

PROGRAMMER

Z1100P

**SPECIFICATIONS
& INSTRUCTIONS**

MOOSE



System II



moose products inc.

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Moose Technical Support

APPLICATION

The Z1100P is a hand held general purpose 256/1024-bit serial EEPROM programmer. This programmer is designed as an optional programming tool for use with the Z1100 Security Control and other EEPROM programmable devices.

SPECIFICATIONS

- Program 256-bit EEPROMs:
National NMC 9306
NCR59306
General Instruments ER59256
or equivalent
- Program 1024-bit EEPROMs:
National NMC 9345
National NMC 9346
NCR 59308
or equivalent
- 16-digit membrane keypad
- Programmer dimensions: 4 x 7 x 1.75 inches
- Travel case dimensions: 12 x 8 x 3.5 inches
- Current drain: 250 milliamps @ 12 VDC
- Operating temperature range: 32 to 122 degrees Fahrenheit (0 to 50 degrees Celsius)

FEATURES

- English language menus and prompts make programming easier
- Read Security Control EEPROMs
- Program Security Control EEPROMs
- Store program libraries
- Easy-to-read alphanumeric liquid crystal display (LCD)
- Rugged travel case
- Compact size
- Comes complete and ready to use. No extra hardware to buy.

IMPORTANT NOTE:

This manual refers to and contains information about the Z1100 System II as well as the original Z1100. If your programmer has not been updated with the new software, then all references to the Z1100 "System II" will not be applicable.

To determine if your Z1100P programmer contains the new software, turn power switch on. If the LCD display reads "Program System II", your programmer contains the new software.

If your programmer reads "Program Z System" upon initial power up, contact Moose Products directly for instructions concerning updating your programmer.

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THEORY OF OPERATION

The Z1100P EEPROM Programmer is designed to program the Z1100 Security Control and other products utilizing EEPROMs. The Z1100P will program two varieties of serial EEPROMs:

1024—bit EEPROM—

National NMC 9345

Naitonal NMC 9346

NCR 59308

or equivalent

256—bit EEPROM—

National NMC 9306

NCR 59306

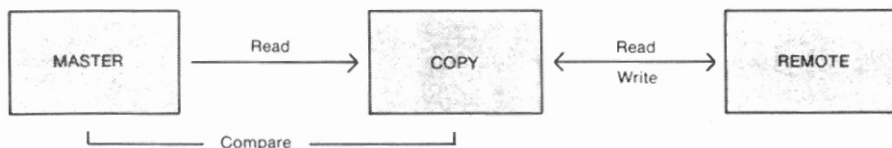
General Instruments ER59256

or equivalent

The EEPROM has many advantages:

- (1) Nonvolatile operation. Data programmed into an EEPROM is not erased if power is removed.
- (2) Ease of handling. Conventional Fuse Link PROMs have to be programmed in a programmer, removed from the programmer, and then installed into a control system without bending or breaking any pins on the chip (or putting the PROM in backwards). EEPROMs on the Z1100P Programmer "talk" to the EEPROM on the Z1100 Security Control through an interface cable, eliminating the need to handle sensitive integrated circuits.
- (3) Multiple uses. Conventional fuse link PROMs can be programmed once, after which you have to start over again with a new PROM. An EEPROM can be programmed over ten thousand times.

EEPROM HIERARCHY



Two EEPROMs are installed on the programmer: MASTER and COPY EEPROMs. One EEPROM is installed on the control (or other programmable device): REMOTE EEPROM. The "COPY EEPROM" is the work area. All programming is done directly to the "COPY EEPROM". When reading or programming a "Remote Security Control", all data is written into or read from the "COPY EEPROM". Therefore a "COPY EEPROM" must be installed for the Z1100P to function properly. The data in the "MASTER EEPROM" can be read and programmed into the "COPY EEPROM", or the "MASTER EEPROM" can be compared with the "COPY EEPROM". No data can be programmed directly into the "MASTER EEPROM".

The Z1100P is equipped with a programming cable that plugs into the Z1100 Security Control and other compatible control systems, allowing the user to read the contents of the "REMOTE EEPROM" into the "COPY EEPROM", make any appropriate changes, and write the contents of the "COPY EEPROM" back into the "REMOTE EEPROM". The EEPROM on the "Remote Security Control" does not have to be removed from the printed circuit board for programming.

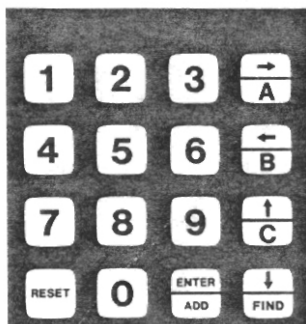
POWERING THE PROGRAMMER

The Z1100P Programmer can be powered in one of three ways:

- (1) Remote Security Control power. The polarized programmer cable brings power from the remote security control to the programmer.
- (2) Plug-in Power Supply. The Z1100P comes with a plug-in power supply to power the programmer whenever remote security control power is not available.
- (3) Four "AA" alkaline batteries. Battery operation should be kept to a minimum, as the programmer consumes a considerable amount of current.

NOTE: Turn off power to the Z1100P and control to be programmed. Plug-in the programmer cable to the control. Turn on power to the Z1100P then turn on power to the control to be programmed.

KEYPAD OPERATION



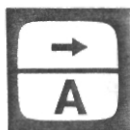
Keypad digits 0 to 9 are for data entry.



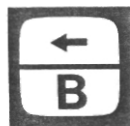
Resets the Z1100P and the top of the option menu is displayed.



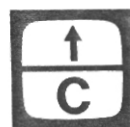
- (1) Select a menu option.
- (2) Enter displayed value into address
("Program System I", Program System II", and "Address Program" options).
- (3) Add bits together
("Address Program" option).



Moves the cursor right
("Program System I", Program System II", and "Address Program"
options).



Moves the cursor left
("Program System I", Program System II", and "Address Program"
options).



Moves the display line up to the previous menu option or previous
address.
("Program System I", Program System II", and "Address Program"
options).



- (1) Moves the display line down to the next menu option or next
address.
- (2) Find displayed address.
("Program System I", Program System II", and "Address Program"
options).

OPTION MENU

All programmer prompts and data displays are in english language format on a 16-character liquid crystal display. This provides the user with clear, easy-to-read instructions and data.

Upon power-up the Z1100P defaults to 1024-bit EEPROM programming which is used by the Z1100 Security Control.

The LCD screen displays the top of the option menu:

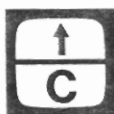
Program System II - top of menu
Program System I
Address Program
Read MASTER
Read REMOTE
Program REMOTE
Compare M. To C.
256 bit EEPROM - bottom of menu

Find a menu option by pressing either



to go
down
the menu

or



to go
up
the menu

or



to go to
top of
the menu

Press



to select
the menu option.

NOTE: These four keys are the only keys that work from the menu; other keys are ignored and will cause the programmer to emit a 2-second error tone.

Program System II

"Program System II" menu option is designed for the Z1100 System II Security Control and other security controls that use the same programming format. System II is the second generation in the Z1100 Security Control family.

To select this option, have "Program System II" on the LCD screen and

press



The LCD screen will display

Function = 000

Enter the first function to be programmed and

press



press



EXAMPLE: Go to function 17

The LCD screen will display:

017 = 030 Exit Time In Sec.

Function

Value stored in Copy EEPROM

Scrolling Function Description

You can change the cursor position with either



Moves the cursor right
and fill with 0

or



Erase right most
digit

The cursor points to the position where the next digit will be entered if a keypad digit (0 to 9) is pressed. When the correct value is displayed on the LCD screen

press



to write the value into the Copy EEPROM.

NOTE: Preceeding 0's are not required.

The Z1100 System II program functions have a range of 1 to 220.

The valid range for a programmed value is 0 to 255.

To go to the next function



To go to the previous function



To find any other function, place the function in the LCD display and

press



Example: Find function 168.

Press



The LCD screen will display:

PH #1 F (Phone number 1 digit 1)

Entire telephone number 1 with "F" as stop character.

For complete LCD screen information, reference "Program System II LCD screen messages" and the **Z1100 System II SECURITY CONTROL SPECIFICATIONS & INSTRUCTIONS** Manual L1124.



to exit System II programming

LCD screen will display
Set Parity? No = 0

The Z1100P will automatically set the copy EEPROM Parity Byte if any key other than 0 is pressed and return to the top of the main menu.

Program System I

"Program System I" menu option is designed for the Z1100 System I Security Control and other security controls that use the same programming format. System I is the first generation in the Z1100 Security Control family.

To select this option, have "Program System I" on the LCD screen and

press



The LCD screen will display:

000 = 002 Fast Loop Response In 40ms Steps

Copy EEPROM memory address

Cursor

Value stored in Copy EEPROM address

[Scrolling address description]

You can change the cursor position with either



Moves the cursor
right and fill with 0

or



Erase right most
digit.

The cursor points to the position where the next digit will be entered if a keypad digit (0 to 9) is pressed. When the correct value is displayed on the LCD screen,

press



to write the value into the Copy EEPROM.

NOTE: Preceeding 0's are not required.

The EEPROM memory address has a range of 000 to 127.

The valid range for a programmed value is 000 to 255.

To go to the next
Copy EEPROM address,

press



To go to the previous
Copy EEPROM address,

press



To find any other Copy EEPROM memory address, place the memory address in the LCD display and

press



Example: Find Copy EEPROM memory address 068.

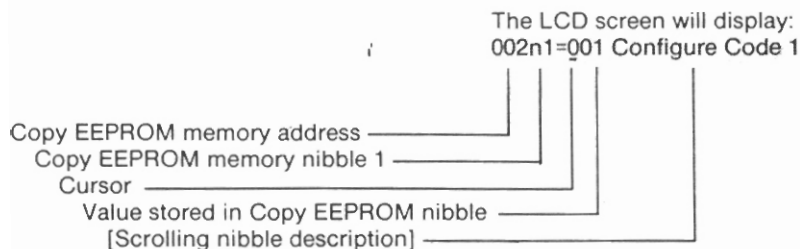
Press



The LCD screen will display:
068=255 Ph #1 01 (Phone number 1 digit 1)

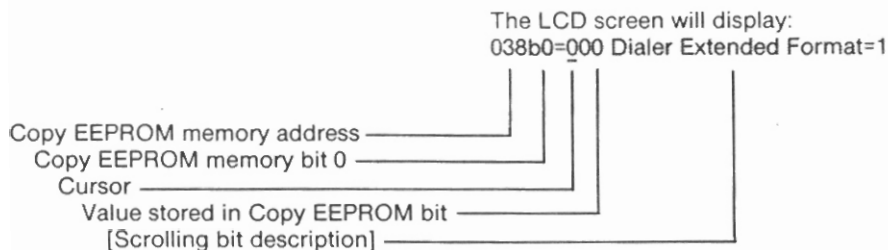
Most EEPROM memory addresses in "Program System I" programming are byte programmed. However, some addresses are nibble and bit programmed.

NIBBLE Programming (2 nibbles per address [byte])
Range: 000 to 015



NOTE: Nibble programming applies only to AUTHORIZATION codes and the Program code. (You may find it easier to program codes with the Z1100R keypad. See the **Z1100 SPECIFICATIONS & INSTRUCTIONS Manual L1128** for more information.)

BIT Programming (8 bits per address [byte])
Range: 000 to 001



For complete LCD screen information, reference "Program System I LCD screen messages" and the **Z1100 SECURITY CONTROL SPECIFICATIONS & INSTRUCTIONS Manual L1128**.

Press

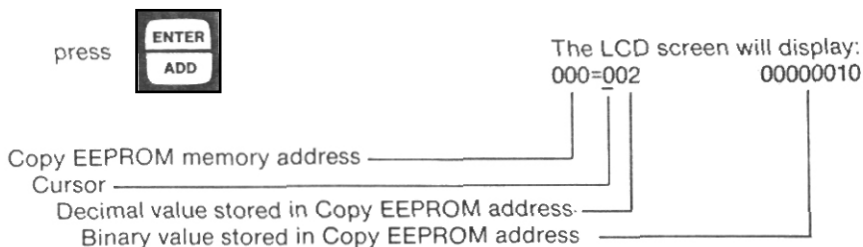


to exit programming
and return
to menu.

Address Program

"Address Program" menu option is designed for systems that cannot be programmed with the "Program System II" or "Program System I" options.

To select this option, have "Address Program" on the LCD screen and



The EEPROM memory address has a range of 0 to 127 in the 1024-bit EEPROM mode and 0 to 031 in the 256-bit EEPROM mode.

You can change the cursor position with either



Moves the cursor
right and fill with 0

or



Erase right most
digit

The cursor points to the position where the next digit will be entered if a keypad digit (0 to 9) is pressed. When the correct value is displayed on the LCD screen,

press



to write the value into the Copy EEPROM.

The valid range for a programmed value is 0 to 255.

To go to the next Copy EEPROM address, To go to the previous EEPROM address,

press



press



To find any other Copy EEPROM memory address, place the memory address in the LCD display and

press



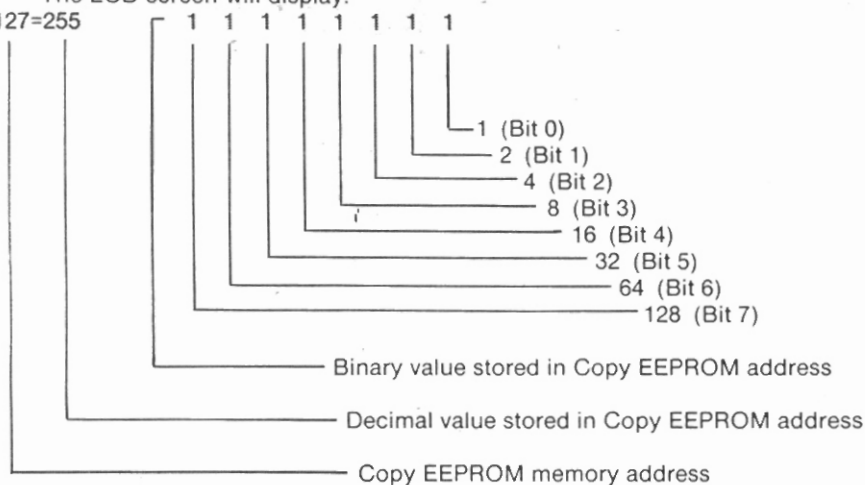
Example: Find Copy EEPROM memory address 127.

Press



The LCD screen will display:

127=255



In a bit-programmed EEPROM memory address, each bit is set independently. The "ADD" function can be used as a temporary buffer to make bit programming easier.

Example: Turn ON (set to "1") bits 2, 4, and 7 at address 038.

Press



The LCD screen will display:

038=000 00000000

Press



to turn on bit 2 and store it in a buffer.

The LCD screen will display the following:

038=004 00000100

_____ bit 2

Press



to turn on bit 4 and store it in a buffer.

The LCD screen will display:

038=020 00010100

Press



bit 4

to turn on bit 7 and store it in a buffer.

The LCD screen will display:

038=148 10010100

bit 7

Bits 2, 4, and 7 are turned on and programmed into the Copy EEPROM.

Press



to exit programming
and return
to menu.

Read MASTER

The "Read MASTER" menu option reads the data stored in the "MASTER EEPROM" and writes the data into the "COPY EEPROM".

CAUTION: If this menu option is selected, data in the "COPY EEPROM" will be lost and the "MASTER EEPROM" data put in its place.

To select this option, have "Read MASTER" on the LCD screen and

press



The LCD screen will display:
**Read MASTER Complete.

Libraries of various system configurations can be stored in a "MASTER EEPROM" to be downloaded to a "REMOTE EEPROM" (via the "COPY EEPROM"). Programming a "MASTER EEPROM" would save considerable time and programming effort if most of your installations are set up with the same characteristics.

For example, a "MASTER EEPROM" can be built for residential systems basic zone definitions, entrance, exit delay times, digital communicator reporting codes and central station telephone numbers. Another "MASTER EEPROM" can be built (with different characteristics) for commercial systems.

The "MASTER EEPROM" must be moved to the "COPY EEPROM" socket for programming, and then moved back to the "MASTER EEPROM" socket.

Press



to exit
and return
to menu.

Read REMOTE

The "Read REMOTE" menu option uploads (reads) the data stored in the "REMOTE EEPROM" (on a Security Control) and writes the data into the "COPY EEPROM".

The Z1100P Programmer Cable must be connected to a Security Control Programmer Plug for this option to work.

CAUTION: If this menu option is selected, data in the "COPY EEPROM" will be lost and the "REMOTE EEPROM" data put in its place.

To select this option, have "Read REMOTE" on the LCD screen and

press



The LCD screen will display:
**Read REMOTE Complete.

Press



to exit
and return
to menu.

Program REMOTE

The "Program REMOTE" menu option downloads (writes) the data stored in the "COPY EEPROM" to a "REMOTE EEPROM"

The Z1100P Programmer Cable must be connected to a Security Control Programmer Plug for this option to work.

CAUTION: If this menu option is selected, data in the "REMOTE EEPROM" will be lost and the "COPY EEPROM" data put in its place.

To select this option, have "Read REMOTE" on the LCD screen and

press



The LCD screen will display:
***Program REMOTE Complete.

Press



to exit
and return
to menu.

Compare Master EEPROM to Copy EEPROM

The "Compare M. To C." menu option compares each memory address in the "MASTER EEPROM" to the corresponding data in the "COPY EEPROM".

To select this option, have "Compare M. to C." on the LCD screen and

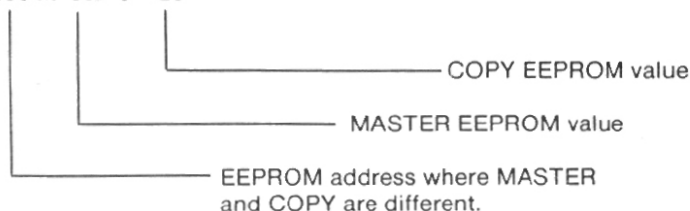
press



The LCD screen will display either:
**COMPARE Complete.

or

000 M=002 C=128



Press



to display the next memory address where the MASTER and COPY EEPROM are different.

NOTE: Z1100 System II Functions do not correspond to EEPROM addresses.

When all addresses have been displayed (or if the MASTER and COPY both contain exactly the same information) the LCD screen will display:

***COMPARE Complete."

Press



to exit
and return
to menu.

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256 bit EEPROM

This option configures the Z1100P for 256-bit EEPROMS and should not be used unless instructed to do so by the installation instructions. The programming sequence is different from the 1024-bit EEPROM. The user can only access 32 memory locations (0 to 031) in "Address Program" and is locked out of "Program System II" and "Program System I" programming.

To configure the Z1100P for 1024-bit EEPROMS the power switch must be turned off and then back on.

To select this option, have "256 bit EEPROM" on the LCD screen and

press



The LCD screen will display:

****Configured For 256 Bit EEPROM.**

Press



to exit
and return
to menu.

"Program System II" LCD screen messages.

Reference Z1100 System II SPECIFICATIONS & INSTRUCTIONS - L1124 for additional information.

FUNCTION LCD screen MESSAGE

1.	Auth. Code 1	56.	Configure Code 3
2.	Auth. Code 2	57.	Configure Code 4
3.	Auth. Code 3	58.	Configure Code 5
4.	Auth. Code 4	59.	Configure Code 6
5.	Auth. Code 5	60.	Configure Code 7
6.	Auth. Code 6	61.	Configure Code 8
7.	Auth. Code 7	62.	Configure Code 9
8.	Auth. Code 8	63.	Two Digit Arm = 1
9.	Auth. Code 9	64.	Command 4 & 5 Works If Armed = 1
10.	Program Auth. Code	65.	Interior/Delay Mode
11.	Usage Count Code 9	66.	Disable Keypad FIRE = 1
12.	Not Programmed	67.	Disable Keypad POLICE = 1
13.	Zones Violated	68.	Disable Keypad MEDICAL = 1
14.	Delete Code 1-9	69.	Disable Keypad Shunting = 1
15.	Not Programmed	70.	No Keypad Beep On Burg = 1
16.	Installer Program Auth. Code	71.	Silent Keypad POLICE = 1
17.	Exit Time In Sec.	72.	Start Entrance 1 From Keypad = 1
18.	Entrance 1 Time In Sec	73.	Disable Keypad Command 4 = 1
19.	Entrance 2 Time In Sec	74.	Disable Keypad Command 5 = 1
20.	Access Time In Sec	75.	Disable Keypad Command 6 = 1
21.	Delay Before Burg. Alarm In Sec	76.	Disable Keypad Command 7 = 1
22.	BURG Cutoff Time In Min	77.	Disable Keypad Command 8 = 1
23.	FIRE Cutoff Time In Min	78.	Delay Before Report In Sec
24.	POLICE Cutoff Time In Min	79.	Dialer Attempts
25.	MEDICAL Cutoff Time In Min	80.	Abort Dialer = 1
26.	Pulsing Burg = 1	81.	Disable Test On Power Up = 1
27.	Pulsing Fire = 1	82.	Exception Opening = 1
28.	BURG Audible Lockout = 1	83.	Account Code Digit 1 Ph #1
29.	Change Mode With Key = 1	84.	Account Code Digit 2 Ph #1
30.	Supervisory Latch = 1	85.	Account Code Digit 3 Ph #1
31.	Auto Interior Off = 1	86.	Account Code Digit 4 Ph #1
32.	Auto Instant = 1	87.	Trans Format Ph #1
33.	No Interior Follower = 1	88.	Single Round = 1 Ph #1
34.	1 Sec Siren Test On Arm = 1	89.	4/2 Format = 1 Ph #1
35.	Days Till Test = 0 - 7	90.	Standard Extended Format = 1 Ph #1
36.	Fast Loop Response In 40ms Steps	91.	A+ Extended Format = 1 Ph #1
37.	Slow Loop Response In 40ms Steps	92.	Radionics Parity = 1 Ph #1
38.	Zone 1	93.	Touchtone® = 1 Ph #1
39.	Zone 2	94.	Zone 1 Dialer Code Ph #1
40.	Zone 3	95.	Zone 2 Dialer Code Ph #1
41.	Zone 4	96.	Zone 3 Dialer Code Ph #1
42.	Zone 5	97.	Zone 4 Dialer Code Ph #1
43.	Zone 6	98.	Zone 5 Dialer Code Ph #1
44.	Zone 7	99.	Zone 6 Dialer Code Ph #1
45.	Zone 8	100.	Zone 7 Dialer Code Ph #1
46.	Zone 1 Short For Supervisory = 1	101.	Zone 8 Dialer Code Ph #1
47.	Zone 2 Short For Supervisory = 1	102.	Keypad FIRE Dialer Code Ph #1
48.	Zone 3 Short For Supervisory = 1	103.	Keypad POLICE Dialer Code Ph #1
49.	Zone 4 Short For Supervisory = 1	104.	Keypad MEDICAL Dialer Code Ph #1
50.	Zone 5 Short For Supervisory = 1	105.	Duress Dialer Code Ph #1
51.	Zone 6 Short For Supervisory = 1	106.	Opening Dialer Code Ph #1
52.	Zone 7 Short For Supervisory = 1	107.	Closing Dialer Code Ph #1
53.	Zone 8 Short For Supervisory = 1	108.	Shunted Dialer Code Ph #1
54.	Configure Code 1	109.	Cancel Dialer Code Ph #1
55.	Configure Code 2	110.	Restore Dialer Code Ph #1
		111.	Supervisory Dialer Code Ph #1

FUNCTION LCD screen MESSAGE

112.	Lo Batt Dialer Code Ph #1	173.	Ph #1 (Digit 6)
113.	Battery Restore Dialer Code Ph #1	174.	Ph #1 (Digit 7)
114.	AC Fail Dialer Code Ph #1	175.	Ph #1 (Digit 8)
115.	AC Restore Dialer Code Ph #1	176.	Ph #1 (Digit 9)
116.	Memory Error Dialer Code Ph #1	177.	Ph #1 (Digit 10)
117.	Test Dialer Code Ph #1	178.	Ph #1 (Digit 11)
118.	Account Code Digit 1 Ph #2	179.	Ph #1 (Digit 12)
119.	Account Code Digit 2 Ph #2	180.	Ph #1 (Digit 13)
120.	Account Code Digit 3 Ph #2	181.	Ph #1 (Digit 14)
121.	Account Code Digit 4 Ph #2	182.	Ph #1 (Digit 15)
122.	Trans Format Ph #2	183.	Ph #1 (Digit 16)
123.	Single Round = 1 Ph #2	184.	Ph #1 (Digit 17)
124.	4/2 Format = 1 Ph #2	185.	Ph #1 (Digit 18)
125.	Standard Extended Format = 1 Ph #2	186.	Ph #1 (Digit 19)
126.	A+ Extended Format = 1 Ph #2	187.	Ph #1 (Digit 20)
127.	Radionics Parity = 1 Ph #2	188.	Ph #1 (Digit 21)
128.	Touchtone® = 1 Ph #2	189.	Ph #1 (Digit 22)
129.	Zone 1 Dialer Code Ph #2	190.	Ph #1 (Digit 23)
130.	Zone 2 Dialer Code Ph #2	191.	Ph #1 (Digit 24)
131.	Zone 3 Dialer Code Ph #2	192.	Ph #1 (Digit 25)
132.	Zone 4 Dialer Code Ph #2	193.	Ph #1 (Digit 26)
133.	Zone 5 Dialer Code Ph #2	194.	Not Programmed
134.	Zone 6 Dialer Code Ph #2	195.	Ph #2 (Digit 1)
135.	Zone 7 Dialer Code Ph #2	196.	Ph #2 (Digit 2)
136.	Zone 8 Dialer Code Ph #2	197.	Ph #2 (Digit 3)
137.	Keypad FIRE Dialer Code Ph #2	198.	Ph #2 (Digit 4)
138.	Keypad POLICE Dialer Code Ph #2	199.	Ph #2 (Digit 5)
139.	Keypad MEDICAL Dialer Code Ph #2	200.	Ph #2 (Digit 6)
140.	Dtess Dialer Code Ph #2	201.	Ph #2 (Digit 7)
141.	Opening Dialer Code Ph #2	202.	Ph #2 (Digit 8)
142.	Closing Dialer Code Ph #2	203.	Ph #2 (Digit 9)
143.	Shunted Dialer Code Ph #2	204.	Ph #2 (Digit 10)
144.	Cancel Dialer Code Ph #2	205.	Ph #2 (Digit 11)
145.	Restore Dialer Code Ph #2	206.	Ph #2 (Digit 12)
146.	Supervisory Dialer Code Ph #2	207.	Ph #2 (Digit 13)
147.	Lo Batt Dialer Code Ph #2	208.	Ph #2 (Digit 14)
148.	Battery Restore Dialer Code Ph #2	209.	Ph #2 (Digit 15)
149.	AC Fail Dialer Code Ph #2	210.	Ph #2 (Digit 16)
150.	AC Restore Dialer Code Ph #2	211.	Ph #2 (Digit 17)
151.	Memory Error Dialer Code Ph #2	212.	Ph #2 (Digit 18)
152.	Test Dialer Code Ph #2	213.	Ph #2 (Digit 19)
153.	Not Programmed	214.	Ph #2 (Digit 20)
154.	Not Programmed	215.	Ph #2 (Digit 21)
155.	Not Programmed	216.	Ph #2 (Digit 22)
156.	New EEPROM = 1	217.	Ph #2 (Digit 23)
157.	Listen-In Active = 1 Ph #1	218.	Ph #2 (Digit 24)
158.	Listen-In Active = 1 Ph #2	219.	Ph #2 (Digit 25)
159.	Line Seize Hangup Time In Sec	220.	Ph #2 (Digit 26)
160.	Dial Attempt Wait Time In Sec		
161.	Extended AC Code		
162.	Extended Battery Code		
163.	Extended Memory Error Code		
164.	Extended Test Code		
165.	Extended Keypad Code		
166.	Fmt. 0..1..2 Radionics Parity = 1		
167.	Not Programmed		
168.	Ph #1 (Digit 1)		
169.	Ph #1 (Digit 2)		
170.	Ph #1 (Digit 3)		
171.	Ph #1 (Digit 4)		
172.	Ph #1 (Digit 5)		

"Program System I" LCD screen messages

Reference Z1100 SPECIFICATIONS & INSTRUCTIONS Manual L1128 for additional information.

ADDRESS	LCD screen MESSAGE		
000	Fast Loop Response In 40ms Steps	038b7	Change Mode With Key = 1
001	Slow Loop Response In 40ms Steps	039	Not Programmed
002n1	Configure Code 1	040	Interior/Delay Mode
002n0	Digit 2 Code 1	041	Dialer Attempts
003n1	Digit 3 Code 1	042	Phone #1 Trans Format
003n0	Digit 4 Code 1	043	Phone #2 Trans Format
004n1	Digit 5 Code 1	044	Account Digit 1
004n0	Digit 6 Code 1	045	Account Digit 2
005	Two digit Arm=0	044	Account Digit 3
006n1	Configure Code 2	047	Silent POLICE=0
006n0	Digit 2 Code 2	048	Zone 1 Dialer Code
007n1	Digit 3 Code 2	049	Zone 2 Dialer Code
007n0	Digit 4 Code 2	050	Zone 3 Dialer Code
008n1	Digit 5 Code 2	051	Zone 4 Dialer Code
008n0	Digit 6 Code 2	052	Zone 5 Dialer Code
009	New EEPROM=255	053	Zone 6 Dialer Code
010n1	Configure Code 3	054	Zone 7 Dialer Code
010n0	Digit 2 Code 3	055	Zone 8 Dialer Code
011n1	Digit 3 Code 3	056	KB FIRE Dialer Code
011n0	Digit 4 Code 3	057	KB POLICE Dialer Code
012n1	Digit 5 Code 3	058	KB MEDICAL Dialer Code
012n0	Digit 6 Code 3	059	Opening Code +16=Exception
013	Usage Count Code 4	060	Closing-No Zone Shunted Code
014n1	Configure Code 4	061	Closing-Zone Shunted Code
014n0	Digit 2 Code 4	062	Cancel Dialer Code
015n1	Digit 3 Code 4	063	Restore Dialer Code
015n0	Digit 4 Code 4	064	FIRE Trouble Dialer Code
016n1	Digit 5 Code 4	065	Lo Batt Dialer Code
016n0	Digit 6 Code 4	066	Test Dialer Code
017	Access Time In Sec.	067b0	"SPECIAL" Zone 1 N.O.=1
018n1	Digit 1 Not Programmed	067b1	"SPECIAL" Zone 2 N.O.=1
018n0	Digit 2 Program Code	067b2	"SPECIAL" Zone 3 N.O.=1
019n1	Digit 3 Program Code	067b3	"SPECIAL" Zone 4 N.O.=1
019n0	Digit 4 Program Code	067b4	"SPECIAL" Access Active=1
020n1	Digit 5 Program Code	068	Ph. #1 01
020n0	Digit 6 Program Code	069	Ph. #1 02
021	Not Programmed	070	Ph. #1 03
022	Zone 1	071	Ph. #1 04
023	Zone 2	072	Ph. #1 05
024	Zone 3	073	Ph. #1 06
025	Zone 4	074	Ph. #1 07
026	Zone 5	075	Ph. #1 08
027	Zone 6	076	Ph. #1 09
028	Zone 7	077	Ph. #1 10
029	Zone 8	078	Ph. #1 11
030	Exit Time Sec	079	Ph. #1 12
031	Entrance 1 Time In Sec	080	Ph. #1 13
032	Entrance 2 Time In Sec	081	Ph. #1 14
033	Delay Before Report Time In Sec	082	Ph. #1 15
034	BURG Cutoff Time In Min	083	Ph. #1 16
035	FIRE Cutoff Time In Min	084	Ph. #1 17
036	POLICE Cutoff Time In Min	085	Ph. #1 18
037	MEDICAL Cutoff Time In Min	086	Ph. #1 19
038b0	Dialer Extended Format=1	087	Ph. #1 20
038b1	Dialer Single Round=1	088	Ph. #1 21
038b2	Pulsing Burg=1	089	Ph. #1 22
038b3	1 Sec Siren Test On Arm=1	090	Ph. #1 23
038b4	Silent BURG Violation=1	091	Ph. #1 24
038b5	Phone #1 Touchtone=1	092	Ph. #1 25
038b6	Phone #2 Touchtone=1	093	Ph. #1 26
		094	Ph. #1 27
		095	Ph. #1 28

FUNCTION LCD screen MESSAGE

096	Ph. #1 29
097	Ph. #1 30
098	Ph. #2 01
099	Ph. #2 02
100	Ph. #2 03
101	Ph. #2 04
102	Ph. #2 05
103	Ph. #2 06
104	Ph. #2 07
105	Ph. #2 08
106	Ph. #2 09
107	Ph. #2 10
108	Ph. #2 11
109	Ph. #2 12
110	Ph. #2 13
111	Ph. #2 14
112	Ph. #2 15
113	Ph. #2 16
114	Ph. #2 17
115	Ph. #2 18
116	Ph. #2 19
117	Ph. #2 20
118	Ph. #2 21
119	Ph. #2 22
120	Ph. #2 23
121	Ph. #2 24
122	Ph. #2 25
123	Ph. #2 26
124	Ph. #2 27
125	Ph. #2 28
126	Ph. #2 29
127	Ph. #2 30

GLOSSARY

- Address programming.** High level programming. This level of programming is used to custom design the Z1100 system. For example, enter 033 into Address 024 to define Zone 3 as a Burglar Standard Perimeter zone with Lockout.
- Authorization code.** A programmable code that is used with a Command.
- Bit.** The smallest quantity the Z1100 system can recognize. A bit can be set high (1) or low (0). Eight bits make up one byte. Some Address programming involves "setting" individual bits of a byte, such as Address 038.
- Byte.** The unit of measure for Z1100 system memory. One byte contains eight bits and can store any value from 000 to 255. Most Z1100 programming is byte programming; that is, you select a feature by Address byte.
- Configuration digit.** The first programmed digit of any code. This digit is used only by the Z1100 system, not by the end user.
- Copy EEPROM.** The "buffer" chip where information is stored during programming.
- Cursor.** The underline character displayed on the Programmer screen.
- Default.** Preset values. The Z1100 system comes with default exit time, entrance times, cutoff times, zone definitions, and other features. The default program makes installation and testing easier.
- Download.** Send information from the Copy EEPROM to the Remote EEPROM.
- EEPROM.** Special type of nonvolatile memory chip used in the Z1100 system. EEPROMs do not lose information (programming) if power fails.
- LCD.** Liquid Crystal Display. The alpha-numeric display on the programmer.
- Loop response time.** The amount of time (in milliseconds) that a zone will have to be violated in order to cause an alarm.
- Master EEPROM.** Use this chip to store custom programming. For example, the Master EEPROM could contain digital communicator parameters: reporting codes, telephone numbers, and transmission formats. Write information from the Master to the copy and then Download the information to the Remote EEPROM on the Z1100 control—a simple and efficient way of doing otherwise complex programming.
- Nibble.** One half of a byte (2 nibbles = 1 byte). Some Address programming requires that each nibble be programmed independently, such as Address 002.
- Remote EEPROM.** The Z1100 system's on board program-storage chip.
- System I.** The first generation Z1100 Security Control.
- System II.** The second generation Z1100 Security Control.
- Upload.** Send information from the Remote EEPROM to the Copy EEPROM.
- Zone Definition.** How a zone is defined. Zones can be burglar, fire, police, medical, or key.

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This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications of Subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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.

1. Reorient the TV or radio antenna.
2. Relocate or move the alarm control away from the receiver.
3. Plug the transformer for the alarm into a different outlet so that the receiver and the alarm are on different branch circuits.
4. If necessary, the user should consult the alarm dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How To Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402 stock #004-000-00345-4.

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