

## 4. PROGRAMMING

### KEYPAD PROGRAMMING

Keypad Programming may be divided into two sub-groups: User Program Mode and Dealer Program Mode. *USER KEYPAD PROGRAMMING* is limited to user codes. In the Dealer Program Mode, the keypad provides full programming capabilities.

#### Dealer Keypad Programming.

Set the keypad to the Dealer Program Mode: Hold down Key [8] until a beep sounds, then enter the Dealer Program Code. (The default Dealer Program Code is 4,5,6,7,8,9, but this code *must* be reprogrammed to preserve system security. See Glossary and the programming example, which follows.) The center segment of the numeric display will light to indicate the Dealer Program Mode.

The Dealer Program Mode cannot be accessed while the panel is armed or communicating *except* during the first three minutes after power-up. (See *Power-Up Delay* in Glossary.) To shut the 3-minute "window" early, that is, before it times out, hold down Key [9]. **Note:** If the Dealer Program Mode has been accessed during this interval, complete required programming, exit the Dealer Program Mode (see following), then power down and power up the system once again.

Set the location to be programmed by pressing Key [B] (the three horizontal segments of the display and the green LED will light), followed by the location number. Each location must be entered as a three-digit number, that is, 001, 020, 157, etc. Notice that as each of the three digits is entered, the three display segments extinguish in succession from bottom to top. When the last digit is entered, the yellow LED will light and the display will show the data (if any) programmed in that location.

At this point, several numeric keys take on new function assignments, as shown in Fig. 3.

**Keys [1] or [6] (Prior Location) and [2] or [3] (Next Location)** - Change the location. Use Key [1] or [6] to move down to the next lower location, or Key [2] or [3] to move

up to the next higher location. Whenever a new location is entered, a beep will sound.

**Keys [4] (Data Up) and [7] (Data Down)** - select the data for the chosen location: numbers 1-9, 0, and letters B, C, D, E, and F, as will be indicated in the display. Key [4] sequences data values in ascending order; Key [7], in descending order.

**Key [5] (Clear)** - clears data from the selected location (display will go blank).

**Key [8] (Exit)** - exits the Dealer Program Mode. Hold down until the beep sounds, then enter the Dealer Program Code within 10 seconds to exit.

**Key [B] (Set)** - sets the location to be programmed. After pressing Key [B], enter a three-digit location number.

To exit the Dealer Program Mode, hold down Key [8] until the beep sounds; all four LEDs will light. Within 10 seconds, enter the Dealer Program Code; the LEDs will go out. (If the LEDs go out before your code is entered, repeat this procedure.)

**Caution:** Before exiting the Dealer Program Mode, be sure that Location 083 contains the data shown in Table 2. If the control panel comes up armed on power-up, you have three minutes to access the Dealer Program Mode. Hold down Key [8] for two seconds, then enter your Dealer Program Code. By checking Location 083, you can prevent accidental erasures of required data from going undetected. (If invalid data reside in Location 083, a non-existent fire trouble and/or loss of keypad functions may result. If you encounter this problem and need assistance, call Napco's Technical Service Department (toll free) at (800) 645-9445.

| Disarmed | Armed     |
|----------|-----------|
| 5        | 7, D or F |

Table 2. Valid data for Location 083.

**Example 1.** Reprogram the existing (default) Dealer Program Code to 8,1,5,4,8,7.

1. Hold down Key [8] until the beep sounds.
2. Enter the existing (default) Dealer Program Code, 4,5,6,7,8,9. The center segment of the display will light.
3. Set Location 244, the first location of the Dealer Program Code block, as follows: (a) Press Key [B] (the three horizontal display segments and green LED will light); (b) press [2],[4],[4] (the yellow LED will come on and the display will indicate the first digit of the existing code, "4").
4. Program the first digit of the *new* Dealer Program Code as follows: Press Key [4] (Data Up) repeatedly until an "8" is displayed.
5. Press Key [2] (Next Location) once to advance to Location 245, the second digit of the code. A "5" (the second digit of the default code) will be displayed. To program the second digit of the *new* code press Key [5] (Clear), then press Key [4] (Data Up) once — a "1" will be displayed.
6. Press Key [2] (Next Location) once again to advance to the third location (246) of the code. Using Key [7] (Data Down), replace the "6" with a "5".
7. Repeat this procedure, using Key [2] to advance locations and Keys [4] and [7] to select data, until the entire code has been reprogrammed. To check the code, press Key [1] (Prior Location) five times to return to Location 244, then press Key [2] to step through each location, noting the data displayed.
8. To exit the Dealer Program Mode, hold down Key [8] until the beep sounds, then enter the *new* Dealer Program Code within 10 seconds. This will confirm operation of the new code.

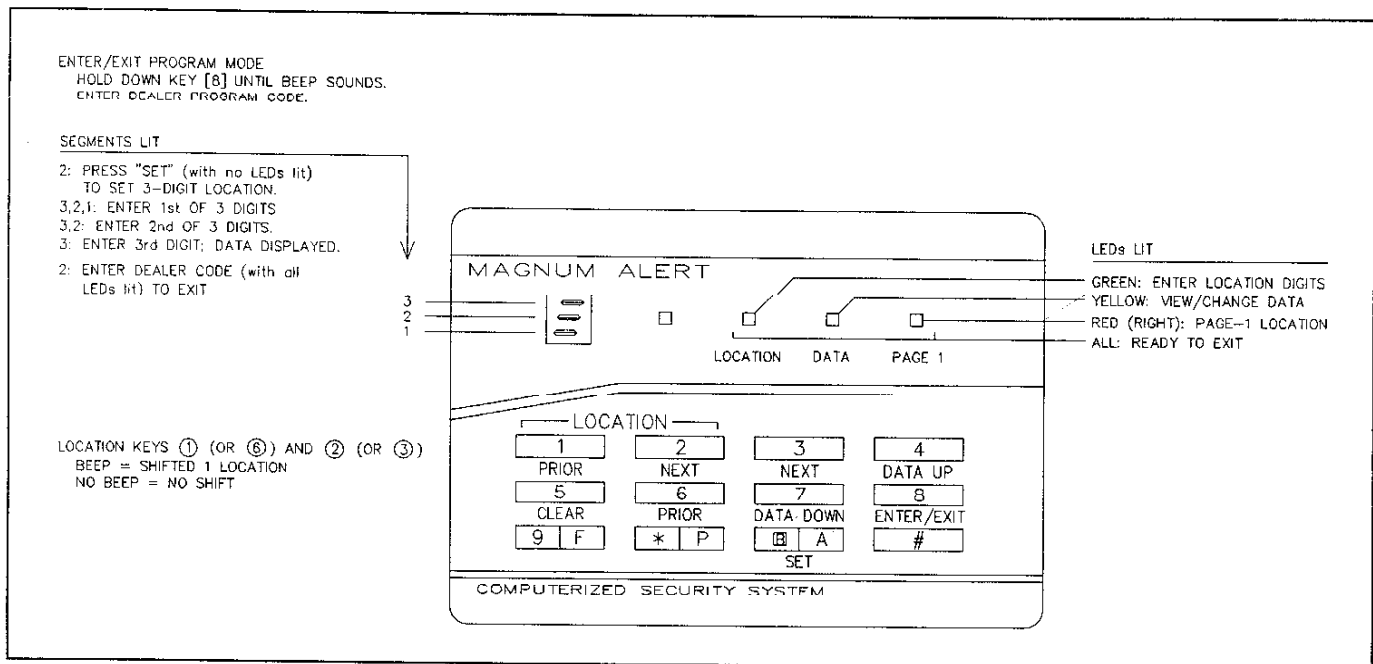


Fig. 3. Keypad functions in Dealer Program Mode (RP1054e Keypad shown).

## PROGRAMMING SHEETS.

Programming Sheets similar to those which follow are completed when planning system features and communicator information for the particular installation. These sheets should be retained for future reference. The Glossary contains information and instructions for programming each feature.

### General Programming Steps

1. Contact the central station to confirm receiver format, data format, event codes, subscriber numbers and telephone number(s). Two receiver descriptions and telephone numbers, and up to 4 Subscriber Identification Numbers may be required.
2. Fill out the Programming Record Sheets by circling the numbers representing the zone features or system features to be programmed. Referring to the programming sheets and the accompanying table, note that each program location is assigned data values (1,2,4,8) such that adding any combination will produce a unique total (entry). Also note that because the entry can be only one character, the two-digit totals greater than 9 are replaced by zero and letters B through F, as shown. Check the Glossary for guidance in selecting "data" entries.

3. To program the subscriber PROM, follow the instructions furnished with the programmer. While programming, remember to keep the address page number in mind, and be sure that the position of the PAGE switch (PRO410/410M) is set accordingly. **Note:** If using the Napco PRO410/410M programmer, before attempting to program either page, be sure that all data in programmer memory are erased (press [ERASE], then [EXECUTE]).

4. Program the entries (data totals from Programming Record Sheets in Step 2) into the respective locations. The display will show the entry numerically, but will display "0" for the number 10, and letters "B", "C", "D", "E", and "F" for the numbers 11 through 15, respectively. To program a 10, enter [0]. To program 11 through 15, enter [B] through [F] respectively. If using the Napco PRO410/410M programmer to program a PROM, use the [PLUS] key to enter any two or more digits that add up to the desired entry. To program 13, for example, enter either [d] or [8] [PLUS] [5], or [8] [PLUS] [4] [PLUS] [1], etc. Similarly, to add to an existing PROM location, first press the [PLUS] key, then the complementary digit, otherwise the digit entered will *replace* the digit in memory. Refer to the PRO410/410M instructions for further programming information.

**Example 2.** Program Zone 1 7 to report on alarm. Referring to the Communicator Information section of the Programming Sheet, *Report on Alarm* is contained in Locations 166 and 167. Circle data values for Zones 1-7.

|                 | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 8/Panic |          |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------------|----------|
| Report on Alarm | 166    | 166    | 166    | 166    | 167    | 167    | 167    | 167          | location |
|                 | ①      | ②      | ④      | ⑧      | ①      | ②      | ④      | 8            | data     |

Add the data values for Location 166:  $1 + 2 + 4 + 8 = 15$ . From Table 3, 15 is programmed as an "F". Now add the data values for Location 167:  $1 + 2 + 4 = 7$ . From Table 3, enter a "7" in Location 167.

| LOCATION XXX |     |     |     | ENTRY  |
|--------------|-----|-----|-----|--------|
|              |     |     |     | blank  |
| (1)          |     |     |     | 1      |
|              | (2) |     |     | 2      |
| (1)          | (2) |     |     | 3      |
|              |     | (4) |     | 4      |
| (1)          |     | (4) |     | 5      |
|              | (2) | (4) |     | 6      |
| (1)          | (2) | (4) |     | 7      |
|              |     |     | (8) | 8      |
| (1)          |     |     | (8) | 9      |
|              | (2) |     | (8) | 0 (10) |
| (1)          | (2) |     | (8) | B (11) |
|              |     | (4) | (8) | C (12) |
| (1)          |     | (4) | (8) | D (13) |
|              | (2) | (4) | (8) | E (14) |
| (1)          | (2) | (4) | (8) | F (15) |

**Table 3. Determining data entry for a location. Numbers in parentheses indicate selected zones or features. (See Programming Sheet.)**

## DOWNLOADING FROM A COMPUTER USING NAPCO SOFTWARE AND INTERFACE.

### Local Downloading

Data may be locally downloaded with the use of a PCL2000 Local Download Cable, which is supplied with the PCI2000 interface. The panel need not be wired nor the keypad connected. Also refer to the instructions included with the PCI2000.

1. Referring to the PCI2000 Wiring Diagram, connect the PCL2000 Local Download Cable between the modem LINE connector and the control panel TELCO terminals. (Remove the plug shown coming from the PCI2000-J5.)
2. With the control panel unpowered, set up the computer for a *Function-6 Method* download.
3. When a high-pitched tone is heard at the modem, power up the panel (connect the battery or transformer). A connection will automatically be established, ignoring the status of the zones.
4. Make all required selections and download the program.
5. After the computer indicates a successful download, terminate the connection, then remove power to the panel.

### Remote Downloading

Data may be remotely downloaded to the panel via telephone lines using an IBM PC-compatible computer with Napco PCD2000 software and PCI2000 interface. On-screen prompting and the extensive use of help menus simplify programming, and an error-checking mode locates omissions and incompatible data to reduce the possibility of mistakes. Remote downloading requires (a) a modem compatible with the PCI2000 and (b) PCD2000 software Version 2.E or higher. **Note:** Remote downloading may be disabled through programming and *must* be disabled in UL installations.

A program may be downloaded remotely using either of the following procedures.

**Callback Method.** This method is used to download to an unattended panel. The MA1008e will accommodate an answering machine at the site if line seizure is used on the house phones. Program a "1" in Location **082** (*Enable Download with Answering Machine*). Refer to the instructions furnished with the PCD2000 for details. **Note:** The number of rings programmed into the panel must exceed that of the answering machine.

**Function-6 Method.** Call the central station from the site to request a *Manual Download*. During this procedure, voice contact will be lost, therefore both the installer and the computer operator should be familiar with the operation. When a high-pitched tone is heard at the site phone, arm the panel, disarm, then access Hold-Down Function 6 (*Manual Download*) within 5 seconds; the site phone will go dead. Hang up the phone and wait for a call from the central station confirming a successful download.

**Auto-Download Method.** Napco PCD2000 Software Version 2.E and later includes *PC-Preset*, a utility wherein blocks of up to 99 programs each may be preset for remote uploading or downloading from the installation site while the computer is unattended. The *Auto-Download ID Number* identifies the program in the computer that will be selected. (Note that the Dealer Program Code in the PCD2000 must agree with that of the control panel for the remote connection to be established.)

At the Installation site, the *Auto-Download ID Number* corresponding to that in the computer is programmed into the panel, along with the *Callback Telephone Number* of the computer. To execute an Auto-Download, arm the panel, disarm, then access Function 6 within 5 seconds.

## PROM PROGRAMMING

A blank DD493BNK PROM may be programmed using a PRO410 or PRO410M Programmer. See *General Programming Steps* and the manual furnished with the programmer for operating instructions, and also the Programming Record Sheets that follow. PROM programming may be used to program all features except the Dealer Program Code (Locations **244-249**) and User Arm/Disarm Codes.

The following programming is *required*.

- Page-0, Location **083**: "5"
- Page-1, Location **251**: "C"
- Page-1, Location **252**: "4"

### Transferring Memory from a PROM.

Data programmed in the PROM are saved in memory as follows.

1. At the panel, with ac and battery power *off*, insert the programmed PROM into the MEMORY CHIP socket. Align the dot on the PROM with the dot on the circuit board.
2. Apply ac power. Enter the Dealer Program Mode: Hold down Key [8] until the function beep sounds, then enter the Dealer Program Code.
3. Exit the Dealer Program Mode: Hold down Key [8] until the beep sounds, then enter the Dealer Program Code.
4. An "L" or "LOADING PROM" will display at the keypad. When loading is complete, remove both ac and battery power, remove the PROM from the socket, then power up normally.

# PROGRAMMING RECORD SHEET FOR THE MA1008e

Communicator Features – Default programming shown in parentheses.

|                         |                        | GROUP 1                       |     |                    |                    |              |     |              |     | GROUP 2                         |     |     |     |     |     |     |     |     |
|-------------------------|------------------------|-------------------------------|-----|--------------------|--------------------|--------------|-----|--------------|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                         |                        | ZONE                          |     |                    |                    |              |     |              | K/P | FIR                             | AMB | TRI | TRI | TMR | AC  | BAT | AUX |     |
|                         |                        | 1                             | 2   | 3                  | 4                  | 5            | 6   | 7            | 8   |                                 |     |     |     |     |     |     |     |     |
| REPORT ON ALARM         |                        | 166                           |     |                    |                    |              |     |              | 167 | 168                             |     |     |     |     |     |     |     | 169 |
|                         |                        | 1                             | 2   | 4                  | 8                  | 1            | 2   | 4            | 8   | 1                               | 2   | 4   | 8   | 1   | 2   | 4   | 8   |     |
| CONTROL-PANEL RESTORE   |                        | 170                           |     |                    |                    |              |     |              | 171 | 172                             |     |     |     |     |     |     |     | 173 |
| (SEE NOTE 1)            |                        | 1                             | 2   | 4                  | 8                  | 1            | 2   | 4            | 8   | 1                               | 2   | 4   | 8   | 1   | 2   | 4   | 8   |     |
| ZONE RESTORE            |                        | 184                           |     |                    |                    |              |     |              | 185 |                                 |     |     |     |     |     |     |     |     |
| (SEE NOTE 1)            |                        | 1                             | 2   | 4                  | 8                  | 1            | 2   | 4            | 8   |                                 |     |     |     |     |     |     |     |     |
| ALARM/TROUBLE CODES     | Single Digit           | 000                           | 002 | 004                | 006                | 008          | 010 | 012          | 014 | 016                             | 018 | 020 | 022 | 024 | 026 | 028 | 062 |     |
|                         |                        | (3)                           | (3) | (3)                | (3)                | (3)          | (3) | (3)          | (2) | (1)                             | (2) | (F) |     |     | (F) | (F) |     |     |
|                         | Extended or Two Digit  | 001                           | 003 | 005                | 007                | 009          | 011 | 013          | 015 | 017                             | 019 | 021 | 023 | 025 | 027 | 029 | 063 |     |
|                         |                        | (1)                           | (2) | (3)                | (4)                | (5)          | (6) | (7)          | (1) | (1)                             | (2) | (1) |     |     | (9) | (8) |     |     |
| RESTORE CODES           | Single Digit           | 040                           | 042 | 044                | 046                | 048          | 050 | 052          | 054 | 056                             | 058 | 060 | 062 | 064 | 066 | 068 |     |     |
|                         |                        | (E)                           | (E) | (E)                | (E)                | (E)          | (E) | (E)          | (E) | (E)                             | (E) | (E) | (E) | (E) | (E) | (E) |     |     |
|                         | Extended or Two Digit  | 041                           | 043 | 045                | 047                | 049          | 051 | 053          | 055 | 057                             | 059 | 061 | 063 | 065 | 067 | 069 |     |     |
|                         |                        | (1)                           | (2) | (3)                | (4)                | (5)          | (6) | (7)          | (1) | (F)                             |     | (9) | (8) |     |     |     |     |     |
| OPENING/CLOSING CODES   |                        | CLOSING USER                  |     |                    |                    | FORCE ARM    |     | OPENING USER |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        | 1                             | 2   | 3                  | 4                  | 038          |     | 1            | 2   | 3                               | 4   |     |     |     |     |     |     |     |
| Single Digit            |                        | 030                           | 032 | 034                | 036                | (F)          |     | 070          | 072 | 074                             | 076 |     |     |     |     |     |     |     |
|                         |                        | (C)                           | (C) | (C)                | (C)                |              |     | (B)          | (B) | (B)                             | (B) |     |     |     |     |     |     |     |
|                         | Extended or Two Digit  | 031                           | 033 | 035                | 037                | 039          |     | 071          | 073 | 075                             | 077 |     |     |     |     |     |     |     |
|                         |                        | (1)                           | (2) | (3)                | (4)                | (SEE NOTE 2) |     | (1)          | (2) | (3)                             | (4) |     |     |     |     |     |     |     |
|                         | Select User(s) Closing | 174                           |     |                    |                    | 176          |     | 176          |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        | 1                             | 2   | 4                  | 8                  | 1            | 2   | 4            | 8   |                                 |     |     |     |     |     |     |     |     |
| SUBSCRIBER I.D. NUMBERS |                        | ALARM/RESTORE ID (SEE NOTE 3) |     |                    |                    |              |     |              |     | OPENING/CLOSING ID (SEE NOTE 4) |     |     |     |     |     |     |     |     |
|                         |                        | GROUP 1                       |     |                    |                    | GROUP 2      |     |              |     |                                 |     |     |     |     |     |     |     |     |
| Telephone 1             |                        | 100                           | 101 | 102                | 103                | 104          | 105 | 106          | 107 | 108                             | 109 | 110 | 111 |     |     |     |     |     |
|                         |                        |                               |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
| Telephone 2             |                        | 132                           | 133 | 134                | 135                | 136          | 137 | 138          | 139 | 140                             | 141 | 142 | 143 |     |     |     |     |     |
|                         |                        |                               |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
| Telephone 1             | FORMAT                 | PRE                           | ACC | D/T                | TELEPHONE NUMBER 1 |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         | RCVR DATA              | DLY                           | NO. | DET                |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        | 112                           | 113 |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        |                               |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
| Telephone 2             |                        | 144                           | 145 | TELEPHONE NUMBER 2 |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        |                               |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        |                               |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         | # OF RINGS             | CALLBACK TELEPHONE NUMBER 1   |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        | 269                           | 270 | 271                | 272                | 273          | 274 | 275          | 276 | 277                             | 278 | 279 | 280 |     |     |     |     |     |
|                         |                        |                               |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        | CALLBACK TELEPHONE NUMBER 2   |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |
|                         |                        | 286                           | 287 | 288                | 289                | 290          | 291 | 292          | 293 | 294                             | 295 | 296 | 297 |     |     |     |     |     |
|                         |                        |                               |     |                    |                    |              |     |              |     |                                 |     |     |     |     |     |     |     |     |

|             |       |
|-------------|-------|
| CUSTOMER:   | DATE: |
| ADDRESS:    |       |
| ACCOUNT NO. | TEL:  |

| ENTRY | RECEIVER FORMAT                                   |
|-------|---------------------------------------------------|
| Blank | ADEMCO, SILENT KNIGHT SLOW                        |
| 1     | SESCOA, VERTEX, DCI, FRANKLIN (SEE NOTE 5)        |
| 2     | RADIONICS FAST (SEE NOTE 5)                       |
| 3     | SILENT KNIGHT FAST                                |
| 4     | RADIONICS, DCI, FRANKLIN SLOW (SEE NOTE 5)        |
| 5     | UNIVERSAL HI-SPEED                                |
| 8     | FOR 2300Hz HANDSHAKE, ADD AN "8" TO THIS LOCATION |

| ENTRY | DATA FORMAT              |
|-------|--------------------------|
| Blank | EXTENDED OR SINGLE DIGIT |
| 1     | SINGLE DIGIT             |
| 2     | TWO DIGIT (OR 4/2)       |
| 4     | SUM CHECK                |

NOTES: (1) IF PROGRAMMING ZONE RESTORE, ALSO PROGRAM CONTROL-PANEL RESTORE. (2) TWO-DIGIT FORMAT ONLY. (3) GROUP-2 CODES MUST BE ENTERED, EVEN IF THEY ARE THE SAME AS GROUP-1 CODES. (4) MUST BE PROGRAMMED IF OPENING/CLOSING CODES ARE PROGRAMMED. (5) THESE FORMATS TYPICALLY USE A 2300Hz HANDSHAKE; ADD AN "8" TO THIS ENTRY.

# PROGRAMMING RECORD SHEET FOR THE MA1008e

## Zone Features & Keypad Codes – Default programming shown in parentheses.

| ZONE FEATURES                          | GROUP 1                       |   |   |   |   |   |   |   | GROUP 2 |     |     |     |     |    |     |     |
|----------------------------------------|-------------------------------|---|---|---|---|---|---|---|---------|-----|-----|-----|-----|----|-----|-----|
|                                        | ZONE                          |   |   |   |   |   |   |   | K/P     |     |     |     |     |    |     |     |
|                                        | 1                             | 2 | 3 | 4 | 5 | 6 | 7 | 8 | FIR     | AMB | TBL | TBL | TMR | AC | BAT | ARM |
| SWINGER SHUTDOWN                       | 084 (1)(2)(4)(8) (1)(2)(4)(8) |   |   |   |   |   |   |   | 085     |     |     |     |     |    |     |     |
| NO END-OF-LINE RESISTOR                | 086 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 087     |     |     |     |     |    |     |     |
| CHIME ZONE                             | 088 (1) 2 4 0 1 2 4 8         |   |   |   |   |   |   |   | 089     |     |     |     |     |    |     |     |
| NEVER ARM                              | 090 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 091     |     |     |     |     |    |     |     |
| PIR ZONE                               | 092 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 093     |     |     |     |     |    |     |     |
| UNTIMED OUTPUT (NTO LUG E15)           | 096 (1)(2)(4)(8) (1)(2)(4)(8) |   |   |   |   |   |   |   | 097     |     |     |     |     |    |     |     |
| ENABLE KEYPAD SOUNDER ON ALARM         | 164 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 165     |     |     |     |     |    |     |     |
| DAY ZONE                               | 186 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 187     |     |     |     |     |    |     |     |
| PRIORITY ZONE WITH BYPASS (SEE NOTE 1) | 188 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 189     |     |     |     |     |    |     |     |
| PRIORITY ZONE                          | 190 (1)(2)(4)(8) (1)(2)(4)(8) |   |   |   |   |   |   |   | 191     |     |     |     |     |    |     |     |
| REMOVE AUTO-BYPASS (SEE NOTE 1)        | 192 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 193     |     |     |     |     |    |     |     |
| SELECTIVE BYPASS                       | 194 (1)(2)(4)(8) (1)(2)(4)(8) |   |   |   |   |   |   |   | 195     |     |     |     |     |    |     |     |
| GROUP BYPASS                           | 196 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 197     |     |     |     |     |    |     |     |
| 24-HOUR PROTECTION                     | 198 1 2 4 8 1 2 4 (8)         |   |   |   |   |   |   |   | 199     |     |     |     |     |    |     |     |
| AUTO-RESET                             | 200 (1)(2)(4)(8) (1)(2)(4)(8) |   |   |   |   |   |   |   | 201     |     |     |     |     |    |     |     |
| EXIT/ENTRY ZONE (ENTRY DELAY 1)        | 202 (1) 2 4 8 1 2 4 8         |   |   |   |   |   |   |   | 203     |     |     |     |     |    |     |     |
| EXIT/ENTRY ZONE (ENTRY DELAY 2)        | 204 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 205     |     |     |     |     |    |     |     |
| EXIT/ENTRY FOLLOWER                    | 206 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 207     |     |     |     |     |    |     |     |
| ABORT DELAY                            | 208 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 209     |     |     |     |     |    |     |     |
| BURGLARY OUTPUT                        | 210 (1)(2)(4)(8) (1)(2)(4)(8) |   |   |   |   |   |   |   | 211     |     |     |     |     |    |     |     |
| 7ms LOOP RESPONSE (SEE NOTE 2)         | 214 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 215     |     |     |     |     |    |     |     |
| 50ms LOOP RESPONSE (SEE NOTE 2)        | 216 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 217     |     |     |     |     |    |     |     |
| FIRE ON BURGLARY ZONE (SEE NOTE 3)     | 306 1 2 4 8 1 2 4 8           |   |   |   |   |   |   |   | 307     |     |     |     |     |    |     |     |

TRANSMITTER ZONE MAP (FOR WIRELESS SYSTEMS ONLY)

| TX# | LOC | ZONE |
|-----|-----|------|
| 1   | 308 |      |
| 2   | 309 |      |
| 3   | 310 |      |
| 4   | 311 |      |

| TX# | LOC | ZONE |
|-----|-----|------|
| 5   | 312 |      |
| 6   | 313 |      |
| 7   | 314 |      |
| 8   | 315 |      |

REFER TO R1000 RECEIVER INSTRUCTIONS W1604 FOR TRANSMITTER MAPPING AND LEARNING INSTRUCTIONS AND OTHER WIRELESS INSTALLATION INFORMATION.

NOTE: For wireless systems, refer to R1000 Receiver Installation Instructions (W1604) for Transmitter Mapping Locations 308-315.

### KEYPAD CODES (DO NOT ENTER ZEROS)

SEE NOTE 4

| AMBUSH                  | USER PROGRAM CODE       | DEALER PROGRAM CODE     |
|-------------------------|-------------------------|-------------------------|
| 236 237                 | 238 239 240 241 242 243 | 244 245 246 247 248 249 |
| (1) (2) (3) (4) (5) (6) | (4) (5) (6) (7) (8) (9) |                         |

| USER 1          | USER 2          | USER 3          | USER 4          |
|-----------------|-----------------|-----------------|-----------------|
| 316 317 318 319 | 320 321 322 323 | 324 325 326 327 | 328 329 330 331 |
| (1) (2) (3)     |                 |                 |                 |

| USER 5          | USER 6          | USER 7          | USER 8          |
|-----------------|-----------------|-----------------|-----------------|
| 332 333 334 335 | 336 337 338 339 | 340 341 342 343 | 344 345 346 347 |
|                 |                 |                 |                 |

|                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |   |
|----------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|---|
| ENTRY TOTAL:         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |   |
| PROGRAMMER DISPLAYS: | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9  | 0  | B  | C  | D  | E  | F |

See Note 5 ———— See Note 6

NOTES: (1) If programming PRIORITY ZONE WITH BYPASS, do not program REMOVE AUTO BYPASS. (2) If neither 7ms nor 50ms LOOP RESPONSE is programmed, loop response will be 750ms. (3) FIRE ON BURGLARY ZONES must also be programmed for 24-HOUR PROTECTION, but for no other zone features except UNTIMED OUTPUT. (4) The Dealer Program Code must not start with the same numbers as the User Program Code. (5) \* (dot) or blank for no entry. (6) To conform with Telephone Company convention, program zeros in Telephone Numbers, Alarm Codes and Subscriber ID Numbers as an entry total of 10. (Press DATA UP button until "0" is displayed; in PRO410, press Key [0].) (7) Zone "8" for wireless operation only. To use as other than Keypad Panic, also program DIRECT KEYPAD PANIC TO AMBUSH (see GLOSSARY).

# PROGRAMMING RECORD SHEET FOR THE MA1008e

## System Features & Timeouts – Default programming shown in parentheses.

### SYSTEM FEATURES

INSTRUCTIONS: FOR EACH LOCATION: (1) CIRCLE NUMBERS FOR FEATURES DESIRED. (2) PLACE SUM OF CIRCLED NUMBERS IN "ENTRY" BOX.  
WARNING: DO NOT ATTEMPT TO PROGRAM "RESERVED" LOCATIONS AS IMPROPER OPERATION MAY RESULT.

| LOCATION 078                      | ENTRY---> |  |
|-----------------------------------|-----------|--|
| DISPLAY DAY ZONES AFTER RESET     | 1         |  |
| FAILURE TO COMMUNICATE ON NTO LUG | 2         |  |
| USER 5 ARM ONLY                   | 4         |  |
| USER 5 REPORT AS USER 1           | 8         |  |

| LOCATION 079                      | ENTRY---> |  |
|-----------------------------------|-----------|--|
| USER 5 SERVICE CODE               | 1         |  |
| DISABLE DAY-ZONE REPORT           | 2         |  |
| USERS 6,7,8 REPORT AS USERS 2,3,4 | 4         |  |
| KEYPAD AUXILIARY ALARM ON NTO LUG | 8         |  |

| LOCATION 080                  | ENTRY---> |  |
|-------------------------------|-----------|--|
| DIRECT KEYPAD PANIC TO AMBUSH | 1         |  |
| DIRECT ZONE 8 TO AMBUSH       | 2         |  |
| DISABLE CALLBACK DOWNLOAD     | 4         |  |
| DISABLE FUNCTION-6 DOWNLOAD   | 8         |  |

| LOCATION 081               | ENTRY---> |  |
|----------------------------|-----------|--|
| WATCH ON WITH GROUP BYPASS | 1         |  |
| CHIME ON WITH GROUP BYPASS | 2         |  |
| DISPLAY OPEN ZONES         | 4         |  |
| DISABLE DISPLAY BYPASS     | 8         |  |

| LOCATION 082                          | ENTRY---> |  |
|---------------------------------------|-----------|--|
| ENABLE DOWNLOAD W/ANSWERING MACH. (1) | 1         |  |
| REMOTE STATUS LED ON NTO LUG          | 2         |  |
| ENABLE KEYPAD FIRE (SEE NOTE 1)       | 4         |  |
| ENABLE KEYPAD AUX. (SEE NOTE 1)       | 8         |  |

| LOCATION 178                 | ENTRY---> |  |
|------------------------------|-----------|--|
| TOUCHTONE DIALING            | 1         |  |
| TOUCHTONE WITH ROTARY BACKUP | 2         |  |
| BACKUP REPORTING             | 4         |  |
| DOUBLE REPORTING             | 8         |  |

| LOCATION 179               | ENTRY---> |  |
|----------------------------|-----------|--|
| OPENING REPORT AFTER ALARM | 1         |  |
| FORCE ARM                  | 2         |  |
| STATUS REPORT              | 4         |  |
| SPLIT REPORTING            | 8         |  |

| LOCATION 180                   | ENTRY---> |  |
|--------------------------------|-----------|--|
| AUDIBLE TEST ON ARMING         | 1         |  |
| AUTO-RESET AFTER ALARM TIMEOUT | (2)       |  |
| POWER UP IN LAST STATE         | (4)       |  |
| SOUNDER OUTPUT ON LUG E4       | 8         |  |

| LOCATION 181               | ENTRY---> |  |
|----------------------------|-----------|--|
| PULSING FIRE OUTPUT        | (1)       |  |
| RESET FIRE ZONE            | (2)       |  |
| ENABLE KEYPAD TACTILE BEEP | (4)       |  |
| RESET TEST TIMER ON REPORT | 8         |  |

| LOCATION 182                   | ENTRY---> |  |
|--------------------------------|-----------|--|
| DISABLE FAULT FIND             | 1         |  |
| ENABLE KEYPAD PANIC            | (2)       |  |
| ENABLE COMMUNICATOR CONF. TEST | (4)       |  |
| DISABLE BELL TEST              | 8         |  |

| LOCATION 183                      | ENTRY---> |  |
|-----------------------------------|-----------|--|
| DISPLAY ANY BYPASS                | 1         |  |
| NO OPNG REPT AFTER ALRM ON ZONE 6 | 2         |  |
| INCL MANL BYP IN FORCE-ARM/STATUS | 4         |  |
| KEY INPUT ON ZONE 7               | 8         |  |

| LOCATION 304                      | ENTRY---> |  |
|-----------------------------------|-----------|--|
| DON'T WAIT FOR HANDSHAKE, TELCO 1 | 1         |  |
| DON'T WAIT FOR HANDSHAKE, TELCO 2 | 2         |  |
| (RESERVED)                        |           |  |
| (RESERVED)                        |           |  |

| LOCATION 305                  | ENTRY---> |  |
|-------------------------------|-----------|--|
| AUDIO VERIFICATION ON NTO LUG | 1         |  |
| BURGLARY OUTPUT ON AMBUSH     | 2         |  |
| RESET SHOCK SENSORS ON ARMING | 4         |  |
| DISABLE LOW-BATTERY DISPLAY   | 8         |  |

### TIMES & TIMEOUTS

| TIME EXAMPLES |         |         |
|---------------|---------|---------|
| TIME          | 1st BOX | 2nd BOX |
| 5             | 5       | NONE    |
| 10            | 0       | NONE    |
| 15            | F       | NONE    |
| 30            | E       | 1       |
| 45            | D       | 2       |
| 60            | C       | 3       |

| x1  | x16 |                      |
|-----|-----|----------------------|
| 094 | 095 | SENSOR WATCH (hours) |
| 250 | 251 | TEST-TIMER           |
|     |     | OFFSET (hours)       |

| x1  | x16 |                               |
|-----|-----|-------------------------------|
| 218 | 219 | EXIT DELAY (D,2) (seconds)    |
| 220 | 221 | ENTRY DELAY 1 (E,1) (seconds) |
| 222 | 223 | ENTRY DELAY 2 (E,1) (seconds) |
| 232 | 233 | ABORT DELAY (seconds)         |

| x1  | x16 |                                  |
|-----|-----|----------------------------------|
| 224 | 225 | BURG OUT TIMEOUT (F, ) (minutes) |
| 228 | 229 | FIRE TIMEOUT (F, ) (minutes)     |
| 230 | 231 | CHIME TIME (8, ) (1/4 seconds)   |

Example: For 2 seconds, enter 8 in 230.

| x1  | x10 |                                |
|-----|-----|--------------------------------|
| 252 | 253 | AUTO D/L ID NO. (SEE NOTE 2)   |
| 254 | 255 | CALLBACK SELECT (ENTER 1 OR 2) |

DD493BNK PROM Required Programming: Page 0, Location 083 = "5"; Page 1, Location 251 = "C"; Page 1, Location 252 = "4"

|                      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|----------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| ENTRY TOTAL :        |   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| PROGRAMMER DISPLAYS: | • | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0  | B  | C  | D  | E  | F  |

See Note 3 ———

————— See Note 4

NOTES: (1) This feature requires that all system keypads have F/P/A keypad panics. (2) Program in decimal numbers; do not use leading zeros. (3) • (dot) or blank for no entry. (4) To conform with Telephone Company convention, program zeros in Telephone Numbers, Alarm Codes and Subscriber ID Numbers as an entry total of 10. (Press DATA UP button until "0" is displayed; in PRO410, press Key [0].)

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## ADDENDUM TO INSTALLATION INSTRUCTIONS

### Subject: Version 2

The following telephone line-fault and other features have been added since the last printing of the Installation Instructions. **Note:** A line-fault condition will cause a System Trouble 8 to display at the keypad.

| LOCATION 854                         | ENTRY → |   |
|--------------------------------------|---------|---|
| ALARM ON LINE FAULT                  |         | 1 |
| ALARM ON LINE FAULT IF ARMED, AREA 1 |         | 2 |
| ALARM ON LINE FAULT IF ARMED, AREA 2 |         | 4 |
| LINE-FAULT DETECTION ON NTO          |         | 8 |

#### New Line-Fault Features:

##### ALARM ON LINE FAULT (Location 854)

##### ALARM ON LINE FAULT IF ARMED (Location 854)

*Alarm on Line Fault* will trip a Burglary Output on a line-fault condition while armed or disarmed. The Burglary Output Timeout is fixed at 5 minutes. Program a "2" in this location for a Burglary Output on line fault only when Area 1 is armed; similarly, program a "4" for a Burglary Output only when Area 2 is armed. **Note:** *Line-Fault Delay* (below) must also be programmed for these features to function.

##### LINE FAULT DETECTION ON NTO (Location 854)

Causes the NTO Lug (Lug E15) to go low when a line-fault condition is detected.

##### LINE-FAULT DELAY (Locations 860-861)

Delays system response to a line-fault condition. Program in units of 15-seconds (quarter-minutes); a minimum of 30 seconds ("2" in Location 860) is recommended. **Note:** (1) If both locations are blank, line-fault detection will be disabled. (2) Depending upon the status of the phone line, the system may take as long as 90 seconds to respond. (3) Maximum programmable time is 63.75 minutes.

| x1  | x16 |
|-----|-----|
| 860 | 861 |
|     |     |

#### Other Features:

| LOCATION 855                           | ENTRY → |   |
|----------------------------------------|---------|---|
| VOICE PRIORITY FOR AUDIO VERIFICATION  |         | 1 |
| SILENCE AUDIBLES ON AUDIO VERIFICATION |         | 2 |
| AREA-2 ARMED OUTPUT ON LUG E16         |         | 4 |
| DISABLE SERVICE CODE BY ANY USER       |         | 8 |

##### VOICE PRIORITY FOR AUDIO VERIFICATION (Location 855)

(*Not evaluated by UL.*) Used in conjunction with the INHO Terminal of an Audio Verification Module connected to Zone 6, this will, for as long as the module is active,

- Prevent the digital dialer from communicating;
- Prevent the NTO Lug from activating the module's trigger input; and
- Disable line-fault detection.

##### SILENCE AUDIBLES ON AUDIO VERIFICATION (Location 855)

(*Not evaluated by UL.*) Used in conjunction with the INHO Terminal of an Audio Verification Module connected to

Zone 6, this will, for as long as the module is active,

- Silence all audible output devices; and
- Disable line-fault detection.

##### AREA-2 ARMED OUTPUT ON LUG E16 (Location 855)

Causes E16 to go low when Area 2 is armed. (Similar in function to Arm Lug E4 for Area 1; see *Arm Lug* in Installation Instructions.)

##### DISABLE SERVICE CODE BY ANY USER (Location 855)

Select to allow any user to disable the Service Code. (Also see Installation Instructions: *User 5 Service Code.*)

| LOCATION 856                                | ENTRY → |   |
|---------------------------------------------|---------|---|
| AUTOMATIC GROUP BYPASS, AREA 1              |         | 1 |
| AUTOMATIC GROUP BYPASS, AREA 2              |         | 2 |
| ARM AREA 2 FIRST                            |         | 4 |
| DISABLE HOLD-DOWN [B] FOR AUTO GROUP BYPASS |         | 8 |

##### AUTOMATIC GROUP BYPASS (BY AREA) (Location 856)

##### DISABLE HOLD-DOWN [B] FOR AUTO GROUP BYPASS (Location 856)

A "1" causes all Area-1 Group Bypass Zones to automatically bypass after exit delay has elapsed only if no Exit/Entry Zones were violated during that interval. Similarly, a "2" causes all Area-2 Group Bypass Zones to automatically bypass. If a *Hold-Down [B]* is executed while armed, Exit/Entry doors may be opened for up to one minute to permit someone to exit (while others remain on premises) without causing an alarm ("8" in Location 856 will disable this feature). **Note:** Zones bypassed in this manner are not included in a status report, even if *Include Manual Bypass in Force-Arm/Status* is selected.

##### ARM AREA 2 FIRST (Location 856)

Program a "4" in this location to ensure that Area 2 is armed before Area 1. Any attempt to arm Area 1 first will result in a Priority condition at the Area-1 keypad.

|           |      | USER |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|-----------|------|------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
|           | LOC. | 1    | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| KEYSWITCH | 862  | 1    | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0  | B  | C  | D  | E  | F  |
| AUTOARM   | 864  | 1    | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0  | B  | C  | D  | E  | F  |

##### KEYSWITCH (Location 862)

Any "user" entry will enable this option. (Only the area(s) selected for that user will arm.) Wire a remote keyswitch arm/disarm station as a normally-open momentary switch across Zone 11's end-of-line resistor. To supervise, program Zone 11 as a Day Zone or 24-Hour Zone with 50mS loop response. For central-station systems, program that user to report openings and/or closings.

##### AUTOARM (Location 864)

Any "user" entry will enable this feature. (Only the area(s) selected for that user will autoarm.) For those systems that report, program the same user to report openings and/or closings. *Autoarm Time* (day and time) is programmed using Napco's PCD2000 Quickloader™ schedule screens.