

Summit 3208GLD

*Installation, Operation
and Programming*



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INTRODUCTION

About the Summit 3208GLD Installation, Operation and Programming Manual

This manual is designed to help you, the installer, with the installation process for the Summit 3208GLD. We strongly urge you to read through this manual, in its entirety, before beginning the installation process so that you can best understand all that this security system has to offer your customers. This manual is not intended for end user use. End users are encouraged to read the Summit 3208GLD User Manual that accompanies the system. If you have any questions concerning any of the procedures described in this manual please contact Electronics Line at (972)-3-9211110.

Publication Information

Catalog Number: ZI0084A (12/98)

CHAPTER ONE: OVERVIEW

1.1: Specifications

| | |
|------------------------------|---|
| Power Input | AC: 15Vac, 30VA transformer. Battery backup: 12Vdc, 6.5 Ah or 7Ah (UL requirement). |
| Power Output | Auxiliary power - regulated 12Vdc nominal at 1A max. including keypads and detection devices for 4 hours standby. (For CSFM Fire applications - 220mA max. including keypads and smoke detectors for 24 hours standby). Bell output - regulated 12Vdc nominal from auxiliary power, unregulated 9 – 18 Vdc, 600mA total auxiliary power. |
| Zones | Number of zones - 8 onboard (expandable to 32) |
| Keypads | Types - 3108 LCD keypad, 3106 LED keypad Number of keypads - Up to 8 supervised Current draw - 40mA without backlight, 60mA with backlight Distress Keys - 3 user initiated |
| User Codes | Number of users – 15 Number of digits per user code - 3 to 6 Authorization levels - 15 |
| Open/Close Windows | Number of windows - 1 opening window + 1 closing window for each day of the week per sub-system Window sizes - ± 15 min, ± 30 min, ± 45 min, ± 60 min. |
| Remote Programming | Equipment - Remote Programmer software package. Access - Direct (Password), Callback, Off-hook. |
| Current Consumption | Control Panel: Approximately 130mA 3108 LCD Keypad: 20mA without backlight, 60mA with backlight. 3106 LED Keypad: 20mA without backlight, 70mA with backlight. 3508 Zone Expander Module: 10mA 3528 Wireless Zone Expander Module: 10mA 3402 Output Relay Module: 15mA all relays deactivated, 30mA per activated relay. 3407 Output Relay Module: 15mA all relays deactivated, 30mA per activated relay. 3417 Transistor Module: 10 mA all transistors deactivated. 725mA all relays transistors (drawing a max. 100mA each). |
| Operating Temperature | 0° to 60°C (32° to 140°F). |
| Dimensions | 12" x 12" x 4" (30.5cm x 30.5cm x 10.2 cm). |
| Weight | Approx. 6.5 lbs. (3 Kg). |

1.2: Zones

The Summit 3208GLD comprises 8 on-board zones that are expandable to a total of 32. Both hardwire and wireless zone expanders are available. Each zone can be precisely configured to suit a wide variety of applications.

Zone Descriptors

Each zone can be assigned an individual zone descriptor. These can be chosen from the standard zone descriptor library or from one of the four custom zone descriptors that are programmable by the installer.

Zone Type

One of fifteen zone types can be defined for each zone. The zone type dictates the nature of a specific zone's operation. The following is an explanation of each zone type.

Perimeter and Interior Zones

Different methods of arming the system rely on the definition of zones as perimeter or interior. For example, when the user wishes to remain on the premises, STAY arming secures only perimeter zones allowing free movement within the protected area. Perimeter and Interior zones can be defined as 'Normal', 'Primary', 'Secondary' or 'Conditional'.

Normal Zone: A normal zone generates an alarm when opened.

Primary and Secondary Zones: Primary zones never actually generate an alarm; they are always used in conjunction with secondary zones. A secondary zone will generate an alarm only if opened during the entry delay of a primary zone. These zones are used when the primary zone is an unprotected area that is crossed by an intruder to reach the area protected by the secondary zone. This rules out the need to compromise the sensitivity of the devices installed in the secondary zone to achieve maximum false alarm immunity.

Conditional Zone: Conditional zones do not generate an alarm when opened during the entry delay - otherwise, an alarm is generated instantly. These zones can be used for detectors protecting the area in which a keypad has been installed or the area crossed in order to reach the keypad.

Common Zone: A common zone belongs to all systems. An alarm will only be generated from a common zone if all the sub-systems are armed. Common zones are generally used in partitioned systems where a corridor is shared by more than one protected area.

24hr zones

24hr zones are always operational regardless of system status and will generate an instant alarm when opened. If an exit/entry delay is defined for a 24hr zone, it will be ignored by the system.

Fire and Verified Fire Zones: Fire zones are designed for use with smoke detectors. A fire zone will generate an instant alarm when opened. Verified fire zones will not sound an alarm and will not send a message to the central station unless a second detection has been made within a minute of the first. The Summit 3208GLD control panel can be programmed to enable automatic or manual power reset for latching smoke detectors (see address 495).

Emergency/Holdup: Emergency/Holdup zones are 24hr zones designed for use with panic buttons in the case of holdup situations, medical emergencies etc. It is recommended that glassbreak detectors be connected to Emergency/Holdup zones.

Tamper: This zone type is used with tamper switches and is designed to prevent unauthorized opening of the metal housing.

Keyswitch zones

Two zone types offering different operational modes are available for use with a momentary keyswitch.

On/Off STAY and On/Off AWAY: A keyswitch zone can be defined to either STAY or AWAY arm the system.

Swinger Zones

Swinger zones limit the amount of alarms that can be sent from a specific zone within a predetermined time period. This feature is designed for use with zones that are highly prone to false alarms. The swinger parameters are programmed at address 388 and at the second address for each specific zone.

System Partitioning

The system can be partitioned into a maximum of 4 independent sub-systems with individual account numbers, keypads, user codes and relays assigned exclusively for each sub-system. A sub-system is created when at least one zone is assigned to it.

1.3: Telephone Dialer

The Summit 3208GLD allows for up to four different telephone numbers to be programmed into the system using either pulse or tone dialing. The Summit 3208GLD supports several communication protocols including pulse protocols enabling communication with most popular central station receivers. Up to 16 digits can be programmed for each telephone number. Different groups of event messages (Burglary, Fire, Open/Close messages etc.) can be programmed for single or multiple central station notification, enabling notification of up to four central stations. Message transmission can be programmed as Primary, Backup or Duplicate.

In some cases the central station handles events reported per zone and in others per event. Additionally, an event code can comprise of either one or two digits and can include additional information such as the user number in opening and closing messages or zone ID in event oriented zone messages. These codes are usually assigned by the central station - consult the central station operator for a listing of the different event codes.

Follow-me

Using the Follow-me feature, the panel can notify the user that the system has undergone certain events by sounding a sequence of tones over the telephone. The user acknowledges that the message has been received by pressing 0, 9 or # on their telephone. If this acknowledgement is not received within the one-minute time window, opened the moment the panel starts dialing, the control panel redials. The number of dialing attempts made depends on the value programmed at address 197.

Telephone #4 is designed for use with this feature, as it is the only telephone number that can be easily programmed by the user, without the need to enter programming mode.

Telephone Line Supervision

Approximately 20 seconds after the telephone line is cut, all keypads sound a trouble beep and the message "Telephone Comm. Failure" appears on LCD keypads.

1.4: Remote Programming

Electronics Line's remote programming software enables all programming and operation to be performed from a PC. This can be done from either a remote location or on-site using the 'Off-hook' communication option. The software provides a comprehensive interface to the Summit 3208GLD control panel facilitating and cutting down the time taken in programming the system.

A number of programmable options, relating to when and how RP communication is established, are available at address 496. The tollsaver feature, RP Callback, makes remote programming more cost-effective and increases the level of security. Using this feature, the Remote Programmer establishes a connection with the panel. The panel recognizes the passcode, hangs up and calls the number programmed at addresses 172-179 within 60 seconds.

Answering Machine Override

Answering machine override enables the control panel to distinguish between regular incoming calls and a communication attempt by the RP (remote programmer) software. An RP call is identified by the control panel as a sequence of two calls within a 30-second time window.

1. The control panel does not answer the first incoming call.
2. The control panel opens a 30-second time window from the moment the telephone stops ringing.
3. The control panel answers after 1 ring and RP communication is established.

Note: The 30-second time window will only start if the number of rings in first call exceeds the number of rings set for the control panel. For example, if the control panel is programmed to pick up after 3 rings, the time window will not start unless the first call was at least 3 rings.

1.5: Other Features

Opening and Closing Windows

This feature helps cut down on the amount of opening and closing reports sent to the central station. The opening and closing windows are programmable windows of time, during which the user usually arms or disarms the system. Disarming during an opening window or arming during a closing window does not send a report to the central station. If the system is not disarmed or armed during the appropriate window, a 'Failed to Open' or 'Failed to Close' message is sent to the central station.

The Summit 3208GLD offers the opportunity to choose from a list comprising three opening and four closing window times. The times in this list can be programmed according to the user's entry and exit scheduling requirements. If required, the user can activate the 'Late to Close' command to extend the closing window period for that day. The user may opt to program an auto arming time at the end of a closing window so that the system automatically arms itself at a set time. This prevents situations where the system is left unarmed at the end of the day.

Latch-Key

The latch key feature has been designed to inform parents whether their children have arrived home safely and on schedule. The panel sends a 'Failed to Open'/'Failed to Close' message to the central station or follow-me number if the MENU/NEXT key is not pressed during the appropriate window.

Dealer Lockout

The control panel's parameter settings can be restored during the 60 seconds following power-up using the unalterable code "123456". Activating Dealer Lockout disables this feature and the code can only be restored using the RP software.

CHAPTER TWO: INSTALLATION

2.1: Parts and Options

Standard Parts

| | |
|--|--------|
| Summit 3208GLD Household Burglary Alarm Control Panel without keypad | 1 each |
| 2.2K ohm burglary End Of Line Resistors | 8 each |
| Installation, Operation, and Programming Manual | 1 each |
| User Manual | 1 each |

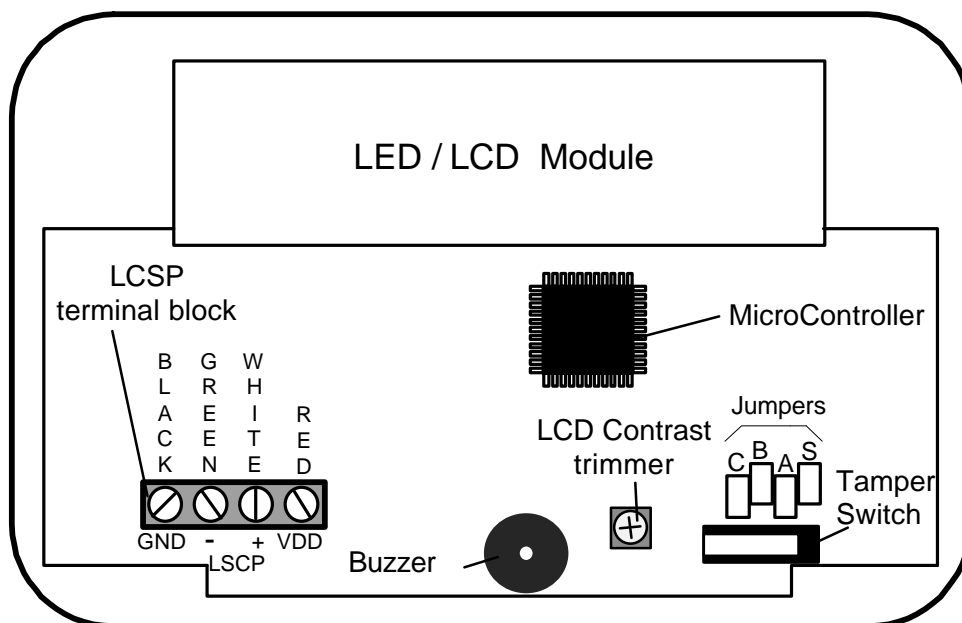
Optional Parts List

| |
|---|
| 3106 LED Keypad |
| 3108 LCD Keypad |
| 3407 7 Relay Output Relay Module |
| 3508 8 Zone Expander Module |
| 3528 Wireless Zone Expander |
| RP3206 Up/Downloading Software |
| 3911 Up/Downloading Remote Programmer & RS232 Cable |
| 12Vdc Adapter for Remote Programmer |
| 12Vdc/7Ah battery |
| 3722 15Vac 30VA Transformer |

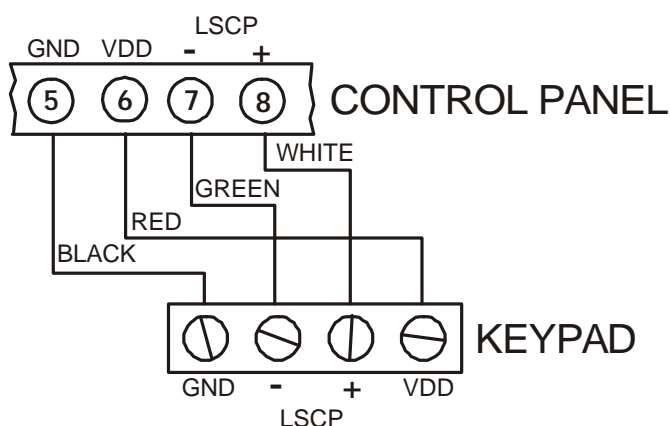
2.2: Mounting the Keypad

Both the LCD and LED keypads are supplied configured to keypad address 1 in unsupervised mode. To connect the keypad/s you will need a small flat-head screwdriver. The maximum recommended distance between the control panel and the keypad is 1,000m (3,000ft.).

LED / LCD Module - rear view, cover removed



Keypad Wiring Connections

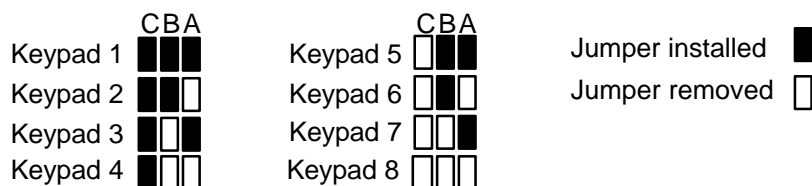


Keypad unit address

Up to eight individually addressed supervised keypads can be installed with the control panel. If more than one keypad is installed with same unit address, all keypads must be configured as unsupervised.

To configure the keypad unit address:

1. Using a small flat-head screwdriver, open the back cover of the keypad.
2. Locate the jumpers marked "CBA".
3. Install the jumpers according to the diagram below.
4. Disconnect and reconnect the power supply.



On LED keypads, the keypad's system defines which zone expander is associated with the keypad. See Addresses 132-139 for keypad system allocation.

System 1: Zone Expander A

System 2: Zone Expander B

System 3: Zone Expander C

System 4: Zone Expander D

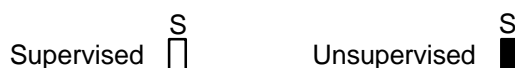
Note: If zone expander A is not in use, the control panel's 8 onboard zones are displayed from a System 1 keypad.

Keypad supervision

A supervised keypad will generate an alarm should it become disconnected from the control panel.

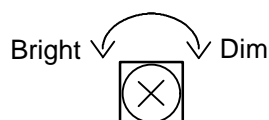
To configure the keypad supervision setting:

1. Using a small flat-head screwdriver, open the back cover of the keypad.
2. Locate the jumper marked S.
3. To configure the keypad in supervised mode, remove the jumper.

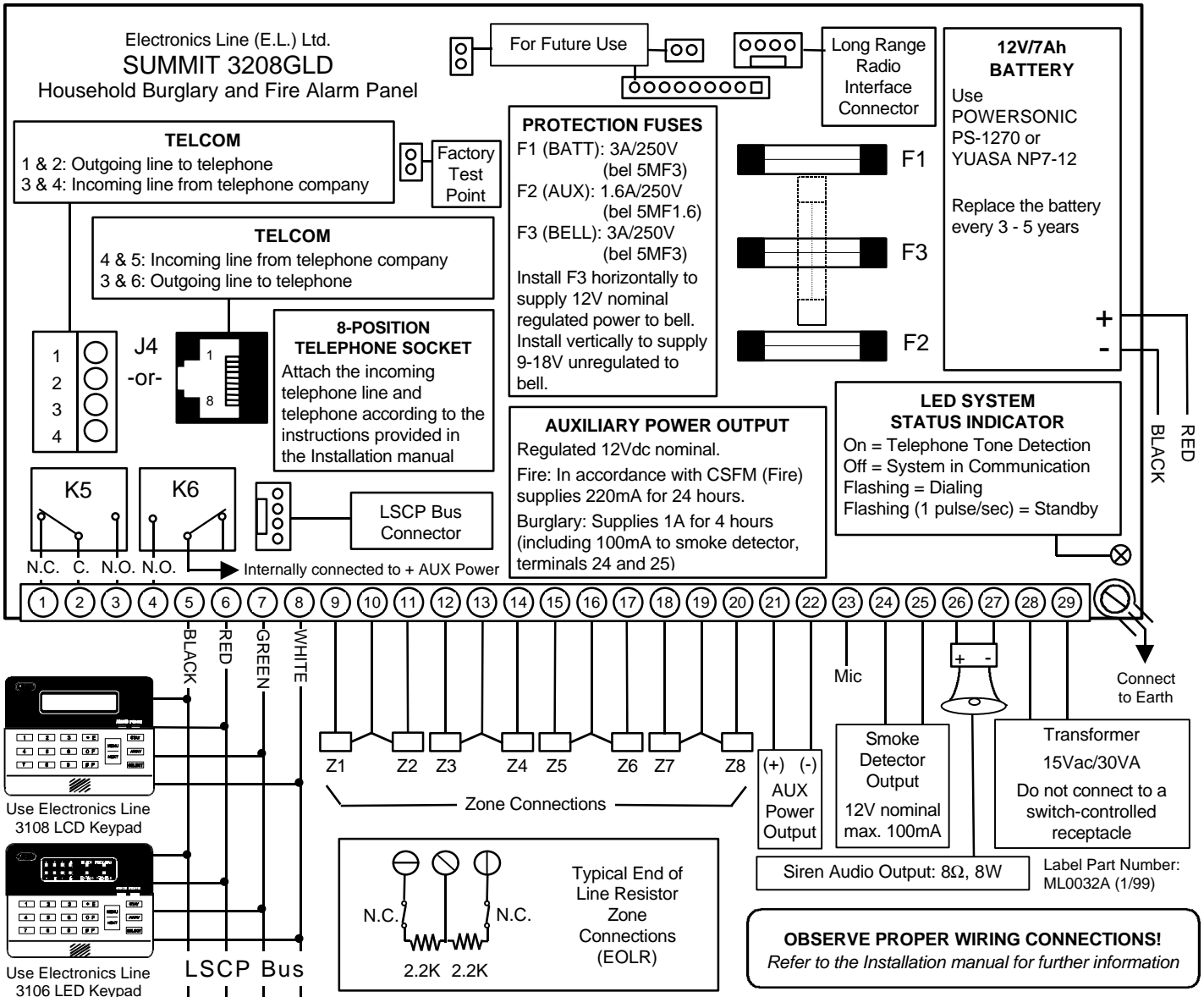


Adjusting the display contrast on the LCD keypad

If the LCD display is unclear, the contrast may be adjusted using the LCD contrast trimmer.



2.3: Wiring Diagram

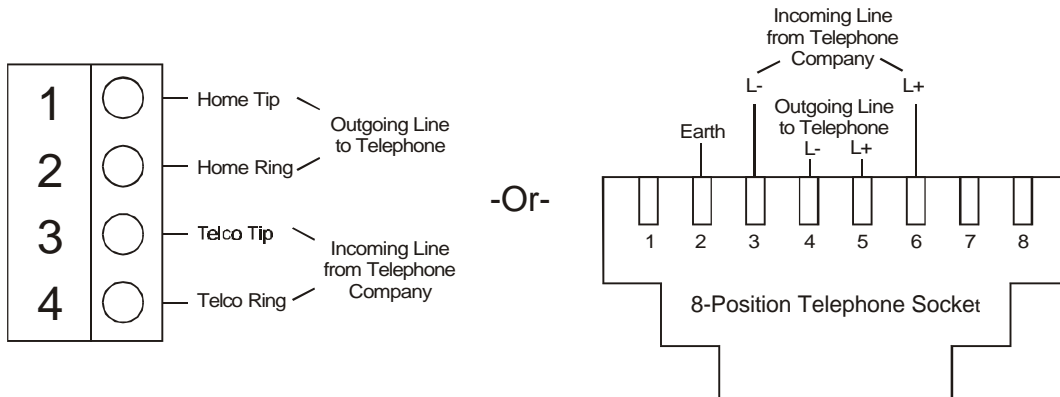


2.4: Terminal Connections

Telephone Connections

Connector J4:

The telephone line should be connected as follows:



On-Board Relay Contacts

Terminals 1, 2, 3 and 4:

K5: 1 - N.C., 2 - Common, 3 - N.O.

K6: 4 - N.O. (Relay K6 is internally connected to + AUX power supply)

Keypad Connections

Terminals 5(-), 6(+), 7(LSCP-), 8(LSCP+):

5 (Black) Common Ground -, 6 (Red) AUX power +, 7 (Green) LSCP - signal, and 8 (White) LSCP + signal. Make sure that the wires are connected to the same connections on the keypad.

Zone Connections

Terminals 9(+), 10(-), 11(+), 12(+), 13(-), 14(+), 15(+), 16(-), 17(+), 18(+), 19(-), 20(+):

| | | | |
|----------------|---------------------|----------------|---------------------------------------|
| Zone 1: | Terminals 9 and 10 | Zone 5: | Terminals 15 and 16 |
| Zone 2: | Terminals 11 and 10 | Zone 6: | Terminals 17 and 16 |
| Zone 3: | Terminals 12 and 13 | Zone 7: | Terminals 18 and 19 |
| Zone 4: | Terminals 14 and 13 | Zone 8: | Terminals 20 and 19 (Fire by default) |

Auxiliary Power Output

Terminals 21(+), 22(-):

Regulated 12Vdc nominal at 1A max. including keypads and detection devices for 4 hours standby. (For CSFM Fire applications - 220mA max. including keypads and smoke detectors for 24 hours standby).

Microphone

Terminal 23

Microphone input for listen-in applications (software dependant).

Smoke Detector Power Output

Terminals 24(+), 25(-):

These terminals provide up to 100mA for powering latching smoke detectors. The smoke detector output is active low and is restored either automatically or manually.

Bell Power Output

Terminals 26(+), 27(-):

Connect these terminals to supply power to the bell. The power requirements are as follows: AUX power (12Vdc nominal regulated; 9 - 18Vdc unregulated), rated at 600mA. with 40VA transformer.

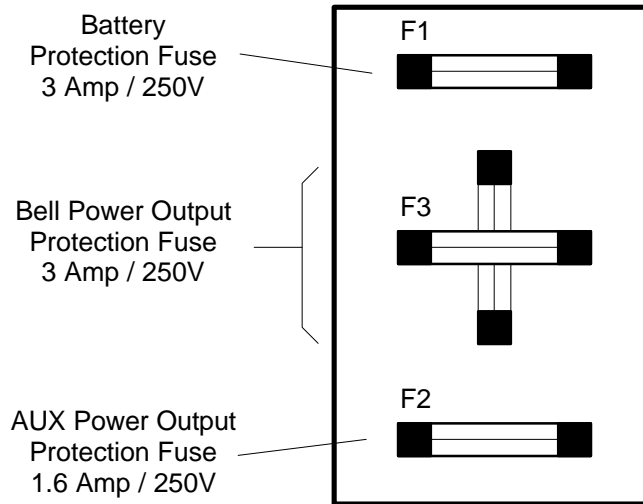
AC Power Input

Terminals 28, 29:

Connect a 16.5Vac Class II transformer rated at 40VA, using 18AWG wire.

2.5: Fuse Replacement

There are 3 protection fuses on the Summit 3208GLD control panel board, the layout of the fuses is shown in the following diagram:



F1 (Battery Protection Fuse): Protects the battery charger circuit and the control panel from a short circuit. To replace this fuse use a bel 5MF3 or other 3A/250V fuse.

F2 (Bell Power Protection Fuse): Protects the active bell output (terminal 26). When the fuse is installed in the horizontal position 12Vdc nominal regulated power is supplied to the bell. When the fuse is installed in the vertical position, unregulated (approx. 9 to 18Vdc) power is supplied to the bell and terminal 28. To replace this fuse use a bel 5MF3 or other 3A/250V fuse.

F3 (AUX Power Output Protection Fuse): Protects terminals 6 (keypad power), 21 (AUX output) and 24 (smoke detector power output). To replace this fuse use a bel 5MF1.6 or other 1.6A/250V fuse.

MAKE SURE YOU REPLACE A FUSE WITH THE CORRECT RATING !

2.6: Turning on the System

Once all of the systems components are properly connected to their destination terminals, the Summit 3208GLD is ready to be turned on. To avoid the risk of electrical shock or damage to the control panel, make sure that both the AC supplier and the battery are connected properly before plugging in the system. If you experience any difficulties in applying power to the unit, please contact Electronics Line's Technical Support Department.

2.7: Testing the System

All system functions can be tested manually using the LED or LCD keypads. Additionally, circuit tests also performed automatically by the control panel. For further information on testing using the keypads, see 3.11: Tests.

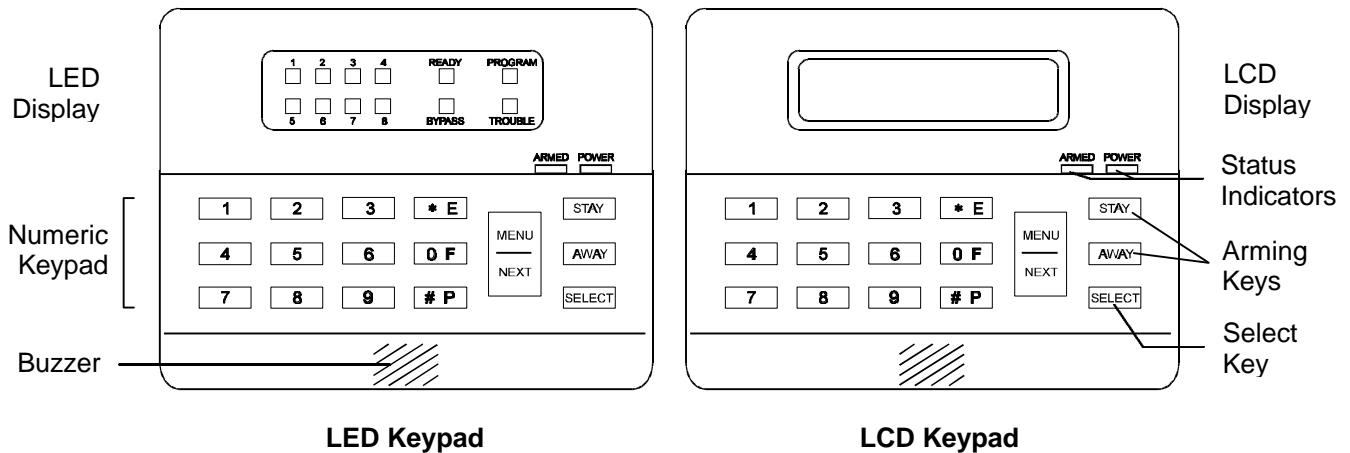
CHAPTER THREE: SYSTEM OPERATION FOR THE 3106 LED AND 3108 LCD KEYPADS

3.1: General

The Summit 3208GLD can be operated by using either the 3108 LCD or 3106 LED keypads. All the parameters can be programmed using either the LCD keypad or the Remote Programmer software. Refer to Chapter Four: Programming, page 23, for instructions relating to programming the system.

3.2: Display and Controls

Keypad Layout



LED Display

1 - 8: Used to display zone status and system status.

READY: Indicates if the system is ready to perform functions.

PROGRAM: Indicates if the system is in programming mode. The Program LED lights up if SELECT is pressed and blinks to indicate that the system is waiting for an authorized user code to be entered.

BYPASS: Indicates if zones have been bypassed. The Bypass LED and the relevant zone LEDs blink to indicate that zones have been bypassed.

TROUBLE: Blinks if a trouble situation exists within the system (telephone communication failure).

Status Indicators

ARMED: On when the system is armed, off when the system is disarmed.

Note: *If the keypad is programmed to display all systems, the Armed LED lights up only when all systems are armed.*

POWER: On when both the AC and the backup battery are connected, provided that the voltage supplied by the battery is over 10.8V and AC power supply is between 50 - 60 Hz. The indicator blinks slowly when the battery is low and turns off to indicate AC power loss.

System Trouble Chimes

The keypad indicates certain trouble situations, such as AC loss and low battery by chiming. Pressing any key on the keypad terminates these chimes.

Keys and Keypad Functions

0 - 9: The numeric keys are used to enter user codes, telephone numbers, to issue commands and for numeric programming.

*** , #:** These keys are used in programming the control panel. Pressing the * key during the exit delay cancels the delay, immediately arming the system. On the LCD keypad, the * key is used for scrolling back during operation and programming. The # key is used for entering hexadecimal digits (A - F) during programming.

MENU/NEXT: On the LCD keypad, pressing the MENU/NEXT key displays the main menu and is used to scroll through the menu items. On both the LCD and LED keypads the MENU/NEXT key is used to log in an arrival when using the latch key feature. Additionally, the MENU/NEXT key generates an emergency alarm when held down simultaneously with one of the distress keys (E, F or P).

SELECT: Pressing SELECT followed by a command code causes a system function to occur. On the LCD keypad, pressing this key when a menu is open results in the selection of the menu item.

STAY: Pressing STAY, when the system is ready to arm, arms only the system's perimeter zones.

AWAY: Pressing the AWAY key, when the system is ready to arm, arms both the perimeter and interior zones. On the LCD keypad, pressing AWAY returns the display back to the main menu when scrolling or programming.

Note: *If one-key arming is enabled, the user can arm the system using the STAY and AWAY keys without having to enter a user code.*

3.3: System Status Displays

On the LED keypad system status is displayed using the eight zone LEDs as well as the Ready, Program, Bypass and Trouble LEDs. LEDs 1 - 8 represent alarm situations from the corresponding zone. The other LEDs show if the system is ready, whether zones are bypassed, if the system is in programming mode and if a trouble condition exists.

The LCD display of the system status includes descriptions of open zones, alarms, etc. The following are typical LCD displays:

Arming Display

| Description | Display |
|---|---------------------------------------|
| System ready to arm | SYSTEM 1 READY |
| System ready to arm with bypassed zones | SYSTEM 1 READY (BYPASSED) |
| System not ready to arm due to open perimeter zones | SYSTEM NOT RDY (OPEN ZONES) |
| System armed, exit delay counting | SYSTEM 1 ARMED 011 SEC TO EXIT |
| System ready for perimeter arming (interior zones open) | SYSTEM 1 READY FOR STAY ARMING |
| System ready for perimeter arming with perimeter bypassed zones | SYSTEM 1 READY FOR STAY (BYPASSED) |
| System armed, exit delay ended - system is fully armed | SYSTEM 1 ARMED |
| System Perimeter armed, exit delay ended (STAY pressed) | SYSTEM 1 ARMED/P |
| System armed, immediate mode | SYSTEM 1 ARMED IMMEDIATE |

Zone Status Display

Zone status will only be displayed if detailed display is selected

| | |
|---------------------------------------|-------------------------------|
| Zone 1, Bedroom, is open | ZONE 1 OPEN BEDROOM |
| Zone 3, Front Door, has been bypassed | ZONE 3 BYPASSED FRONT DOOR |
| Zone 4 has been tampered with | ZONE 4 TAMPER |
| Zone 4, bedroom, is in alarm | ZONE 4 IN ALARM BEDROOM |

System Status Display

| | |
|---|----------------------------|
| AC power has been disconnected: | SYSTEM AC LOSS |
| Backup battery is low (under 10.8V) or has been disconnected: | SYSTEM LOW BATT |
| Communication failure or the telephone has been disconnected: | TELEPHONE COMM. FAILURE |
| Time and Date display (scrolls every few seconds): | THU, 28 JUL 94 12:37 PM |

Refer to Appendix A for information on returning system status display to normal.

3.4: Menu Selections/Direct Commands

There are two ways to perform a command on the control panel:

- Direct commands (LCD and LED keypads)
- Menu selections (LCD keypad only)

Direct Command Codes

To perform a direct command:

1. Press "SELECT".
2. Enter the operation code for the desired command (refer to the "Command Codes" table below).
3. If prompted to, enter an authorized user code; an acknowledgment tone is sounded to indicate that the command has been performed.

Command Codes

| | |
|---|---|
| 1X Disarm System X (1 - 4) | 44 Bell Cancel |
| 21X Perimeter Arm System X (1 - 4) | 45 Stop Telephone Call |
| 22X Normal Arm System X (1 - 4) | 46 Follow Me |
| 23X Late to Close HHMM | 5 User Codes |
| 31X Bypass Zone X (1 - 32) | 61 View Log |
| 32X Unbypass Zone X (1 - 32) | 62 Clear Log |
| 33 Chime On | 64 Show Versions |
| 34 Chime Off | 71 Manual Programming |
| 39 Unbypass All zones | 72 Default Programming 1 |
| 41 Set Time HHMM, DDMMYY | 73 Default Programming 2 |
| 421 Walk Test | 741 Remote Programming: off hook |
| 422 Bell Test | 742 Remote Programming: Callback |
| 423 Telephone Test | 83X Reset Relay X |
| 425 System Test | 84X Set Relay X |
| 426 Battery Test | 9 Access Control |
| 43 Fire Sensor Reset | |

Menu Selections Using the LCD Keypad

To make a menu selection from the menu:

1. Press MENU/NEXT; the main menu will be displayed and the selection pointed to by >.
2. Press MENU/NEXT to scroll through the menu items. Pressing "*" scrolls backwards and pressing any numeric key displays that number's associated menu item. To abort at any time, press AWAY.
3. Press SELECT to select the displayed menu item (indicated by the arrow). Certain menu items may require an authorized passcode.

Example:

| Selection | Display |
|--|---------------------------------|
| Pressing MENU/NEXT for the first time displays | > 1 OPEN / DISARM NEXT . . . |
| Pressing MENU/NEXT displays the next menu item in the same menu: | > 2 CLOSE / ARM NEXT . . . |
| Pressing SELECT when the CLOSE/ARM menu is selected displays | > 21 PERIM ARM NEXT . . . |

Note: The selection numbers are the direct command numbers for specific menu items. These commands can be performed without having to scroll through the menus. For further information, refer to the direct command operating procedure.

Main Menu

- | | | |
|----------------------|--------------------------|----------------------------|
| 1 - DISARM | 421 - WALK TEST | 7 - PROG. |
| 2 - ARM | 422 - BELL TEST | 71 - MANUAL PROGRAMMING |
| 21 - PERIMETER ARM | 423 - TELEPHONE TEST | 72 - LOAD DEFAULT PROG. #1 |
| 22 - NORMAL ARM | 425 - SYSTEM TEST | 73 - LOAD DEFAULT PROG. #2 |
| 23 - LATE TO CLOSE | 426 - BATTERY TEST | 74 - REMOTE PROGRAMMING |
| 3 - BYPASS | 43 - FIRE SENSOR RESET | 741 - OFF HOOK |
| 31 - BYPASS ZONE | 44 - BELL CANCEL | 742 - CALLBACK |
| 32 - UNBYPASS ZONE | 45 - STOP COMMUNICATIONS | 8 - AUX RELAY |
| 33 - CHIME ON | 46 - FOLLOW ME | 83 - RESET RELAY |
| 34 - CHIME OFF | 5 - USER CODES | 84 - SET RELAY |
| 39 - UNBYPASS ALL | 6 - VIEW/LOG | 9 - ACCESS CONTROL |
| 4 - SERVICE | 61 - VIEW LOG | |
| 41 - SET TIME & DATE | 62 - CLEAR LOG | |
| 42 - TEST | 64 - SHOW VERSIONS | |

3.5: Arming/Disarming

Arming & Disarming

To arm the system:

- Press AWAY to arm both the perimeter and interior or STAY to arm the perimeter only; the Armed LED lights up to indicate that the system is armed.

The system can also be armed by entering an authorized passcode or by selecting one of the arming options from the Arm menu.

To disarm the system:

- Enter an authorized passcode. If the system is in alarm, entering an authorized passcode will disarm the system and terminate the alarm.

Forced Arming

Forced arming enables the user to arm the system even if all zones are not secured. If zones are still not secured after the exit delay has ended, an alarm will be generated. The ability to force arm the system is optional and is selected at address 494.

Note: Electronics Line recommends waiting until all of the zones are secured and the system can be armed normally.

Immediate Arming

The system can be immediately armed, canceling the entry or exit delay for the arming period.

To arm the system immediately:

- Press * during the exit delay; the delay is cancelled and the system is armed immediately.

Note: Immediate arming disables both the exit and entry delays for the arming period.

3.6: User Codes

Most operations executed from the control panel require a user code. Different user code authorization levels restrict certain functions to specific users. That is to say, of the 15 users that are able to operate the system, not all of them have access to all system operations. For example, an installer with a level 12 user code can only test and program the system. The installer does not have the ability to arm and disarm the system, which maintains a high level of security for the user. Each of the 15 user codes can be programmed with 3 to 6 digits. Each user code has an authorization level and can be assigned to either a specific sub-system or to all systems.

The following list explains each of the authorization levels:

- Level 0* No functions are assigned to the user code
- Level 1* Allows only normal arming (AWAY), interior & perimeter zones
- Level 2* Operations of Level 1 + Perimeter arming (STAY)
- Level 3* Same as Level 2
- Level 4* Operations of Level 3 + Disarming, bell cancel, chime on/off, fire sensor reset and auxiliary relay operations
- Level 5* Operations of Level 4 + view log, Follow-me telephone number programming and access control
- Level 6* Operations of Level 5 + Zone bypass/unbypass, clock setting, late to close, clear log, remote programming and stop call
- Level 7* Operations of Level 6 + User code programming
- Level 8* Same as Level 7
- Level 9* Operations of Level 7 + Tests
- Level 10* Operations of Level 9 + Programming
- Level 11* Not available at this time
- Level 12* Allows only tests & programming
- Level 13* Allows only view & clear log
- Level 14* Allows only tests
- Level 15* Duress code level allows arm, disarm, stop call, bell cancel and fire sensor reset

3.7: Emergency and Duress

Distress Keys

In the case of an emergency, 3 types of alarm can be generated from the keypad.

To generate a distress key alarm.

1. Press and hold down the MENU/NEXT key.
2. Keeping the MENU/NEXT key held down, press the required distress key, for more than 1 second; the relevant event code is reported to the central station and, if programmed, the bell is activated.

The distress key combinations are:

- *MENU/NEXT and E* - Emergency (Event code at address 255 or 289)
- *MENU/NEXT and F* - Fire alarm emergency (Event code at address 256 or 290)
- *MENU/NEXT and P* - Police emergency (Event code at address 257 or 291)

Duress Code

The duress code is a user code designed for situations where the user is being forced to operate the system. This user code performs the selected operation, while sending the duress event message (address 259 or 293) to the central station. A duress code has an authorization level of 15. For further information on programming user codes see 3.6: User Codes.

Note: In the message to the central station, the control panel always indicates the system of the keypad from which the duress code was entered.

User codes and system partitioning

When the Summit 3208GLD is partitioned into several sub-systems, user codes can be associated either with a specific sub-system or with the entire system. Assigning a user code to only one system will default all operations to that system. For example, if a user code is assigned to system 3, entering the code arms system 3 without the need to indicate the system number. A user code authorized to all of the subsystems can perform functions affecting the entire system, such as arming and disarming. To assign a user code to all of the systems, program the code as belonging to system 5.

Programming User Codes

To program user codes (LCD keypad only):

1. Select User Codes from main menu or press SELECT, 5; the LCD display requests a user code.
2. Enter an authorized user code; the display reads:

USER 01 : > 1234. .
SYS. : 1 LEVEL: 10

In the above example: The code displayed is for User 1. The user code is "1234" - 4 digits with ".." following, signifying that two digits were not used in this user code. The user code is assigned to system 1. The user code authorization level is 10. The current field is indicated by ">".

3. To scroll through the user codes, press MENU/NEXT to scroll forward and * to scroll back.
4. To scroll through the different fields, press SELECT.
5. To change the value of the current field, enter the required value.
6. Press AWAY to exit user code programming or MENU/NEXT to program the next user code.

Note: A user cannot program a code to a higher access level or to a sub-system other than the one to which their code belongs. Additionally, a user cannot view user codes assigned to a higher access level. The system accepts the first user code it recognizes. To prevent being locked out of the system, do not program user codes beginning with the same numeric combination. For example, the 3 digit user code "123" and the 4 digit code "1234" are programmed in the same system. Any attempt to enter "1234" is impossible as the system recognizes "123" the moment the third digit is entered.

3.8: Zone Bypassing/Unbypassing

A bypassed zone is ignored by the system when arming. Bypassing and unbypassing can only be performed if the system is disarmed.

To bypass a zone:

1. From the Bypass menu, select Bypass or press SELECT 3, 1.
2. Enter an authorized user code and a zone number.

To unbypass a zone:

1. From the Bypass menu, select Unbypass or press SELECT 3, 2.
2. Enter an authorized user code and the bypassed zone number.

To unbypass all zones:

1. From the Bypass menu, select Unbypass All or press SELECT 3, 9.
2. Enter an authorized user code.

Note: On a control panel with zone expanders, the control panel waits for an extra digit when zones 1, 2 or 3 are bypassed. This allows bypassing of the additional zones (for example, 11, 24, or 32). In this case, when enter the zone number and press MENU/NEXT to indicate that no additional digit is necessary.

3.9: Event Log

The event log records the last 100 events the system has undergone. The event log uses the FIFO (first in, first out) method. Once the log is full, the oldest event will automatically be erased. The event log can only be viewed with the LCD keypad.

View Event Log

To view the event log:

1. From the View/Log menu select View Log or press SELECT 6, 1.
2. Enter an authorized user code.
3. Scroll through the log by pressing the MENU/NEXT key. The events are displayed starting with the most recent event registered in the log.
4. Press AWAY to exit the log.

The following table shows examples of typical event log displays.

| Event | Display |
|--|-----------------------------------|
| Day 23 in month, time 12:45, alarm from zone 2, Bathroom | 23 12:45 ALARM BATHROOM, 02 |
| Day 23 in month, time 12:50, system 1 was armed (perimeter) by user 11. | 23 12:50 STAY SYS.1 BY USER 11 |
| System message: Last message was successfully sent to the central station. | 23 13:56 SYSTEM REPORT SENT |
| Log viewing completed. | *** END OF LOG *** |

Clear Event Log

To clear the log:

1. From the View/Log menu, select Clear Log or press SELECT 6, 2.
2. Enter an authorized user code; the log is erased and the message "***END OF LOG***" is displayed. Clear Log also causes the Armed LED to stop flashing and zone in alarm messages to be cleared.

3.10: System Partitioning

The Summit 3208GLD can be operated in partitioned mode where the system is separated into a maximum of four sub-systems. A sub-system is created when at least one zone has been assigned to it. The following section describes how certain elements of the system are affected by system partitioning.

Zones

Each zone can be assigned to a one of the four sub-systems. A common zone is assigned to all sub-systems and will only be armed in the event that all systems are armed.

User Codes

User codes are assigned to any sub-system or to the entire system during user code programming. For more information on the programming of user codes refer to page 18.

Keypad Display

The keypad can display either the entire system or a specific sub-system. This is programmed at parameter addresses 132 - 139.

Arming & Disarming

Pressing STAY or AWAY on a keypad assigned to a specific sub-system arms only that sub-system. Entering a user code assigned to a specific sub-system arms the system to which the user code has been assigned. To disarm a sub-system, the user code entered must be assigned to either that sub-system or to all systems. All arming methods are available for each sub-system.

Note: If the user code entered is assigned to all systems, the panel asks which system to arm. Entering System 5 arms all the sub-systems that are ready.

3.11: Tests

Walk Test

The walk test allows detection devices to be tested without generating an alarm.

To perform a walk test:

1. Press SELECT 4, 2, 1 or select Walk Test from the Test menu.
2. Test the control panel's detection devices; an opened zone causes the keypad to beep.
3. To end the walk test, press AWAY.

Walk test mode is automatically terminated after 4 minutes and 15 seconds.

Note: During a walk test, an open zone will not create an alarm. However, this does not apply to zones programmed as tamper zones and 24hr zones (Emergency/Holdup, Fire and Verified Fire) opening these zones will create an alarm.

Bell Test

To perform a bell test:

- Press SELECT 4, 2, 2 or select Bell Test from the Test menu; a 1 second ring is heard and the test is terminated automatically.

Telephone Communicator Test

To perform a telephone communicator test:

- Press SELECT 4, 2, 3 or select Telephone Test from the Test menu; a test message is sent to all central stations that are programmed to receive communications from the control panel. The control panel returns to normal operation after the telephone communication test is initiated. The report code for this message is at address 251 or 285.

Note: The control panel seizes the telephone line to run this test.

System Test

To perform a system test:

- Press "SELECT" 4, 2, 5 or select System Test from the Test menu; the system tests the control panel's electronic circuitry. Should the LCD display the message "System Failure", contact our technical support department.

Battery Test

To perform a battery test:

- Press "SELECT" 4, 2, 6 or select Batt. from the Test menu; the battery is tested under loading conditions, the control panel returns to normal operation and the battery status display is updated. For the test to be successful the voltage must not be lower than 10.8V under loading conditions. This test is automatically executed by the system every 30 seconds.

3.12: Additional Operations

Set Time & Date

To set the time and date:

1. On the LCD keypad, press SELECT 4, 1; the panel prompts you to enter a user code.
 2. Enter an authorized user code; the panel prompts you to set the date.
 3. Enter the date (DDMMYY).
 4. Enter the time in 24 hour format (HHMM).
 5. Press AWAY; the panel returns to normal operation.
- or
1. On the LED keypad, press SELECT 4, 1; the Program LED lights up.
 2. Enter an authorized user code.
 3. Enter the date (DDMMYY).
 4. Enter the time in 24 hour format (HHMM).
 5. Press AWAY; the Program LED turns off.

Bell Cancel

The bell is automatically stopped when the system is disarmed. To stop the bell manually:

1. On the LCD keypad, press SELECT 4, 4; the panel prompts you to enter a user code.
 2. Enter an authorized user code; the bell stops ringing immediately and the system sends a Bell Cancel event code to the central station.
- or
1. On the LED keypad, press SELECT 4, 4; the Program LED lights up.
 2. Enter an authorized user code; the bell stops ringing immediately, the Program LED turns off and the system sends a Bell Cancel event code to the central station.

Stop Communications

To stop all communications and clear communication message buffers:

1. On the LCD keypad, press SELECT 4, 5; the panel prompts you to enter a user code.
 2. Enter an authorized user code; all communication buffers are cleared and all communications stop immediately.
- or
1. On the LED keypad, press SELECT 4, 5; the Program LED flashes.
 2. Enter an authorized user code; the Program LED turns off, all communication buffers are cleared and all communications stop immediately.

Follow-me

To program a telephone number (telephone #4) for the Follow-me feature:

1. On the LCD keypad, press SELECT 4, 6; the panel prompts you to enter a user code.
 2. Enter an authorized user code; the panel prompts you to enter the telephone number.
 3. Enter the required telephone number using keys 0 - 9, # to include a three second pause and * to switch to tone dialing (DTMF).
- or
1. On the LED keypad, press SELECT 4, 6; the Program LED flashes.
 2. Enter an authorized user code; the Program LED lights up.
 3. Enter the desired telephone number, using keys 0 - 9, # to include a three second pause and * to switch to tone dialing (DTMF); after a short delay the Program LED turns off.

Examples: To program telephone number 921-1110 using DTMF dialing, enter *9211110. To dial telephone number 9211110 in pulse dialing, and then switch to tone dialing to access extension 231 after a pause, key in 9211110#*231. Up to 16 digits can be entered, including pauses (#) and tone dialing switches (*). The * key will appear on the display as "T" and the # will appear as ",".

To disable the Follow-me number enter # ("") as the first digit of the number.

Note: Make sure all types of messages that need to be passed to the "follow me" number are routed correctly (see Chapter Four: Programming). A follow me number can be set on any phone number, however, only telephone number 4 can be changed through "SELECT" 4, 6.

Late To Close

When using opening/closing windows, the control panel must be armed within the programmed time frame for the closing window. If the user wishes to stay on the premises and arm the system at a later time, a "Late to Close" condition can be activated in order to extend the window and prevent a message being sent to the central station.

To activate a "Late to Close" condition:

1. On the LCD keypad, press SELECT 2, 3; the system prompts you to enter the system number.
 2. Enter the system number; the system prompts you to enter a user code.
 3. Enter an authorized user code; the system prompts you to set a time.
 4. Enter the new closing hour in 24-hour format (HH); the command is acknowledged and the system returns to normal operation.
- or
1. On the LED keypad, press SELECT 2, 3. The Program LED turns on.
 2. Enter the system number; the Program LED begins flashing
 3. Enter an authorized user code.
 4. Enter the new closing hour in 24-hour format (HH). The command is acknowledged, the system returns to normal operation and the Program LED turns off.

Latch Key

When the latch key feature is activated (address 411), the MENU/NEXT key is used to acknowledge arrivals or departures from the system during opening or closing windows. If MENU/NEXT is not pressed after the user code is entered, a 'Failed to Open' or 'Failed to Close' event code is sent to the central station.

Zone Chime

A zone can be programmed to chime when opened.

To program a zone to chime:

1. Press SELECT 3,3.
2. Enter an authorized user code.
3. Enter a zone number; the zone is programmed to chime when opened.

To deactivate a zone chime:

1. Press SELECT 3, 4.
2. Enter an authorized user code.
3. Enter the zone number; the zone will not chime when opened.

Access Control

This feature is designed for use with an electric door latch. The user is able to release the door latch from the keypad by activating a relay programmed to "Access Control" mode – see address 477. A relay is controlled by its corresponding keypad. For example, 'Keypad 1' controls 'Relay 1', 'Keypad 2' controls 'Relay 2' and so on.

Note: Keypad 8 cannot be used to operate this feature, as it has no relay assigned.

To activate an access control relay:

1. Press SELECT 9.
2. Enter an authorized user code; the relay is activated for the programmed cutoff time.

Set Relay

Relays can be manually activated and deactivated using this operation. A relay activated in this way is not dependent on system status and stays activated until manually reset.

To manually activate a relay:

1. Press SELECT 8,4.
2. Enter the number of the relay you want to activate (1-7).
3. Enter an authorized user code; the relay is activated.

To manually reset a relay:

1. Press SELECT 8,3.
2. Enter the number of the relay you want to reset (1-7).
3. Enter an authorized user code; the relay is deactivated.

4.1: General

The Summit 3208GLD control panel can be programmed using either the 3108 LCD keypad or the Remote Programmer, Electronics Line's up/downloading software. For keypad operation refer to Chapter 3.

For programming using the Remote Programmer refer to the instructions provided with the software. Contact your nearest Electronics Line office or agent to obtain a copy of the software.

4.2: Guide to Programming

The control panel has 500 parameter addresses. All the programmed data is stored in the EEPROM memory and is saved even if both AC and battery power are disconnected. To make programming easier, the Summit 3208GLD includes a default program including typical values for most installations. This means that, in most cases, only the programming of customer specific parameters (such as telephone numbers, account numbers, etc.) is required. Programming changes are made by entering a new value at the appropriate address. This chapter includes a complete list of parameter addresses and the options available for each address.

4.3: Programming Procedure

Electronics Line suggests the following:

- Always load a default program when receiving a new panel by pressing SELECT 7, 2 (Default Program 1) or SELECT 7, 3 (Default Program 2 - if available).
- Before installation and programming, plan the application well using the programming form provided.
- Use the following procedure to program the data from the programming form into the control panel.

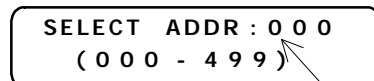
To program the Summit 3208GLD using the 3108 LCD keypad:

1. Press SELECT 7, 1 to enter programming mode.
2. Enter an authorized user code.
3. Enter a 3-digit parameter address; the keypad displays the selected address within a group of related parameters (zones, telephone numbers, routing etc.). For example, if a zone parameter address is selected, the four parameters relating to that specific zone are displayed and the first digit of the selected address flashes.
4. Pressing MENU/NEXT or entering data moves the cursor to the next parameter digit. To move back to the previous digit press the *.
5. To move to another item within the current group, press SELECT and then MENU/NEXT or * to scroll forwards and backwards through the available options. For example, if zone 1 is selected, the zone number flashes when SELECT is pressed. MENU/NEXT and * enable you to scroll forward and backwards through the zones.
6. To exit programming mode, press AWAY.
7. For the modifications to take effect, disconnect and reconnect both AC and battery power supplies.

Note: The system allows two minutes to begin programming before automatically exiting programming mode. Programming mode is immediately aborted if the control panel is in communication (both incoming and outgoing calls).

LCD Keypad Programming Display

Entering programming mode



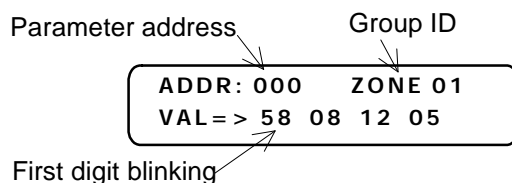
```
SELECT ADDR : 0 0 0
( 0 0 0 - 4 9 9 )
```

First digit blinking, any key will change this digit

Press:

* to move to the previous digit
SELECT to select another address or group of parameters
MENU/NEXT to move to the next digit or group
AWAY to exit programming mode

After entering parameter changes



Upon entering a digit, the display automatically moves to the next digit. To move to the next digit without entering a modification, press MENU/NEXT. To move back to the previous digit, press *.

Entering Hex data

Pressing # scrolls through the hexadecimal digits A, B, C, D, E and F. If the original digit is decimal (0-9), press # to change the digit to A. If the original digit is hexadecimal (A-F), press # to move to the next hexadecimal digit in sequence.

4.4: Programming Parameters

This section comprises a complete listing of the Summit 3208GLD control panel's programming parameters. The following table lists the addresses for each group of programming parameters.

| ADDRESSES | PARAMETERS | ADDRESSES | PARAMETERS |
|----------------|----------------------------|----------------|---|
| 000-127 | Zone Parameters | 388 | Swinger Parameters |
| 128-131 | System Parameters | 389-409 | Opening & Closing Windows |
| 132-139 | Keypad Parameters | 410 | Bell Cut-Off |
| 140-179 | Telephone Numbers | 411 | Dealer Lockout & Latchkey |
| 180-195 | Account Numbers | 412-475 | Custom LCD Zone Descriptors |
| 196-197 | Telephone Line Parameters | 476 | Zone Expanders |
| 198-201 | Communication Protocols | 477-490 | Relay Parameters |
| 202-261 | Zone Oriented Event Codes | 491-493 | Periodic Test |
| 262-295 | Event Oriented Event Codes | 494 | Arming Options & Arming Ring |
| 296-310 | Event & Message Routing | 495 | Detailed Display, Bell Muting & Fire Sensor Reset |
| 378-381 | Exit Timers | 496 | Police Key Operation & RP Communication Options |
| 382-384 | Entry Timers | 497-498 | AC Loss & Restore |
| 385-387 | Pulse Counters | 499 | Listen-In Time Out |

ADDRESSES 000-127: ZONE PARAMETERS

000-003: Zone # 1 Parameters

Each zone is individually defined in four parameter addresses. The following four addresses relate to zone 1 but the method of programming zones 2 - 32 is identical.

000 LCD Zone Descriptor and Entry Delay for Zone #1

Select a zone descriptor and entry delay for zone 1 from the table below. Entry delay options #1, #2 and #3 are set at addresses 382, 383 and 384, respectively. The four custom LCD messages can be programmed at addresses 412-475.

| No Delay | Delay #1 | Delay #2 | Delay #3 | Descriptor |
|----------|----------|----------|----------|------------|
| 00 | 40 | 80 | C0 | no message |
| 01 | 41 | 81 | C1 | 1ST FLOOR |
| 02 | 42 | 82 | C2 | 2ND FLOOR |
| 03 | 43 | 83 | C3 | 3RD FLOOR |
| 04 | 44 | 84 | C4 | 4TH FLOOR |
| 05 | 45 | 85 | C5 | BACK DOOR |
| 06 | 46 | 86 | C6 | BASEMENT |
| 07 | 47 | 87 | C7 | BATHROOM |
| 08 | 48 | 88 | C8 | BEDROOM |
| 09 | 49 | 89 | C9 | BEDROOM 1 |
| 0A | 4A | 8A | CA | BEDROOM 2 |
| 0B | 4B | 8B | CB | BEDROOM 3 |
| 0C | 4C | 8C | CC | COMPUTER |
| 0D | 4D | 8D | CD | CONFERENCE |
| 0E | 4E | 8E | CE | CORRIDOR |
| 0F | 4F | 8F | CF | DINING |
| 10 | 50 | 90 | D0 | DOOR |
| 11 | 51 | 91 | D1 | EAST |
| 12 | 52 | 92 | D2 | EMERGENCY |
| 13 | 53 | 93 | D3 | ENTRANCE |
| 14 | 54 | 94 | D4 | EXIT |
| 15 | 55 | 95 | D5 | EXTERIOR |
| 16 | 56 | 96 | D6 | FAMILY |
| 17 | 57 | 97 | D7 | FIRE |
| 18 | 58 | 98 | D8 | FRONT DOOR |
| 19 | 59 | 99 | D9 | GARAGE |
| 1A | 5A | 9A | DA | GUEST ROOM |
| 1B | 5B | 9B | DB | HALL |
| 1C | 5C | 9C | DC | HOLDUP |
| 1D | 5D | 9D | DD | INTERIOR |
| 1E | 5E | 9E | DE | KITCHEN |
| 1F | 5F | 9F | DF | LAUNDRY |

| No Delay | Delay #1 | Delay #2 | Delay #3 | Descriptor |
|----------|----------|----------|----------|-------------|
| 20 | 60 | A0 | E0 | LOBBY |
| 21 | 61 | A1 | E1 | LIVNG ROOM |
| 22 | 62 | A2 | E2 | MSTR BEDRM |
| 23 | 63 | A3 | E3 | MAT |
| 24 | 64 | A4 | E4 | MOTION |
| 25 | 65 | A5 | E5 | NORTH |
| 26 | 66 | A6 | E6 | NURSERY |
| 27 | 67 | A7 | E7 | OFFICE |
| 28 | 68 | A8 | E8 | PANIC |
| 29 | 69 | A9 | E9 | PERIMETER |
| 2A | 6A | AA | EA | POOL |
| 2B | 6B | AB | EB | ROOF |
| 2C | 6C | AC | EC | ROOM |
| 2D | 6D | AD | ED | ROOM 1 |
| 2E | 6E | AE | EE | ROOM 2 |
| 2F | 6F | AF | EF | ROOM 3 |
| 30 | 70 | B0 | F0 | ROOM 4 |
| 31 | 71 | B1 | F1 | SHIPPING |
| 32 | 72 | B2 | F2 | SHOP |
| 33 | 73 | B3 | F3 | SLIDE DOOR |
| 34 | 74 | B4 | F4 | SOUTH |
| 35 | 75 | B5 | F5 | STAIRS |
| 36 | 76 | B6 | F6 | STORAGE |
| 37 | 77 | B7 | F7 | STUDY |
| 38 | 78 | B8 | F8 | VAULT |
| 39 | 79 | B9 | F9 | WAREHOUSE |
| 3A | 7A | BA | FA | WEST |
| 3B | 7B | BB | FB | WINDOW |
| 3C | 7C | BC | FC | (custom #1) |
| 3D | 7D | BD | FD | (custom #2) |
| 3E | 7E | BE | FE | (custom #3) |
| 3F | 7F | BF | FF | (custom #4) |

001 First Digit: Loop Speed, Pulse Count and Swinger Setting for zone # 1

The following table lists the options for the loop speed, pulse count and swinger setting. A slow loop response (150ms) should be entered for motion sensors and contacts. Enter a fast loop response (50ms) for shock sensors. The three optional pulse count settings can be programmed at addresses 385-387 and the swinger setting is programmed at address 388. A full explanation of these features can be found in this section at their respective addresses.

First digit value:

| Loop Speed | Pulse Count | Swinger Setting | Value |
|------------|-------------|-----------------|-------|
| Slow | None | - | 0 |
| | | Active | 1 |
| | #1 | - | 2 |
| | | Active | 3 |
| | #2 | - | 4 |
| | | Active | 5 |
| | #3 | - | 6 |
| | | Active | 7 |

| Loop Speed | Pulse Count | Swinger Setting | Value |
|------------|-------------|-----------------|-------|
| Fast | None | - | 8 |
| | | Active | 9 |
| | #1 | - | A |
| | | Active | B |
| | #2 | - | C |
| | | Active | D |
| | #3 | - | E |
| | | Active | F |

Second Digit: Bypassability, Zone Chime and System ID

The second digit of this address deals with a number of options. Select whether the zone is bypassable, if the zone chime feature is enabled and to which system the zone is assigned from the table below.

Second digit value:

| Bypassable | Chime | System | Value |
|------------|-------|--------|-------|
| No | No | 1 | 0 |
| | | 2 | 1 |
| | | 3 | 2 |
| | | 4 | 3 |
| | Yes | 1 | 4 |
| | | 2 | 5 |
| | | 3 | 6 |
| | | 4 | 7 |

| Bypassable | Chime | System | Value |
|------------|-------|--------|-------|
| Yes | No | 1 | 8 |
| | | 2 | 9 |
| | | 3 | A |
| | | 4 | B |
| | Yes | 1 | C |
| | | 2 | D |
| | | 3 | E |
| | | 4 | F |

002 First Digit: Zone ID for zone#1

Zone ID is the number that can be sent to identify the zone in event code messages to the central station (event oriented event code table). Generally, the zone ID is the same as the zone number.

First digit value:

Enter a value between 0 – F for Zone ID

Second Digit: Loop type for zone #1

Select the loop type for this zone from the following list.

Second digit value:

0 – N.C. restore on short, alarm on open.

1 – N.O. alarm on short, restore on open.

2 – EOLR alarm on short, restore on normal, alarm on open.

003 First Digit: Zone type for zone #1

Select a zone type from the following list. For a full explanation of each zone type, see 1.2: Zones.

First digit value:

0 – Perimeter normal zone.

1 – Perimeter primary zone.

2 – Perimeter secondary zone.

3 – Perimeter conditional zone.

4 – Interior normal zone.

5 – Interior primary zone.

6 – Interior secondary zone.

7 – Interior conditional zone.

9 – Verified Fire Zone.

A – Fire Zone.

B – Common Zone.

C – Emergency/Holdup (24 Hour).

D – Tamper.

E – On/Off STAY.

F – On/Off key switch AWAY.

Note: Zones defined as Emergency/Hold-up, Tamper, Fire and Verified Fire will ignore the entry/exit delay even if defined.

Second Digit: Listen-In, Event Code Transmission to the Central Station and Bell Activation

Select the type of output for this zone in the event of an alarm.

Second digit value:

| Listen-In Activated | Send Message to Central Station | Activate Bell | Value |
|---------------------|---------------------------------|---------------|-------|
| No | No | No | 0 |
| | | Yes | 1 |
| Yes | Yes | No | 4 |
| | | Yes | 5 |
| | | No | 8 |
| | | Yes | 9 |

- 004-007 Same as above for zone #2
- 008-011 Same as above for zone #3
- 012-015 Same as above for zone #4
- 016-019 Same as above for zone #5
- 020-023 Same as above for zone #6
- 024-027 Same as above for zone #7
- 028-031 Same as above for zone #8

ADDRESSES 032-063: Zones 9 - 16 These addresses are added to the control panel with either the 3508 or 3528 zone expanders (zone expander jumper setting B). Zone expanders are programmed at address 476.

- 032-035 Same as above for zone #9
- 036-039 Same as above for zone #10
- 040-043 Same as above for zone #11
- 044-047 Same as above for zone #12
- 048-051 Same as above for zone #13
- 052-055 Same as above for zone #14
- 056-059 Same as above for zone #15
- 060-063 Same as above for zone #16

ADDRESSES 064 – 095: Zones 17 - 24 These addresses are added to the control panel with either the 3508 or 3528 zone expanders (zone expander jumper setting C). Zone expanders are programmed at address 476.

- 064-067 Same as above for zone #17
- 068-071 Same as above for zone #18
- 072-075 Same as above for zone #19
- 076-079 Same as above for zone #20
- 080-083 Same as above for zone #21
- 084-087 Same as above for zone #22
- 088-091 Same as above for zone #23
- 092-095 Same as above for zone #24

ADDRESSES 096-127: Zones 25 - 32 These addresses are added to the control panel with either the 3508 or 3528 zone expanders (zone expander jumper setting D). Zone expanders are programmed at address 476.

- 096-099 Same as above for zone #25
- 100-103 Same as above for zone #26
- 104-107 Same as above for zone #27
- 108-111 Same as above for zone #28
- 112-115 Same as above for zone #29
- 116-119 Same as above for zone #30
- 120-123 Same as above for zone #31
- 124-127 Same as above for zone #32

ADDRESSES 128 – 131: SYSTEM PARAMETERS

These addresses offer a number of options for each sub-system. The keypad tones (beeps) and one-key arming feature for each sub-system can be set at these addresses. Program only system 1 for unpartitioned systems.

128 First Digit: Keypad Arming/Disarming Tones for System #1

Each sub-system’s keypads can be programmed to beep during arming, disarming and during the entry delay. Select the keypad tones for system #1 from the table below.

First digit value:

| Arm Beep | Continuous on Entry | Disarm Beep | Value |
|------------|---------------------|-------------|-------|
| No | No | No | 0 |
| | | 1 | 1 |
| | | 3 | 2 |
| 1 | Yes | No | 3 |
| | | No | 4 |
| | | 1 | 5 |
| 3 | No | 3 | 6 |
| | | No | 7 |
| | | No | 8 |
| Continuous | Yes | 1 | 9 |
| | | 3 | A |
| | | No | B |
| | No | No | C |
| | | 1 | D |
| | | 3 | E |
| | Yes | No | F |

Second Digit: Display, Power Trouble Tones and One Key Arming for System #1

The second digit of this address offers options for the display type of each sub-system’s keypads and the tones sounded for power related trouble conditions. One-Key Arming allows the user the capability to arm the system, using either the STAY or AWAY keys, without needing to enter a user code. Select these options for system #1 from the table below.

Second digit value:

| Display Type | One Key Arming | Beep for AC Loss | Beep for Low Battery | Value |
|--------------|----------------|------------------|----------------------|-------|
| Summarized | Disabled | No | No | 0 |
| | | | Yes | 1 |
| | | Enabled | Yes | No |
| | Yes | | | 3 |
| | Detailed | | No | No |
| | | Yes | | 5 |
| Enabled | | Yes | No | 6 |
| | Yes | | 7 | |
| | Detailed | Disabled | No | No |
| Yes | | | | 9 |
| Enabled | | | Yes | No |
| | | Yes | | B |
| | | | No | No |
| Yes | | | | D |
| | Yes | | No | E |
| | | Yes | F | |

129 Same as above for System #2

130 Same as above for System #3

131 Same as above for System #4

ADDRESSES 132 – 139: KEYPAD PARAMETERS

The following addresses offer options for the configuration of each keypad.

132 First Digit: Backlight and Buzzer Operation for Keypad # 1

Select the backlight and buzzer options from the following table.

First digit value:

| Buzzer | Backlight | Value |
|---------|---------------------------------|-------|
| Audible | On after keystroke for 1 minute | 0 |
| | On for opening windows | 1 |
| | On for closing windows | 2 |
| | On for opening/closing windows | 3 |
| | On at all times | 4 |
| Silent | On after keystroke for 1 minute | 8 |
| | On for opening windows | 9 |
| | On for closing windows | A |
| | On for opening/closing windows | B |
| | On at all times | C |

Second Digit: Keypad Supervision, System Operation and Display for keypad #1

In partitioned systems, each keypad is associated with a specific sub-system and can be programmed to display only its own sub-system or all the sub-systems. Keypad supervision is selected at this address and on the keypad itself - see 2.2: Mounting the Keypad.

Second digit value:

| Supervision | Display System | Operate System | Value | |
|-------------|----------------|----------------|-------|---|
| No | 1 | 1 | 0 | |
| | 2 | 2 | 1 | |
| | 3 | 3 | 2 | |
| | 4 | 4 | 3 | |
| | All | 1 | 4 | 4 |
| | | 2 | 5 | 5 |
| | | 3 | 6 | 6 |
| | | 4 | 7 | 7 |

| Supervision | Display System | Operate System | Value | |
|-------------|----------------|----------------|-------|---|
| Yes | 1 | 1 | 8 | |
| | 2 | 2 | 9 | |
| | 3 | 3 | A | |
| | 4 | 4 | B | |
| | All | 1 | 1 | C |
| | | 2 | 2 | D |
| | | 3 | 3 | E |
| | | 4 | 4 | F |

- 133 Same as above keypad #2
- 134 Same as above keypad #3
- 135 Same as above keypad #4
- 136 Same as above keypad #5
- 137 Same as above keypad #6
- 138 Same as above keypad #7
- 139 Same as above keypad #8

ADDRESSES 140 - 179: TELEPHONE NUMBERS

Consecutive addresses are used to enter telephone numbers up to 16 digits. Indicate the end of the telephone number with the hex digit F. To enter a 3 second pause enter C, for a 7 second pause enter D, to switch from pulse to tone dialing, enter E. Other telephone data and parameters are entered at later addresses.

Note: The emergency telephone numbers shall not be set or programmed to place a call to a police station that has not been specifically assigned by that police station for such service.

- 140-147 Telephone #1(primary)
- 148-155 Telephone #2(backup)
- 156-163 Telephone #3
- 164-171 Telephone #4 *Note: Usually used with the Follow-me feature (SELECT, 4, 6).*
- 172-179 Telephone number for Remote Programmer Callback.

The Remote Programmer Callback telephone number is programmed using the same method as telephone numbers 1 - 4.

ADDRESSES 180 - 195: ACCOUNT NUMBERS

Account numbers are transmitted to the central station with the event code to identify the source of the event. Each system can be given a separate account number. If the system is not partitioned, only enter the account number for System 1. For partitioned systems, program account numbers for all sub-systems. Account numbers are entered in four consecutive addresses. To enter an account number always enter 8 digits in sequence (if the number is less than 8 digits, use leading zeros).

Certain protocols can handle more than one transmission length. This means that in some protocols either 5 or 8 digit account numbers, for example, can be sent. The following example illustrates how to program account numbers for a protocol that handles 3 or 4 digit account numbers.

When transmitting an account number to the central station, the control panel automatically ignores any sequence of zeros at the beginning of the number.

Enter the following to program a 3 digit account number for System 1:

| | | | | |
|-----------|-----|-----|-----|-----|
| Address → | 180 | 181 | 182 | 183 |
| Value → | 00 | 00 | 01 | 23 |

In the above example the account number will be regarded as "123". If a 4 digit account number "0123" is required, enter the following:

| | | | | |
|-----------|-----|-----|-----|-----|
| Address → | 180 | 181 | 182 | 183 |
| Value → | 10 | 00 | 01 | 23 |

The first digit indicates to the control panel that the zero is to be considered as part of the 4 digit account number.

- 180-183 Account # for System 1**
- 184-187 Account # for System 2**
- 188-191 Account # for System 3**
- 192-195 Account # for System 4**

ADDRESSES 196-197: TELEPHONE LINE PARAMETERS

196 First Digit: Dialing Options and Telephone Event Message Enable/Disable

The first digit of this address comprises the following options.

- Dialing Initiation – the control panel only dials if a dial tone is detected within the time-out (programmed at address 197) or allowed anyway after the second time-out.
- Dialing Mode – the panel can be programmed to use either pulse or tone (DTMF) dialing.
- Telephone Event Message Enable/Disable – this option enables or disables telephone communications to the central station and follow-me number. If disabled, there is no need to program any of the other parameters regarding central station communications (telephone numbers, event codes etc.).

Note: This option does not affect RP communications. The RP Callback number, addresses 172-179, may still be programmed.

First digit value:

| Dialing Initiation | Dialing Mode | Telephone Event Message | Value |
|--------------------------|--------------|-------------------------|-------|
| Dial Anyway | Pulse | No | 0 |
| | | Yes | 2 |
| | DTMF | No | 4 |
| | | Yes | 6 |
| Do not Dial Without Tone | Pulse | No | 8 |
| | | Yes | A |
| | DTMF | No | C |
| | | Yes | E |

Second Digit: Time-Outs for Acknowledgment

Acknowledgments are tones transmitted from the central station to the control panel to confirm successful transmission of event codes. There are 2 acknowledgment tones, Ack1 and Ack2. Ack1 is the tone that confirms that the central station has recognized that the panel is attempting to send an event code. Time-Out for Ack1 is the amount of time the panel waits for Ack1 to be sent after the central station picks up. If Ack1 is not received within this time period, the panel makes another dialing attempt (if programmed at address 197). Ack2 is the tone that confirms that the central station has received and understood the message. Time-Out for Ack2 is the amount of time the panel waits for Ack2 after sending the message. If Ack2 is not received during this time period, the panel makes another message attempt (if programmed at

address 197). **Note: When using the Follow-me feature, Ack1 is received when the user presses 0, 9 or # on their telephone and Ack2 is not relevant.**

Second digit value:

| Time-Out | | |
|----------|--------|-------|
| Ack 1 | Ack 2 | Value |
| 2 sec | 2 sec | 0 |
| | 3 sec | 1 |
| | 5 sec | 2 |
| | 10 sec | 3 |
| 15 sec | 2 sec | 4 |
| | 3 sec | 5 |
| | 5 sec | 6 |
| | 10 sec | 7 |

| Time-Out | | |
|----------|--------|-------|
| Ack 1 | Ack 2 | Value |
| 30 sec | 2 sec | 8 |
| | 3 sec | 9 |
| | 5 sec | A |
| | 10 sec | B |
| 60 sec | 2 sec | C |
| | 3 sec | D |
| | 5 sec | E |
| | 10 sec | F |

197 First Digit: Dialing & Message attempts

The first digit of this address deals with the number of times the panel attempts to dial or transmit an event code message until a successful transmission is sent.

First digit value:

| Dialing | Message | Value |
|---------|---------|-------|
| 1 | 1 | 0 |
| | 2 | 1 |
| | 5 | 2 |
| | 10 | 3 |
| 2 | 1 | 4 |
| | 2 | 5 |
| | 5 | 6 |
| | 10 | 7 |

| Dialing | Message | Value |
|---------|---------|-------|
| 5 | 1 | 8 |
| | 2 | 9 |
| | 5 | A |
| | 10 | B |
| 10 | 1 | C |
| | 2 | D |
| | 5 | E |
| | 10 | F |

Second Digit: Dial Tone Wait and Anti Jamming

The default value for the second digit of this parameter has been chosen according to the requirements of the local telecommunications authority. If any problems are experienced, please contact Electronics Line Technical Support Dept.

Second digit value:

- 0 - Dial after 1 second, 2 second anti-jam
- 1 - Dial after 5 seconds, 2 second anti-jam
- 2 - Dial after 10 seconds, 2 second anti-jam
- 3 - Dial after 20 seconds, 2 second anti-jam
- 4 - Dial after 1 second or if dial tone present, 2 second anti-jam
- 5 - Dial after 5 seconds or if dial tone present, 2 second anti-jam
- 6 - Dial after 10 seconds or if dial tone present, 2 second anti-jam
- 7 - Dial after 20 seconds or if dial tone present, 2 second anti-jam
- 8 - Dial after 1 second, 10 second anti-jam
- 9 - Dial after 5 seconds, 10 second anti-jam
- A - Dial after 10 seconds, 10 second anti-jam
- B - Dial after 20 seconds, 10 second anti-jam
- C - Dial after 1 second or if dial tone present, 10 second anti-jam
- D - Dial after 5 seconds or if dial tone present, 10 second anti-jam
- E - Dial after 10 seconds or if dial tone present, 10 second anti-jam
- F - Dial after 20 seconds or if dial tone present, 10 second anti-jam

ADDRESSES 198 - 201: COMMUNICATION PROTOCOLS

Each of the four telephone numbers is associated with a telephone communication protocol programmable at these addresses. These can be defined according to the protocol used in communications with the central station and whether the message sent will be from either the zone or event oriented event code tables. Telephone #4 is usually associated with the "follow-me" feature, as it is the lowest priority telephone number and can be modified by the user.

Protocol Formats.

First digit value:

- 5 - Follow Me
- 6 - SIA 110 baud
- 7 - SIA 300 baud
- 8 - Scantronics
- A - Contact ID
- F - Pulse Protocols

IMPORTANT: The value entered at the second digit is dependent on the first digit. If the value entered is anything other than F, only the event code table needs to be chosen.

Event Code Table.

Second digit value:

- 0 - Event oriented table
- 8 - Zone oriented table

For pulse protocols, the data frequency and data rate should be defined in addition to the event code table. Select the second digit value from the following table.

Event Code Table, Data Frequency and Data Rate Options for Pulse Protocols.

Second digit value:

| Event Code Format | Data Frequency | Ack. Frequency | Data Rate | Value |
|-------------------|----------------|----------------|-----------|-------|
| Event Oriented | 1800Hz | 1400Hz | 10pps | 0 |
| | | | 20pps | 1 |
| | | 2300Hz | 10pps | 2 |
| | | | 20pps | 3 |
| | 1900Hz | 1400Hz | 10pps | 4 |
| | | | 20pps | 5 |
| | | 2300Hz | 10pps | 6 |
| | | | 20pps | 7 |
| Zone Oriented | 1800Hz | 1400Hz | 10pps | 8 |
| | | | 20pps | 9 |
| | | 2300Hz | 10pps | A |
| | | | 20pps | B |
| | 1900Hz | 1400Hz | 10pps | C |
| | | | 20pps | D |
| | | 2300Hz | 10pps | E |
| | | | 20pps | F |

Pulse protocol examples: Ademco 4/2 Slow (10pps) - F8
 Ademco 4/2 Fast (20pps) - F9

- 198 Protocol for telephone #1**
- 199 Protocol for telephone #2**
- 200 Protocol for telephone #3**
- 201 Protocol for telephone #4**

ADDRESSES 202 - 261: ZONE ORIENTED EVENT CODE TABLE

The following is a guide to programming event codes.

- 00 - No message is sent for this event.
- 0X (where X is any number between 1 and 9) - A 1 digit event code is sent for this event.
- XX - A 2 digit event code is sent for this event.
- X0 - For opening and closing events, the 0 is replaced with the user number. For other events both digits are regarded as the event code.

The following are the addresses for zone oriented event code messages. For event oriented codes refer to addresses 262 - 295.

| | |
|-----|---|
| 202 | Event code for zone restore |
| 203 | Event code for zone 1 |
| 204 | Event code for zone 2 |
| 205 | Event code for zone 3 |
| 206 | Event code for zone 4 |
| 207 | Event code for zone 5 |
| 208 | Event code for zone 6 |
| 209 | Event code for zone 7 |
| 210 | Event code for zone 8 |
| 211 | Event code for zone 9 |
| 212 | Event code for zone 10 |
| 213 | Event code for zone 11 |
| 214 | Event code for zone 12 |
| 215 | Event code for zone 13 |
| 216 | Event code for zone 14 |
| 217 | Event code for zone 15 |
| 218 | Event code for zone 16 |
| 219 | Event code for zone 17 |
| 220 | Event code for zone 18 |
| 221 | Event code for zone 19 |
| 222 | Event code for zone 20 |
| 223 | Event code for zone 21 |
| 224 | Event code for zone 22 |
| 225 | Event code for zone 23 |
| 226 | Event code for zone 24 |
| 227 | Event code for zone 25 |
| 228 | Event code for zone 26 |
| 229 | Event code for zone 27 |
| 230 | Event code for zone 28 |
| 231 | Event code for zone 29 |
| 232 | Event code for zone 30 |
| 233 | Event code for zone 31 |
| 234 | Event code for zone 32 |
| 235 | Event code for opening (disarming) |
| 236 | Event code for normal closing (arming) |
| 237 | Event code for closing with bypassed zones |
| 238 | Event code for perimeter closing (STAY arming) |
| 239 | Event code for LSCP unit tamper |
| 240 | Event code for LSCP unit tamper restore |
| 241 | Event code for wireless unit supervision failure |
| 242 | Event code for wireless unit supervision restore |
| 243 | Event code for wireless unit jamming |
| 244 | Event code for wireless unit jamming restore |
| 245 | Event code for failed to open |
| 246 | Event code for failed to close |
| 247 | Event code for AC loss |
| 248 | Event code for AC restore |
| 249 | Event code for low battery |
| 250 | Event code for battery restore |
| 251 | Event code for manual telephone test |
| 252 | Event code for log 75% full |
| 253 | Event code for clock change or completion of remote programming |

| | |
|-----|---|
| 254 | Event code for user initiated bell cutoff |
| 255 | Event code for “E” button |
| 256 | Event code for “F” button |
| 257 | Event code for “P” button |
| 258 | Event code for keypad emergency restore |
| 259 | Event code for duress |
| 260 | Event code for periodic test <i>Note: This event code is reported with user code 0.</i> |
| 261 | Event code for system initialization |

ADDRESSES 262 - 295: EVENT ORIENTED EVENT CODE TABLE

The following is a guide to programming event codes.

- 00 - No message is sent for this event.
- 0X (where X is any number between 1 and 9) - A 1 digit event code is sent for this event.
- XX - A 2 digit event code is sent for this event.
- X0 - For opening and closing events, the 0 is replaced with the user number. For zone events, the 0 is replaced with the zone ID. For system events, such as AC loss, both digits are regarded as the event code.

The following are the addresses for event oriented event code messages. For zone oriented codes refer to addresses 202 – 261.

| | |
|-----|---|
| 262 | Event code for zone in alarm |
| 263 | Event code for zone alarm restore |
| 264 | Event code for zone trouble (battery low) |
| 265 | Event code for zone trouble restore (battery low) |
| 266 | Event code for zone tamper |
| 267 | Event code for zone tamper restore |
| 268 | Event code for zone emergency alarm |
| 269 | Event code for opening (disarming) |
| 270 | Event code for normal closing (arming) |
| 271 | Event code for closing with bypassed zones |
| 272 | Event code for perimeter closing |
| 273 | Event code for LSCP unit tamper |
| 274 | Event code for LSCP unit tamper restore |
| 275 | Event code for wireless unit supervision failure |
| 276 | Event code for wireless unit supervision restore |
| 277 | Event code for wireless unit jamming |
| 278 | Event code for wireless unit jamming restore |
| 279 | Event code for failed to open |
| 280 | Event code for failed to close |
| 281 | Event code for AC loss |
| 282 | Event code for AC restore |
| 283 | Event code for low battery |
| 284 | Event code for battery restore |
| 285 | Event code for manual telephone test |
| 286 | Event code for log 75% full |
| 287 | Event code for clock change or completion of remote programming |
| 288 | Event code for user initiated bell cutoff |
| 289 | Event code for “E” button |
| 290 | Event code for “F” button |
| 291 | Event code for “P” button |
| 292 | Event code for keypad emergency restore |
| 293 | Event code for duress |
| 294 | Event code for periodic test <i>Note: This event code is reported with user code 0.</i> |
| 295 | Event code for system initialization |

ADDRESSES 296-310: EVENT & MESSAGE ROUTING

Event code messages can be routed in several ways. Each telephone number can be set as a primary, back-up or duplicate number for a specific group of events. The control panel can also be programmed not to dial a certain telephone number for certain events. A primary number is the first number the control panel dials when an event occurs. If the control panel is unsuccessful in dialing the primary number, the back-up number is dialed. A duplicate number is used to report the same event to several locations and is dialed only after a successful transmission has been made to the primary number. Routing also determines whether messages are entered in the log, whether the bell is activated and which bell pattern is sounded.

296-298 Message routing for burglary alarm messages

(alarm, alarm restore, holdup, keypad emergency, police)

296 Message routing for burglary alarms, telephone numbers 4 and 3

Telephone #4

First digit value:

- 0 - Do not call this telephone number
- 1 - Primary telephone number
- 2 - Duplicate telephone number
- 3 - Backup telephone number

Note: If the Follow-me feature is used, define this number as a duplicate telephone number.

Telephone #3

Second digit value:

- 0 - Do not call this telephone number
- 1 - Primary telephone number
- 2 - Duplicate telephone number
- 3 - Backup telephone number

297 Message routing for burglary alarms, telephone numbers 2 and 1

Telephone #2

First digit value:

- 0 - Do not call this telephone number
- 1 - Primary telephone number
- 2 - Duplicate telephone number
- 3 - Backup telephone number

Telephone #1

Second digit value:

- 0 - Do not call this telephone number
- 1 - Primary telephone number
- 2 - Duplicate telephone number
- 3 - Backup telephone number

298 Bell Delay, Log Entry and Bell Activation for burglary alarms

Select from the following options to set the 20 second bell delay, log entry and bell activation for burglary alarms.

Bell Delay and Log Entry

First digit value:

- 0 – No bell delay, no log
- 1 – Bell delay, no log
- 8 – No bell delay, log
- 9 – Bell delay, log

Bell Activation

Second digit value:

- 0 – No bell
- 1 – Bell pattern 1
- 2 – Bell pattern 2
- 3 – Steady bell

Note: Pulsed signals are available for special alarm types.

299-301 Message routing for LSCP unit trouble messages Same as addresses 296 – 298

302-304 Message routings for fire trouble messages Same as addresses 296 - 298
Note: Fire zones have a fixed bell pattern - pulse on and off for half a second in groups of three with an interval of one and a half seconds between each sequence. The cut-off time is fixed at four minutes.

305-307 Message routings for open and close messages (duress, opening, normal closing, perimeter closing, forced arming, failed to open and failed to close)
Same as addresses 296 – 298

308-310 Message routings for service messages (telephone test, ac loss and restore, low battery, battery restore, bell cutoff, clock change, log 75% full and periodic test)
Same as addresses 296 – 298

311-377 Not available.

ADDRESSES 378-381: EXIT TIMERS

The exit delay timer determines the amount of time the user has to leave the premises after arming the system. Enter a hexadecimal value number between 0 - 255 seconds using the hexadecimal conversion chart in Appendix B. **Note: Zones defined as Emergency/Hold-up, Tamper, Fire and Verified Fire will ignore the exit delay even if defined.**

- 378 Exit Delay Time for System 1**
- 379 Exit Delay Time for System 2**
- 380 Exit Delay Time for System 3**
- 381 Exit Delay Time for System 4**

ADDRESSES 382-384: ENTRY TIMERS

The entry delay timer determines the amount of time the user has to disarm the system before an alarm is generated. Three different entry delay times can be programmed and each zone can be assigned one of these delays. Enter a hexadecimal value number between 0 - 255 seconds using the hexadecimal conversion chart in Appendix B. **Note: Zones defined as Emergency/Hold-up, Tamper, Fire and Verified Fire will ignore the entry delay even if defined.**

- 382 Entry Delay 1**
- 383 Entry Delay 2**
- 384 Entry Delay 3**

ADDRESSES 385-387: PULSE COUNTERS

Using a pulse counter helps eliminate false alarms and is very similar to pulse count selection in motion detectors. When a pulse counter is assigned to a zone, the zone must be opened the selected number of times, in the designated time period, before the panel generates an alarm.

Second digit value:

- | | |
|--|--|
| 0 - 2 pulses within a period of 2 seconds | 4 - 3 pulses within a period of 5 seconds |
| 1 - 2 pulses within a period of 5 seconds | 5 - 3 pulses within a period of 10 seconds |
| 2 - 2 pulses within a period of 10 seconds | 6 - 3 pulses within a period of 20 seconds |
| 3 - 2 pulses within a period of 20 seconds | 7 - 3 pulses within a period of 30 seconds |

Note: A pulse counter should not be assigned to a zone using door contacts.

- 385 Pulse Counter Option 1**
- 386 Pulse Counter Option 2**
- 387 Pulse Counter Option 3**

ADDRESS 388: SWINGER PARAMETERS

Swinger mode.

Defining a zone as a Swinger limits the number of alarms that can be generated from that zone within a pre-programmed amount of time. Each zone can be programmed with its Swinger option active. All swinger zones are assigned the same swinger setting.

Example: If zone 1 is set as a swinger at address 001, and swinger mode is set to “1 alarm in 1 arming period” at address 388, only one alarm will be accepted from this zone within every one arming period. Any subsequent alarms from this zone are ignored by the system.

388 00 - 1 alarm in 1 arming period

or enter a hexadecimal value at this address from 01 to FF. Each hexadecimal unit represents a period of 15 minutes. This can be calculated by multiplying the required amount of time by 4 then converting to hexadecimal using the conversion chart in Appendix B. For example, to program one alarm every three and a quarter hours, enter 0D. $3\frac{1}{4} \times 4 = 13$, $13 = D$.

ADDRESSES 389-409: OPENING & CLOSING WINDOWS

For each day of the week, one of three opening window options and four closing window options can be set. These are programmable at addresses 389-395. To program a window time and size, use the following table. The times listed in the rows indicate the center of the window. The size of the window can be selected from the columns. For example, a window starting at 7:30 and ending at 8:30 will be programmed as 41 (8:00 ±30 minutes). **Note: To disable an opening or closing window option, enter FF.**

| Time | ±15 min | ±30 min | ±45 min | ±60 min |
|-------|---------|---------|---------|---------|
| 00:00 | | | | |
| 00:30 | 04 | 05 | | |
| 01:00 | 08 | 09 | 0A | 0B |
| 01:30 | 0C | 0D | 0E | 0F |
| 02:00 | 10 | 11 | 12 | 13 |
| 02:30 | 14 | 15 | 16 | 17 |
| 03:00 | 18 | 19 | 1A | 1B |
| 03:30 | 1C | 1D | 1E | 1F |
| 04:00 | 20 | 21 | 22 | 23 |
| 04:30 | 24 | 25 | 26 | 27 |
| 05:00 | 28 | 29 | 2A | 2B |
| 05:30 | 2C | 2D | 2E | 2F |
| 06:00 | 30 | 31 | 32 | 33 |
| 06:30 | 34 | 35 | 36 | 37 |
| 07:00 | 38 | 39 | 3A | 3B |
| 07:30 | 3C | 3D | 3E | 3F |
| 08:00 | 40 | 41 | 42 | 43 |
| 08:30 | 44 | 45 | 46 | 47 |
| 09:00 | 48 | 49 | 4A | 4B |
| 09:30 | 4C | 4D | 4E | 4F |
| 10:00 | 50 | 51 | 52 | 53 |
| 10:30 | 54 | 55 | 56 | 57 |
| 11:00 | 58 | 59 | 5A | 5B |
| 11:30 | 5C | 5D | 5E | 5F |

| Time | ±15 min | ±30 min | ±45 min | ±60 min |
|-------|---------|---------|---------|---------|
| 12:00 | 60 | 61 | 62 | 63 |
| 12:30 | 64 | 65 | 66 | 67 |
| 13:00 | 68 | 69 | 6A | 6B |
| 13:30 | 6C | 6D | 6E | 6F |
| 14:00 | 70 | 71 | 72 | 73 |
| 14:30 | 74 | 75 | 76 | 77 |
| 15:00 | 78 | 79 | 7A | 7B |
| 15:30 | 7C | 7D | 7E | 7F |
| 16:00 | 80 | 81 | 82 | 83 |
| 16:30 | 84 | 85 | 86 | 87 |
| 17:00 | 88 | 89 | 8A | 8B |
| 17:30 | 8C | 8D | 8E | 8F |
| 18:00 | 90 | 91 | 92 | 93 |
| 18:30 | 94 | 95 | 96 | 97 |
| 19:00 | 98 | 99 | 9A | 9B |
| 19:30 | 9C | 9D | 9E | 9F |
| 20:00 | A0 | A1 | A2 | A3 |
| 20:30 | A4 | A5 | A6 | A7 |
| 21:00 | A8 | A9 | AA | AB |
| 21:30 | AC | AD | AE | AF |
| 22:00 | B0 | B1 | B2 | B3 |
| 22:30 | B4 | B5 | B6 | B7 |
| 23:00 | B8 | B9 | BA | |
| 23:30 | BC | | | |

- 389 Opening Window Option 1
- 390 Opening Window Option 2
- 391 Opening Window Option 3
- 392 Closing Window Option 1
- 393 Closing Window Option 2
- 394 Closing Window Option 3
- 395 Closing Window Option 4

396-409 Daily Windows Settings

A different combination of windows can be programmed for each day of the week and for each system. Select a value for each digit of these addresses from the following table.

| Open | Close | Value |
|------------|-------|-------|
| No Windows | | 0 |
| #1 | #1 | 4 |
| | #2 | 5 |
| | #3 | 6 |
| | #4 | 7 |
| #2 | #1 | 8 |
| | #2 | 9 |

| Open | Close | Value |
|------|-------|-------|
| #2 | #3 | A |
| | #4 | B |
| #3 | #1 | C |
| | #2 | D |
| | #3 | E |
| | #4 | F |

MONDAY

396 *First digit value:* System 1 *Second digit value:* System 2
 397 *First digit value:* System 3 *Second digit value:* System 4

TUESDAY

398 *First digit value:* System 1 *Second digit value:* System 2
 399 *First digit value:* System 3 *Second digit value:* System 4

WEDNESDAY

400 *First digit value:* System 1 *Second digit value:* System 2
 401 *First digit value:* System 3 *Second digit value:* System 4

THURSDAY

402 *First digit value:* System 1 *Second digit value:* System 2
 403 *First digit value:* System 3 *Second digit value:* System 4

FRIDAY

404 *First digit value:* System 1 *Second digit value:* System 2
 405 *First digit value:* System 3 *Second digit value:* System 4

SATURDAY

406 *First digit value:* System 1 *Second digit value:* System 2
 407 *First digit value:* System 3 *Second digit value:* System 4

SUNDAY

408 *First digit value:* System 1 *Second digit value:* System 2
 409 *First digit value:* System 3 *Second digit value:* System 4

ADDRESS 410: BELL CUT-OFF

410 Enter the desired bell cut-off time, 1 - 255(FF) seconds.

ADDRESS 411: DEALER LOCKOUT & LATCH KEY

411 **First Digit: Latch Key**

When the latch key feature is activated a 'Failed to Open' or 'Failed to Close' message is sent to the central station if MENU/NEXT is not pressed after the user code is entered during an opening or closing window. This feature is used in conjunction with the opening/closing windows programmed at addresses 389 – 409.

First digit value:

- 0 - Latch key not activated
- 1 - Latch key activated

Second Digit: Dealer Lockout

For a period of 60 seconds following power-up, the dealer code '1,2,3,4,5,6' is valid. This code can be cancelled by activating dealer lockout. **Note: Once activated, the dealer lockout option is irreversible.**

Second digit value:

- 0 - Dealer lockout not activated
- 1 - Dealer lockout activated

ADDRESSES 412-475: CUSTOM LCD ZONE DESCRIPTORS

Four of the descriptors that can be assigned to each zone (see Address 000) can be customized to suit a specific installation. A total of sixteen characters, including spaces, can be entered for each LCD custom zone descriptor using the following table. Each custom zone descriptor is entered in a series of consecutive addresses. It is recommended to fill in all 16 characters for each custom zone descriptor.

Example: To set Custom Zone Descriptor 1 as “ABC”, enter 41, 42, 43, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20 at addresses 412-427, respectively.

| | | | | | | | | | | | |
|----|-------|----|---|----|---|----|---|----|---|----|---|
| 20 | space | 2D | - | 41 | A | 4E | N | 61 | A | 6E | n |
| 21 | ! | 2E | . | 42 | B | 4F | O | 62 | B | 6F | o |
| 22 | “ | 2F | / | 43 | C | 50 | P | 63 | C | 70 | p |
| 23 | # | 30 | 0 | 44 | D | 51 | Q | 64 | D | 71 | q |
| 25 | % | 31 | 1 | 45 | E | 52 | R | 65 | E | 72 | r |
| 26 | & | 32 | 2 | 46 | F | 53 | S | 66 | F | 73 | s |
| 27 | ' | 33 | 3 | 47 | G | 54 | T | 67 | G | 74 | t |
| 28 | (| 34 | 4 | 48 | H | 55 | U | 68 | H | 75 | u |
| 29 |) | 35 | 5 | 49 | I | 56 | V | 69 | I | 76 | v |
| 2A | * | 36 | 6 | 4A | J | 57 | W | 6A | J | 77 | w |
| 2B | + | 37 | 7 | 4B | K | 58 | X | 6B | K | 78 | x |
| 2C | , | 38 | 8 | 4C | L | 59 | Y | 6C | L | 79 | y |
| | | 39 | 9 | 4D | M | 5A | Z | 6D | M | 7A | z |

- 412-427 Custom Zone Descriptor 1
- 428-443 Custom Zone Descriptor 2
- 444-459 Custom Zone Descriptor 3
- 460-475 Custom Zone Descriptor 4

ADDRESS 476: ZONE EXPANDERS

476 Definition of Zone Expander Modules. When installing zone expanders (hardwire or wireless), the system must be programmed to recognize the existence of the additional zones. All defined zone expanders are supervised. If a zone expander is disconnected, all its zones are opened. **Note: Following any modifications made to this address, disconnect and re-apply both AC and battery power to enable the changes to take effect.**

Zone Expander

To install any combination of zone expander units enter the data value from the following table.

Second digit value

| Units | Value | Units | Value | Units | Value | Units | Value |
|----------|-------|-------|-------|-------|-------|---------|-------|
| A(1-8) | 1 | A,B | 3 | B,D | A | A,C,D | D |
| B(9-16) | 2 | A,C | 5 | C,D | C | B,C,D | E |
| C(17-24) | 4 | A,D | 9 | A,B,C | 7 | A,B,C,D | F |
| D(25-32) | 8 | B,C | 6 | A,B,D | B | | |

Wireless Zone Expander

To add wireless zone expander units, enter a value from the following table. A wireless zone expander must be defined in both the first and second digits of this address. For example, if three zone expanders ABC are added to the control panel and B is wireless, the data entered at this address should be 27.

First digit value

| W/L Units | Value | W/L Units | Value | W/L Units | Value | W/L Units | Value |
|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
| A(1-8) | 1 | A,B | 3 | B,D | A | A,C,D | D |
| B(9-16) | 2 | A,C | 5 | C,D | C | B,C,D | E |
| C(17-24) | 4 | A,D | 9 | A,B,C | 7 | A,B,C,D | F |
| D(25-32) | 8 | B,C | 6 | A,B,D | B | | |

ADDRESSES 477-490: RELAY PARAMETERS

Output relay modules are optional add-on peripherals that are connected to the control panel via the LSCP bus. Relays can be used for various purposes including status indication, additional bell outputs and access control. Each individual relay is programmed at two addresses.

477 Operation Mode Relay 1(and onboard relay K5)

Each relay can be programmed to activate or deactivate based on specific events or status conditions. The following table lists the various relay operation mode options. **Note: In some cases, changing the relay's mode type can activate the relay for the duration of the cutoff time.**

| Type | Description | Activated by | Deactivated by | Value |
|--------|-------------------|--|---|-------|
| Access | Access control | Pressing SELECT, 9 on the keypad | Cutoff | 00 |
| Status | System 1 armed | System 1 armed | System disarmed/ Cutoff | 01 |
| Status | System 2 armed | System 2 armed | System disarmed/ Cutoff | 02 |
| Status | System 3 armed | System 3 armed | System disarmed/ Cutoff | 03 |
| Status | System 4 armed | System 4 armed | System disarmed/ Cutoff | 04 |
| Event | Silent alarm | Keypad Emergency, Police Emergency, Duress | Cutoff | 05 |
| Event | System 1 alarm | System 1 alarm | Cutoff / System 1 disarm | 06 |
| Event | System 2 alarm | System 2 alarm | Cutoff / System 2 disarm | 07 |
| Event | System 3 alarm | System 3 alarm | Cutoff / System 3 disarm | 08 |
| Event | System 4 alarm | System 4 alarm | Cutoff / System 4 disarm | 09 |
| Event | Fire alarm | Fire zone in alarm or keypad fire emergency | Cutoff | 0A |
| Status | System 1 status | System 1 Not ready, Pulsing if system has bypassed zones | System 1 ready without bypassed zones | 0C |
| Status | System 2 status | System 2 Not ready, Pulsing if system has bypassed zones | System 2 ready without bypassed zones | 0D |
| Status | System 3 status | System 3 Not ready, Pulsing if system has bypassed zones | System 3 ready without bypassed zones | 0E |
| Status | System 4 status | System 4 Not ready, Pulsing if system has bypassed zones | System 4 ready without bypassed zones | 0F |
| Status | Power trouble | System power trouble (AC or Battery) | System power is OK | 10 |
| Event | Telephone trouble | Failed communication attempt (only activated after all message attempts have failed) | Cutoff | 11 |
| Status | Pre-alarm | Pre-Alarm (if 20 sec bell delay) | Bell activated/Bell Cancel/ System disarm | 12 |
| Status | Exit/Entry sys. 1 | System 1 in Exit/Entry | System 1 not in Exit/Entry | 14 |
| Status | Exit/Entry sys. 2 | System 2 in Exit/Entry | System 2 not in Exit/Entry | 15 |
| Status | Exit/Entry sys. 3 | System 3 in Exit/Entry | System 3 not in Exit/Entry | 16 |
| Status | Exit/Entry sys. 4 | System 4 in Exit/Entry | System 4 not in Exit/Entry | 17 |
| Status | Bell | Bell activated | Bell deactivated | 18 |

478 Output and Cutoff Relay 1 (and onboard relay K5)

The second address concerns the following characteristics of the relay's operation.

- Polarity – the relay's status when deactivated
- Output – how the relay acts when activated
- Cutoff – the duration for which the relay is activated

First digit value:

| Output | Polarity | Value |
|----------------------------------|--------------|-------|
| Steady relay | Normally Off | 0 |
| | Normally On | 1 |
| 1sec ON , 1sec OFF | Normally Off | 2 |
| | Normally On | 3 |

Note: After changing the relay polarity, press SELECT 8,3 or activate the relay via the remote programming software.

Certain operation modes deactivate the relay according to changes in system status, others deactivate the relay according to the cutoff time or a combination of the two. For example, if a system is in alarm, the relay is activated until the system is disarmed or after the programmed cutoff time, whichever happens first.

If the cutoff is set to be continuous, the relay is activated until manually reset using the command SELECT 8, 3.

Entering 0 – No Operation, cancels the operation of the relay even if the relay mode is not dependent on cutoff time.

Second digit value:

| Cutoff | Value | Cutoff | Value | Cutoff | Value | Cutoff | Value |
|---------|-------|---------|-------|---------|-------|------------|-------|
| None | 0 | 20 secs | 4 | 2 mins | 8 | 15 mins | C |
| 2 secs | 1 | 30 secs | 5 | 3 mins | 9 | 20 mins | D |
| 5 secs | 2 | 60 secs | 6 | 5 mins | A | ---- | E |
| 10 secs | 3 | 90 secs | 7 | 10 mins | B | Continuous | F |

479-480 Same as above for Relay 2 (and onboard relay K6)

481-482 Same as above for Relay 3

483-484 Same as above for Relay 4

485-486 Same as above for Relay 5

487-488 Same as above for Relay 6

489-490 Same as above for Relay 7

ADDRESSES 491-493: PERIODIC TEST

Periodic test transmissions are used to check the system's ability to communicate with the central station. The frequency of these transmissions and the time at which the transmissions take place are programmed at these three addresses.

491 Periodic Test Timer Frequency

Select the frequency of the periodic test transmissions from the following table.

Note: The control panel automatically adjusts for a leap year.

| Setting | Value | Setting | Value | Setting | Value |
|--------------------------|-------|---------------------------|-------|---------------------------|-------|
| No Test | 00 | Monthly, 5 th | 2E | Monthly, 21 st | AE |
| 1 Hour Test | 01 | Monthly, 6 th | 36 | Monthly, 22 nd | B6 |
| 6 Hour Test | 02 | Monthly, 7 th | 3E | Monthly, 23 rd | BE |
| 12 Hour Test | 03 | Monthly, 8 th | 46 | Monthly, 24 th | C6 |
| Daily Test | 04 | Monthly, 9 th | 4E | Monthly, 25 th | CE |
| Weekly, Monday | 05 | Monthly, 10 th | 56 | Monthly, 26 th | D6 |
| Weekly, Tuesday | 0D | Monthly, 11 th | 5E | Monthly, 27 th | DE |
| Weekly, Wednesday | 15 | Monthly, 12 th | 66 | Monthly, 28 th | E6 |
| Weekly, Thursday | 1D | Monthly, 13 th | 6E | Monthly, 29 th | EE |
| Weekly, Friday | 25 | Monthly, 14 th | 76 | (except Feb) | |
| Weekly, Saturday | 2D | Monthly, 15 th | 7E | Monthly, 30 th | F6 |
| Weekly, Sunday | 35 | Monthly, 16 th | 86 | (except Feb) | |
| Monthly, 1 st | 0E | Monthly, 17 th | 8E | Monthly, 31 st | FE |
| Monthly, 2 nd | 16 | Monthly, 18 th | 96 | (except Feb, Apr, | |
| Monthly, 3 rd | 1E | Monthly, 19 th | 9E | Jun, Sep & Nov) | |
| Monthly, 4 th | 26 | Monthly, 20 th | A6 | | |

492 Periodic Test Time Setting (Hour)

The periodic test time is set at two addresses, 492 and 493. The hour at which the test will take place is programmed at this address. **Note: If either the 6-hour or 12-hour test has been programmed this is the time of the first test. If the 1-hour test has been programmed, only the minutes setting needs to be defined (Address 493).**

Select a two digit value from the following table:

| Time | Value | Time | Value | Time | Value | Time | Value |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 00:00 | 00 | 06:00 | 06 | 12:00 | 0C | 18:00 | 12 |
| 01:00 | 01 | 07:00 | 07 | 13:00 | 0D | 19:00 | 13 |
| 02:00 | 02 | 08:00 | 08 | 14:00 | 0E | 20:00 | 14 |
| 03:00 | 03 | 09:00 | 09 | 15:00 | 0F | 21:00 | 15 |
| 04:00 | 04 | 10:00 | 0A | 16:00 | 10 | 22:00 | 16 |
| 05:00 | 05 | 11:00 | 0B | 17:00 | 11 | 23:00 | 17 |

493 Periodic Test Time Setting (Minutes)

Enter a hexadecimal value between 0-59 using the hexadecimal conversion chart in Appendix B.

ADDRESSES 494-496: MISCELLANEOUS

494 First Digit: Arming Options

The first digit of this address offers the following options:

- Auto unbyypass upon disarm – the control panel automatically unbyypasses all bypassed zones when the system is disarmed.
- Send ‘Arm’ only if all systems armed – the control panel only sends the arming event code message when all existing sub-systems are armed. The panel sends this message with the account number for the last sub-system to be armed.
- Auto arming at the end of closing window – if the system has not been armed by the end of the closing window, the control panel automatically arms itself.
- Force Arm – the panel can be programmed to enable or disable forced arming.

First digit value:

| Auto unbyypass upon disarm | Send ‘Arm’ only if all systems armed | Auto arming at the end of closing window | Force Arm | Value | |
|----------------------------|--------------------------------------|--|-----------|-------|---|
| No | No | No | No | 0 | |
| | | Yes | Yes | 1 | |
| | Yes | No | No | No | 2 |
| | | | Yes | Yes | 3 |
| | | Yes | No | No | 4 |
| | | | Yes | Yes | 5 |
| Yes | No | No | No | 6 | |
| | | Yes | Yes | 7 | |
| | Yes | No | No | No | 8 |
| | | | Yes | Yes | 9 |
| | | Yes | No | No | A |
| | | | Yes | Yes | B |
| Yes | Yes | No | No | C | |
| | | Yes | Yes | D | |
| Yes | Yes | No | No | E | |
| | | Yes | Yes | F | |

Second Digit: Arming Ring

The control panel can be programmed to sound the bell/siren for 1 second on arming each system or only after all sub-systems have been armed.

Second digit value:

- 0 – no arming ring
- 1 – 1 second ring after arming of every system
- 5 – 1 second ring only after all systems are armed

495 First Digit: Detailed Display

The keypad can be programmed to show the detailed display at all times or only when the system is disarmed.

First digit value:

- 0 – Detailed display only when system disarmed.
- 1 – Detailed display at all times.

Second Digit: Fire Sensor Reset and Bell Muting for Listen-In Applications

The second digit of this address concerns the following:

- Power reset for latching smoke detectors – an activated fire sensor can be reset in two ways. The fire sensor can be reset manually (SELECT, 43) or the system can be programmed to automatically reset fire sensors. In both cases, power is restored 15 seconds after the zone has been reset.
- Bell Muting for Listen-In applications – the bell is not sounded until after a message has been sent to the central station. **Note: In the event that the telephone line has been disconnected, the bell is sounded immediately even if bell muting is activated.**

Second digit value:

| Fire Sensor Reset | Bell Muting | Value |
|-------------------|-------------|-------|
| User initiated | Off | 0 |
| | On | 1 |
| Automatic | Off | 2 |
| | On | 3 |

496 First Digit: Police Key Operation and Remote Programming Communication Speed

The following two options are available at the first digit of this address:

- The Police key can be programmed to generate a silent or audible alarm.
- The remote programming speed can be set to either 110 BPS or 300 BPS.

First digit value:

| Remote Programmer tel. Communication speed | Police Key alarm | Value |
|--|------------------|-------|
| 300 BPS | silent | 0 |
| | audible | 4 |
| 110 BPS | silent | 8 |
| | audible | C |

Second Digit: Remote Programming Communication Options

The following options are available at the second digit of this address:

- The panel can be programmed to enable RP access 24 hours a day or only when all of the sub-systems are disarmed.
- The panel can be programmed to enable RP access to be established directly or using the RP callback feature.
- The number of rings after which the panel picks up can be set to 1, 3, 7 or 17 rings

Second digit value:

| Remote Prog. Access | Remote Prog. Comm. | Number of Rings | Value |
|---------------------|--------------------|-----------------|-------|
| 24 hours | direct call | 1 | 0 |
| | | 3 | 1 |
| | | 7 | 2 |
| | | 17 | 3 |
| | callback | 1 | 4 |
| | | 3 | 5 |
| | | 7 | 6 |
| | | 17 | 7 |

| Remote Prog. Access | Remote Prog. Comm. | Number of Rings | Value |
|---------------------|--------------------|-----------------|-------|
| disarmed | direct call | 1 | 8 |
| | | 3 | 9 |
| | | 7 | A |
| | | 17 | B |
| | callback | 1 | C |
| | | 3 | D |
| | | 7 | E |
| | | 17 | F |

ADDRESSES 497-498: AC LOSS & RESTORE

497 AC loss report delay.

The AC loss report delay determines how many minutes the panel will wait after AC power has been lost before transmitting a message to the central station. Select a value in hexadecimal for the AC loss report delay. For hexadecimal value conversions refer to the hexadecimal conversion chart located in Appendix B.

498 AC restore report delay.

The AC restore report delay determines how many minutes the panel will wait after AC power has been regained before transmitting a message to the central station. Select a value in hexadecimal for the AC restore report delay. For hexadecimal value conversions refer to the hexadecimal conversion chart located in Appendix B.

ADDRESS 499: LISTEN-IN TIME OUT

499 Select a value in seconds for the listen in time out. Select a value in hexadecimal from the hexadecimal conversion chart located in Appendix B.

APPENDIX A: TROUBLESHOOTING

The following is a guide to troubleshooting, using the Summit 3208GLD security system.

| <u>Problem</u> | <u>Reason</u> | <u>Action</u> |
|--|---|---|
| Telephone line failure appears when the telephone line is not connected (control panel used as a local alarm). | Event codes programmed at values above "00". | Program event codes as "00" and power down the panel. |
| Keypad display not responsive. | A Keypad at a different address has been activated. | Wait for time out to activate, or press "AWAY" key. |
| No display on keypad. | Auxiliary power fuse blown. | Replace fuse. |
| Constant low battery message on display. | Faulty battery or battery fuse blown. | Replace battery at least every five years or replace the blown fuse. |
| No sound from the bell. | Blown bell fuse or wrong parameters. | Replace fuse or program the bell parameters correctly. |
| Zone expander does not give any zone indications. | Zone expander supervision is not programmed. | Reprogram parameters. |
| A single output does not react properly. | Programming error. | Correct the programming for the specific relay. |
| Wrong alarm or trouble indicator from the zone. | Wrong zone loop type selected. | Reprogram zone type parameters for the correct loop type. |
| Failure to communicate with the central station. | Wrong telephone number, wrong event code, wrong protocol, or wrong telephone line parameters. | Consult with the central station owner/operator and program the appropriate parameters. |
| Failure to communicate with the central station. | Incorrect telephone line communication. | Incoming line should be connected to terminals 3 and 4. Outgoing telephone line to terminals 1 and 2. |

APPENDIX B: HEXADECIMAL CONVERSION CHART

The following is a decimal (i.e. number of hours, minutes, etc.) to hexadecimal conversion chart:

| Dec | Hex | Dec | Hex | Dec | Hex | Dec | Hex | Dec | Hex | Dec | Hex |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0 | 0 | 43 | 2B | 86 | 56 | 129 | 81 | 172 | AC | 215 | D7 |
| 1 | 1 | 44 | 2C | 87 | 57 | 130 | 82 | 173 | AD | 216 | D8 |
| 2 | 2 | 45 | 2D | 88 | 58 | 131 | 83 | 174 | AE | 217 | D9 |
| 3 | 3 | 46 | 2E | 89 | 59 | 132 | 84 | 175 | AF | 218 | DA |
| 4 | 4 | 47 | 2F | 90 | 5A | 133 | 85 | 176 | B0 | 219 | DB |
| 5 | 5 | 48 | 30 | 91 | 5B | 134 | 86 | 177 | B1 | 220 | DC |
| 6 | 6 | 49 | 31 | 92 | 5C | 135 | 87 | 178 | B2 | 221 | DD |
| 7 | 7 | 50 | 32 | 93 | 5D | 136 | 88 | 179 | B3 | 222 | DE |
| 8 | 8 | 51 | 33 | 94 | 5E | 137 | 89 | 180 | B4 | 223 | DF |
| 9 | 9 | 52 | 34 | 95 | 5F | 138 | 8A | 181 | B5 | 224 | E0 |
| 10 | A | 53 | 35 | 96 | 60 | 139 | 8B | 182 | B6 | 225 | E1 |
| 11 | B | 54 | 36 | 97 | 61 | 140 | 8C | 183 | B7 | 226 | E2 |
| 12 | C | 55 | 37 | 98 | 62 | 141 | 8D | 184 | B8 | 227 | E3 |
| 13 | D | 56 | 38 | 99 | 63 | 142 | 8E | 185 | B9 | 228 | E4 |
| 14 | E | 57 | 39 | 100 | 64 | 143 | 8F | 186 | BA | 229 | E5 |
| 15 | F | 58 | 3A | 101 | 65 | 144 | 90 | 187 | BB | 230 | E6 |
| 16 | 10 | 59 | 3B | 102 | 66 | 145 | 91 | 188 | BC | 231 | E7 |
| 17 | 11 | 60 | 3C | 103 | 67 | 146 | 92 | 189 | BD | 232 | E8 |
| 18 | 12 | 61 | 3D | 104 | 68 | 147 | 93 | 190 | BE | 233 | E9 |
| 19 | 13 | 62 | 3E | 105 | 69 | 148 | 94 | 191 | BF | 234 | EA |
| 20 | 14 | 63 | 3F | 106 | 6A | 149 | 95 | 192 | C0 | 235 | EB |
| 21 | 15 | 64 | 40 | 107 | 6B | 150 | 96 | 193 | C1 | 236 | EC |
| 22 | 16 | 65 | 41 | 108 | 6C | 151 | 97 | 194 | C2 | 237 | ED |
| 23 | 17 | 66 | 42 | 109 | 6D | 152 | 98 | 195 | C3 | 238 | EE |
| 24 | 18 | 67 | 43 | 110 | 6E | 153 | 99 | 196 | C4 | 239 | EF |
| 25 | 19 | 68 | 44 | 111 | 6F | 154 | 9A | 197 | C5 | 240 | F0 |
| 26 | 1A | 69 | 45 | 112 | 70 | 155 | 9B | 198 | C6 | 241 | F1 |
| 27 | 1B | 70 | 46 | 113 | 71 | 156 | 9C | 199 | C7 | 242 | F2 |
| 28 | 1C | 71 | 47 | 114 | 72 | 157 | 9D | 200 | C8 | 243 | F3 |
| 29 | 1D | 72 | 48 | 115 | 73 | 158 | 9E | 201 | C9 | 244 | F4 |
| 30 | 1E | 73 | 49 | 116 | 74 | 159 | 9F | 202 | CA | 245 | F5 |
| 31 | 1F | 74 | 4A | 117 | 75 | 160 | A0 | 203 | CB | 246 | F6 |
| 32 | 20 | 75 | 4B | 118 | 76 | 161 | A1 | 204 | CC | 247 | F7 |
| 33 | 21 | 76 | 4C | 119 | 77 | 162 | A2 | 205 | CD | 248 | F8 |
| 34 | 22 | 77 | 4D | 120 | 78 | 163 | A3 | 206 | CE | 249 | F9 |
| 35 | 23 | 78 | 4E | 121 | 79 | 164 | A4 | 207 | CF | 250 | FA |
| 36 | 24 | 79 | 4F | 122 | 7A | 165 | A5 | 208 | D0 | 251 | FB |
| 37 | 25 | 80 | 50 | 123 | 7B | 166 | A6 | 209 | D1 | 252 | FC |
| 38 | 26 | 81 | 51 | 124 | 7C | 167 | A7 | 210 | D2 | 253 | FD |
| 39 | 27 | 82 | 52 | 125 | 7D | 168 | A8 | 211 | D3 | 254 | FE |
| 40 | 28 | 83 | 53 | 126 | 7E | 169 | A9 | 212 | D4 | 255 | FF |
| 41 | 29 | 84 | 54 | 127 | 7F | 170 | AA | 213 | D5 | | |
| 42 | 2A | 85 | 55 | 128 | 80 | 171 | AB | 214 | D6 | | |

| | |
|--------------------------------------|--|
| 24 hr zone | A zone which is always active regardless of whether the system is armed or disarmed. Opening a 24hr zone always generates an alarm. |
| -A- | |
| AC Loss | The disruption of AC power. |
| Account Number | The number transmitted to the central station along with an event code to identify the source of the event. |
| Answering Machine Override | The method used in RP communication allowing the control panel to share a telephone line with answering machines, fax machines etc. |
| Armed | The state during which the control panel is activated. In most cases, when the system is armed, a tripped zone generates an alarm |
| Arming Ring | A one-second ring sounded by the bell, which indicates that the system has been armed. |
| Audible Alarm | An alarm that activates the siren when generated. |
| Authorization Level | Each user code is assigned an authorization level. Authorization levels grant or limit access to certain system operations. |
| Auto Arming | The system arms itself automatically at the end of a closing window – see <i>Closing Window</i> . |
| Auxiliary Power Output | The Auxiliary Power Output supplies power to detectors and additional detection devices. |
| Away Arming | Arming the entire system, both interior and perimeter zones. |
| -B- | |
| Backup | The telephone number dialed if the panel fails to communicate with the primary telephone number. |
| Battery Test | A test that checks the control panel's battery backup. A battery test is performed automatically every 30 seconds and can also be initiated manually. |
| Bell | Audible alarm device activated by a DC voltage. |
| Bell Cancel | A keypad operation that immediately stops the bell/siren. |
| Bell Cut-Off | The programmable amount of time the bell/siren is sounded when an audible alarm is generated. |
| Bell Muting | A feature used in Listen-in applications where the bell is not sounded until after a message has been sent to the central station. |
| Bell Test | A manual test that sounds the bell for 1 second. |
| Bypassed Zone | Alarms from a bypassed zone are ignored by the system. |
| -C- | |
| Callback | A toll saver feature used during remote programming. The RP software establishes communication with the control panel, the control panel hangs up and calls the RP Callback telephone number programmed at addresses 172-179. |
| Central Station Communication | The sending of event codes and account numbers to the central monitoring station. |
| Chime | A series of tones sounded by the keypad. Each zone can be programmed to sound a chime when opened. Chimes also indicate system trouble conditions such as low battery or telephone line failure. |
| Clear Log | The operation that deletes all the events recorded in the event log. |
| Closing Window | A programmed period of time in which the user usually arms the system. Arming the system during a closing window does not send a closing message to the central station. The system can also be programmed to arm itself automatically at the end of a closing window. |
| Command Code | A sequence of numbers that perform an operation when entered after pressing SELECT. |
| Common Zone | A zone defined as Common belongs to all systems. The zone is designed for partitioned systems where, for example, a corridor is shared by more than one protected area. An alarm will only be generated from a common zone if all the sub-systems are armed. |

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| Communication Protocol | <i>See Protocol.</i> |
| Conditional Zone | A zone that will not generate an alarm during the entry delay. |
| -D- | |
| Dealer Lockout | An option that disables the default restore code "123456". |
| Default Program | The default program contains the factory parameter settings. For typical installations, the default program minimizes the amount of programming that needs to be performed by the installer. |
| Detailed Display | The keypads for each sub-system can be programmed to show a detailed or summarized display of the system. The detailed display includes system troubles, sub-system status, time/date and zone status. |
| Disarmed | The state in which the system is deactivated. When the system is disarmed, only 24hr zones and distress keys are capable of generating an alarm. |
| Distress Keys | The Emergency, Fire and Police keys (E, F and P) that generate an alarm when pressed with the MENU/NEXT key. |
| Duplicate Number | A telephone number which is dialed in addition to the primary number. |
| Duress Code | This code sends an event message to the central station, notifying that the user has been forced to arm or disarm their system. |
| -E- | |
| EEPROM | Non-volatile memory. |
| Emergency Holdup Zone | A 24hr zone designed for use with panic buttons and glassbreak detectors – <i>see 24hr zones.</i> |
| End Of Line Resistor | A loop type used to prevent tampering with the cables connecting detection devices. Any attempt to cut the cable results in an alarm signal. |
| Entry Delay | Zones can be programmed to initiate an entry delay when opened. The entry delay is a pre-programmed amount of time that allows the user enough time to enter the protected area and disarm the system without generating an alarm. |
| Event Code | The code transmitted to the central station when an event occurs. |
| Event Log | A record of the last 100 events that the system has undergone. |
| Exit Delay | The amount of time the user has to exit the protected area without generating an alarm. |
| -F- | |
| Failed To Close | The message sent to the central station when the system has still not been armed at the end of a closing window – <i>see Closing Window.</i> |
| Failed to open | The message sent to the central station when the system has still not been disarmed at the end of an opening window – <i>see Opening Window.</i> |
| Fire Zone | A 24hr zone designed for use with smoke detectors – <i>see Verified Fire Zone.</i> |
| Follow Me | A communication format typically used with telephone #4. The control panel dials the follow me number to notify the user of events that have occurred. |
| Forced Arming | Arming the system when zones are still open. If zones are still open at the end of the exit delay an alarm is generated. |
| -I- | |
| Immediate Arming | The canceling of the exit/entry delay when the system is armed. This is done by pressing the "*" during the delay. |
| Interior Zone | Zones of this type are not armed when the "STAY" key is pressed – <i>see Stay Arming.</i> |
| -K- | |
| Keypad Unit Address | The hardware configuration that identifies the keypad to the control panel. A keypad can be configured to one of 8 unit addresses. |
| Keyswitch | A key operated switch used for arming and disarming the system. Keyswitches can be used to either Stay or Away arm the system. |

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| -L- | |
| Latch Key | A feature designed to inform parents whether their children have arrived home safely. The panel sends a message to the central station and/or the follow-me number if MENU/NEXT is not pressed during the appropriate window. |
| Late to Close | A command that extends the closing window period if the system needs to be armed later than usual – see <i>Closing Window</i> . |
| -M- | |
| Manual Programming | Programming from either a LCD or LED keypad. |
| MENU/NEXT key | The key used for scrolling through menus on the LCD keypad. Also used with the “*”, “0” or “#” keys to send distress messages and to register Latch Key arrivals. |
| Message Routing | The designated destinations of event messages. The system can be programmed to send different groups of events to up to four central stations. |
| -N- | |
| Normal Arming | See <i>Away Arming</i> . |
| Normally Closed | A loop type that generates an alarm when opened. |
| Normally Open | A loop type that generates an alarm when closed. |
| -O- | |
| Off Hook | A direct connection between a PC and the control panel enabling on-site programming using the RP software. |
| Opening Window | A programmed period of time in which the user usually disarms the system. Disarming the system during an opening window does not send an opening message to the central station. |
| Output Relay | Programmable outputs that react to different system events and status conditions. |
| -P- | |
| Partitioned System | A system that is divided into a number of independent sub-systems. |
| Perimeter Arming | See <i>Stay Arming</i> . |
| Perimeter Zone | A zone intended for detection devices that protect the outer perimeter of the premises. These zones are used in conjunction – see <i>Stay Arming</i> . |
| Periodic Test | Test transmission used to check the control panel’s capability to communicate with the central station. |
| Primary Number | The first telephone number the panel attempts to dial when an event occurs. |
| Protocol | Communication format used in event message transmissions to the central station. |
| Pulse Count | The setting that determines the number of times a zone must be opened within a certain time period in order to generate an alarm. |
| -R- | |
| Remote Programming | Programming the control panel from a PC using the RP software. Remote Programming can be performed from a remote location or on-site – see <i>Off Hook</i> . |
| Relay Module | A peripheral add-on module providing a number of output relays – see <i>Output Relay</i> . |
| -S- | |
| SELECT Key | The key used to choose menu items and enter command codes. |
| Silent Alarm | A silent alarm sends an event message to the central station without sounding the siren. |
| Stay Arming | Arming perimeter zones only, enabling unrestricted movement within the protected area. |
| Stop Communications | A command that immediately stops the control panel transmitting to the central station and clears all pending messages. |
| Sub-System | An independent division of the system – see <i>Partitioned System</i> . |

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| Summarized Display | A keypad display mode without zone status – see <i>Detailed Display</i> . |
| Supervised Keypad Swinger Zone | A supervised keypad generates an alarm when disconnected from the control panel. A zone from which the number of alarms sent within a predetermined time period is limited. |
| -T- | |
| Telephone Communicator Test | A manual test that checks the control panel's ability to communicate with all programmed telephone numbers. |
| Toll Saver | See <i>Callback</i> . |
| Transistor Module | Peripheral add-on module that uses transistors instead of relays to provide programmable outputs – See <i>Output Relay</i> . |
| Trouble Tones | The tones sounded by the keypad when certain trouble conditions occur. |
| -U- | |
| Up/Downloading Software | See <i>Remote Programming</i> . |
| Unbypass | Restoral of a bypassed zone – see <i>Bypassed Zone</i> . |
| Unpartitioned System | Operating the control panel as one system – see <i>Partitioned System</i> . |
| Unsupervised Keypad | An unsupervised keypad will not generate an alarm if disconnected from the control panel. Unsupervised keypads are used when the installation requires that more than one keypad be configured to the same unit address – see <i>Keypad Unit Address</i> . |
| User Code | The code that grants access to certain operational capabilities. The operations available to a specific user are dependent on the authorization level assigned to their user code – see <i>Authorization Level</i> . |
| -V- | |
| View Log | An LCD keypad operation that allows the user to view a record of the last 100 events the system has undergone. |
| Verified Fire Zone | A fire zone which will not sound an alarm and/or send a message to the central station unless a second detection has been made within a minute of the first. |
| -W- | |
| Walk Test | A test that allows detection devices to be tested without generating an alarm. This does not apply to devices connected to 24hr zones. |
| -Z- | |
| Zone | The physical connection of a detector to the control panel. |
| Zone Chime | A command that causes the keypad to chime if a specific zone is opened. |
| Zone Descriptor | A name assigned to a zone that appears on the LCD keypad whenever an event occurs related to the zone. |
| Zone Expander | A peripheral add-on module that adds extra zones to the control panel. Can be either wired or wireless. |
| Zone ID | The number associated with messages regarding a specific zone (event oriented event code table). |

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