a Binary system. With this system the yellow zone 1 LED equals "1" when illuminated. The zone 2 LED equals "2" when illuminated. The zone 3 LED equals "4" when illuminated. The zone 4 LED equals "8" when illuminated. Thus if the data in location 000 is "9", the LED for zone 1 (=1) and zone 4 (=8) would be illuminated. By adding the two values together, (1+8=9) you would determine that the data in location 000 is "9". If the data in location 000 is "6", the LEDs for zone 2 (=2) and zone 3 (=4) would be added (2+4=6) indicating the data in that location to be "6". If no LED's are illuminated, the location contains a "0". To advance from location 000 through 255, press the [#] key. To go to a specific location, press the location number followed by the [#] key. The yellow LED's will then display the data in that location. Data is changed by entering a number 0 to 15 followed by [*] (* = data enter). Review the examples in figure 1 on the following page.

Important Function Codes

- [9]-[1]-[0]-[#] When in the program mode, this function code can be used to write original factory default codes into the 8980E.
- [9]-[2]-[0]-[#] When in the program mode (after data has been entered into locations 000-255), you must enter [9]-[2]-[0]-[#] to permanently load the information into the EEPROM. **IF THIS STEP IS NOT TAKEN, THE DATA IN THE EEPROM WILL NOT CHANGE, AND THE RANGER 8980E WILL NOT CHANGE CHARACTERISTICS.**
- [9]-[3]-[0]-[#] This function code is used to exit the programming mode after it was accessed via the Keypad.
- [2]-[3]-[0]-[#] This function code is used to exit the programming mode after it was accessed via the 9050 LCD Keypad.

PROGRAMMING EXAMPLE - FIGURE 2



To change or enter data in location shown, enter data and follow by the [*] Key.

Pressing the [#] Key will advance to next location, or specific location can be reached by pressing location number followed by the [#] Key.

8950 PROGRAMER - FIGURE 3

