

The Sierra logo features the word "Sierra" in a white, sans-serif font. Above the letters "i", "e", and "r" is a white wavy line representing a mountain range. A registered trademark symbol (®) is located to the upper right of the word. The logo is set against a solid black rectangular background.

Sierra[®]

Model S5832SG
Control Panel
8 to 32 Zones

Installation Instructions

The C&K Systems logo consists of the letters "C&K" in a bold, italicized, sans-serif font. The ampersand is smaller and positioned between the "C" and "K". A registered trademark symbol (®) is to the upper right of the "K". Below "C&K" is the word "SYSTEMS" in a smaller, bold, sans-serif font.

C&K[®]
SYSTEMS

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Country Specific Compliance Information

Singapore

The following hardware and programming guidelines are required for installation of this system in Singapore.

Hardware Requirements:

1. The Digital Communicator must be Model S5070SG or S5070SG-2.

Programming Requirements:

1. Dial Type (Block 4, CL 101) must be programmed for DTMF only.
2. Dial Attempts (Block 4, CL 102) must not be programmed to more than 10.

Malaysia

The following hardware and programming guidelines are required for installation of this system in Malaysia.

Hardware Requirements:

1. The Digital Communicator must be Model S5070SG or S5070SG-2.

Programming Requirements:

1. Dial Attempts (Block 4, CL 102) must not be programmed to more than 3.

Standby Battery Information

The Table and worksheet below provide the installer with the information necessary to determine the AH rating and battery requirements for any particular installation.

Sierra Accessory Loading

Product current consumption	Max. Standby	Max. Active
S5832 Control Panel	125 mA	125 mA
S5010 Alpha Keypad	30 mA	50 mA
S5020 LED Keypad	30 mA	50 mA
S5030 Icon Keypad	30 mA	50 mA
S5050 REMM (up to 2)	100 mA (each)	100 mA
S5058 ZEM (up to 3)	40 mA (each)	40 mA**
S5070 Single-line Dialer	35 mA	60 mA
S5070-2 Dual-line Dialer	35 mA	70 mA
SN915-BUS RF Receiver	125 mA	170 mA
**ZEM VOUT terminals can supply up to 300 mA (max.)		

Table A - Standby Battery Loading

AH Requirements for Backup

Product/Device	4-Hour	24-Hour	72-Hour	Qty	Total
S5832SG	0.5 AH	3.0 AH	9.0 AH		
S5010	0.12 AH	0.72 AH	2.16 AH		
S5020	0.12 AH	0.72 AH	2.16 AH		
S5030	0.12 AH	0.72 AH	2.16 AH		
S5050	0.4 AH	2.4 AH	7.2 AH		
S5058	0.16 AH	0.96 AH	2.88 AH		
S5070(-2)	0.14 AH	0.84 AH	2.52 AH		
SN915-BUS	0.5 AH	3.0 AH	9.0 AH		
Sensor (10 mA)	0.04 AH	0.24 AH	0.72 AH		
Sensor (25 mA)	0.1 AH	0.6 AH	1.8 AH		
Bell/Siren (5 min)	0.085 AH	0.085 AH	0.085 AH		
Bell/Siren (15 min)	0.225 AH	0.225 AH	0.225 AH		
* Bell/Siren current may be 0.7 - 1.0 A			Total AH Required		

Table B - AH Requirements

Determining Standby Battery Requirements

To calculate the size (AH rating) of your system's Backup Battery, enter the Number (Qty) of devices of each type in the chart above. Multiply the number of devices times the AH rating for the desired backup period (Qty x AH = Total) and enter the total in the last column. To determine the total AH rating of the battery, add all values in the last column.

Total current from all sensors must be considered when calculating AH rating. For example:

$$\begin{aligned}
 &10 \text{ sensors @ } 10 \text{ mA} = 100 \text{ mA} \\
 &4 \text{ sensors @ } 25 \text{ mA} = 100 \text{ mA} \\
 &\text{Total current all sensors} = 200 \text{ mA}
 \end{aligned}$$

S5832SG Terminal Layout

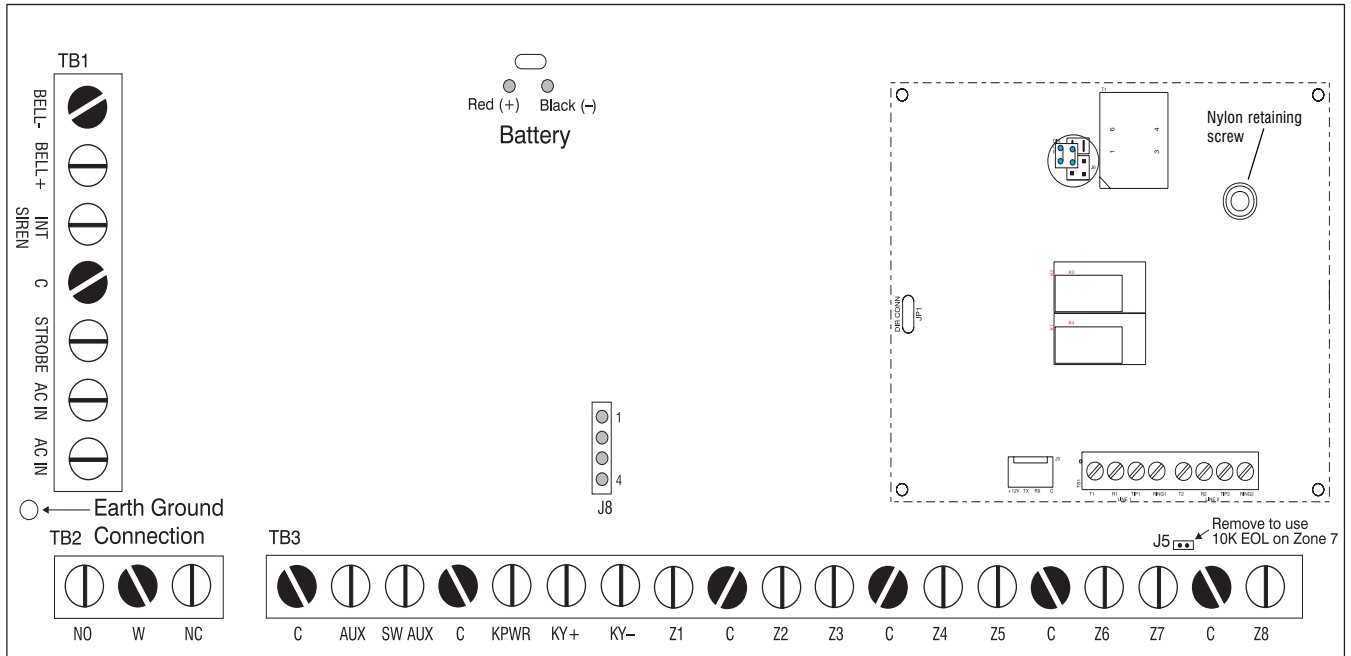


Figure 1
S5832SG PCB Terminal Layout

Introduction

This manual contains basic information and programming information for the Sierra Model S5832SG control panel.

For additional information regarding programming and applications, refer to the Expanded Programming section of the S5090 Sierra Reference Manual.

Mounting the Panel

The Sierra S5832SG should be mounted in a location which allows convenient access to AC power, telephone connections, and earth ground (see Figure 2).

- Remove the knock-outs, if necessary.
- Mark the screw mounting holes on the wall, using the cabinet as a template.
- Mount the cabinet at the desired height and pass the cables through the knock-outs.
- Mount the circuit board to the stand-offs. The stand-offs are factory installed. The metal stand-off (lower left corner) has a panhead screw to be used for connecting earth ground.
- Connect the earth ground wire (green with yellow stripe) to the board (see Figure 1) and cabinet. The earth ground wire will connect to the upper hinge when using the large enclosure and to the lower hinge on the small enclosure.

Panel Setup and Installation

The first step in any installation process is careful planning of the installation. Install the Sierra Model S5832SG in a location as close as possible to power and phone lines. The control panel is designed to operate as a local panel, with an optional plug-on digital communicator.

Earth Ground

To ensure the effectiveness of the lightning and transient protection circuits, the control panel **must** be connected to "Earth Ground". Ideally, this should be a common ground to the power lines, telephone system, and security system. This type of ground, called a "Unified Earth Ground", provides the best protection. The ground connection, from a grounding rod, cold water pipe or other established ground point, is made to the green/yellow jacketed wire, providing a ground to the panel housing.

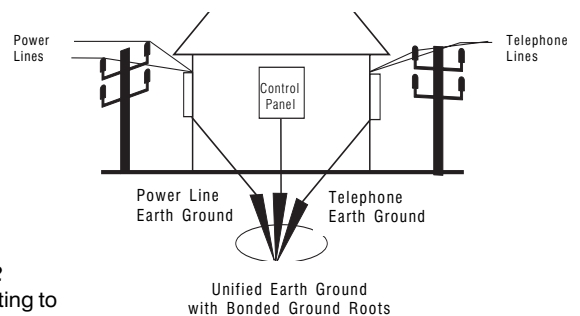


Figure 2
Connecting to Earth Ground

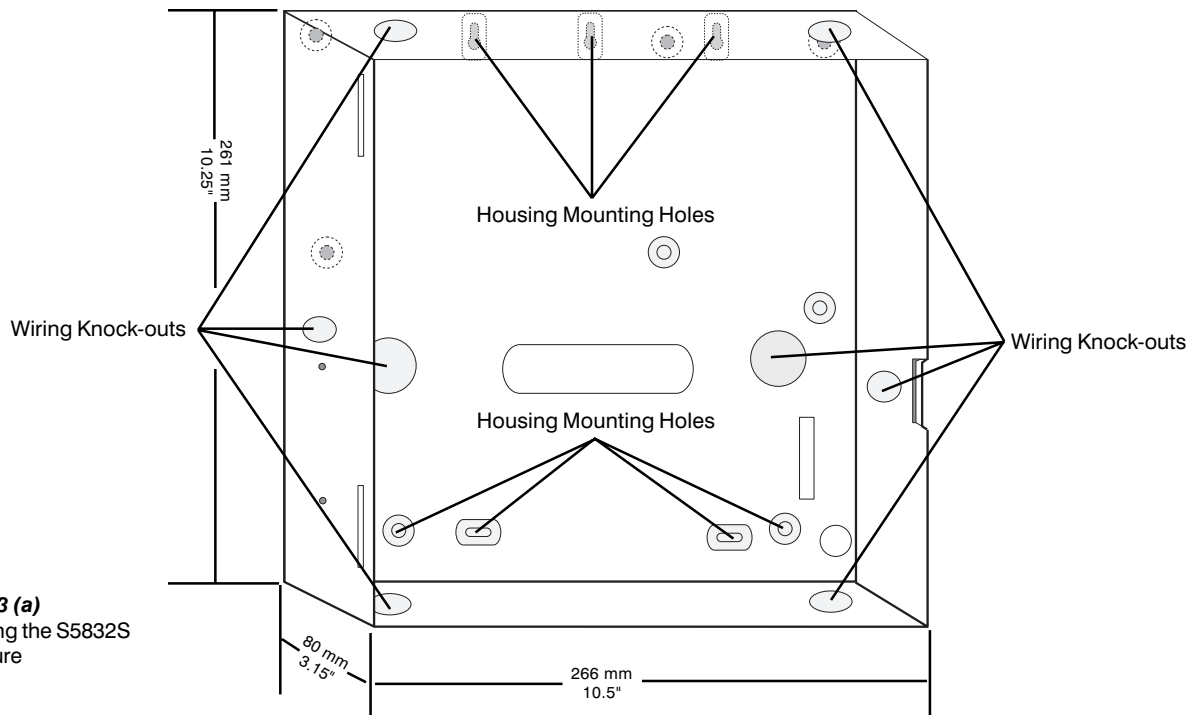


Figure 3 (a)
Mounting the S5832S
Enclosure

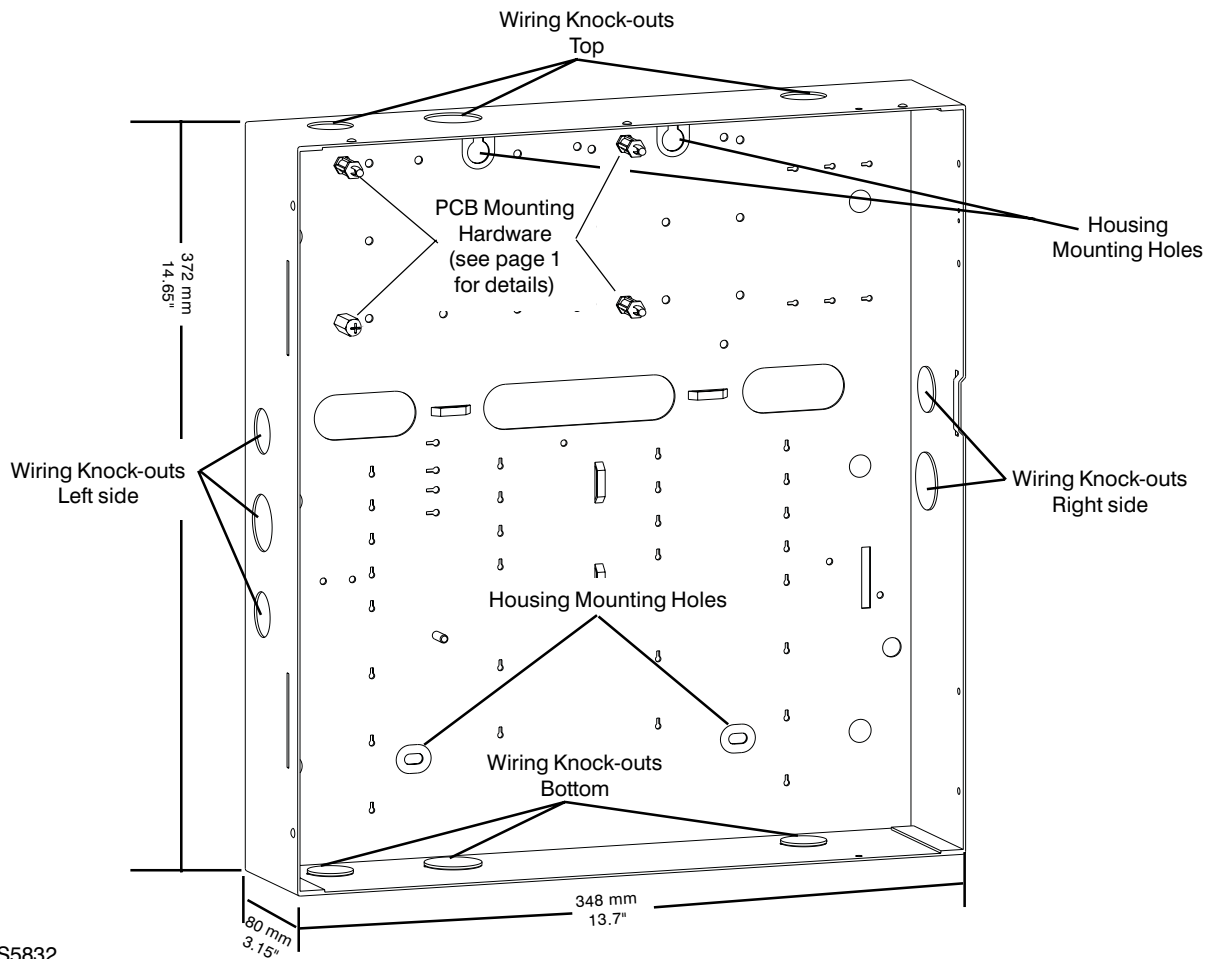


Figure 3 (b)
Mounting the S5832
Enclosure

Backup Battery

The system employs one or more 6.5 AH (Model 1265) or 7.0 AH (Model 1270) sealed lead-acid storage battery. Connect the battery to the control panel PCB via the red (+) and black (-) leads. The battery should be replaced every 3 - 5 years.

When connecting two or more batteries in parallel, use the Model S5054 Auxiliary Battery Harness. Both batteries **must** have the same AH (Ampere-Hour) rating and should have the same lot number or date code. Figure 4, below, shows correct method for wiring the batteries in parallel.

NOTE: Up to 2 batteries may be connected in parallel to obtain the desired standby (backup) time.

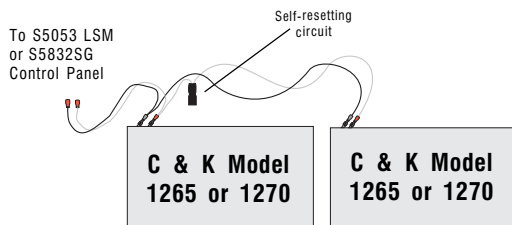


Figure 4
Connecting two Batteries in Parallel

Sierra Accessory Loading

Product	Current Consumption	Max. Standby	Max. Active
S5832SG Control Panel		125 mA	125 mA
S5010 Alpha Keypad		30 mA	50 mA
S5020 Icon Keypad		30 mA	50 mA
S5030 LED Keypad		30 mA	50 mA
S5050 REMM (up to 2) (Relay/Event Memory Module)		100 mA (each)	100 mA
S5058 ZEM (up to 3) (Zone Expansion Module)		40 mA (each)	40 mA**
S5070 Single-line Digital Communicator		35 mA	60 mA
S5070-2 Dual-line Digital Communicator		35 mA	70 mA
SN915-BUS RF Receiver		125 mA	170 mA
** ZEM VOUT Terminals can supply up to 300 mA (max.)			

Table 1 - Standby Battery Loading

Table 1 shows the current requirements for the Sierra S5832SG control panel and accessories. Additional information about Standby Battery requirements and Audible times may be found in Table 2 - AH Requirements, at the top of the next column.

AH Requirements for Backup

Product/Device	4-Hour	24-Hour	72-Hour	Qty.	Total
S5832SG	0.5 AH	3.0 AH	9.0 AH		
S5010	0.12 AH	0.72 AH	2.16 AH		
S5020	0.12 AH	0.72 AH	2.16 AH		
S5030	0.12 AH	0.72 AH	2.16 AH		
S5050	0.4 AH	2.4 AH	7.2 AH		
S5058	0.16 AH	0.96 AH	2.88 AH		
S5070 (-2)	0.14 AH	0.84 AH	2.52 AH		
SN915-BUS	0.5 AH	3.0 AH	9.0 AH		
Sensor (10 mA)	0.04 AH	0.24 AH	0.72 AH		
Sensor (25 mA)	0.1 AH	0.6 AH	1.8 AH		
Bell/Siren (5 min)	0.085 AH	0.085 AH	0.085 AH		
Bell/Siren (15 min)	0.225 AH	0.225 AH	0.225 AH		
* Bell/Siren current may be 0.7 - 1.0 A			Total AH Required		

Table 2 - AH Requirements

Determining Standby Battery Requirements

To calculate the size (AH rating) of your system's Backup Battery, enter the Number (Qty) of devices of each type in the chart above. Multiply the number of devices times the AH rating for the desired backup period (Qty x AH = Total) and enter the total in the last column. To determine the total AH rating of the battery, add all values in the last column.

Total current from all sensors must be considered when calculating AH rating. For example:

$$\begin{aligned}
 &10 \text{ sensors @ } 10 \text{ mA} = 100 \text{ mA} \\
 &4 \text{ sensors @ } 25 \text{ mA} = 100 \text{ mA} \\
 &\text{Total current all sensors} = 200 \text{ mA}
 \end{aligned}$$

AC Power

The Sierra S5832SG receives its power from a 16.5 VAC 40 VA transformer. Connect the transformer to the AC In terminals on TB1 of the PCB (see Figure 1), using 18 AWG (1.02 mm) wire. (Some systems may have the transformer and mains fuse block installed and pre-wired from the factory.)

Connect the AC transformer to an unswitched receptacle. **Do not** share the secondary of the transformer with other devices.

NOTE: AC input requirements may vary by country. Refer to the Compliance section for additional wiring information.

Output Terminals

Table 3 shows the Output Terminals of the S5832SG, with the Voltage and Current Range of each Output. The Table also shows the maximum combined current for related outputs.

Function	Terminal	Voltage Range	Current	Combined Current	Comments
Strobe Output	STROBE	8.4 – 14.9 V	0.75 A	1.5 A (3.0 A with Battery)	Specifically designed to drive strobes with high in-rush currents.
Internal Siren	INT SIREN	8.4 – 14.9 V	0.75 A		Typically used to drive sirens mounted inside the premises.
External Siren	BELL+ BELL-	8.4 – 14.9 V	2.0 A		Supervised Siren Output typically used to drive bells, sirens, and other high current devices outside the premises.
Auxiliary Power	AUX	8.4 – 14.9 V	1.0 A		Used to drive sensors, etc.
Switched Auxiliary Power	SW AUX	8.4 – 14.9 V	0.3 A		Used to drive latching devices like glassbreak detectors or four-wire smoke detectors that must be reset.
Keypad Power	KPWR	8.4 – 14.9 V	1.0 A		Used to power keypads, REMMs, ZEMs, and SN915 RF Receiver.
Zone 8	Z8	8.5 – 14.0 V	0.03 A	0.03 A	2-wire Smoke Detectors

Table 3
Output Terminal limits

External Bell Supervision

The circuit connection shown in Figure 5 is used **only** when External Bell Line Supervision is required. For Bell Line Supervision, the bell must be equipped with an internal diode.

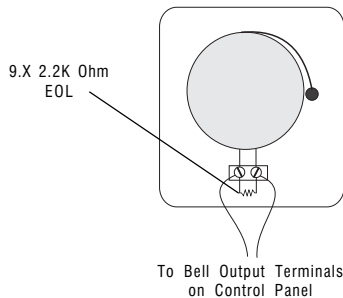


Figure 5 - Bell Supervision Wiring

Keypad Wiring

The Sierra S5832SG uses four terminals for powering and communicating with the keypads and other devices via the keypad data bus. The terminal connections are as follows:

- KPWR** This terminal supplies +12 VDC to power the keypads or accessories.
- KY+** One half of the differential keypad data bus. This terminal combined with the KY- terminal provides communication between the various devices and the control panel.
- KY-** Used in conjunction with the KY+ terminal for data communications on the keypad data bus.
- C** Common (ground) terminal for Power return.
- TRMX** Optional Terminate Exit Delay switch connected between this terminal and C terminal. When active (Block 7, CL 012), closing the exit delay switch will short the TRMX terminal and skip all but the last 5 seconds of the exit delay.

Keypad Wiring (cont.)

Figure 6, below, shows the connections for wiring the Sierra Keypad to the Control Panel and connecting the optional Terminate Exit Delay switch. Switch S1, in the lower right-hand corner, is used for keypad addressing (see Table 5).

NOTE: If the keypad tampers are active (and programmed in Block 3, Cmd Loc 044 - 045), tamper signals will be sent to the control panel via the keypad bus. Keypad tamper (hardwired keypads only) report routing is programmed in Block 4, Cmd Loc 158. Keypad trouble conditions are also reported on the keypad bus and the routing is defined in Block 4, Cmd Loc 159.

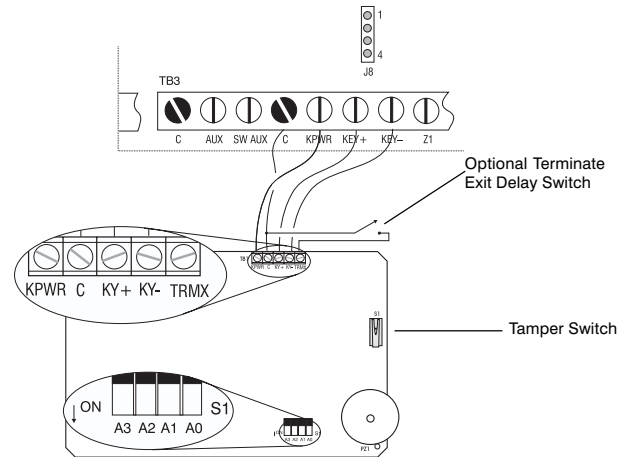


Figure 6
Connecting the Keypad Terminals

Sierra Accessory Wiring Distances

The Table shown below shows the maximum wiring distances for the Sierra accessories based upon total load current drawn from each run. Refer to the Accessory Loading Table on page 3 for load requirements.

NOTE: Total wire distance for all devices combined not to exceed 2440 M.

Max Load per run (mA)	0.40 mm (26 AWG)		0.51 mm (24 AWG)		0.64 mm (22 AWG)		0.81 mm (20 AWG)		1.02 mm (18 AWG)		1.29 mm (16 AWG)	
	M	(Ft.)	M	(Ft.)	M	(Ft.)	M	(Ft.)	M	(Ft.)	M	(Ft.)
50	121	(395)	192	(629)	305	(1000)	490	(1605)	774	(2538)	1225	(4016)
100	60	(198)	96	(314)	153	(500)	245	(803)	387	(1269)	612	(2008)
150	40	(132)	64	(210)	102	(333)	163	(535)	258	(846)	408	(1339)
200	30	(99)	48	(157)	76	(250)	122	(401)	194	(635)	306	(1004)
250	24	(79)	38	(126)	61	(200)	98	(321)	155	(508)	245	(803)
300	20	(66)	32	(105)	51	(167)	82	(268)	129	(423)	204	(669)
350	17	(56)	27	(90)	44	(143)	70	(229)	111	(363)	175	(574)
400	15	(49)	24	(79)	38	(125)	61	(201)	97	(317)	153	(502)
450	13	(44)	21	(70)	34	(111)	54	(178)	86	(282)	136	(446)
500	12	(40)	19	(63)	31	(100)	49	(161)	77	(254)	122	(402)
550	11	(36)	17	(57)	28	(91)	45	(146)	70	(231)	111	(365)
600	10	(33)	16	(52)	25	(83)	41	(134)	65	(212)	102	(335)
700	9	(28)	14	(45)	22	(71)	35	(115)	55	(181)	87	(287)
800	8	(25)	12	(39)	19	(63)	31	(100)	48	(159)	77	(251)
900	6	(22)	10	(35)	17	(55)	27	(89)	43	(141)	68	(223)
1000	6	(20)	9	(31)	15	(50)	24	(80)	39	(127)	61	(201)

Table 4
Maximum Wiring Distance for Sierra Accessories

Keypad Addressing

The S5832SG control panel will support up to 16 hardwired keypads. Each keypad **must** have a different address, with addresses ranging from 1 - 16. (Figure 6 shows the location of the switch used to address the keypad.) Table 5 lists the switch settings for S1 for each keypad address.

Addr	A0	A1	A2	A3
1	on	off	off	off
2	off	on	off	off
3	on	on	off	off
4	off	off	on	off
5	on	off	on	off
6	off	on	on	off
7	on	on	on	off
8	off	off	off	on

Addr	A0	A1	A2	A3
9	on	off	off	on
10	off	on	off	on
11	on	on	off	on
12	off	off	on	on
13	on	off	on	on
14	off	on	on	on
15	on	on	on	on
16	off	off	off	off

Table 5
Keypad Addressing

Each keypad (Alphanumeric, Icon, or LED) may draw up to 50 mA of current. Once connected, the control panel will automatically recognize the presence of the keypad.

Connecting an Auxiliary Keypad (J8)

The S5832SG Control Panel also has a 4-pin Molex® connector (J8) for attaching an auxiliary keypad to the panel for on-site programming. The connector (J8) is located on the PCB above the Keypad Data Bus terminals (see Figure 6, on page 4).

The connections to J8 are as follows:

- Pin 1 Common (ground) for Power return.
- Pin 2 Supplies +12 VDC to power the keypad.
- Pin 3 KY+ on the differential keypad data bus.
- Pin 4 KY- on the differential keypad data bus.

Pins 1 and 2 supply power and ground, while pins 3 and 4 provide communication between the panel and the keypad.

Zone Terminals

The basic configuration of the S5832SG can support up to 8 hardwired zones. Zone 8 is a powered loop for use with two-wire smoke detectors. This loop is current-limited at 30 mA.

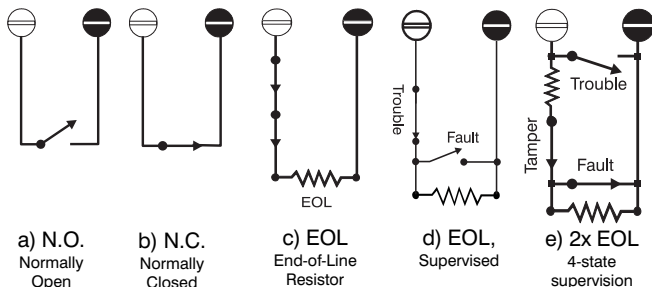


Figure 7
Zone Configurations

Zones may be configured with Normally Open (N.O.) or Normally Closed (N.C.) contacts (although not recommended).

The N.O. and N.C. zone configurations do not provide for supervision of the detection devices.

The following configurations provide supervision of the detection devices:

EOL: This zone configuration uses a single EOL resistor to detect the following conditions: Normal (2.2K), Fault (open or short).

Supervised EOL: This zone configuration uses a single EOL resistor to detect the following conditions: Normal (2.2K), Fault (short), or Trouble (open).

Tamper: This zone configuration uses two EOL resistors to detect four different zone conditions: Normal (2.2K), Fault (4.4K), Trouble (short), or Tamper (open).

NOTE: For devices requiring a 10K Ohm EOL resistor, use Zone 7 and remove jumper J5. (See page 1, Figure 1 for jumper location.)

On-Board Relay Terminals (TB2)

The Sierra S5832EB has a single-pole, double-throw (Form C) relay mounted on the PCB. Connections to the relay are made at TB2. (Refer to Figure 1 for relay terminal location.)

The on-board relay may be configured as Normally Open (N.O.) or Normally Closed (N.C.) and can switch up to 1 A of current at 12 VDC. For programming options, refer to Block 7, Command Location (CL) 001.

Accessories

The Sierra S5832SG supports a variety of accessories which communicate with the panel through the keypad data bus. These accessories can include up to two Model S5050 Relay/Event Memory Modules (REMM), up to three Model S5058 Zone Expansion Modules (ZEM), and a Model SN915-BUS SpreadNet® RF Receiver.

Caution: When connecting accessories to the system, use care not to exceed rated outputs. (See Table 1 on page 3 for Accessory loading information.)

S5050 Relay/Event Memory Module

The Sierra S5832SG control panel will support up to two Model S5050 REMMs connected to the keypad data bus.

NOTE: Trouble conditions and tampers, if enabled, are reported via the keypad bus. Refer to Block 4, CL 158 and 159, respectively, for report routing information.

Power for the S5050 REMM is obtained by connecting the KPWR terminal on the REMM PCB to either the KPWR or AUX terminal on the control panel. For the power return, connect the C terminal on the REMM to the C terminal on the control panel. The GND terminal on the REMM PCB is used to connect the REMM to Earth Ground.

Adding one REMM will increase Event Memory storage capability from 60 events to 250 events. Adding a second REMM will increase the storage capacity to 500 events.

The REMM also has five independently programmable relays. The relay programming options are explained in the programming summary, Block 7.

The AUX terminal on the S5050 REMM is capable of supplying up to 100 mA of output current to power sensors and other devices.

NOTE: Total combined current from the relays and AUX output terminal may **not** exceed 100 mA.

Refer to the S5050 REMM Installation Instructions (P/N 5-051-453-00) for additional information regarding the set up, configuration, and operation of the S5050 REMM.

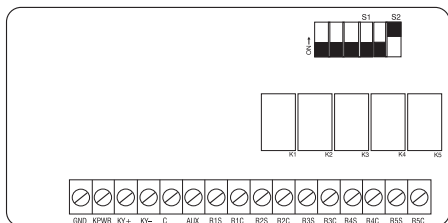


Figure 8
The S5050 Relay/Event Memory Module (REMM) PCB Layout

Switch Settings

The S5050 REMM has five (5) dip switches (S1-1 thru S1-4 and S2-1) which can be used to provide AUX power to the relay outputs. The default setting for each switch is "OFF." In this position, each relay uses the switched (S) and common (C) terminals. Each relay is independently programmable by the installer.

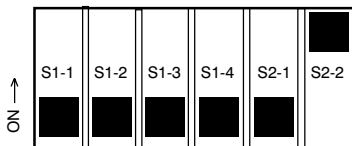
With the switch in the ON position, the +12 VDC AUX power is applied to the respective Relay switched (S) output terminal (see Figure 9, below).

Switch Configuration

Figure 9, below, shows the relationship of the switches to the relays on the REMM.

S2-2 is used to address the REMM. Leave S2-2 in the ON position for REMM #1. Change S2-2 to the OFF position to address REMM #2.

Switch	Relay
S1-1	R1S
S1-2	R2S
S1-3	R3S
S1-4	R4S
S2-1	R5S



Switch	REMM
S2-2	ON = REMM #1
S2-2	OFF = REMM #2

Figure 9
REMM Switch Settings (shown in default position)

S5058 Zone Expansion Module

The Sierra S5832SG control panel has eight hardwired zones and may be expanded up to 32 zones. Eight additional hardwire zones are obtained by connecting an S5058 Zone Expansion Module to the keypad data bus. Up to three S5058 ZEMs may be connected, providing a total of 24 additional zones.

NOTE: Trouble conditions and tampers, if enabled, are reported via the keypad bus. The report routing is defined in Block 4, CL 158 and 159, respectively.

Power is supplied by connecting the KPWR terminal on the S5058 ZEM PCB to the KPWR or AUX terminal on the control panel and the C terminal on the ZEM to the C terminal on the control panel. The GND terminal on the ZEM PCB is for connecting earth ground to the ZEM.

There are two VOUT terminals (connected in parallel), which can provide up to 300 mA of output current to power sensors or other devices.

Each S5058 ZEM will support up to 8 hardwired zones. If a zone is programmed as a SpreadNet zone (see Block 2, CL 111 - 142), it is not available for use as a hardwired zone.

Additional setup and wiring information is available in the S5058 Zone Expansion Module Installation Instructions (P/N 5-051-454-00).

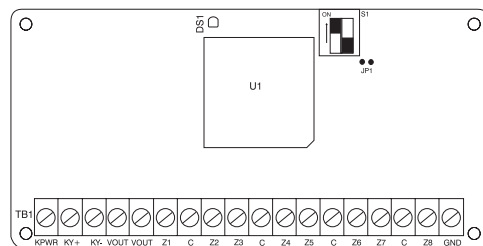


Figure 10
S5058 Zone Expansion Module (ZEM) PCB Layout

ZEM Addressing

S1-1 and S1-2 are used to address the ZEMs. The ZEM address determines which zones are added to the S5832SG control panel.

Figure 11, below, shows the switch settings to address the ZEMs. ZEM #1 is used to add zones 9 - 16; ZEM #2 adds zones 17 - 24; and ZEM #3 adds zones 25 - 32.

Addr.	S1-1	S1-2	Zones
1	on	off	9 - 16
2	off	on	17 - 24
3	on	on	25 - 32

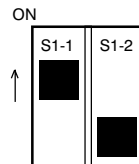


Figure 11
Addressing the ZEM

SN915-BUS SpreadNet Receiver

The SpreadNet SN915-BUS Bus Receiver connects to the keypad bus and provides the communication link for all SpreadNet keypads/keyfobs and zone transmitters.

NOTE: Tamper and trouble conditions, if enabled, are reported via the keypad bus. The report routing is specified in Block 4, CL 158 and 159, respectively. Low Battery Report Routing for the SpreadNet Transmitters is programmed in Block 4, CL 157.

Power for the SN915-BUS may be supplied from either the KPWR or AUX and C terminals on the control panel to the V+ and GND terminals on the SpreadNet Receiver (see Figure 12).

For additional information on wiring and configuration of the SN915-BUS Receiver, refer to the SN915-BUS Installation Instructions (P/N 5-051-440-00).

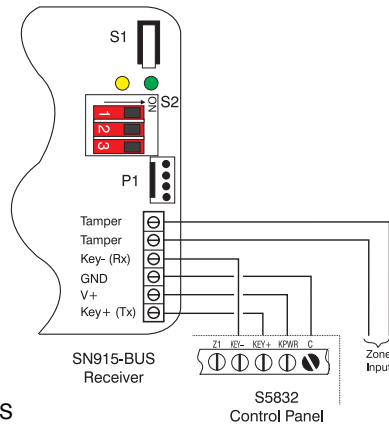


Figure 12
Connecting the SN915-BUS

SN990/991 SpreadNet Keypad/Remote

The control panel can support up to eight SpreadNet keypads. There are two different models available, the SN990-KEYPAD and SN991-REMOTE. Both devices are battery operated and communicate with the panel through the SpreadNet SN915-BUS RF Receiver.

SpreadNet keypads provide one-way communication only and do not display any panel status information.

Additional information on the SpreadNet keypad and remote may be found in the SN990/991 Installation Instructions (P/N 5-051-556-00).

SN961 SpreadNet Keyfob

The control panel can have up to eight SpreadNet keyfobs. Each keyfob will be associated with a specific user number and will arm, home arm, or disarm the system just like the user code. The keyfob will communicate with the control panel via the keypad bus.

SpreadNet keyfob allows one-way communication only and cannot display any panel status information.

For information on programming the SpreadNet keyfob, refer to the SN900-PROG Operating Manual (P/N 5-051-136-00 Rev C or later).

Digital Communicator Connections

Removing/Installing the Digital Communicator

The digital communicator plugs into the control panel PCB and is secured by a nylon retaining screw.

To remove the digital communicator:

- 1) Remove AC and DC power from the control panel.
- 2) Locate and remove the nylon screw. The screw is located near the upper right-hand corner of the digital communicator PCB. (See page 1, Figure 1.) Use a #1 phillips head screwdriver to remove the retaining screw.
- 3) Unplug the digital communicator from the control panel.

To install the digital communicator:

- 1) Ensure that AC and DC power have been removed from the control panel.
- 2) Carefully plug the digital communicator into the control panel PCB. Misalignment of the pins could damage the control panel.
- 3) Replace the nylon retaining screw.
- 4) Apply power.

Digital Communicator Telephone Connections

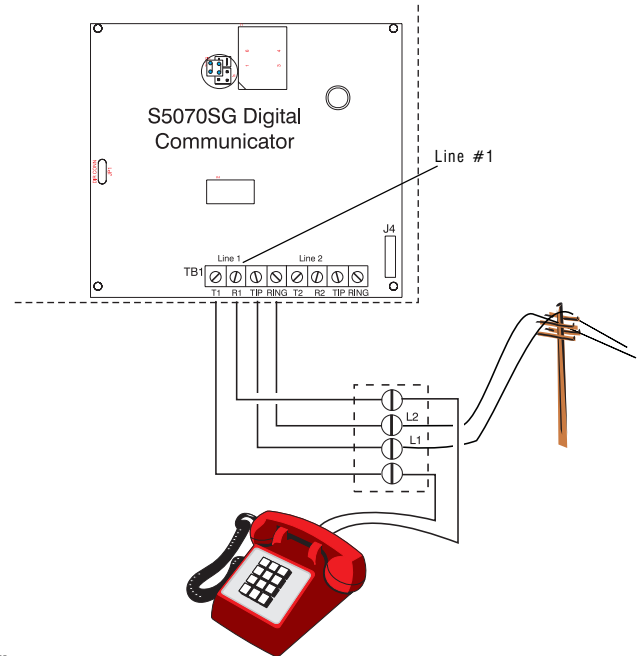


Figure 13
Telephone Connections

The Sierra S5832SG control panel can support either a one- or two-line plug-on digital communicator.

The digital communicators have four terminals for connection to the telephone lines. These terminals are labelled: Tip, Ring, T1, and R1. The single-line digital communicator has one set of terminals and the dual-line digital communicator has two sets of terminals. Figure 13 shows how to connect the digital communicator to the incoming phone lines and the house phones using either a single-line or a dual-line digital communicator.

Figure 14, below, shows the layout of the S5070SG-2 dual-line digital communicator. The terminals for line 2 are labelled Tip, Ring, T2, and R2.

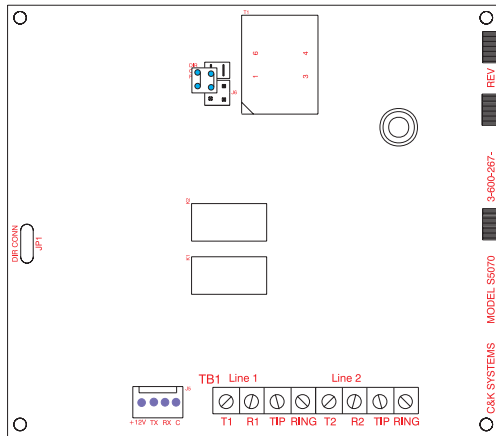


Figure 14
S5070US-2 Dual-line digital communicator

Terminal Connections

Connect the Sierra S5832SG digital communicator to the telephone line, as shown in Figure 13 (on previous page), using an approved, 6 or 8 conductor telephone cable (not included). Connect the cable to the control panel as follows:

- | | |
|-------------------------|---------------------------|
| Red = Ring | Brown = Seized Tip (T1) |
| Green = Tip | Blue & Orange = Tamper |
| Grey = Seized Ring (R1) | Yellow & Black = Not Used |

Programming the Panel

The Sierra S5832SG control panel may be programmed from any keypad connected to the keypad data bus. Connector J8 (see Figure 1) is also available to temporarily connect a keypad, if desired, for programming the panel. The panel can also be programmed, either remotely or on-site, using the Commander II software.

The Command Locations used to store the programming options of the Sierra S5832SG control panel are divided into 10 sections. Each section is called a Block. The configuration of the control panel determines which Blocks are programmed.

All keypad programming is done from the Installer Programming Mode. To enter the Installer Programming Mode, press and hold the [1] key for 2 seconds.

When programming with an Alphanumeric keypad, you must select the appropriate language for your panel, followed by the [Home] key. The icon and LED keypads do not require the [Home] key to be pressed. On the LED keypad, all LEDs are off to indicate that you must enter the installer code.

Next, enter the 6-digit installer code. The default installer code is [0-1-2-3-4-5]. On the Alphanumeric keypad, press the [Home] key to use Menu Programming or the [Bypass] key to use Quick Programming. You are now in installer programming mode.

To exit the Installer Programming Mode, press and hold the [CANCEL] key for 2 seconds. This will exit the programming mode and reset the panel.

Remote Programming (RPS)

Remote Programming of the Sierra S5832SG control panel is available with the Commander II software. The remote programming session can be initiated locally from the keypad or remotely by the Commander II software.

Setup for Direct Connect to the S5832SG

The procedure for initiating Direct Connect with your model of Digital Communicator is outlined below.

1. When using Direct Connect, connect the telco cable from the line side of the modem to the Tip and Ring terminals on the Digital Communicator (Line 1 only).
2. Move the jumper (J6) to the enabled position, as shown in Figure 15, below.
3. Start Commander II and open the Panel menu. Select the Connect option and then click on Direct Connect.

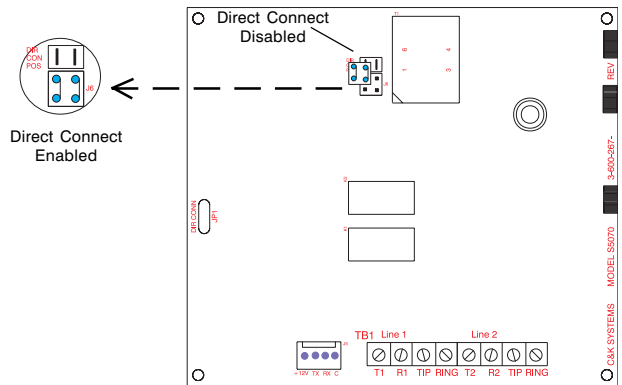


Figure 15
Direct Connect using the S5070SG Digital Communicator

4. Enable the Direct Connect jumper (see Figure 15) and initiate the Direct Connect function in Commander II. When you hear the modem tones, momentarily short the Direct Connect pads located on the left-hand side of the digital communicator PCB. You should hear the seize relay energize to indicate connection.
5. Commander II should indicate that the connection has been established. You are now ready to program the panel.
6. Be sure to return the jumper to its original position when the RPS session is completed.

Keypad Activated RPS

The following conditions must be met before starting a keypad activated RPS session:

1. The RPS Phone Number must be programmed into Block 4, CL 085 - 100;
2. Keypad RPS Enable (Block 4, CL 106) must be programmed for Yes (2);
3. RPS/Modem Types (Block 4, CL 107) must match the configuration of the Commander II software;
4. The phone lines must be connected to the Tip and Ring terminals on the digital communicator (Line 1 only); and

Keypad Activated RPS (cont.)

5. Commander II must be running at the remote site.

If the above conditions are met, you are now ready to initiate the RPS session from an Alphanumeric keypad.

- Using an Alphanumeric Keypad, enter the Installer Mode Programming (see Programming With an Alphanumeric Keypad on page 10). Select the Menu Programming Mode and go to Block 0 (Installer Commands). Press the [Home] key to accept.



Figure 16
Accessing Installer Commands (Block 0)

- Scroll through the options, using the [Bypass] key until you get to the RPS Callback? option (option 10).

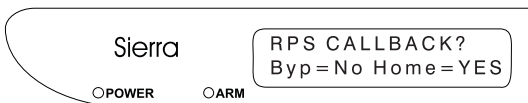


Figure 17
Activating Keypad RPS

- Press [Home] to activate the RPS feature.

Programming With an LED Keypad

You may use an LED keypad to program the control panel.

The LED display on the keypad is used to display all programming information: Block Number, Command Location, and Data. The Block Number is displayed using the Power, Arm, Ready, and Service LEDs. Command Locations are displayed using the LEDs for zones 1 - 8. The LEDs representing zones 9 - 16 are used to display the program data. Table 6, below, lists the relative value for each LED.

Upon entering the installer programming mode, all LEDs will be off. The installer must then enter the installer code [0-1-2-3-4-5]. The system will then go to Block 1, Command Location 001 and display the data stored at that location.

The LEDs in the currently active field will blink (if any are lit) indicating that the data may be edited.

Block Numbers		Zone LEDs		
LED	Value	Cmd Loc	Data	Value
Service	1	8	16	1
Ready	2	7	15	2
Arm	4	6	14	4
Power	8	5	13	8
		4	12	16
		3	11	32
		2	10	64
		1	9	128

Table 6
Reading the LEDs

Programming With an LED Keypad (cont.)

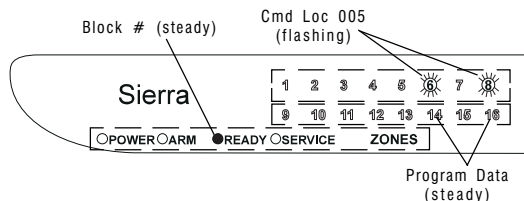


Figure 18
Reading Programming Data on the LED Keypad

There are three keys used to access and enter data into the control panel from the keypad. They are the [Bypass], [Home], and [Cancel] keys. The function of each key is explained in the next column.

Key **Function**
[Bypass] Moves the cursor between the Block, Command Location (Cmd Loc), and Data fields. Press the [Bypass] key a fourth time to return the cursor to the Cmd Loc field.

[Home] This key has several functions, depending upon the field being edited and the data entered at the keypad.

If the **Cmd Loc** field is active, press the [Home] key to increment to the next Loc. You may also enter a new Cmd Loc and press the [Home] key to move to that Loc. The LEDs for zones 9 - 16 display will show the data stored in the new Loc.

If the **Data** field is active, pressing the [Home] key will write the data in the display to the Cmd Loc indicated. The system will also be incremented to the next Cmd Loc. The Data field will remain active.

If the **Block** field is active, press the [Home] key to increment to the next Block and reset the Cmd Loc to 001. You may also enter the number of the desired Block (1 - 10 or 0 - 10 for the Alphanumeric keypad), followed by the [Home] key to go to that Block.

[Cancel] The [Cancel] key allows you to undo changes to the programming, provided you have not stored the data. Once the data has been written to memory (by pressing the [Home] key), you cannot use the [Cancel] key to recover the original data.

If the data has not been changed and the Cmd Loc field is active, pressing the [Cancel] key will decrement to the previous Cmd Loc. If the Block field is active, pressing the [Cancel] key will decrement to the previous Block.

CAUTION: Pressing and holding the [Cancel] key for 2 seconds will Exit Programming Mode.

Programming With an Alpha Keypad

Upon entering the installer programming mode, the display will ask you which language you wish to use for programming the panel. Each panel supports three languages, one of which is English. The other languages are determined by the model number of the panel. The Alphanumeric keypad provides two panel programming options: Quick or Menu programming. Both options use a combination of text and numbers in the LCD display.

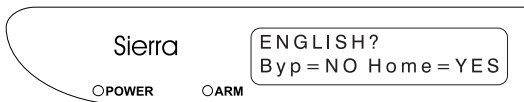


Figure 19
Selecting the Language on the Alphanumeric Keypad

Once a valid installer code has been entered, the installer has the option of using either the Quick or Menu Programming mode to enter data into the panel. Each method is explained below.



Figure 20
Selecting the Programming Mode with the Alphanumeric Keypad

Quick Programming Mode

Using the Quick Programming mode, you can easily go directly to any Cmd Loc (Blocks 1 - 10 only; the Installer Commands, Block 0, are not available in Quick programming mode). This allows you to view or edit any of the data programmed into the panel.

The Alphanumeric display will show the Block Number (1 - 10) and Programmed Data (varies by location) on the top line of the display, with the Command Location (varies by Block) shown on the bottom line.



Figure 21
Reading Programming Data on the Alphanumeric Keypad

The [Bypass], [Home], and [Cancel] keys are used to move between fields and to edit the data in each field, as outlined previously.

Menu Programming Mode

The Menu Programming mode uses menu options and descriptions to guide you easily through the panel programming. You can scroll through the Blocks by pressing the [Bypass] key or go directly to any Block by pressing the desired key (0 - 10), followed by the [Home] key.

The same three keys ([Bypass], [Home], and [Cancel]) are used in the Menu Programming mode, with slight variations.

Programming With an Alpha Keypad (cont.)

Key	Function
[Bypass]	Used to scroll through the different Menu options and levels.
[Home]	If the PRG> prompt is displayed, this key will write the data currently displayed to memory and increment to the next program position. If the Menu has additional options in sub-menus, this key will move to the next sub-menu.
[Cancel]	Cancel the operation, if the data has not been written to memory. If you are in a sub-menu, this key will back up one level.

CAUTION: Pressing and holding the Cancel key for 2 seconds will Exit Programming Mode.

Programming With an Icon Keypad

The display on the keypad consists of a 3-digit display for showing numbers (Blocks, Cmd Locs, and Data) and fixed text for indicating the type of data displayed.



Figure 22
Reading Command Location on the Icon Keypad

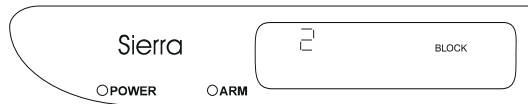


Figure 23
Displaying Block Data on the Icon Keypad

Data will be displayed using only the digits required.

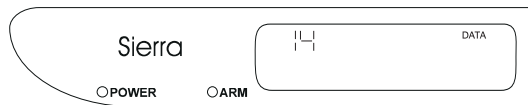


Figure 24
Viewing Program Data on the Icon Keypad

The [Bypass], [Home], and [Cancel] keys are used to move between fields and to edit the data in each field, as outlined previously.

Installer Mode Options, (Block 0)

There are 10 Installer Mode Options which are available from the Menu mode. These options allow the installer to test the various aspects of the system's operation, program the Custom Messages used by the Alphanumeric keypads, and start keypad activated RPS.

To access the Block 0 Commands, press and hold the [1] key for 2 seconds. Use the [Home] and [Bypass] keys to select the desired language. When prompted, enter your [Installer Code]. Then press the [Home] key to select Menu mode. Upon entering the Menu mode, pressing either [0] or [Bypass] will take you to the first of the Block 0 options.

Installer Walk-Test

The first option available from the Block 0 Commands is the **Walk-Test?** option. To use this option, press [Home]. To proceed to the next option, press [Bypass].

After installation, the installer can perform a system Walk-Test. Using this option, the installer can test the operation of each zone in the system.

While in the Installer Walk-Test Mode, the zones faulted during the current Walk-Test session will be annunciated at the keypad and continuously displayed. This memory will be purged when exiting Walk-Test Mode.

Event Memory

The second Block 0 Command available is Event Memory. Press [Home] to access the Event Memory option or [Bypass] to scroll to the next option.

After selecting **Event Memory?**, the display will ask if you wish to **Display Event Memory**. To display the contents of the Event Memory, press [Home]. If you wish to **Erase Event Memory**, press [Bypass], then press [Home].

Event Memory stores all events which have occurred since the panel was initially installed or the memory was last cleared. The Sierra S5832SG control panel has an internal Event Memory capable of storing up to 60 events with time and date stamping. By adding the Relay/Event Memory Module, the memory capability may be expanded to either 250 events (1 module) or 500 events (2 modules).

Events are viewed in chronological order (oldest to newest) by pressing the [1] key. Events may be viewed in reverse order (newest to oldest) by pressing the [4] key.

Table 7 shows the Event Codes displayed by the LED and Icon keypads. The event codes are displayed using the zone LEDs (LED keypad) or the 3-digit display (Icon keypad). The Sierra Reference Manual contains additional information on reading the codes with the LED keypad. The events are listed in numerical order.

Event Memory Codes

Event Code	Description
1	Zone is/was in alarm
2	Zone is/was tampered
3	Zone is/was in trouble
4	Zone alarm/tamper restored
5	Zone has been bypassed
6	Zone Unbypassed
7	Area X disarmed by User Y
8	Area X armed by User Y
9	User Walk-test started
10	User Walk-test completed
11	Alarm in Area X canceled by User Y
12	Comm Fail Receiver X
13	Comm Fail restore Receiver X
14	AC power fail
15	AC power restored
16	Low Battery (Control Panel)
17	Low Battery restored (Control Panel)
18	Master User changed User Code Y
19	Primary phone line cut
20	Primary phone line cut restored
21	Secondary phone line cut
22	Secondary phone line cut restored
23	Emergency/medical alarm (hard or soft zone)
24	Emergency/medical alarm restored (hard / soft)
25	Panic/police alarm (hard or soft zone)
26	Panic/police alarm restore (hard / soft)
27	Fire alarm (hard or soft zone)
28	Fire alarm restore (hard / soft)
29	Begin Installer Programming (local)
30	Installer Programming completed (local)
31	Supervisory failure Zone X (SpreadNet)
32	Supervisory failure restore Zone X (SpreadNet)
33	Low Battery Zone X (SpreadNet)
34	Low Battery restore Zone X (SpreadNet)
35	Watchdog reset (panel reset)
36	Bell failure (Siren loop open or short)
37	Bell failure restored
38	Exit fail, Zone X still faulted at end of Exit Delay
39	Duress code entered for Area X
40	Kidwatch open failure (Kidwatch time expired)
41	Begin RPS programming
42	RPS connection failure
43	RPS programming successful
44	Test Report (manual or automatic)
45	Trouble Zone X restored
46	User Y override of Auto Arming
47	Tamper Zone X restored
48	Ground Fault
49	Ground Fault restored
50	Brown Out
51	Brown Out restored
52	Peripheral communications trouble
53	Peripheral communications trouble restored

Table 7
Event Memory Codes

Custom Messages

Alphanumeric keypads have the ability to display customized messages. These messages are stored in the control panel's nonvolatile memory.

To program the Custom Messages, use the [Bypass] key to scroll to the **Custom Messages?** screen. Press the [Home] key to display the first Custom Message (EDIT TROUBLE MSG).

There are 41 Custom Messages available. The Edit Trouble Message, 32 Zone Messages, and 8 Area Messages.

To assist you in entering the Custom Messages, a programming template is included with the keypad. The template is shown below and the operation of the keys is described at the top of the next page.

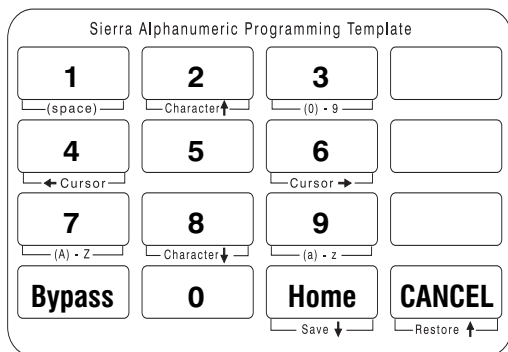


Figure 25
The Alphanumeric Keypad Programming Template

To enter a Message or Label, use the following key commands:

Key	Function
[2]	Scroll forward through characters/symbols
[8]	Scroll backward through characters/symbols
[4]	Move cursor left one character
[6]	Move cursor right one character
[Cancel]	Cancel current changes and restore previous message, or scroll up one message
[Home]	Write message to memory and scroll down one message

In addition, other numbers on the keypad enable you to quickly move to special places in the alphabet. These special keys are:

- [1] Jump to the space character
- [3] Jump to the number 0
- [7] Jump to the letter A
- [9] Jump to the letter a

NOTE: The [Cancel] key will only restore previous messages if the message has not been written to memory using the [Home] key.

Test Report

Following the Custom Messages option is the **Send Test Report** option. Selecting this option will initiate a Test Report to the Central Station. The keypad will display a message indicating the success or failure of the Report.

Test Report with Audibles

This option generates a Test Report to the Central Station with all local audibles (internal and external sirens) sounding for the duration of the Test Report attempt. Pressing any key during the Test Report period will turn the sirens off. The system will provide feedback to confirm the success or failure of the Report.

Audible Test

This option turns on all local audibles (internal and external sirens) for a period of 5 seconds.

Entry Delay Test

Using this option, the installer can test the Entry Delay to ensure that a user has sufficient time to enter the premises and disarm the system without generating an alarm. To begin the test, scroll to the **Entry Delay Test** screen and press [Home]. Then fault the Entry zone to begin the delay.

Exit Delay Test

Using this option, the installer can test the Exit Delay to ensure that a user has sufficient time to arm the system and leave the premises without generating an alarm. To begin the test, scroll to the **Exit Delay Test** screen and press [Home]. The Exit delay will begin immediately.

Transmit Walk-Test Queue Reports

Walk-Test events stored in Event Memory during the current session will be transmitted to the Central Station. The system will provide feedback to confirm the success or failure of the Report.

RPS Callback

Using this option, the installer can initiate an RPS session from the Keypad.

Battery Test

This option allows the installer to perform a Battery Test on the system. The test starts when you press the [Home] key. The system will exit the installer programming mode and reset the panel. The test takes approximately two minutes to complete. The battery status will be displayed only if a Low Battery condition exists.

Programming Summary - Sierra Model S5832SG

Block 1 - Code Option Programming

This programming block is divided into 80 Command Locations (CL 001 - 080). This Block used to program the Installer's Code (001-006), Default Installer Code on Power Up (007), Require Installer Code for Direct Connect via RPS (008), and to set up the User Code parameters. The parameters include setting Maid Code, Duress, and Kidwatch.

Installer Code

Cmd Loc	001	002	003	004	005	006
Default	0	1	2	3	4	5
Range	0 - 9	0 - 9	0 - 9	0 - 9	0 - 9	0 - 9

Comments

This is a 6-digit code which is required to allow access to installer programming mode. The code is programmed 1 digit per Cmd Loc.

Default Installer Code on Power Up?

Cmd Loc	007
Default	2
Range	1 - 2

Comments

If enabled (programmed as 2), this restores the Installer Code to the default value (see CL 001 - 006) following a power failure/restoral.

Options:

- 1 No
- 2 Yes

Installer Code Required on Direct Connect RPS?

Cmd Loc	008
Default	2
Range	1 - 2

Comments

If enabled, the Installer Code (CL 001 - 006) is required when programming the panel with the direct connect RPS function of COMMANDER II.

Options:

- 1 No
- 2 Yes

Maid Code Enable (by Area)

Cmd Loc	009	010	011	012	013	014	015	016
Default	0	0	0	0	0	0	0	0
Area	1	2	3	4	5	6	7	8
Range	0 - 255 (CL 009)							
	0 - 127 (CL 010 - 016)							

Comments

The Maid Code may be specified by active days of the week and by individual areas. Area 1 may also use keypad activation for temporary access.

NOTE: Maid Code Enable programming determines when the Maid Code may be used for disarming the system. The Maid code is always available to arm the system.

Options:

- 0 Disabled
- 1 Saturday
- 2 Friday
- 4 Thursday
- 8 Wednesday
- 16 Tuesday
- 32 Monday
- 64 Sunday
- 128 By Keypad

Maid Code Hours, Temporary Access, Area 1

Cmd Loc	017
Default	12
Range	0 - 254

Comments

This option is used in conjunction with keypad activation of the Maid Code for area 1 **only**. Duration of the active period is from the time of activation by grand master user (user #1) or area master (user #12). To disable keypad (temporary) activation, program this location with 0.

Duress Code Enable (By Area)

Cmd Loc	018
Default	0
Range	0 - 255

Comments

If the system is divided into areas, this option determines if the duress code associated with a specific area is active. Refer to the Sierra S5090 Reference Manual (P/N 5-051-528-01), Block 9 programming for details on assigning user codes to areas.

Options:

- 0 Disabled
- 1 Area 1
- 2 Area 2
- 4 Area 3
- 8 Area 4
- 16 Area 5
- 32 Area 6
- 64 Area 7
- 128 Area 8

Kidwatch Enable

Cmd Loc	019
Default	0
Range	0, 129 - 255

Comments

If used, this option must be enabled (program value > 128) and have the appropriate days of the week programmed. The Kidwatch timer is programmed from Block 6, CL 006 - 009. The same start and end times are used for all days when the Kidwatch feature is active.

NOTE: If enabled, the Kidwatch code **must** be entered if Area 1 is armed during the Kidwatch window (see Block 6, CL 006 - 009).

Options:

- 0 Disabled
- 1 Saturday
- 2 Friday
- 4 Thursday
- 8 Wednesday
- 16 Tuesday
- 32 Monday
- 64 Sunday
- 128 Enable (Master)

Keypad Lockout Enable

Cmd Loc	020
Default	1
Range	1 - 3

Comments

If enabled, 10 consecutive keystrokes without producing a valid user code will cause a keypad delay starting at 15 seconds and doubling each time up to a maximum of 240 seconds (4 min).

Options:

- 1 Disabled
- 2 When Disarmed
- 3 Always Active

Block 1 - Code Option Programming (cont.)

User Code Privileges (User # 1 - 60)

Cmd Loc	021	022	023	024	025	026	027	028
User #	1	2	3	4	5	6	7	8
Cmd Loc	029	030	031	032	033	034	035	036
User #	9	10	11	12	13	14	15	16
Cmd Loc	037	038	039	040	041	042	043	044
User #	17	18	19	20	21	22	23	24
Cmd Loc	045	046	047	048	049	050	051	052
User #	25	26	27	28	29	30	31	32
Cmd Loc	053	054	055	056	057	058	059	060
User #	33	34	35	36	37	38	39	40
Cmd Loc	061	062	063	064	065	066	067	068
User #	41	42	43	44	45	46	47	48
Cmd Loc	069	070	071	072	073	074	075	076
User #	49	50	51	52	53	54	55	56
Cmd Loc	077	078	079	080				
User #	57	58	59	60				

Default 15 (All CL)
Range 0 - 47 (All CL)

Comments

These programming Options determine which Options the user is authorized to perform. Some user codes may have alternate functions. (See Block 9 - Partition Programming in the Sierra Reference Manual for additional information.)

Language	Program Value
English	0
Spanish	16
Italian	32

Options:

- 0 Limited Functions**
- 1 Disarm
- 2 Arm
- 4 Bypass
- 8 Open/Close Rpt

- 16 Lang. Code opt. 1
- 32 Lang. Code opt. 2

** Limited Functions are user number specific. They may include relay operation, restricted SN device operation, and some end-user functions.

Block 2 - Zone Configuration Programming

Block 2 is divided into 160 Command Locations (CL 001 - 160) which are used to program the characteristics of each of the zones in the control panel. The features include Delay Times, Zone Type, Zone Restoral Type, Zone Response Time, Audible Cadence, Circuit Type, Chime Enable, Shunt Enable, and Home Arm Shunt List. The soft zone programming uses CL 155 - 160.

Entry Delay #1

Cmd Loc	001
Default	20
Range	10 - 255 (Seconds)

Comments

This establishes the first of two delay times for entry zones. Time is entered in seconds.

Entry Delay #2

Cmd Loc	002
Default	40
Range	10 - 255 (Seconds)

Comments

This establishes the second of two delay times for entry zones. Time is entered in seconds.

Exit Delay

Cmd Loc	003
Default	60
Range	20 - 255 (Seconds)

Comments

This establishes the delay time for exit zones. The time programmed into this location should allow the user to use the exit farthest from the keypad. Time is entered in seconds.

Zone Type (Zones 1 - 32)

Cmd Loc	004	005	006	007	008	009	010	011
Zone #	1	2	3	4	5	6	7	8
Default	1	3	3	5	5	5	5	10
Cmd Loc	012	013	014	015	016	017	018	019
Zone #	9	10	11	12	13	14	15	16
Cmd Loc	020	021	022	023	024	025	026	027
Zone #	17	18	19	20	21	22	23	24
Cmd Loc	028	029	030	031	032	033	034	035
Zone #	25	26	27	28	29	30	31	32

Default 0 (CL 012 - 035)
Range 0 - 15 (All CL)

Comments

These programming Options determine the zone type for each zone (hardwired or wireless) in the system.

Options:

- 0 Disabled
- 1 Entry Delay 1/Exit
- 2 Entry Delay 2/Exit
- 3 Interior Instant
- 4 Interior Delay 2
- 5 Instant (Perim.)
- 6 Day Buzzer/Inst
- 7 Day Buzzer/Delay
- 8 Day Bell/Inst
- 9 Day Bell/Delay
- 10 24-Hr. BA
- 11 Fire (FA)
- 12 Tamper
- 13 Panic/Hold-Up
- 14 Emergency-Med
- 15 Keyswitch **

** If the Zone Type is programmed as Keyswitch, then Zone Restoral Type (Block 2, CL 036 - 067) will be programmed using Option #2 values.

Zone Restoral Type (Zones 1 - 32)

Cmd Loc	036	037	038	039	040	041	042	043
Zone #	1	2	3	4	5	6	7	8
Cmd Loc	044	045	046	047	048	049	050	051
Zone #	9	10	11	12	13	14	15	16
Cmd Loc	052	053	054	055	056	057	058	059
Zone #	17	18	19	20	21	22	23	24
Cmd Loc	060	061	062	063	064	065	066	067
Zone #	25	26	27	28	29	30	31	32

Default 2 (All CL)
Range 1 - 5 (All CL)

Comments

Option #1 values are used for all zone types **except** Keyswitch.

Keyswitch zones will use the second set of Options. Default value for keyswitch is 2 (Arm/Disarm).

Option Set #1

- 1 Disabled
- 2 Return to normal
- 3 Return to normal and bell silenced
- 4 Return to normal and not armed
- 5 User code entry (zone may remain faulted)

Option Set #2

- 1 Disabled
- 2 Arm/Disarm
- 3 Arm Only
- 4 Disarm Only
- 5 N/A

Block 2 - Zone Configuration Programming (cont.)

Zone Response Time (Zones 1 - 8)

Cmd Loc	068	069	070	071	072	073	074	075
Zone #	1	2	3	4	5	6	7	8
Cmd Loc	076 (Zone Expander Module #1)							
Zone #	9 thru 16							
Cmd Loc	077 (Zone Expander Module #2)							
Zone #	17 thru 24							
Cmd Loc	078 (Zone Expander Module #3)							
Zone #	25 thru 32							
Default	2 (All CL)							
Range	1 - 2 (All CL)							

Comments

These Options select the zone response time (in milliseconds) of zones 1 - 8 and zones available from the S5058 Zone Expansion Module.

Options:

- | | |
|---|--------|
| 1 | 250 mS |
| 2 | 500 mS |

All zones on the S5058 ZEM use the same response time.

Audible Cadence (Zones 1 - 32)

Cmd Loc	079	080	081	082	083	084	085	086
Zone #	1	2	3	4	5	6	7	8
Cmd Loc	087	088	089	090	091	092	093	094
Zone #	9	10	11	12	13	14	15	16
Cmd Loc	095	096	097	098	099	100	101	102
Zone #	17	18	19	20	21	22	23	24
Cmd Loc	103	104	105	106	107	108	109	110
Zone #	25	26	27	28	29	30	31	32
Default	3 (All CL)							
Range	1 - 7 (All CL)							

Comments

These options program the operation of the internal and external sounders. Both internal and external sounders will operate together. Programming options 5 and 6 also limit the duration of the sounder outputs.

Options:

- 1 Keypad Buzzer
- 2 Pulsing Sounder (1.5s on/off)
- 3 Steady Sounder
- 4 Temporal Code 3 (0.5s on/ 0.5s off 2x, 0.5s on/ 1.5s off)
- 5 On 1 Min./Off 30s (repeated twice)
- 6 On 1 Min./Off 30s (repeated 5x)
- 7 Silent

Exceptions are: Keypress/Spread-Net Arming Annunciation (Block 3, CL 051) and Ringback (Block 4, CL 115).

Zone Circuit Type (Zones 1 - 32)

Cmd Loc	111	112	113	114	115	116	117	118
Zone #	1	2	3	4	5	6	7	8
Cmd Loc	119	120	121	122	123	124	125	126
Zone #	9	10	11	12	13	14	15	16
Cmd Loc	127	128	129	130	131	132	133	134
Zone #	17	18	19	20	21	22	23	24
Cmd Loc	135	136	137	138	139	140	141	142
Zone #	25	26	27	28	29	30	31	32
Default	3 (All CL)							
Range	1 - 6 (All CL)							

Comments

Tamper zones use 2 EOL resistors and may detect 4 discreet conditions (normal, fault/ alarm, trouble, and tamper).

Options:

- 1 Normally Closed
- 2 Normally Open
- 3 EOL
- 4 Supervised EOL
- 5 Tamper (2 EOL)
- 6 SpreadNet RF

If any zone is designated as a SpreadNet zone, it will automatically be ignored as a hardwired zone.

For devices requiring 10K EOL resistor, use zone 7 and remove J5. Refer to the S5090 Sierra Reference Manual for additional information.

Chime Enable

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	143	144	145	146
Default	0	0	0	0
Range	0 - 255	0 - 255	0 - 255	0 - 255

Comments

If programmed for chime, these zones will sound at the keypad when the control panel is disarmed and the zone is faulted. It is used for delay, interior, and instant zones only. The program value is a total of all zones in the group which will have Chime enabled.

Options:

0	Disabled
1	Zone 1 9 17 25
2	Zone 2 10 18 26
4	Zone 3 11 19 27
8	Zone 4 12 20 28
16	Zone 5 13 21 29
32	Zone 6 14 22 30
64	Zone 7 15 23 31
128	Zone 8 16 24 32

Zone Bypass Enable

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	147	148	149	150
Default	255	255	255	255
Range	0 - 255	0 - 255	0 - 255	0 - 255

Comments

These four command locations determine which zones a user may manually bypass (if authorized in Block 1, CL 021 - 080).

Zone bypass enable is divided into groups of 8 zones each. The program value is a total of all zones in the group which may be bypassed.

Options:

0	Disabled
1	Zone 1 9 17 25
2	Zone 2 10 18 26
4	Zone 3 11 19 27
8	Zone 4 12 20 28
16	Zone 5 13 21 29
32	Zone 6 14 22 30
64	Zone 7 15 23 31
128	Zone 8 16 24 32

Block 2 - Zone Configuration Programming (cont.)

Home Arm Bypass List

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	151	152	153	154
Default	0	0	0	0
Range	0 - 255	0 - 255	0 - 255	0 - 255

Comments

These four (4) command locations determine which zones will be automatically bypassed when the user home arms the system.

The home arm bypass list is divided into groups of 8 zones each. The value entered is the total of all zones in the group to be automatically bypassed.

Options:

0	Disabled
1	Zone 1 9 17 25
2	Zone 2 10 18 26
4	Zone 3 11 19 27
8	Zone 4 12 20 28
16	Zone 5 13 21 29
32	Zone 6 14 22 30
64	Zone 7 15 23 31
128	Zone 8 16 24 32

Soft Zone Enable (Medical, Police, and Fire)

Key:	Med	Police	Fire
Cmd Loc	155	156	157
Default	1	1	1
Range	1 - 2	1 - 2	1 - 2

Comments

If enabled, press and hold any of the soft zone keys for two seconds to report an alarm condition (see also Block 4, CL 148 (Report Routing)). The local sounder (Block 2, CL 158 - 160) will also be activated.

Options:

- 1 No
- 2 Yes

Soft Zone Audible Cadence

Key:	Med	Police	Fire
Cmd Loc	158	159	160
Default	3	2	4
Range	1 - 7	1 - 7	1 - 7

Comments

These Options program the operation of the internal and external sounders in response to the Medical, Police, and Fire (soft zone) keys. Both internal and external sounders will operate together. Programming Options 5 and 6 also limit the duration of the sounder outputs.

Options:

- 1 Keypad Buzzer
- 2 Pulsing Sounder (1.5S on/off)
- 3 Steady Sounder
- 4 Temporal Code 3 (0.5S on/ 0.5S off 2x, 0.5 S on/ 1.5 S off)
- 5 On 1 Min./ Off 30S (repeated twice)
- 6 On 1 Min./ Off 30S (repeated 5x)
- 7 Silent

Block 3 - Armed System Programming

This Block is divided into 54 Command Locations (CL 001 - 054). This Block allows the installer to set the Arming Type, Enable Autohome, and set the three Quick functions. In addition, the Installer can select the Keypad functions, Cross-Zoning and Double-Knock functions, Auto Arming and Disarming, and other miscellaneous functions.

Arming Type

Cmd Loc	001
Default	1
Range	1 - 3

Comments

This option determines the conditions necessary in order to arm the system (zone status, etc.). For additional details on arming options, refer to the S5090 Reference Manual.

Options:

- 1 Goof-Proof
- 2 Force Arming
- 3 Chirp-Alert

Autohome Enable

Cmd Loc	002
Default	1
Range	1 - 2

Comments

If enabled, arming the system without exiting the premises will cause the system to automatically home arm (bypass all zones programmed in Block 2, CL 151 - 154). Perimeter zones will be armed with all delays active.

Options:

- 1 No
- 2 Yes

Quick Arming Enable

Cmd Loc	003
Default	2
Range	1 - 2

Comments

If enabled, quick arming allows the user to arm the system without entering a user code. Quick arming pertains to full arming, home arming, and instant arming. System delays programmed for those functions will be in effect. (See the S5090 Reference Manual for details on arming features.)

Options:

- 1 No
- 2 Yes

SpreadNet Single Button Disarming Enable

Cmd Loc	004
Default	2
Range	1 - 2

Comments

If enabled, allows the system to be disarmed using the "Dis-arm" button on a SpreadNet SN991-REMOTE or SN961-KEYFOB. With this option enabled, the "Door" button on the SN991-REMOTE or SN990-KEYPAD may also be used to activate a relay (see Block 7, CL 001 - 011, option 2).

Options:

- 1 No
- 2 Yes

Quick Exit Enable

Cmd Loc	005
Default	1
Range	1 - 2

Comments

If enabled, quick exit allows the user to Home arm the system and then leave the premises at a later time, without the need to disarm and re-arm the system. Pressing and holding the [Home] key for two seconds will invoke the quick exit function.

Options:

- 1 No
- 2 Yes

Block 3 - Armed System Programming (cont.)

Quick Bypass Enable

Cmd Loc	006
Default	1
Range	1 - 2

Comments

If enabled, quick bypass allows any user to bypass zones without entering a user code. To bypass a zone, press the [Bypass] key followed by the 2-digit code for the zone to be bypassed.

Options:

- 1 No
- 2 Yes

Home Arm Exit Delay Enable

Cmd Loc	007
Default	1
Range	1 - 2

Comments

If enabled, the exit delay (Block 2, CL 003) will start when a user presses and holds the [Home] key for two seconds. If disabled, the exit delay will be ignored and the system will home arm instantly.

Options:

- 1 No
- 2 Yes

4X Exit Delay Extension Enable

Cmd Loc	008
Default	2
Range	1 - 2

Comments

If enabled, the exit delay (Block 2, CL 003) will restart if the delay zone is faulted a second or subsequent time during the exit delay. The exit delay may be restarted up to 4 times.

Options:

- 1 No
- 2 Yes

Chirp-Alert on Exit Fail

Cmd Loc	009
Default	2
Range	1 - 2

Comments

If enabled, all sounders (internal and external) will chirp for three seconds at the start of the entry delay (Block 2, CL 001 or 002).

Options:

- 1 No
- 2 Yes

Low Battery Arming

Cmd Loc	010
Default	2
Range	1 - 2

Comments

If enabled, allows the system to be armed even if the back-up battery is low.

Options:

- 1 No
- 2 Yes

Keypad Buzzer During Exit Delay

Cmd Loc	011
Default	2
Range	1 - 2

Comments

If enabled, the keypad buzzer sounds during the exit delay. The keypad buzzer rate is faster during the last 10 seconds of the exit delay.

Options:

- 1 No
- 2 Yes

Keypad Buzzer During Entry Delay

Cmd Loc	012
Default	2
Range	1 - 2

Comments

If enabled, the keypad buzzer sounds during the entry delay. The keypad buzzer rate is faster during the last 10 seconds of the entry delay.

Options:

- 1 No
- 2 Yes

Keypad LED Status

Cmd Loc	013
Default	1
Range	1 - 3

Comments

This option controls the zone and status displays of the LED keypad.

Options:

- 1 Always display arm and zone status
- 2 Status always on while disarmed. If armed, status displayed for 30 secs.
- 3 Display arm and zone status for 30 seconds following User Code entry.

NOTE: The Power and Arm LEDs on **all** keypads operate the same.

Cross-Zoning List

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	014	015	016	017
Default	0	0	0	0
Range	0 - 255	0 - 255	0 - 255	0 - 255

Comments

If programmed for cross-zoning, any two of the zones listed here must be violated while armed in order for an alarm condition to register.

If the system is divided into areas, both zones in alarm must be within the same area.

NOTE: Fire, delay, and keyswitch zones are ignored if placed on the cross-zone list.

Options:

0	Disabled
1	Zone 1 9 17 25
2	Zone 2 10 18 26
4	Zone 3 11 19 27
8	Zone 4 12 20 28
16	Zone 5 13 21 29
32	Zone 6 14 22 30
64	Zone 7 15 23 31
128	Zone 8 16 24 32

Double-Knock List

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	018	019	020	021
Default	0	0	0	0
Range	0 - 255	0 - 255	0 - 255	0 - 255

Comments

Zones listed here must be violated twice (or any two zones must be faulted) within a 30-second period in order for an alarm condition to register.

If the system is divided into areas, the alarms must be within the same area.

NOTE: Fire, delay, and keyswitch zones are ignored if placed on this list.

Options:

0	Disabled
1	Zone 1 9 17 25
2	Zone 2 10 18 26
4	Zone 3 11 19 27
8	Zone 4 12 20 28
16	Zone 5 13 21 29
32	Zone 6 14 22 30
64	Zone 7 15 23 31
128	Zone 8 16 24 32

Block 3 - Armed System Programming (cont.)

Auto-Arming Enable (Area)

Cmd Loc	022
Default	0
Range	0 - 255

Auto-Arming Time (Hours)

Cmd Loc	023
Default	0
Range	0 - 23

Auto-Arming Time (Minutes)

Cmd Loc	024
Default	0
Range	0 - 59

Comments

Auto-Arming may be enabled for any or all partitions. If enabled, the system will be automatically armed each day at the time specified in Block 3, CL 023 and 024. All partitions will auto-arm using the same timer.

When programming the time of day for auto-arming, use the 24-hour format. (Add 12 hours for afternoon and evening times.)

The internal sounder will sound a warning two minutes and again at one minute prior to the Automatic Arming of the system.

Options:

- 0 Disabled
- 1 Area 1
- 2 Area 2
- 4 Area 3
- 8 Area 4
- 16 Area 5
- 32 Area 6
- 64 Area 7
- 128 Area 8

Auto-Disarming Enable (Area)

Cmd Loc	025
Default	0
Range	0 - 255

Comments

This will automatically disarm the partitions indicated according to the information programmed into Block 3, CL 026 - 028. The value programmed is a total of all areas to auto-disarm within the system.

Options:

- 0 Disabled
- 1 Area 1
- 2 Area 2
- 4 Area 3
- 8 Area 4
- 16 Area 5
- 32 Area 6
- 64 Area 7
- 128 Area 8

Auto-Disarming Enable (Day of Week)

Cmd Loc	026
Default	0
Range	0 - 127

Comments

This will automatically disarm the areas specified in Block 3, CL 025. Auto-disarm will occur on the days programmed (Block 3, CL 026) and at the time specified (Block 3, CL 027 - 028). The value programmed in Block 3, CL 026 is the total of all days to auto-disarm the system.

Options:

- 0 Disabled
- 1 Saturday
- 2 Friday
- 4 Thursday
- 8 Wednesday
- 16 Tuesday
- 32 Monday
- 64 Sunday

Auto-Disarming Time (Hours)

Cmd Loc	027
Default	0
Range	0 - 23

When programming the time of day for auto-disarming, use the 24-hour format. (Add 12 hours for afternoon and evening times.)

Auto-Disarming Time (Minutes)

Cmd Loc	028
Default	0
Range	0 - 59

Swinger Alarm Lockout Limit

Cmd Loc	029
Default	0
Range	0 - 15

Comments

Limits the number of alarm signals reported and/or annunciated during an armed period. Additional alarms will **not** be indicated. Setting the limit to zero (0) indicates unlimited signals reported. In partitioned systems, this limit pertains to **ALL** partitions (areas).

Audible Output Limits

Cmd Loc	030
Default	2
Range	1 - 3

Comments

Determines the number of times the sounders (bells) will indicate an alarm condition during an armed period.

Options:

- 1 Unlimited Local Audibles.
- 2 One Audible per Zone.
- 3 One Audible per Area.

Fire Verification Enable

Cmd Loc	031
Default	1
Range	1 - 4

Comments

Determines if powered loop (zone 8) or switched aux power will be reset for fire alarm verification.

Options:

- 1 No Verification
- 2 Powered Loop Verify Only
- 3 Switched Aux Verify Only
- 4 Powered Loop and Switched Aux

AC Power Loss Delay Before Report (Minutes)

Cmd Loc	032
Default	15
Range	1 - 255

Comments

Specifies the number of minutes AC power must be interrupted before an AC power fail report is sent.

Battery Test Interval (Hours)

Cmd Loc	033
Default	24
Range	0 - 24

Comments

The interval (in hours) between battery tests. If programmed for 0, the test is disabled. This test is conducted each time the system is reset. Additional tests follow the test interval specified.

Block 3 - Armed System Programming (cont.)

Sounder Turn-On Delay Following Alarm (Seconds)

Cmd Loc	034
Default	0
Range	0 - 255

Comments

Number of seconds that elapse following an alarm condition before the internal siren/external bell sounds. The keypad buzzer is active during this period.

Strobe/Siren Disable with Low Battery

Cmd Loc	035
Default	2
Range	1 - 2

Comments

If enabled, this option disables the strobe/siren, to extend backup time with a low battery condition.

Options:

- 1 No
- 2 Yes

Phone Line Cut or Comm Fail Indication (Silent to Audible)

Cmd Loc	036
Default	1
Range	1 - 2

Comments

If enabled, alarm conditions programmed as silent will convert to audible.

Options:

- 1 No
- 2 Yes

Phone Line Cut Audible Action

Cmd Loc	037
Default	1
Range	1 - 3

Comments

Determines the audible action to be taken when the telephone line has been cut.

Options:

- 1 No Local Audible Annunciation.
- 2 Turn On Sounders.
- 3 Turn On Sounders **only** if armed.

Internal/External Sounder Output Duration (Minutes)

Cmd Loc	038
Default	5
Range	0 - 60

Comments

Amount of time the internal siren and external bell will sound following an alarm condition. Sounder cadence is programmed in Block 2, CL 079 - 110.

Strobe Output Duration (Days)

Cmd Loc	039
Default	7
Range	0 - 7

Comments

This option specifies the duration of the strobe output (in days) following an alarm condition.

Options:

- 0 Strobe Disabled
- 1 - 6 Days
- 7 Strobe Latched

Soak Mode (Learning Period) Duration (Days)

Cmd Loc	040
Default	0
Range	0 - 31

Comments

Panel will operate as a local system **only** during this period. This will give the user time to learn the system. All alarm indications during this period will **only** be annunciated by keypad buzzer. The internal and external sounders are also disabled during this period.

Duress Active Only When (Area) Armed

Cmd Loc	041
Default	2
Range	1 - 2

Comments

If enabled, the duress code will only disarm the system. The duress code may not be used for arming.

Options:

- 1 No
- 2 Yes

If disabled, this option will send a duress report when arming or disarming.

Opening Report Programming Override

Cmd Loc	042
Default	1
Range	1 - 2

Comments

An Opening Report will be sent if the following conditions are met:

Options:

- 1 No
- 2 Yes

- 1 - An alarm has occurred;
- 2 - the cancel report timer (Block 4, CL 110) has expired; and
- 3 - a valid user code is entered.

The report is sent, regardless of the User Code Privileges (Block 1, CL 021 - 080) assigned to the user. The report will not override First to Open/Last to Close (Block 9, CL 110) option.

External Bell Supervision Enable

Cmd Loc	043
Default	1
Range	1 - 2

Comments

If enabled, provides for supervision of external bell wiring for opens, shorts, and ground faults. Bell supervision requires an EOL resistor at the bell terminals. This option may **not** be used if External Bell Reverse (Block 3, CL 048) is active.

Options:

- 1 No
- 2 Yes

For proper supervision, Ground Fault Supervision (Block 3, CL 053) should also be enabled.

Block 3 - Armed System Programming (cont.)

Keypad Tamper Switch Enable (By Address)

Keypad #	1 - 8	9 - 16
Cmd Loc	044	045
Default	0	0
Range	0 - 255	0 - 255

Comments

Each Cmd Loc will be programmed with the total of the keypad addresses with active tamper switches.

Keypad Tampers are reported via the keypad bus.

Options:

0	Disabled
1	Keypad 1 9
2	Keypad 2 10
4	Keypad 3 11
8	Keypad 4 12
16	Keypad 5 13
32	Keypad 6 14
64	Keypad 7 15
128	Keypad 8 16

Reserved for Future Use

Cmd Loc	046	047
Default	0	0
Range	N/A	N/A

Comments

These locations are Reserved for Future Use and are not available in this firmware version.

External Bell Reverse Enable

Cmd Loc	048
Default	1
Range	1 - 2

Comments

If enabled, supplies voltage to external bell when bell is off. This option may not be used with External Bell Supervision (Block 3, CL 043) enabled.

Options:

- 1 No
- 2 Yes

Sounder (Bell) Test Enable (By Area)

Cmd Loc	049
Default	0
Range	0 - 255

Comments

Sounds a 5-second bell test at the start of each exit delay. The value programmed into this Cmd Loc is the total of all areas for which the bell test will be active.

Options:

- 0 Disabled
- 1 Area 1
- 2 Area 2
- 4 Area 3
- 8 Area 4
- 16 Area 5
- 32 Area 6
- 64 Area 7
- 128 Area 8

Home Arming Enable

Cmd Loc	050
Default	1
Range	1 - 2

Comments

This option, when enabled, allows a system to be home armed or instant home-armed. All zones listed in the Home Arm Bypass List (Block 2, CL 151 - 154) will be automatically bypassed.

Options:

- 1 No
- 2 Yes

Keyswitch/SpreadNet Arming Annunciation

Cmd Loc	051
Default	0
Range	0 - 15

Comments

This option determines how keyswitch or SpreadNet arming is annunciated. The value programmed into this Cmd Loc is the total of all sounders to be activated. When arming, the selected sounders will beep three times (1.5 sec on/off) and the strobe will light for 3 seconds. When disarming, the selected sounders will beep once and the strobe will be on for 1.5 seconds.

Options:

- 0 No Annunciation
- 1 Keypad Buzzer
- 2 Strobe
- 4 Internal Siren
- 8 External Bell

Auto-Arming Enable (Day of Week)

Cmd Loc	052
Default	0
Range	0 - 127

Comments

This will automatically arm the areas specified in Block 3, CL 022 at the time specified in Block 3, CL 023 and 024. The value programmed here is the total for all days of the week when the system will auto-arm.

Options:

- 0 Disabled
- 1 Saturday
- 2 Friday
- 4 Thursday
- 8 Wednesday
- 16 Tuesday
- 32 Monday
- 64 Sunday

Ground Fault Supervision Enable

Cmd Loc	053
Default	1
Range	1 - 2

Comments

This option, when enabled, reports and annunciates all ground fault conditions.

Options:

- 1 No
- 2 Yes

When disabled, these conditions are not reported or annunciated.

Home Arm Reports Enable

Cmd Loc	054
Default	1
Range	1 - 2

Comments

This option, when enabled, allows opening/closing and by-pass reports to be sent to the central station, if programmed in Block 1, CL 021 - 080 (User Code Privilege) and Block 5, CL 069 - 072 (Zone Bypass Reports); CL 095 - 098 (Opening Reports); and/or CL 099 - 102 (Closing Reports).

Options:

- 1 No
- 2 Yes

Block 4 - Digital Communicator Programming

This Block is divided into 164 Command Locations (CL 001 - 164). The programming locations in this Block reflect the Receiver Type and Message Format for Receivers 1 & 2, Account Numbers, Phone Numbers (Receiver 1, 2, and RPS), Dialing Parameters and Delays, and Call Routing (including SpreadNet).

Receiver Type (Receiver #1)

Cmd Loc	001
Default	2
Range	1 - 15

Options:

- 1 ADEMCO 4+2 Express (DTMF)
- 2 ADEMCO Contact ID (DTMF)
- 3 ADEMCO High Speed (DTMF)
- 4 SIA Level 1 (FSK)
- 5 SIA (Date and Time)
- 6 SIA (Area)
- 7 SIA (Date & Time + Area)
- 8 CFSK-IV (FSK)
- 9 Radionics / Fast
- 10 Radionics / Slow
- 11 Silent Knight / ADEMCO Fast
- 12 Silent Knight / ADEMCO Slow
- 13 Radionics High Speed
- 14 Numeric DTMF Pager (4+2)
- 15 Personal Dialing

NOTE: ADEMCO High Speed (option #3) may **not** be used with systems having more than 8 zones.

Message Format (Receiver #1)

Cmd Loc	002
Default	1
Range	1 - 4

Comments

Specifies the method of sending the reported message (Account Number and Reporting Code) to the Central Station.

Options:

- 1 3/1 Dual Round
- 2 4/1 Dual Round
- 3 4/2 Dual Round
- 4 3/1 Extended Dual Round

NOTE: The 4/1 Message Format may **not** be used with Radionics High Speed.

Receiver Type (Receiver #2)

Cmd Loc	003
Default	2
Range	1 - 15

Options:

- 1 ADEMCO 4+2 Express (DTMF)
- 2 ADEMCO Contact ID (DTMF)
- 3 ADEMCO High Speed (DTMF)
- 4 SIA Level 1 (FSK)
- 5 SIA (Date and Time)
- 6 SIA (Area)
- 7 SIA (Date & Time + Area)
- 8 CFSK-IV (FSK)
- 9 Radionics / Fast
- 10 Radionics / Slow
- 11 Silent Knight / ADEMCO Fast
- 12 Silent Knight / ADEMCO Slow
- 13 Radionics High Speed
- 14 Numeric DTMF Pager (4+2)
- 15 Personal Dialing

NOTE: ADEMCO High Speed (option #3) may **not** be used with systems having more than 8 zones.

Message Format (Receiver #2)

Cmd Loc	004
Default	1
Range	1 - 4

Comments

Specifies the method of sending the reported message (account number and reporting code) to the central station.

Options:

- 1 3/1 Dual Round
- 2 4/1 Dual Round
- 3 4/2 Dual Round
- 4 3/1 Extended Dual Round

NOTE: The 4/1 Message Format may **not** be used with Radionics High Speed.

Account #1

Cmd Loc	005	006	007	008	009	010
Default	0	0	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15

Comments

This is a 6-digit account number which is used by Receiver 1. In a partitioned system, this is the account number for area #1.

Account #2

Cmd Loc	011	012	013	014	015	016
Default	0	0	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15

Comments

This is a 6-digit account number which is used by Receiver 2. In a partitioned system, this is the account number for area #2.

Block 4 - Digital Communicator Programming (cont.)

Account #3

Cmd Loc	017	018	019	020	021	022
Default	0	0	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15

Comments

In a partitioned system, this is the account number for area #3.

Account #4

Cmd Loc	023	024	025	026	027	028
Default	0	0	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15

Comments

In a partitioned system, this is the account number for area #4.

Account #5

Cmd Loc	029	030	031	032	033	034
Default	0	0	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15

Comments

In a partitioned system, this is the account number for area #5.

Account #6

Cmd Loc	035	036	037	038	039	040
Default	0	0	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15

Comments

In a partitioned system, this is the account number for area #6.

Account #7

Cmd Loc	041	042	043	044	045	046
Default	0	0	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15

Comments

In a partitioned system, this is the account number for area #7.

Account #8

Cmd Loc	047	048	049	050	051	052
Default	0	0	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15

Comments

In a partitioned system, this is the account number for area #8.

Telephone Number (Receiver #1)

Cmd Loc	053	054	055	056	057	058	059	060
Cmd Loc	061	062	063	064	065	066	067	068
Default	14 (All Locations)							
Range	0 - 15 (All Locations)							

Comments

Each telephone number may be up to 16 digits long. Acceptable values are the digits 0 - 9 and the special characters shown at the right.

Options:

- 0 - 9 Dialing Digits
- 10 Dial Tone Detect
- 11 Not Used
- 12 * [Star Key] - Not Available with Pulse Dialing
- 13 # [Pound Key] -Not Available with Pulse Dialing
- 14 End of Number - All Cmd Locs following this character are ignored
- 15 5 second Dialing Pause

Telephone Number (Receiver #2)

Cmd Loc	069	070	071	072	073	074	075	076
Cmd Loc	077	078	079	080	081	082	083	084
Default	14 (All Locations)							
Range	0 - 15 (All Locations)							

Telephone Number (RPS Callback)

Cmd Loc	085	086	087	088	089	090	091	092
Cmd Loc	093	094	095	096	097	098	099	100
Default	14 (All Locations)							
Range	0 - 15 (All Locations)							

Dial Type

Cmd Loc	101
Default	1
Range	1 - 3

Comments

Determines the format used for all dialing operations.

Options:

- 1 DTMF (5 tones/sec)
- 2 Pulse
- 3 DTMF/Pulse Alternating (DTMF first)

Dial Attempt Limit

Cmd Loc	102
Default	6
Range	0 - 15

Comments

Determines the number of times the digital communicator will attempt to place a call (per phone number) before reporting a comm fail. **To set up the system as a local panel (non-reporting), enter 0 into this location.**

Telephone Ring Cadence

Cmd Loc	103
Default	2
Range	1 - 2

Comments

This is the ring cadence used by the local telephone system. In a double-ring system, two rings count as a one.

Options:

- 1 Single Ring
- 2 Double Ring

Ring Count to Answer

Cmd Loc	104
Default	15
Range	1 - 15

Comments

This option determines the procedure the system will use when answering incoming phone calls.

Options:

- 1 Auto-Answer Disabled
- 2 - 14 Number of Rings Before Answering
- 15 Answering Machine Bypass

Block 4 - Digital Communicator Programming (cont.)

RPS Callback Enable

Cmd Loc	105
Default	1
Range	1 - 2

Comments

If enabled, requires the panel to call COMMANDER II in order to establish RPS. If disabled, the panel will stay on-line when called by COMMANDER II the second time (following handshaking).

Options:

- 1 No
- 2 Yes

Keypad RPS Enable

Cmd Loc	106
Default	2
Range	1 - 2

Comments

If enabled, allows remote programming to be initiated from the keypad (either Block 0 or user programming).

Options:

- 1 No
- 2 Yes

RPS and CFSK-IV Modem Type

Cmd Loc	107
Default	2
Range	1 - 2

Comments

Establishes the modem protocol for RPS and CFSK-IV communications.

Options:

- 1 Bell 103
- 2 CCITT

Alarm Dialing Delay (Seconds)

Cmd Loc	108
Default	0
Range	0 - 255

Comments

The delay (in seconds) after an alarm occurs before the report is sent.

24-Hour Zone Dial Delay

Cmd Loc	109
Default	1
Range	1 - 2

Comments

If enabled, uses the time programmed above (Block 4, CL 108) for reporting alarms on 24-hour zones. If disabled, 24-hour zones report immediately.

Options:

- 1 No
- 2 Yes

Cancel Report Delay (Seconds)

Cmd Loc	110
Default	0
Range	0 - 255

Comments

The amount of time (in seconds), following an alarm, during which a cancel report may be sent. The cancel report is not sent if a valid user code is entered before the alarm dialing delay has expired.

Dialer Retry Sequence

Cmd Loc	111
Default	4
Range	1 - 4

Options:

- 1 Repeat Call Attempt Series Every 30 min.
- 2 Repeat Call Attempt Series Every four hrs.
- 3 Repeat Call Attempt Series at 30 min. then double interval up to 128 hrs.
- 4 No additional Call Attempts After Failed Series Until New Report is Queued.

Phone Line Call Routing

Cmd Loc	112
Default	1
Range	1 - 4

Options:

- 1 Line #1 Only
- 2 Line #1 with Line #2 Backup (Phone Line Cut or Comm Fail)
- 3 Line #1 with Line #2 as Backup, Alternating (2 Attempts Each)
- 4 Line #1 with Line #2 as Backup, Alternating (4 Attempts Each)

Test Report Interval (Days)

Cmd Loc	113
Default	7
Range	0 - 30

Comments

This option determines the test interval. Test reports are sent in daily intervals, ranging from 1 to 30 days. The time of day for the report is programmed into Block 4, CL 114. To disable reporting, set to 0.

Test Report Time of Day (Hours)

Cmd Loc	114
Default	1
Range	0 - 23

Comments

When programming the test report time of day, use the 24-hour format. (Add 12 hours for afternoon and evening times.)

Ringback Outputs Enable

Cmd Loc	115
Default	0
Range	0 - 15

Comments

The selected outputs will sound for three seconds following a successful closing report.

Options:

- 0 Disable
- 1 Keypad Buzzer
- 2 Strobe
- 4 Internal Siren
- 8 External Bell

Block 4 - Digital Communicator Programming (cont.)

Report Routing (Zones 1 - 32)

Cmd Loc	116	117	118	119	120	121	122	123
Zone #	1	2	3	4	5	6	7	8
Cmd Loc	124	125	126	127	128	129	130	131
Zone #	9	10	11	12	13	14	15	16
Cmd Loc	132	133	134	135	136	137	138	139
Zone #	17	18	19	20	21	22	23	24
Cmd Loc	140	141	142	143	144	145	146	147
Zone #	25	26	27	28	29	30	31	32

Default 2 (All CL)
Range 1 - 5 (All CL)

Keypad Medical, Police, and Fire Report Routing

Cmd Loc	148
Default	2
Range	1 - 5

Duress Report Routing

Cmd Loc	149
Default	2
Range	1 - 5

Opening / Closing Report Routing

Cmd Loc	150
Default	2
Range	1 - 5

Test Report Routing

Cmd Loc	151
Default	2
Range	1 - 5

Power Supply Report Routing

Cmd Loc	152
Default	2
Range	1 - 5

Phone Line Trouble Report Routing

Cmd Loc	153
Default	2
Range	1 - 5

Kidwatch Check-In Fail Report Routing

Cmd Loc	154
Default	2
Range	1 - 5

Installer Programming Report Routing

Cmd Loc	155
Default	2
Range	1 - 5

Bell Supervision Trouble Report Routing

Cmd Loc	156
Default	2
Range	1 - 5

SpreadNet Transmitter Low Battery Report Routing

Cmd Loc	157
Default	2
Range	1 - 5

Keypad and Accessory Tamper Report Routing

Cmd Loc	158
Default	2
Range	1 - 5

Comments

These locations determine the report routing for alarms, bypasses, troubles, tampers, restorals, and cancel reports on all zones.

Options:

- 1 Disable Reports
- 2 Receiver 1 Only
- 3 Receiver 2 Only
- 4 Receivers 1 and 2
- 5 Receiver 1, with Receiver 2 as Back-up, Alternating

Comments

Report routing for soft zone alarms, if soft zones are enabled (Block 2, CL 155 - 157).

Comments

Report routing for all duress codes. Areas are indicated by the account number.

Comments

Report routing for opening and closing reports, if enabled.

Comments

Report routing for test reports.

Comments

Report routing for AC power fail, low battery, and the respective restoral reports.

Comments

Report routing for phone line cut or comm fail reports.

Comments

If Kidwatch is enabled and the Kidwatch code is not entered during the Kidwatch window (Block 6, CL 006 - 009), a report will be sent.

Comments

Report routing for installer programming start and end reports (see Block 5, CL 135 - 138).

Comments

Report routing for external bell supervision trouble and restoral reports.

Comments

Report routing for all SpreadNet transmitters low battery and restoral reports.

Comments

Report routing for all tamper and restoral reports associated with keypads and accessories connected to the system.

Block 4 - Digital Communicator Programming (cont.)

Keypad and Accessory Communications

Trouble Report Routing

Cmd Loc	159
Default	2
Range	1 - 5

Comments

Report routing for all communication trouble and restoral reports associated with keypads and accessories connected to the system.

Options:

- 1 Disable Reports
- 2 Receiver 1 Only
- 3 Receiver 2 Only
- 4 Receivers 1 and 2
- 5 Receiver 1, with Receiver 2 as Back-up, Alternating

Audio Verification Enable (Listen-In)

Cmd Loc	160
Default	1
Range	1 - 4

Options:

- 1 No Audio Verification (AV)
- 2 Trigger AV following alarm, but before releasing line. Panel may not seize line for 3 min. or send reports until AV session is complete.
- 3 Same as option #1, but allows reports to interrupt AV session.
- 4 Same as option #1, except retriggers AV when panel attempts to seize line to send alarm report.

Digital Communications Enable

Cmd Loc	161
Default	1
Range	1 - 2

Comments

If disabled, programmed for No (1), the system will operate as a local system. Phone line checking will also be disabled. For reporting systems, program this location as Yes (2).

Options:

- 1 No (Local System)
- 2 Yes

Telephone Line #1 Supervision Time (Minutes)

Cmd Loc	162
Default	5
Range	0 - 30

Comments

Amount of time (in minutes) that the phone line must be cut (open) before annunciation will occur and a report is sent to the central station. This is also the time interval required before the phone line cut action (Block 3, CL 036 and 037). Programming either command location with 0 will disable phone line checking for that line.

Telephone Line #2 Supervision Time (Minutes)

Cmd Loc	163
Default	5
Range	0 - 30

If the system is equipped with a single-line digital communicator, the programming of CL 163 will be ignored.

Test Report Phone Line Routing

Cmd Loc	164
Default	1
Range	1 - 3

Comments

This option allows the installer to select the phone line which will be used to send test reports. If a dual-line digital communicator is used, both lines may be selected for test reporting. The data programmed in this location overrides the programming of Block 4, CL 112 for test reports only.

Options:

- 1 Line #1 Only
- 2 Line #2 Only
- 3 Line #1 and Line #2

Block 5 - Reporting Digits Programming

This Block has 180 Command Locations (CL 001 - 180). Certain reporting formats such as CFSK-IV, Contact ID, and SIA have pre-defined codes and the data programmed here is ignored. Reports may be disabled by programming the reporting code as 0 (or 00 for two-digit codes). Each Cmd Loc may be programmed with any value from 0 - 15.

Report Code, Alarm (Zones 1 - 32)

Cmd Loc	001 002	003 004	005 006	007 008	009 010	011 012
Default	0 1	0 1	0 1	0 1	0 1	0 1
Zone	1	2	3	4	5	6
Cmd Loc	013 014	015 016	017 018	019 020	021 022	023 024
Default	0 1	0 1	0 1	0 1	0 1	0 1
Zone	7	8	9	10	11	12
Cmd Loc	025 026	027 028	029 030	031 032	033 034	035 036
Default	0 1	0 1	0 1	0 1	0 1	0 1
Zone	13	14	15	16	17	18
Cmd Loc	037 038	039 040	041 042	043 044	045 046	047 048
Default	0 1	0 0	0 1	0 1	0 1	0 1
Zone	19	20	21	22	23	24
Cmd Loc	049 050	051 052	053 054	055 056	057 058	059 060
Default	0 1	0 1	0 1	0 1	0 1	0 1
Zone	25	26	27	28	29	30
Cmd Loc	061 062	063 064				
Default	0 1	0 1				
Zone	31	32				
Range	0 - 15 (All CL)					

Comments

These codes are used to indicate alarm conditions. Each report code is a two-digit code. Reports may be disabled by programming a value of 00 into the Cmd Loc. Each location may contain any digit from 0 - 15.

NOTE: The programmed digits 10 - 15 will be sent to the central station as their hexadecimal equivalent, as shown in the table below:

Reporting Digit Conversion:

Decimal	Hexadecimal
10	A
11	B
12	C
13	D
14	E
15	F

Block 5 - Reporting Digits Programming (cont.)

Report Code, Restoral (Zones 1 - 32)

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	065	066	067	068
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The restoral report code is a single-digit code. For 2-digit reporting formats, the relative zone number (1 - 8) is sent as the second digit. Disable the reporting by programming 0 into the specific Cmd Loc. Disabling a Cmd Loc disables reporting for all zones associated with that location.

Report Code, Zone Bypass (Zones 1 - 32)

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	069	070	071	072
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The zone bypass report code is a single-digit code. For two-digit reporting formats, the relative zone number (1 - 8) is sent as the second digit. Disable this report by programming 0 into the specific Cmd Loc. Disabling a Cmd Loc disables reporting for all zones associated with that location.

Report Code, Trouble (Zones 1 - 32)

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	073	074	075	076
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The zone trouble report code is a single-digit code. For two-digit reporting formats, the relative zone number (1 - 8) is sent as the second digit. Disable the reporting by programming 0 into the specific Cmd Loc. Disabling a Cmd Loc disables reporting for all zones associated with that location.

Report Code, Tamper (Zones 1 - 32)

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	077	078	079	080
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The zone tamper report code is also a single-digit code. For two-digit reporting formats, the relative zone number (1 - 8) is sent as the second digit. Program the specific Cmd Loc with 0 to disable reporting. Disabling a Cmd Loc disables reporting for all zones associated with that location.

Report Code, Soft Zone (Medical)

Key:	Medical
Cmd Loc	081 - 082
Default	0 1
Range	0 - 15

Comments

This is the code sent to the central station when the Medical soft zone is activated from the keypad. Disable reporting by programming 00 into these Cmd Loc.

Report Code, Soft Zone (Medical) Restoral

Key:	Medical
Cmd Loc	083 - 084
Default	0 1
Range	0 - 15

Comments

This is the code sent to the central station when the user enters a valid user code following a keypad-activated Medical emergency. Disable reporting by programming 00 into these Cmd Loc.

Report Code, Soft Zone (Police)

Key:	Police
Cmd Loc	085 - 086
Default	0 1
Range	0 - 15

Comments

This is the code sent to the central station when the Police soft zone is activated from the keypad. Disable reporting by programming 00 into these Cmd Loc.

Report Code, Soft Zone (Police) Restoral

Key:	Police
Cmd Loc	087 - 088
Default	0 1
Range	0 - 15

Comments

This is the code sent to the central station when the user enters a valid user code following a keypad-activated Police emergency. Disable reporting by programming 00 into these Cmd Loc.

Report Code, Soft Zone (Fire)

Key:	Fire
Cmd Loc	089 - 090
Default	0 1
Range	0 - 15

Comments

This is the code sent to the central station when the Fire soft zone is activated from the keypad. Disable the reporting by programming 00 into these Cmd Loc.

Report Code, Soft Zone (Fire) Restoral

Key:	Fire
Cmd Loc	091 - 092
Default	0 1
Range	0 - 15

Comments

This is the code sent to the central station when the user enters a valid user code following a keypad-activated Fire emergency. Disable reporting by programming 00 into these Cmd Loc.

Report Code, Duress

Cmd Loc	093 - 094
Default	0 1
Range	0 - 15

Comments

This is the code sent to the central station when the user enters a duress code. (See Block 3, CL 041 to determine when the duress code is active.) If the system is divided into areas, the area associated with the duress code will be identified by the account number (see Block 4, CL 005 - 052). Disable the reporting by programming 00 into the specified Cmd Loc.

Block 5 - Reporting Digits Programming (cont.)

Report Code, Opening (Users 1 - 60)

User #:	1 - 15	16 - 30	31 - 45	46 - 60
Cmd Loc	095	096	097	098
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The opening report code is a single-digit code. For two-digit reporting formats, the relative user number (1 - 15) is sent as the second digit. Program the specific Cmd Loc with 0 to disable reporting. Disabling a Cmd Loc disables reporting for all users associated with that location.

Report Code, Closing (Users 1 - 60)

User #:	1 - 15	16 - 30	31 - 45	46 - 60
Cmd Loc	099	100	101	102
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The closing report code is a single-digit code. For two-digit reporting formats, the relative user number (1 - 15) is sent as the second digit. Program the specific Cmd Loc with 0 to disable reporting. Disabling a Cmd Loc disables reporting for all users associated with that location.

Report Code, Cancel (Users 1 - 60)

User #:	1 - 15	16 - 30	31 - 45	46 - 60
Cmd Loc	103	104	105	106
Default	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The cancel report code is a single-digit code. For two-digit reporting formats, the relative user number (1 - 15) is sent as the second digit. Program the specific Cmd Loc with 0 to disable reporting. Disabling a Cmd Loc disables reporting for all users associated with that location.

Report Code, Exit Fail Alarm (Zones 1 - 32)

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	107	108	109	110
Default	0	0	0	0
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The exit fail report code is a single-digit code which is sent if the exit (delay) zone remains faulted at the end of the exit delay. The alarm is generated in association with the Chirp-Alert Warning (Block 3, CL 009). For two-digit reporting formats, the relative zone number (1 - 8) is sent as the second digit. Program the specific Cmd Loc with 0 to disable reporting. Disabling a Cmd Loc disables reporting for all zones associated with that location.

Report Code, Kidwatch Check-in Failure

Cmd Loc	111	112
Default	0	0
Range	0 - 15 (All CL)	

Comments

This two-digit code is sent to the central station if the Kidwatch code (user #11) is not entered during the Kidwatch period (Block 6, CL 006 - 009). Disable the reporting by programming 00 into these Cmd Loc.

Report Code, AC Power Loss

Cmd Loc	113	114
Default	0	1
Range	0 - 15 (All CL)	

Comments

These two-digit codes are used to report AC power failures and restorals. Only the second digit is sent when using single-digit reporting formats.

Report Code, AC Power Restoral

Cmd Loc	115	116
Default	0	1
Range	0 - 15 (All CL)	

Report Code, Low Battery

Cmd Loc	117	118
Default	0	1
Range	0 - 15 (All CL)	

Comments

These two-digit report codes will be sent to indicate a low battery condition or restoral report. When using single-digit reporting formats, only the second digit will be sent.

Report Code, Low Battery Restoral

Cmd Loc	119	120
Default	0	1
Range	0 - 15 (All CL)	

Report Code, Test

Cmd Loc	121	122
Default	0	1
Range	0 - 15 (All CL)	

Comments

This two-digit report code will be sent to indicate a system test. When using single-digit reporting formats, only the second digit is sent.

Report Code, Failure to Report (Comm Fail)

Cmd Loc	123	124
Default	0	0
Range	0 - 15 (All CL)	

Comments

These two-digit report codes will be sent to indicate a comm fail (failure to report) condition. The reports are also sent to indicate a comm fail restoral. Only the second digit is sent when using single-digit reporting formats.

Report Code, Fail to Report (Comm Fail) Restoral

Cmd Loc	125	126
Default	0	0
Range	0 - 15 (All CL)	

Report Code, Primary Phone Line Cut

Cmd Loc	127	128
Default	0	0
Range	0 - 15 (All Locations)	

Comments

These two-digit codes are sent when the system detects a primary or secondary phone line cut, or their respective restorals. When using single-digit reporting formats, only the second digit is sent.

Block 5 - Reporting Digits Programming (cont.)

Report Code, Primary Phone Line Restoral

Cmd Loc	129	130
Default	0	0

Range 0 - 15 (All Locations)

Report Code, Secondary Phone Line Cut

Cmd Loc	131	132
Default	0	0

Range 0 - 15 (All Locations)

Report Code, Secondary Phone Line Restoral

Cmd Loc	133	134
Default	0	0

Range 0 - 15 (All Locations)

Comments

These two-digit codes are sent when the system detects a primary or secondary phone line cut, or their respective restorals. When using single-digit reporting formats, only the second digit is sent.

Report Code, Installer Programming Start

Cmd Loc	135	136
Default	0	0

Range 0 - 15 (All Locations)

Report Code, Installer Programming Complete

Cmd Loc	137	138
Default	0	1

Range 0 - 15 (All Locations)

Comments

This two-digit report code will be sent to indicate the start of installer programming. Single-digit reporting formats will only send the second digit to the central station.

Report Code, Bell Supervision Trouble

Cmd Loc	139	140
Default	0	0

Range 0 - 15 (All Locations)

Report Code, Bell Supervision Trouble Restoral

Cmd Loc	141	142
Default	0	0

Range 0 - 15 (All Locations)

Comments

These two-digit report codes will be sent to indicate an external bell supervision trouble condition or a restoral report. When using single-digit reporting formats, only the second digit will be sent.

Report Code, SpreadNet Supervisory Trouble

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	143	144	145	146
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The SpreadNet supervisory trouble and supervisory trouble restoral report codes are single-digit codes. For two-digit reporting formats, the relative zone number (1 - 8) is sent as the second digit. Program the specific Cmd Loc with 0 to disable reporting. Disabling a Cmd Loc disables reporting for all zones associated with that location.

Report Code, SN Supervisory Trouble Restoral

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	147	148	149	150
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Report Code, SN Transmitter Low Battery

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	151	152	153	154
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Comments

The SpreadNet low battery and low battery restoral report codes are a single-digit code. For two-digit reporting formats, the relative zone number (1 - 8) is sent as the second digit. Program the specific Cmd Loc with 0 to disable reporting. Disabling a Cmd Loc disables reporting for all zones associated with that location.

Report Code, SN Tx Low Battery Restoral

Zones:	1 - 8	9 - 16	17 - 24	25 - 32
Cmd Loc	155	156	157	158
Default	1	1	1	1
Range	0 - 15	0 - 15	0 - 15	0 - 15

Report Code, Ground Fault

Cmd Loc	159	160
Default	0	0

Range 0 - 15 (All CL)

Report Code, Ground Fault Restoral

Cmd Loc	161	162
Default	0	0

Range 0 - 15 (All CL)

Comments

These two-digit report codes will be sent to indicate a ground fault condition or restoral report. When using single-digit reporting formats, only the second digit will be sent.

Block 5 - Reporting Digits Programming (cont.)

Report Code, Report Queue Overflow

Cmd Loc	163	164
Default	0	0

Range 0 - 15 (All CL)

Comments

This two-digit report code will indicate that the report buffer has overflowed. When using single-digit reporting formats, only the second digit is sent.

Report Code, SN Keypad Supervisory Failure

Cmd Loc	165
Default	1
Range	0 - 15

Comments

The SpreadNet keypad supervisory (check-in) failure and restoral report codes are a single-digit code. For two-digit reporting formats, the keypad address is sent as the second digit. To disable reporting, program 0 into the specific location.

Report Code, SN Kpd Supervisory Fail Restoral

Cmd Loc	166
Default	1
Range	0 - 15

Report Code, SpreadNet Keypad/Keyfob Low Battery

Cmd Loc	167
Default	1
Range	0 - 15

Comments

These report codes apply to the SpreadNet keypad, remote, and keyfob. The low battery and restoral report codes are a single-digit code. For two-digit reporting formats, the respective keypad number or user number associated with the remote/keyfob will be sent as the second digit. To disable reporting, program 0 into the specific location.

Report Code, SpreadNet Keypad/Keyfob Low Battery Restoral

Cmd Loc	168
Default	1
Range	0 - 15

Report Code, Accessory Tamper

Cmd Loc	169
Default	1
Range	0 - 15

Comments

The respective report code is sent to indicate a tamper or trouble condition (or the respective restoral report) associated with a specific accessory. For two-digit reporting formats, a hardcoded address is added as the second digit. The addresses for each accessory are listed to the right.

Accessory Addresses

- 1 - ZEM #1
- 2 - ZEM #2
- 3 - ZEM #3
- 4 - Not Used (Reserved)
- 5 - REMM #1
- 6 - REMM #2
- 7 - SN915-BUS Receiver

Report Code, Accessory Tamper Restoral

Cmd Loc	170
Default	1
Range	0 - 15

Report Code, Accessory Trouble

Cmd Loc	171
Default	1
Range	0 - 15

Report Code, Accessory Trouble Restoral

Cmd Loc	172
Default	1
Range	0 - 15

Report Code, Keypad Tamper

Cmd Loc	173	174
Default	0	1

Range 0 - 15 (All CL)

Comments

These two-digit report codes indicate tamper, trouble, and restoral conditions associated with hardwired keypads. When using single-digit reporting formats, only the second digit is sent.

Report Code, Keypad Tamper Restoral

Cmd Loc	175	176
Default	0	1

Range 0 - 15 (All CL)

Report Code, Keypad Trouble

Cmd Loc	177	178
Default	0	0

Range 0 - 15 (All CL)

Report Code, Keypad Trouble Restoral

Cmd Loc	179	180
Default	0	0

Range 0 - 15 (All CL)

Block 6 - Real Time Clock Programming

The Real Time Clock Programming Block is divided into two sections and has a total of 9 Command Locations (CL 001 - 009). The two sections relate to the system clock and the Kidwatch timer.

Date (Day of Month)

Cmd Loc	001
Default	1
Range	1 - 31

Comments

The system clock is used for date and time stamping of events stored in Event Memory. This information is also associated with certain reporting formats (see Block 4, CL 001 and 003 for additional information).

Date (Month)

Cmd Loc	002
Default	1
Range	1 - 12

Date (Current Year)

Cmd Loc	003
Default	98
Range	00 - 99

Time of Day (Hours)

Cmd Loc	004
Default	0
Range	0 - 23

Time of Day (Minutes)

Cmd Loc	005
Default	0
Range	0 - 59

Kidwatch Start Time (Hours)

Cmd Loc	006
Default	0
Range	0 - 23

Comments

If the Kidwatch feature is enabled (see Block 1, CL 019), the Kidwatch timer (window) is programmed into these Cmd Locs.

Failure to enter the Kidwatch code during this period will result in the system sending a Kidwatch Check-In Fail Report (see Block 4, CL 154 and Block 5, CL 111 - 112 for additional details).

Kidwatch Start Time (Minutes)

Cmd Loc	007
Default	0
Range	0 - 59

Kidwatch End Time (Hours)

Cmd Loc	008
Default	0
Range	0 - 23

Kidwatch End Time (Minutes)

Cmd Loc	009
Default	0
Range	0 - 59

Block 7 - Auxiliary Devices Programming

The Auxiliary Devices Programming Block has a total of 79 Command Locations (CL 001 - 079). Each of the first 11 commands has an input range of 1 - 82. Additional relay Options are provided for setting up specific timing operations.

On Board Relay

Cmd Loc	001
Default	1
Range	1 - 82

Relay #1 - REMM #1

Cmd Loc	002
Default	1
Range	1 - 82

Relay #2 - REMM #1

Cmd Loc	003
Default	1
Range	1 - 82

Relay #3 - REMM #1

Cmd Loc	004
Default	1
Range	1 - 82

Relay #4 - REMM #1

Cmd Loc	005
Default	1
Range	1 - 82

Relay #5 - REMM #1

Cmd Loc	006
Default	1
Range	1 - 82

Relay #1 - REMM #2

Cmd Loc	007
Default	1
Range	1 - 82

Relay #2 - REMM #2

Cmd Loc	008
Default	1
Range	1 - 82

Relay #3 - REMM #2

Cmd Loc	009
Default	1
Range	1 - 82

Relay #4 - REMM #2

Cmd Loc	010
Default	1
Range	1 - 82

Relay #5 - REMM #2

Cmd Loc	011
Default	1
Range	1 - 82

Options:

- 1 Disabled, relay open
- 2 Close on SN "Door" button (keypad or remote) activation
- 3 Closed when entire system armed
- 4 Closed when entire system disarmed
- 5 0.5 sec on/off (3x) when keyswitch or SpreadNet arming; 1.5 sec on for keyswitch or SpreadNet disarming (ignores timer)
- 6 Close on any tamper
- 7 Close when phone line cut
- 8 Close when comm fail occurs
- 9 3-sec toggle to activate listen-in (ignores timer)
- 10 Follow keypad audible sounder (exit/entry delays, area 1 only) (ignores timer)
- 11 Close on fault (except 24-hr. zone); open when faulted zone is bypassed, restored, system armed, or timer
- 12 Close on any alarm
- 13 Close on fire alarm
- 14 Close on burglar alarm
- 15 Close on panic/holdup
- 16 Close in installer programming mode
- 17 Activated by Commander II (RPS)
- 18 Close at end of exit delay (all areas armed), open at start of entry delay
- 19 Close on area 1 alarm
- 20 Close on area 2 alarm
- 21 Close on area 3 alarm
- 22 Close on area 4 alarm
- 23 Close on area 5 alarm
- 24 Close on area 6 alarm
- 25 Close on area 7 alarm
- 26 Close on area 8 alarm
- 27 Close when area 1 armed
- 28 Close when area 2 armed
- 29 Close when area 3 armed
- 30 Close when area 4 armed
- 31 Close when area 5 armed
- 32 Close when area 6 armed
- 33 Close when area 7 armed
- 34 Close when area 8 armed
- 35 Close when armed, oscillate at 0.5 Hz when home armed (area 1)
- 36 Close when armed, oscillate at 0.5 Hz when home armed (area 2)
- 37 Close when armed, oscillate at 0.5 Hz when home armed (area 3)
- 38 Close when armed, oscillate at 0.5 Hz when home armed (area 4)
- 39 Close when armed, oscillate at 0.5 Hz when home armed (area 5)
- 40 Close when armed, oscillate at 0.5 Hz when home armed (area 6)
- 41 Close when armed, oscillate at 0.5 Hz when home armed (area 7)
- 42 Close when armed, oscillate at 0.5 Hz when home armed (area 8)
- 43 Close on relay user code 14 entry
- 44 Close on relay user code 18 entry
- 45 Close on relay user code 22 entry
- 46 Close on relay user code 26 entry
- 47 Close on relay user code 30 entry
- 48 Close on relay user code 34 entry
- 49 Close on relay user code 38 entry
- 50 Close on relay user code 42 entry
- 51 Close on user code entry (area 1)
- 52 Close on user code entry (area 2)
- 53 Close on user code entry (area 3)
- 54 Close on user code entry (area 4)
- 55 Close on user code entry (area 5)
- 56 Close on user code entry (area 6)
- 57 Close on user code entry (area 7)
- 58 Close on user code entry (area 8)
- 59 Close on duress (area 1), open on next area 1 user code entry (except Duress code)
- 60 Close on duress (area 2), open on next area 2 user code entry (except Duress code)
- 61 Close on duress (area 3), open on next area 3 user code entry (except Duress code)
- 62 Close on duress (area 4), open on next area 4 user code entry (except Duress code)
- 63 Close on duress (area 5), open on next area 5 user code entry (except Duress code)
- 64 Close on duress (area 6), open on next area 6 user code entry (except Duress code)
- 65 Close on duress (area 7), open on next area 7 user code entry (except Duress code)
- 66 Close on duress (area 8), open on next area 8 user code entry (except Duress code)
- 67 Relay status #1 (see below) (ignores timer)
- 68 Relay status #2 (see below) (ignores timer)
- 69 Close on bell supervision trouble
- 70 Close on keypad/accessory trouble or tamper
- 71 Close on Medical alarm
- 72 3-sec toggle for annunciator shutoff (ignores timer)
- 73 3-sec toggle on local bell test (ignores timer)
- 74 Close on alarm associated with zone activated relay (see Block 7, CL 035 - 066)
- 75 Close on AC fail
- 76 Close on low battery
- 77 Close on chime zone fault
- 78 Close on system trouble
- 79 Close on Pre-set Timer #1 (Block 7, CL 067 - 069)
- 80 Close on Pre-set Timer #2 (Block 7, CL 070 - 072)
- 81 Close on Pre-set Timer #3 (Block 7, CL 073 - 075)
- 82 Close on Pre-set Timer #4 (Block 7, CL 076 - 078)

NOTE: All relays may be programmed to open according to a timer (Block 7, CL 013 - 034), unless otherwise indicated. For additional information, refer to the S5090 Reference Manual.

Relay status #1

System Status	Alarms?	Relay State
Disarmed	No	Closed
Disarmed	Yes	Open
Armed	No	Closed
Armed	Yes	Open

Relay status #2

System Status	Alarms?	Relay State
Disarmed	No	Open
Disarmed	Yes	Open
Armed	No	Closed
Armed	Yes	Open

NOTE: Relays are open when de-energized.

Block 7 - Auxiliary Devices Programming (cont.)

Exit Delay Terminator

Cmd Loc	012
Default	1
Range	1 - 2

Comments

If enabled, jumps to the last 5 seconds of the exit delay, then arms the system. Requires a normally open switch connected to keypad (TXD and C terminals).

Options:

- 1 No
- 2 Yes

Timer Units (On Board Relay)

Cmd Loc	013
Default	2
Range	1 - 5

Comments

Each relay has its own independent countdown timer. The timer consists of two parts: the Units and the Counter. The countdown timer determines the amount of time a relay will remain closed. For the On-Board Relay, CL 013 stores the units, while CL 014 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Options:

- 1 Latched
- 2 Seconds
- 3 Minutes
- 4 Hours
- 5 Days

Timer Count (On Board Relay)

Cmd Loc	014
Default	30
Range	1 - 255

NOTE: The timer function is ignored if the Relay option (Block 7, CL 001 - 011) is programmed for SpreadNet Arming/Disarming (option #5), Listen-In Trigger (option #9), Follows Keypad Sounder (option #10), Relay Status #1 (option #67), Relay Status #2 (option #68), 3-second Toggle for Audible Shutoff (option #72), or 3-second Toggle for Local Bell Test (option #73).

Timer Units (REMM #1, Relay #1)

Cmd Loc	015
Default	2
Range	1 - 5

Comments

For REMM #1, Relay #1, CL 015 stores the units, while CL 016 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Timer Count (REMM #1, Relay #1)

Cmd Loc	016
Default	30
Range	1 - 255

Timer Units (REMM #1, Relay #2)

Cmd Loc	017
Default	2
Range	1 - 5

Comments

For REMM #1, Relay #2, CL 017 stores the units, while CL 018 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Timer Count (REMM #1, Relay #2)

Cmd Loc	018
Default	30
Range	1 - 255

Timer Units (REMM #1, Relay #3)

Cmd Loc	019
Default	2
Range	1 - 5

Comments

For REMM #1, Relay #3, CL 019 stores the units, while CL 020 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Timer Count (REMM #1, Relay #3)

Cmd Loc	020
Default	30
Range	1 - 255

Timer Units (REMM #1, Relay #4)

Cmd Loc	021
Default	2
Range	1 - 5

Comments

For REMM #1, Relay #4, CL 021 stores the units, while CL 022 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Timer Count (REMM #1, Relay #4)

Cmd Loc	022
Default	30
Range	1 - 255

Timer Units (REMM #1, Relay #5)

Cmd Loc	023
Default	2
Range	1 - 5

Comments

For REMM #1, Relay #5, CL 023 stores the units, while CL 024 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Timer Count (REMM #1, Relay #5)

Cmd Loc	024
Default	30
Range	1 - 255

Block 7 - Auxiliary Devices Programming (cont.)

Timer Units (REMM #2, Relay #1)

Cmd Loc	025
Default	2
Range	1 - 5

Timer Count (REMM #2, Relay #1)

Cmd Loc	026
Default	30
Range	1 - 255

Timer Units (REMM #8, Relay #2)

Cmd Loc	027
Default	2
Range	1 - 5

Timer Count (REMM #2, Relay #2)

Cmd Loc	028
Default	30
Range	1 - 255

Timer Units (REMM #2, Relay #3)

Cmd Loc	029
Default	2
Range	1 - 5

Timer Count (REMM #2, Relay #3)

Cmd Loc	030
Default	30
Range	1 - 255

Timer Units (REMM #2, Relay #4)

Cmd Loc	031
Default	2
Range	1 - 5

Timer Count (REMM #2, Relay #4)

Cmd Loc	032
Default	30
Range	1 - 255

Timer Units (REMM #2, Relay #5)

Cmd Loc	033
Default	2
Range	1 - 5

Timer Count (REMM #2, Relay #5)

Cmd Loc	034
Default	30
Range	1 - 255

Relay Activation By Zone (Zones 1 - 32)

Cmd Loc	035	036	037	038	039	040	041	042
Zone #	1	2	3	4	5	6	7	8
Cmd Loc	043	044	045	046	047	048	049	050
Zone #	9	10	11	12	13	14	15	16
Cmd Loc	051	052	053	054	055	056	057	058
Zone #	17	18	19	20	21	22	23	24
Cmd Loc	059	060	061	062	063	064	065	066
Zone #	25	26	27	28	29	30	31	32
Default	0 (All CL)							
Range	0 - 11 (All CL)							

Comments

For REMM #2, Relay #1, CL 025 stores the units, while CL 026 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Options:

- 1 Latched
- 2 Seconds
- 3 Minutes
- 4 Hours
- 5 Days

NOTE: The timer function is ignored if the Relay option (Block 7, CL 001 - 011) is programmed for SpreadNet Arming/Disarming (option #5), Listen-In Trigger (option #9), Follows Keypad Sounder (option #10), Relay Status #1 (option #67), Relay Status #2 (option #68), 3-second Toggle for Audible Shutoff (option #72), or 3-second Toggle for Local Bell Test (option #73).

Comments

For REMM #2, Relay #2, CL 027 stores the units, while CL 028 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Comments

For REMM #2, Relay #3, CL 029 stores the units, while CL 030 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Comments

For REMM #2, Relay #4, CL 031 stores the units, while CL 032 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Comments

For REMM #2, Relay #5, CL 033 stores the units, while CL 034 stores the starting count. The timer will count backwards and when it reaches 0, the respective relay will open.

Comments

These Options determine which relay(s) are activated following an alarm on a specific zone. Each relay may be specified by one or more zones.

The specific relay (Block 7, CL 001 - 011) must be programmed for zone activation (Option #74).

Options:

- 0 No Relay Activation
- 1 On Board Relay
- 2 REMM #1, Relay #1
- 3 REMM #1, Relay #2
- 4 REMM #1, Relay #3
- 5 REMM #1, Relay #4
- 6 REMM #1, Relay #5
- 7 REMM #2, Relay #1
- 8 REMM #2, Relay #2
- 9 REMM #2, Relay #3
- 10 REMM #2, Relay #4
- 11 REMM #2, Relay #5

Block 7 - Auxiliary Devices Programming (cont.)

Timed Relay Closing (Timer #1 - Day of Week)

Cmd Loc	067
Default	0
Range	0 - 127

Timed Relay Closing (Timer #1 - Hours)

Cmd Loc	068
Default	0
Range	0 - 23

Timed Relay Closing (Timer #1 - Minutes)

Cmd Loc	069
Default	0
Range	0 - 59

Comments

These Options will determine the Day(s) of the Week and Time of Day when the programmed relay will automatically close. The value programmed into CL 067 is the total for all days the relay is to be activated. The relay to be closed is programmed in Block 7, CL 001 - 011 using Option 79.

Once activated, the relay will remain closed for the amount of time programmed into the countdown timer for the specific relay (Block 7, CL 013 - 034).

Options: (CL 067)

- 0 Disabled
- 1 Saturday
- 2 Friday
- 4 Thursday
- 8 Wednesday
- 16 Tuesday
- 32 Monday
- 64 Sunday

Timed Relay Closing (Timer #2 - Day of Week)

Cmd Loc	070
Default	0
Range	0 - 127

Timed Relay Closing (Timer #2 - Hours)

Cmd Loc	071
Default	0
Range	0 - 23

Timed Relay Closing (Timer #2 - Minutes)

Cmd Loc	072
Default	0
Range	0 - 59

Comments

These Options will determine the Day(s) of the Week and Time of Day when the programmed relay will automatically close. The value programmed into CL 070 is the total for all days the relay is to be activated. The relay to be closed is programmed in Block 7, CL 001 - 011 using Option 80.

Once activated, the relay will remain closed for the amount of time programmed into the countdown timer for the specific relay (Block 7, CL 013 - 034).

Options: (CL 070)

- 0 Disabled
- 1 Saturday
- 2 Friday
- 4 Thursday
- 8 Wednesday
- 16 Tuesday
- 32 Monday
- 64 Sunday

Timed Relay Closing (Timer #3 - Day of Week)

Cmd Loc	073
Default	0
Range	0 - 127

Timed Relay Closing (Timer #3 - Hours)

Cmd Loc	074
Default	0
Range	0 - 23

Timed Relay Closing (Timer #3 - Minutes)

Cmd Loc	075
Default	0
Range	0 - 59

Comments

These Options will determine the Day(s) of the Week and Time of Day when the programmed relay will automatically close. The value programmed into CL 073 is the total for all days the relay is to be activated. The relay to be closed is programmed in Block 7, CL 001 - 011 using Option 81.

Once activated, the relay will remain closed for the amount of time programmed into the countdown timer for the specific relay (Block 7, CL 013 - 034).

Options: (CL 073)

- 0 Disabled
- 1 Saturday
- 2 Friday
- 4 Thursday
- 8 Wednesday
- 16 Tuesday
- 32 Monday
- 64 Sunday

Timed Relay Closing (Timer #4 - Day of Week)

Cmd Loc	076
Default	0
Range	0 - 127

Timed Relay Closing (Timer #4 - Hours)

Cmd Loc	077
Default	0
Range	0 - 23

Timed Relay Closing (Timer #4 - Minutes)

Cmd Loc	078
Default	0
Range	0 - 59

Comments

These Options will determine the Day(s) of the Week and Time of Day when the programmed relay will automatically close. The value programmed into CL 076 is the total for all days the relay is to be activated. The relay to be closed is programmed in Block 7, CL 001 - 011 using Option 82.

Once activated, the relay will remain closed for the amount of time programmed into the countdown timer for the specific relay (Block 7, CL 013 - 034).

Options: (CL 076)

- 0 Disabled
- 1 Saturday
- 2 Friday
- 4 Thursday
- 8 Wednesday
- 16 Tuesday
- 32 Monday
- 64 Sunday

Number of REMMs

Cmd Loc	079
Default	0
Range	0 - 2

Comments

This option determines where panel events are stored.
 0 = No REMMs installed, all events are stored in the control panel's event memory (60 events maximum).
 1 = REMM #1 installed. Control panel events will be stored in the REMM (250 events maximum).
 2 = Both REMM #1 and REMM #2 are installed. Control panel events will be stored using a both REMMs (500 events maximum).

Options:

- 0 None
- 1 REMM 1 only
- 2 REMM 1 and 2

Block 8 - SpreadNet Programming

The SpreadNet Programming Block has a total of 45 Command Locations (CL 001 - 045). The SpreadNet transmitters must be programmed with the SpreadNet Programmer. Refer to the Sierra Reference Manual for additional information.

SpreadNet Channel

Cmd Loc	001
Default	1
Range	1 - 2

Comments

The Spread Spectrum channel used by the system.

SpreadNet Property Code

Cmd Loc	002	003	004	005
Default	0001			
Range	0001 - 4048			

Comments

Unique Property Code used to identify a transmitter as being part of the system. Program one digit per Cmd Loc.

SpreadNet Zone Transmitter Supervisory Rates (Zones 1 - 32)

Cmd Loc	006	007	008	009	010	011	012	013
Zone #	1	2	3	4	5	6	7	8
Cmd Loc	014	015	016	017	018	019	020	021
Zone #	9	10	11	12	13	14	15	16
Cmd Loc	022	023	024	025	026	027	028	029
Zone #	17	18	19	20	21	22	23	24
Cmd Loc	030	031	032	033	034	035	036	037
Zone #	25	26	27	28	29	30	31	32

Default 1 (All CL)
Range 1 - 4 (All CL)

Comments

The Supervisory Rate is the time interval between transmitter check-ins. A total of eight consecutive supervisory check-ins must be missed before a supervisory failure is reported.

Options:

- 1 Unsupervised, Battery status sent hourly
- 2 30 seconds
- 3 120 seconds
- 4 300 seconds

If option 1 is selected, unsupervised transmitters will send battery status hourly, only if they are within range of the receiver. **Transmitters which are out of range will not be reported as missing, because they are unsupervised.**

SpreadNet Keypad Supervisory Rate (Keypads 1 - 8)

Cmd Loc	038	039	040	041	042	043	044	045
Keypad #	1	2	3	4	5	6	7	8

Default 1 (All CL)
Range 1 - 4 (All CL)

Block 9 - Partition (Area) Programming

This Block has 178 Command Locations (CL 001 - 178) and is used to define all partition information, including which zones, user codes, and keypads are assigned to each partition. SpreadNet SN991-REMOTES and SN961-KEYFOBs are associated with a specific user number and both sections must be programmed for them to function.

Partition Type

Cmd Loc	001
Default	1
Range	1 - 3

Comments

This option is used to specify whether or not a partitioned system has a common area and the type of display used in the common area.

Options:

- 1 No Common Area
- 2 Common Area - Full View Keypad
- 3 Common Area - Limited View Keypad

Zone Assignments to Areas (Zones 1 - 32)

Cmd Loc	002	003	004	005	006	007	008	009
Zone #	1	2	3	4	5	6	7	8
Cmd Loc	010	011	012	013	014	015	016	017
Zone #	9	10	11	12	13	14	15	16
Cmd Loc	018	019	020	021	022	023	024	025
Zone #	17	18	19	20	21	22	23	24
Cmd Loc	026	027	028	029	030	031	032	033
Zone #	25	26	27	28	29	30	31	32

Default 1 (All CL)
Range 0 - 8 (All CL)

Comments

Each zone may be individually assigned to an Area (Partition) or disabled.

Options:

- 0 Zone Disabled
- 1 Area 1
- 2 Area 2
- 3 Area 3
- 4 Area 4
- 5 Area 5
- 6 Area 6
- 7 Area 7
- 8 Area 8

Block 9 - Partition (Area) Programming (cont.)

Area Access by User Number (User # 1 - 60)

Cmd Loc	034	035	036	037	038	039	040	041
User #	1	2	3	4	5	6	7	8
Cmd Loc	042	043	044	045	046	047	048	049
User #	9	10	11	12	13	14	15	16
Cmd Loc	050	051	052	053	054	055	056	057
User #	17	18	19	20	21	22	23	24
Cmd Loc	058	059	060	061	062	063	064	065
User #	25	26	27	28	29	30	31	32
Cmd Loc	066	067	068	069	070	071	072	073
User #	33	34	35	36	37	38	39	40
Cmd Loc	074	075	076	077	078	079	080	081
User #	41	42	43	44	45	46	47	48
Cmd Loc	082	083	084	085	086	087	088	089
User #	49	50	51	52	53	54	55	56
Cmd Loc	090	091	092	093				
User #	57	58	59	60				

Default 255 (CL 034), 1 (All Other Locations)
 Range 1 - 255 (All Locations)

Comments

If common area is enabled, then area 1 **must** be active for each user who requires access to the common area.

Assigned user codes, if used:

System Master Code - user #1

Kidwatch Code - user #11

Area Masters

Area 1 - user #12	Area 5 - user #28
Area 2 - user #16	Area 6 - user #32
Area 3 - user #20	Area 7 - user #36
Area 4 - user #24	Area 8 - user #40

Maid Codes

Area 1 - user #13	Area 5 - user #29
Area 2 - user #17	Area 6 - user #33
Area 3 - user #21	Area 7 - user #37
Area 4 - user #25	Area 8 - user #41

Relay Activation Codes

Area 1 - user #14	Area 5 - user #30
Area 2 - user #18	Area 6 - user #34
Area 3 - user #22	Area 7 - user #38
Area 4 - user #26	Area 8 - user #42

Duress Codes

Area 1 - user #15	Area 5 - user #31
Area 2 - user #19	Area 6 - user #35
Area 3 - user #23	Area 7 - user #39
Area 4 - user #27	Area 8 - user #43

Options:

- 1 Area 1 (Common Area, if enabled)
- 2 Area 2
- 4 Area 3
- 8 Area 4
- 16 Area 5
- 32 Area 6
- 64 Area 7
- 128 Area 8

Keypad Assignments to Areas (Keypads 1 - 16)

Cmd Loc	094	095	096	097	098	099	100	101
Keypad #	1	2	3	4	5	6	7	8
Cmd Loc	102	103	104	105	106	107	108	109
Keypad #	9	10	11	12	13	14	15	16

Default 1 (All Locations)
 Range 0 - 9 (All Locations)

Comments

Each keypad may be assigned to any area (partition) or designated as a Common Keypad.

NOTE: Only Alphanumeric keypads may be designated as Common Keypads.

Options:

- 0 Disabled
- 1 Area 1
- 2 Area 2
- 3 Area 3
- 4 Area 4
- 5 Area 5
- 6 Area 6
- 7 Area 7
- 8 Area 8
- 9 Common Keypad

First to Open/Last to Close Enable

Cmd Loc	110
Default	2
Range	1 - 2

Comments

If enabled (programmed as 2), the first user to disarm any area will send an opening report to the central station. The last user to arm any area will send the closing report. The user must be authorized to send opening/closing reports (Block 1, CL 021 - 080).

Options:

- 1 No
- 2 Yes

Area Assignments (SpreadNet Keypads 1 - 8)

Cmd Loc	111	112	113	114	115	116	117	118
Keypad #	1	2	3	4	5	6	7	8

Default 0 (All Locations)
 Range 0 - 255 (All Locations)

Comments

If the system is divided into areas, this option determines the area(s) associated with each SpreadNet SN990-KEYPAD. SpreadNet keypads arm and disarm all assigned areas at the same time. The value programmed into the specific location is the total of all areas the keypad will be able to access. To send a Panic report from a SpreadNet keypad, the Police Soft Zone (Block 2, CL 156) **must** also be enabled.

Options:

- 0 Disabled
- 1 Area 1
- 2 Area 2
- 4 Area 3
- 8 Area 4
- 16 Area 5
- 32 Area 6
- 64 Area 7
- 128 Area 8

Block 9 - Partition (Area) Programming (cont.)

Area Access (SN Keyfob/Remote # 1 - 60)

Cmd Loc	119	120	121	122	123	124	125	126
User #	1	2	3	4	5	6	7	8
Cmd Loc	127	128	129	130	131	132	133	134
User #	9	10	11	12	13	14	15	16
Cmd Loc	135	136	137	138	139	140	141	142
User #	17	18	19	20	21	22	23	24
Cmd Loc	143	144	145	146	147	148	149	150
User #	25	26	27	28	29	30	31	32
Cmd Loc	151	152	153	154	155	156	157	158
User #	33	34	35	36	37	38	39	40
Cmd Loc	159	160	161	162	163	164	165	166
User #	41	42	43	44	45	46	47	48
Cmd Loc	167	168	169	170	171	172	173	174
User #	49	50	51	52	53	54	55	56
Cmd Loc	175	176	177	178				
User #	57	58	59	60				

Default 1 (All Locations)
Range 0 - 255 (All Locations)

Comments

If the system is divided into areas, this option determines the area(s) associated with each SpreadNet SN991-REMOTE or SN961-KEYFOB. The SpreadNet remotes and keyfobs are associated with a specific user number and will arm or disarm all assigned areas at the same time. The value programmed into the specific location is the total of all areas the remote/keyfob will be able to access. To send a Panic report from a keyfob or remote, the Police Soft Zone (Block 2, CL 156) **must** also be enabled.

NOTE: If the user code for the specific user number is disabled, the remote or keyfob will not work. The SN991-REMOTE or SN961-KEYFOB may be assigned to any or all areas to which the user has authority (see Block 9, CL 034 - 093).

Options:

0	Disabled
1	Area 1
2	Area 2
4	Area 3
8	Area 4
16	Area 5
32	Area 6
64	Area 7
128	Area 8

Block 10 - User Code Programming

User Codes (User # 1 - 60)

Cmd Loc	001	002	003	004	
User #1	5	8	3	2	System Master Code
Cmd Loc	005	006	007	008	
User #2	0	0	0	0	
Cmd Loc	009	010	011	012	
User #3	0	0	0	0	
Cmd Loc	013	014	015	016	
User #4	0	0	0	0	
Cmd Loc	017	018	019	020	
User #5	0	0	0	0	
Cmd Loc	021	022	023	024	
User #6	0	0	0	0	
Cmd Loc	025	026	027	028	
User #7	0	0	0	0	
Cmd Loc	029	030	031	032	
User #8	0	0	0	0	
Cmd Loc	033	034	035	036	
User #9	0	0	0	0	
Cmd Loc	037	038	039	040	
User #10	0	0	0	0	
Cmd Loc	041	042	043	044	
User #11	0	0	0	0	Kidwatch Code
Cmd Loc	045	046	047	048	
User #12	0	0	0	0	Area 1 Master Code
Cmd Loc	049	050	051	052	
User #13	0	0	0	0	Area 1 Maid Code
Cmd Loc	053	054	055	056	
User #14	0	0	0	0	Area 1 Relay Code
Cmd Loc	057	058	059	060	
User #15	0	0	0	0	Area 1 Duress Code
Cmd Loc	061	062	063	064	
User #16	0	0	0	0	Area 2 Master Code
Cmd Loc	065	066	067	068	
User #17	0	0	0	0	Area 2 Maid Code
Cmd Loc	069	070	071	072	
User #18	0	0	0	0	Area 2 Relay Code
Cmd Loc	073	074	075	076	
User #19	0	0	0	0	Area 2 Duress Code
Cmd Loc	077	078	079	080	
User #20	0	0	0	0	Area 3 Master Code
Cmd Loc	081	082	083	084	
User #21	0	0	0	0	Area 3 Maid Code

Comments

Each user code is a 4-digit code which may be used to arm and disarm the system or to bypass zones. Valid entries are the digits 0 - 9. To disable a user code, enter 0-0-0-0 (default code for all user codes except user #1).

User code authority is programmed in Block 1, CL 021 - 080.

User codes are programmed with 1 digit per Cmd Loc.

Block 10 - User Code Programming (cont.)

Comments

Each user code is a 4-digit code which may be used to arm and disarm the system or to bypass zones. Valid entries are the digits 0 - 9. To disable a user code, enter 0-0-0-0 (default code for all user codes except user #1).

User code authority is programmed in Block 1, CL 021 - 080.

User codes are programmed with 1 digit per Cmd Loc.

User Codes (cont.)					
Cmd Loc	085	086	087	088	Area 3 Relay Code
User #22	0	0	0	0	
Cmd Loc	089	090	091	092	Area 3 Duress Code
User #23	0	0	0	0	
Cmd Loc	093	094	095	096	Area 4 Master Code
User #24	0	0	0	0	
Cmd Loc	097	098	099	100	Area 4 Maid Code
User #25	0	0	0	0	
Cmd Loc	101	102	103	104	Area 4 Relay Code
User #26	0	0	0	0	
Cmd Loc	105	106	107	108	Area 4 Duress Code
User #27	0	0	0	0	
Cmd Loc	109	110	111	112	Area 5 Master Code
User #28	0	0	0	0	
Cmd Loc	113	114	115	116	Area 5 Maid Code
User #29	0	0	0	0	
Cmd Loc	117	118	119	120	Area 5 Relay Code
User #30	0	0	0	0	
Cmd Loc	121	122	123	124	Area 5 Duress Code
User #31	0	0	0	0	
Cmd Loc	125	126	127	128	Area 6 Master Code
User #32	0	0	0	0	
Cmd Loc	129	130	131	132	Area 6 Maid Code
User #33	0	0	0	0	
Cmd Loc	133	134	135	136	Area 6 Relay Code
User #34	0	0	0	0	
Cmd Loc	137	138	139	140	Area 6 Duress Code
User #35	0	0	0	0	
Cmd Loc	141	142	143	144	Area 7 Master Code
User #36	0	0	0	0	
Cmd Loc	145	146	147	148	Area 7 Maid Code
User #37	0	0	0	0	
Cmd Loc	149	150	151	152	Area 7 Relay Code
User #38	0	0	0	0	
Cmd Loc	153	154	155	156	Area 7 Duress Code
User #39	0	0	0	0	
Cmd Loc	157	158	159	160	Area 8 Master Code
User #40	0	0	0	0	
Cmd Loc	161	162	163	164	Area 8 Maid Code
User #41	0	0	0	0	
Cmd Loc	165	166	167	168	Area 8 Relay Code
User #42	0	0	0	0	
Cmd Loc	169	170	171	172	Area 8 Duress Code
User #43	0	0	0	0	
Cmd Loc	173	174	175	176	
User #44	0	0	0	0	
Cmd Loc	177	178	179	180	
User #45	0	0	0	0	
Cmd Loc	181	182	183	184	
User #46	0	0	0	0	
Cmd Loc	185	186	187	188	
User #47	0	0	0	0	
Cmd Loc	189	190	191	192	
User #48	0	0	0	0	
Cmd Loc	193	194	195	196	
User #49	0	0	0	0	
Cmd Loc	197	198	199	200	
User #50	0	0	0	0	
Cmd Loc	201	202	203	204	
User #51	0	0	0	0	
Cmd Loc	205	206	207	208	
User #52	0	0	0	0	
Cmd Loc	209	210	211	212	
User #53	0	0	0	0	

Block 10 - User Code Programming (cont.)

User Codes (cont.)

Cmd Loc	213	214	215	216
User #54	0	0	0	0
Cmd Loc	217	218	219	220
User #55	0	0	0	0
Cmd Loc	221	222	223	224
User #56	0	0	0	0
Cmd Loc	225	226	227	228
User #57	0	0	0	0
Cmd Loc	229	230	231	232
User #58	0	0	0	0
Cmd Loc	233	234	235	236
User #59	0	0	0	0
Cmd Loc	237	238	239	240
User #60	0	0	0	0

Comments

Each user code is a 4-digit code which may be used to arm and disarm the system or to bypass zones. Valid entries are the digits 0 - 9. To disable a user code, enter 0-0-0-0 (default code for all user codes except user #1).

User code authority is programmed in Block 1, CL 021 - 080.

User codes are programmed with 1 digit per Cmd Loc.

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