

Installation Guide

MASOL40I-0002B

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SOLUTION 40

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Features

Listed below are the main features of the SOLUTION 40 control panel.

- 40 Fully Programmable Zones
- Fire Alarm Verification
- 32 PIN codes
- 32 RF Keyfobs
- 4 On-Board Outputs (Max 20 Outputs)
- Supervised Siren Driver
- 8 Programmable Schedules (Skeds)
- Partitionable (1 – 4 Areas)
- Built-In Dialler (reports (Contact ID, SIA, Securitel and Pager formats)
- Up To 8 Fully Supervised Keypads
- Keyswitch Input (programmable)
- 254 History Event Memory
- EMI / Lightning Transient Protection
- Programmable Via Text Keypad
- Remote Programmable Via RPS Upload/Download Software
- Alarm Event Memory
- Automatic Test Reports
- Built-In Telephone Line Fail Monitor
- Securitel Compatible

Specifications

Voltage Input

Primary	18 VAC / 22 W class 2 plug-in transformer
Secondary	12 VDC, 7 Ah sealed lead acid rechargeable battery

Current Requirements

Panel	100 mA
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Power Outputs

Continuous Power	600 mA at 11.5 VDC – 12.4 VDC (Primary supply source only)
Secondary Source	1500 mA (Total with both primary and secondary source combined)

Battery Discharge/Recharge Schedule

Discharge Cycle

AC Off	Keypads indicate trouble condition, AC Fail report sent as programmed
13.8 VDC	Charging float level
12.1 VDC	Low Battery trouble at keypads, low battery report sent as programmed
10.2 VDC	Panel operation will not be guaranteed at voltages below 10.2 VDC.

Recharge Cycle

AC On	Panel restarts, battery charging begins. AC restore report sent as programmed, AC trouble clears from keypads.
13.0 VDC	Battery restore report sent, battery trouble clears from keypads.
13.8 VDC	Battery float charged.

Minimum Operating Voltage	10.2 VDC
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Option bus	12 VDC, 305 m (1000 ft) of 22 AWG (diam 0.644 mm) cable.
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Telephone Connections	RJ-12 Socket (6P4C)
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Environmental

Temperature	0° to 50° C (+32° to +122° F)
Relative Humidity	5 to 85% at 30°C (86°F) non-condensing.

Compatible Keypads	CP7446 – LCD text keypad
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Compatible Accessories

DX2010 – Zone Expansion Module
 DX3010 – Relay Output Expansion Module
 DX3020 – X-10 Interface Module
 DX4010 – RS232 Serial Output Module
 RF3227E – RF Receiver (433 MHz)
 RF3332E/3334E – RF Keyfob (2 Button / 4 Button)
 RF280THSE – RF Smoke Detector
 RF940E – Supervised PIR
 RF835E – Supervised Tritech PIR
 RF3401E – Supervised Door/Window Contact
 PK32 – Programming Key

Compatible Enclosures CX1010 - Enclosure (supplied with SOLUTION 40)

Control Panel Assembly

The SOLUTION 40 control panel is pre-assembled from the factory. You should receive the following parts with your control panel.

Literature Pack

MA7240AQ Quick Reference Guide
MA7240AO Operators Manual

Assembly

CX1010 Metal Case
Two 6x3/8 Phillips Pan Zinc Plate Screw
Two PCB Clips
CC7240 PCB
Resistor Pack

Includes:

1 x Red Battery Lead (20 AWG – 300 mm)
1 x Black Battery Lead (20 AWG – 300 mm)
1 x 2-Way Shunt With Handle
2 x (6x11/2) Phillips Pan Head Zinc Plate Screw
1 x Telephone Cable (6P4C to AUS 605 - Four Wire Conductor Wire)
10 x 2K2 – 0.25W +/- 1% Metal Resistors

Order Separately

MA7240I Installation Manual
RPS-INTL RPS (Remote Programming Software)

Wiring Diagram

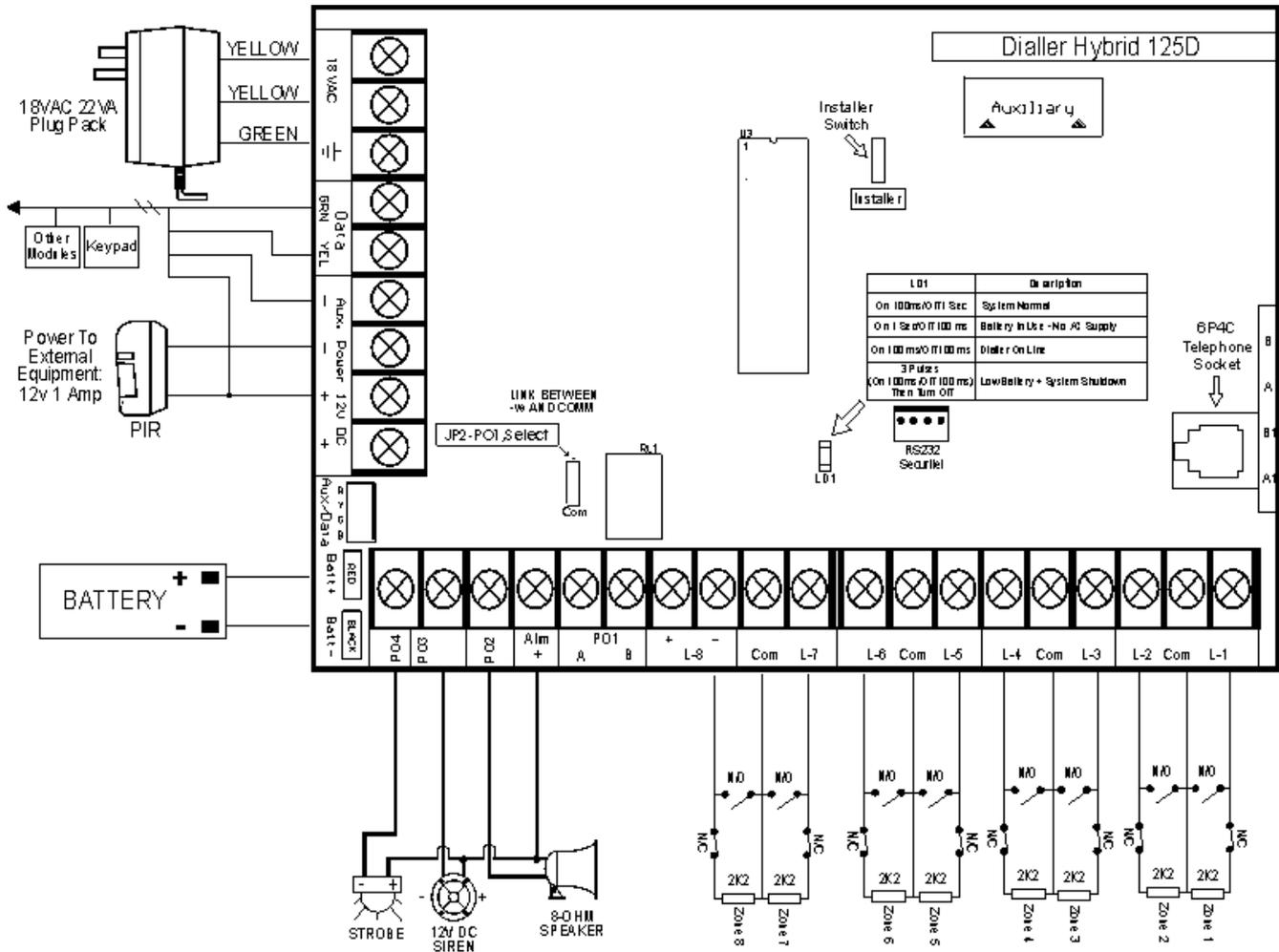


Figure 1: SOLUTION 40 Wiring Diagram

Telephone Line Connections

TELECOM CONNECTION DIAGRAM FOR AUSTRALIA

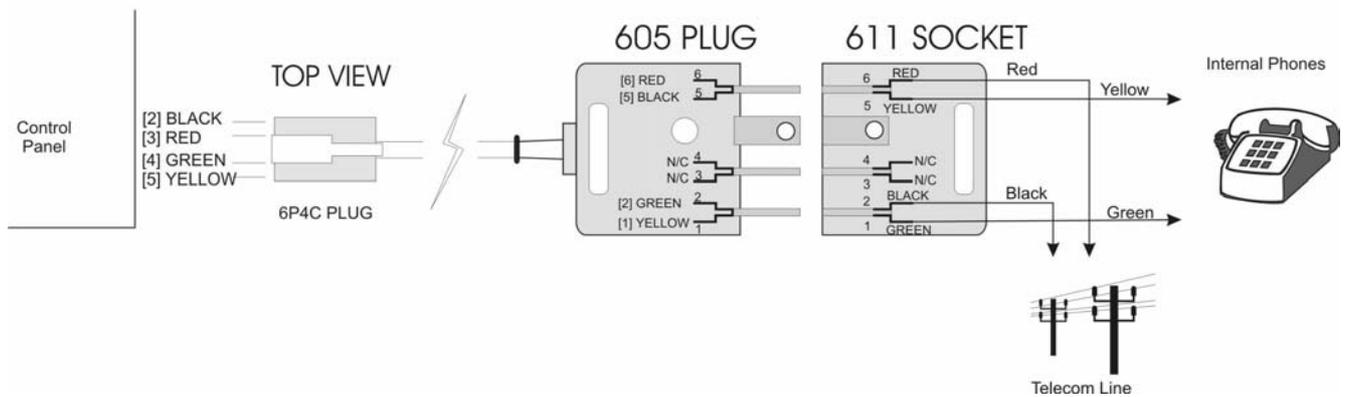


Figure 2: Telephone Line Connection Diagram (Australia)

Installation

The control panel is shipped already mounted in the enclosure. Hardware to mount the enclosure to a wall is not included.

Mounting The Enclosure

1. Use the metal enclosure as a template and mark the top and bottom mounting holes on the mounting surface.
2. Knockout the desired wire entrances on the enclosure.
3. Pre-start the mounting screws (not supplied) for these holes and slide the enclosure onto these mounting screws so that the screws move up into the thinner section of the holes (See Figure 3).
4. Tighten the screws.
5. Screw in the remaining two screws into the bottom mounting holes (see Figure 3).

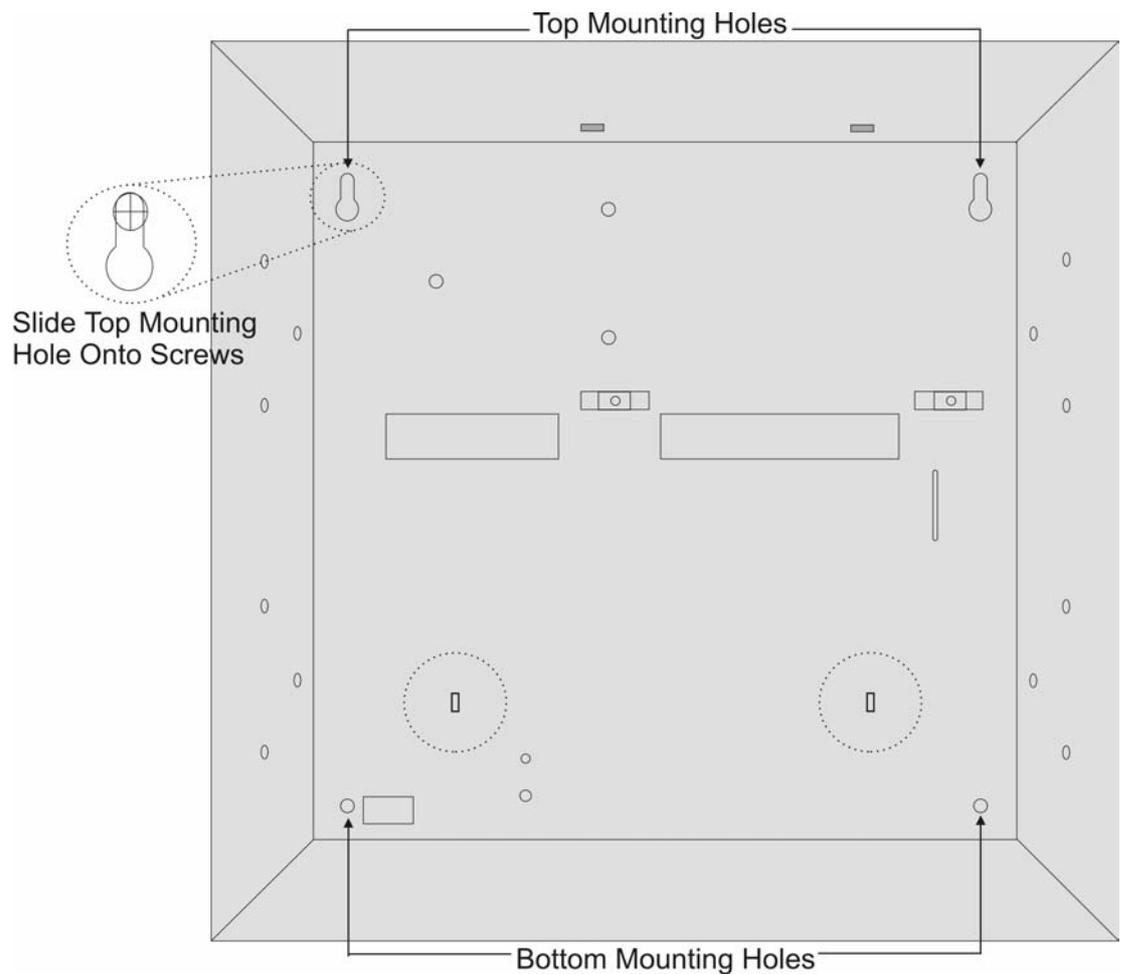


Figure 3: Enclosure Mounting Hole Locations

Installing The Control Panel PCB

Note

The PCB (printed circuit board) contains static-sensitive components and must be handled with care. Follow anti-static procedures when handling the PCB.

Electro Magnetic Interference (EMI) may occur if you install the system or run system wires near any of the following:

- Computer network system
- Electrical Lines, Fluorescent fixtures or telephone lines
- Ham radio Transmitter Site
- Heavy Machinery and Motors
- High Voltage Electrical Equipment of Transformers
- PBX Telephone System
- Public Service (Police, Fire etc) Using Radio Communications
- Radio Station Transmitter Site or Other Broadcast Station Equipment
- Welding Shop

If you think that EMI may be a problem, use shielded cable. The drain wire for the shielded cable must have continuity from the earth ground terminal on the panel to the end of the wire run. If continuity is not maintained, the shielded cable may aggravate potential noise problems rather than eliminate them.

Connecting the drain wire to ground at any place other than the earth ground terminal may also produce problems. If you cut the drain wire to install devices, be certain to splice it together. Carefully solder and tape all splices.

1. Place the PCB mounting clips on the appropriate enclosure standoff's (see Figure 4).
2. Slide the PCB into the mounting slots at the top of the enclosure and then secure it with the two screws provided.

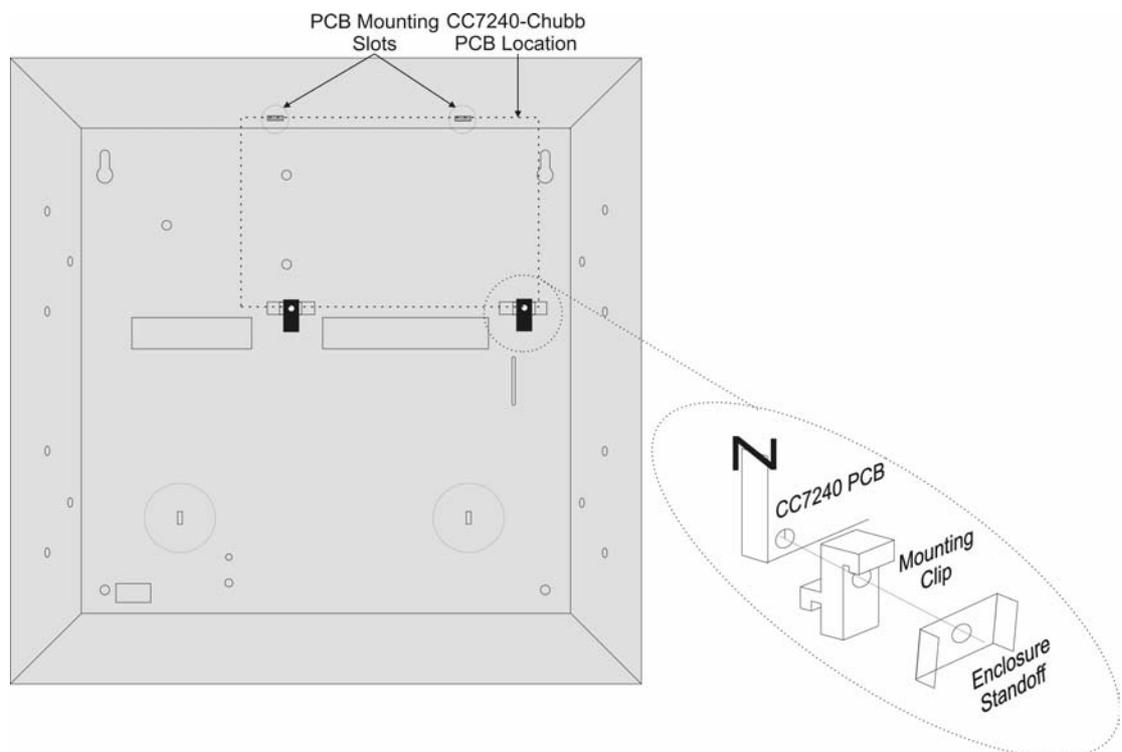


Figure 4: Installing The PCB

Mounting Expander Boards

The control panel enclosure has the ability to mount up to a combination of four zone expanders (DX2010) and/or output modules (DX3010) in the locations provided in Figure 5.

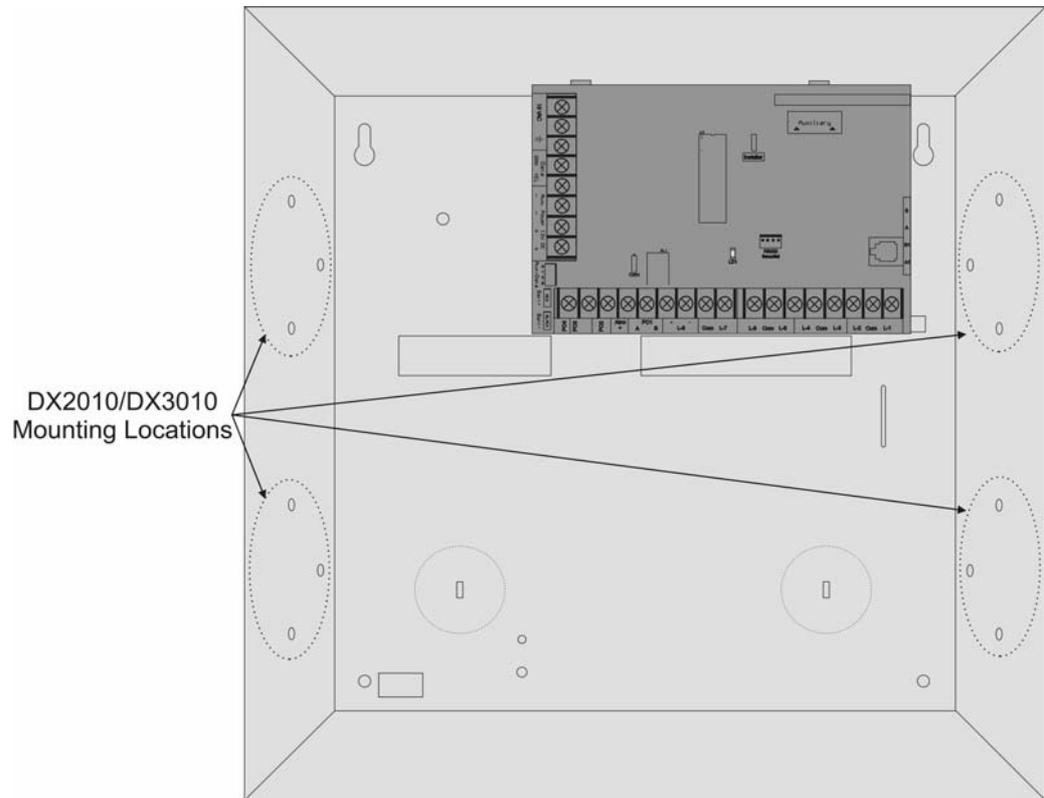


Figure 5: DX2010/DX3010 Enclosure Mounting Locations

Text Keypad User's Guide

This user's guide shows you how to use and maintain your security system. It covers basic functions, such as arming and disarming the system.

The functions describe in this guide are programmed by your security company. Some of them may not be included in your system. Some of the functions covered may require you to enter your PIN Code.

Introduction

Your system helps to secure life, property, and investments against fire, theft and bodily harm. It consists of a keypad (or keypads), sensors, such as motion detectors or devices located on doors and windows, and other sensing devices designed to detect the presence of smoke or combustion. Each of these devices is connected to a sophisticated electronic "brain", which processes all events registered by the system.

Control of your security system is achieved through the keypad, which offers a variety of basic and advanced features. Its function, versatility, and ease of operation, make it ideal for home or office. The keypad is tailored to meet your individual needs. Moreover, it has been designed with you, the user, in mind.

Security System Basics

What Is A Zone?

A "Zone" is a detection device, or group of devices connected to your security system. Zones are identified by the area they monitor, such as a front door, bedroom window or hallway.

What Is A "Faulted" Zone ?

When a zone (such as a door or window) is closed, it is said to be "normal". When the door or window is open, the zone is said to be "faulted" or not normal. When you arm your system, you will usually want all of the zones in your system to be normal, although, you can arm your system with faulted zones by using the Bypass Zones command.

You can see whether there are faulted zones by pressing the [Select] key when the system is off.

Are All Zones the Same ?

No. There are two basic types of zones, Controlled and 24-hour.

Controlled Zones

Controlled zones respond to alarm conditions depending upon whether the system is armed or disarmed. They are programmed to either respond instantly to alarm conditions or to provide a delay for you to reach the keypad and disarm the system. Various controlled zones may be located throughout your premises.

When you arm your system, you have the option of arming all controlled zones (Away mode), or just some of the controlled zones (Stay mode). Refer to and , on page 17 for more information.

24-Hour Zones

24-hour zones are always on, even when the system is disarmed. There are two types of 24-hour zones, fire zones and non-fire zones.

Fire zones

Fire zones only monitor fire detection devices, such as smoke detectors. They are always on and cannot be turned off.

Non-fire 24-Hour Zones

Non-fire 24-hour zones are always on and cannot be turned off.

Away

When you arm your system in Away mode, you are turning on all controlled zones, both interior (motion detectors) and perimeter (doors and windows of the building).

Stay

When you arm your system in Stay mode, you are turning on only a portion of the controlled zones. Your alarm company determines the particular zones included in this portion. Stay zones may include only the perimeter (doors and windows) or your system, or sensors in other areas of your premises. Check with your security company to learn which zones are Part zones.

Keypad Keys

Your keypad has 20 keys. These keys perform various functions as described below:

1, 2, 3, 4, 5, 6, 7, 8, 9, 0 The numeric keys allow you to enter your PIN Code when required.

Select Use the Select and the numeric keys to enter commands. Numerous commands are detailed throughout the user guide.

Away The Away key allows you to arm your system in Away mode. Refer to page 25 for more information on Arming The System in Away mode, (Command 1)

Stay The Stay key allows you to arm your system in Stay mode. Refer to page 26 for more information on Arming The System in Stay mode, (Command 2)

No Delay The No Delay key allows you to arm your system in Away or Stay mode with no entry delay. Refer to page 29 for more information on Arming The System With No Entry Delay.

Bypass The Bypass key allows you to bypass one or more zones. Refer to page 34 for information on Bypassing Zones.

***** Press the * key to advance to the next display (when available).

A An emergency function (Fire, Panic or Emergency Alarms) may be assigned to this key by your security company. Press this key twice to activate the special function. Your security company will label each key accordingly.

B An emergency function (Fire, Panic or Emergency Alarms) may be assigned to this key by your security company. Press this key twice to activate the special function. Your security company will label each key accordingly.

C An emergency function (Fire, Panic or Emergency Alarms) may be assigned to this key by your security company. Press this key twice to activate the special function. Your security company will label each key accordingly.

Use this key to exit menu options or move forward in programming.

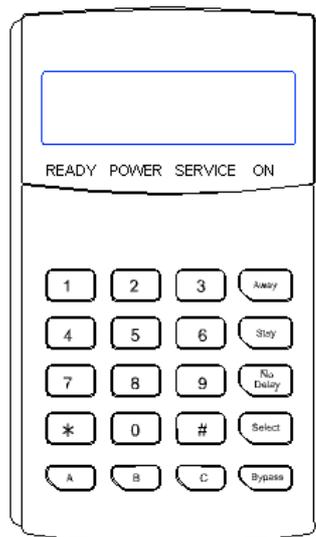


Figure 6: CP9 Keypad

Status LED's

The following table describes the function of each of the status LED's.

LED	Display	Condition
READY	On Steady	Area is ready to arm
	Off	Area has zone faulted or Area is armed in Away mode
POWER	On Steady	AC mains supply is normal
	Slow Flash	AC mains supply has failed
SERVICE	Off	No system trouble exists
	Slow Flash	A system trouble condition exists
	Fast Flash	System Testing
ON	Off	System is disarmed
	On Steady	Area is armed with delay
	Slow Flash	Area is armed without delay

Table 1: Status LED's

Area Icons

The keypad can display the status of each of the four areas via the area icons located on the bottom row of the LCD display. At factory default only the Area 1 icon will display. Area icons 2 to 4 are only applicable when the system has been partitioned into multiple areas. The following table describes the function of each of the area icons.

Icon	Condition
On Steady	The corresponding Area is in Away or Stay (Armed) mode.
Off	The corresponding Area is disarmed with all zones normal.
Slow Flash	A zone in the corresponding area has been bypassed or is in a trouble condition.
Fast Flash	The corresponding area has a zone in alarm.

Table 2: Area Icon Display

Keypad Tones

Your keypad emits several distinct tones and displays text to alert you to system events. Additional bells or sirens may also be connected to your system. Bells or sirens mounted on the exterior of your premises alert neighbours to emergencies and provide an audible guide for police and fire fighters.

Fire Alarm Tone When a fire zone activates, the keypad emits a repeated warble tone (on for one second, then briefly off).

Burglary Alarm Tone When a burglary zone activates while your system is armed, your keypad emits a continuous warble tone. It sounds for the time set by your security company.

Trouble Tone When a system component is not functioning properly, your keypad emits a repeated warble tone (on briefly, followed by a pause, followed by the warble tone). If the problem is with a zone, the keypad display indicates which zone is faulted.

Key Press Tone Pressing any key on the keypad sounds a short pip, indicating that the key press is accepted.

Entry Delay Tone When you enter the premises through a zone programmed for entry delay, the keypad emits a repeating short beep, long beep tone to remind you to disarm your system. If the system is not disarmed before the entry delay expires, an alarm condition will sound and a report may be sent to your alarm company.

Exit Delay Tone After you arm your system, the keypad emits an intermittent beep tone and counts down the exit delay time. If you don't exit before the delay time expires and an exit delay door is faulted, an alarm occurs.

Error Tone If you press an incorrect key, your keypad emits an error tone to indicate an invalid entry. The error tone is the same warble tone as the Trouble Tone, but is not repeated.

OK Tone Indicates that a keypad entry is accepted; for example, that a correct PIN Code has been entered. The keypad emits a single, high-pitched beep tone for one second.

Chime Tone The keypad emits a tone to alert you when any Chimed zone is faulted. The tone varies in duration, depending upon the Chime Tones selected. Refer to page 52 for more information on Selecting Chime Tone, (Command 62).

Commands

Commands allow you to carry out various tasks (For example, add or delete PIN codes, set the date and time or test the system etc.) Each command is detailed throughout the user guide.

Commands will be written like the following: **Command 63**. To enter this command, you would first press the **[Select]** key, followed by the **[6]** key and then the **[3]** key.

System Events

Your system responds to four types of alarm events. If more than one event occurs, your system sorts them into one of four groups. The groups (highest in priority first) are: Fire Alarms, Burglary Alarms, Fire Troubles and Non-Fire Troubles.

Fire Alarms

Fire alarms are the highest priority events. When a fire zone activates, your keypad emits a warble tone that is on for one second, then briefly off (repeatedly). The tone sounds for the time set by your security company. Evacuate all occupants and investigate for smoke or fire. Ensure that all occupants know the difference between the burglary tone and the fire tone.

Burglary Alarms

Burglary alarms are the second priority. When a burglary zone activates while your system is armed, your keypad emits a constant warble tone. The tone sounds for the time set by your security company.

The keypad display shows each burglary zone that went into alarm. Press the [*] key to manually scroll the list if you wish.

Fire Trouble Events

When a fire trouble (such as a loose wire) occurs, your keypad emits a trouble tone, which is a warble tone that is on briefly, then followed by a pause, followed by the warble tone (repeatedly).

The keypad displays the SYSTEM TROUBLE message. Refer to page 43 for more information on Checking System Troubles, (Command 4) to determine the nature of the trouble.

Non-Fire Trouble Events

When a trouble event such as a power failure occurs, your keypad emits a trouble tone, which is a warble tone that is on briefly, followed by a pause, followed by the warble tone (repeatedly).

The keypad displays the SYSTEM TROUBLE message. Refer to page 43 for more information on Checking System Troubles, (Command 4) to determine the nature of the trouble.

How Your System Reports Alarms

Your security system may be programmed to send reports to your security company. Once the report is complete, the system returns the telephone to normal operation (check with your security company).

Your system makes repeated attempts to send reports to your security company. If your system fails to report, the keypad will signal a system trouble. Refer to page 43 for more information on Checking System Troubles, (Command 4) to determine the nature of the trouble.

Note

If your telephone service is interrupted, your security system cannot send reports to your security company unless it has an alternate means of transmitting them.

Checking System Status

When the system is Off, pressing the Command key shows the current system status. The following messages may appear:

System OK.	Indicates that the system is ready to be armed.
System Trouble! Press 4 to view.	Indicates that there is a system trouble. Refer to page 43 for more information on Checking System Troubles, (Command 4) to determine the nature of the trouble.
Zones bypassed. Press 0 to view.	Indicates that the system has zones that have been bypassed. Refer to page 34 for information on Bypassing Zones.
Zones faulted. Press 0 to view.	Indicates that the system has zones faulted. Refer to page 33 for information on Viewing Faulted Zones, (Command 0)

RF Keyfobs

The SOLUTION 40 control panel can be programmed with up to a maximum of 32 RF keyfobs. Each RF keyfob is assigned automatically to a PIN Code (eg. RF keyfob 1 will operate with the same authority level and area assignment as PIN Code 1). Only the security company can program the RF keyfobs. Each RF keyfob is supervised for low battery conditions. Figure 7 and Figure 8 below outlines each key function of the RF keyfobs.

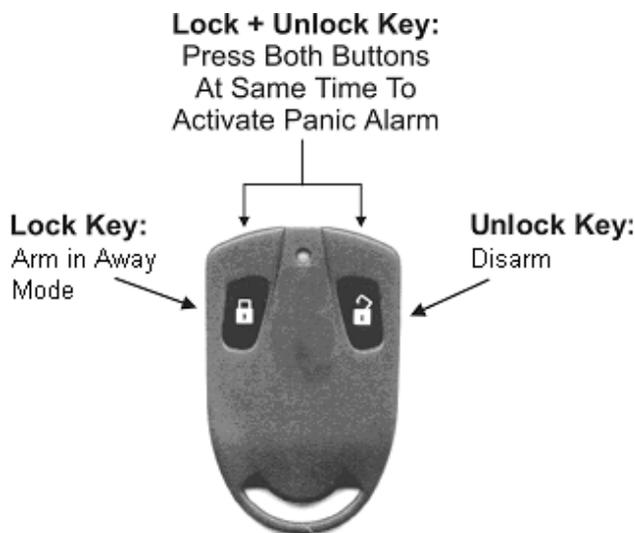


Figure 7: Two Button RF Keyfob (RF3332E)

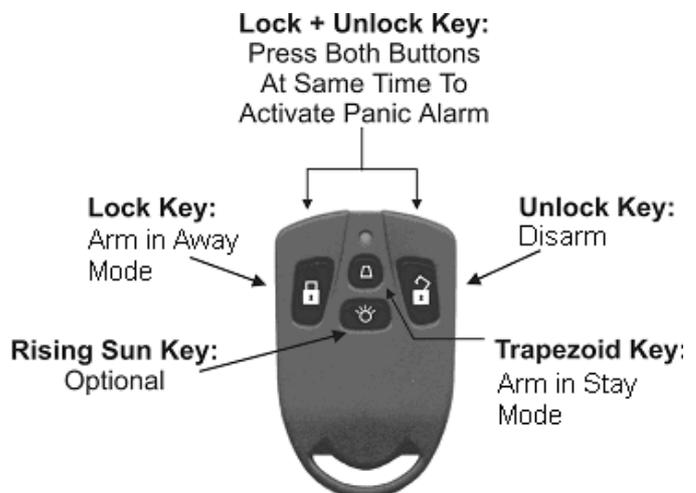


Figure 8: Four Button RF Keyfob (RF3334E)

Silencing Alarms

When there is an alarm, the alarm tone sounds and the zone (or zones) in alarm are shown in the display. If you enter your PIN Code before the system dials your security company, the alarm report is cancelled.

1. The zone in alarm is shown on the display:

```
Alarm Zn 4
Living Room
```

```
Enter PIN to
silence alarm.
```

2. Enter your PIN Code to silence the alarm and disarm the system (if it was armed). If not, an alarm report is sent to your alarm company. To determine whether this alarm was reported, follow the procedure to View Alarm Memory. The display continues to show the zone (or zones) that caused the alarm:

```
Silenced alarms
listed below.
```

```
Alarm Zn 8
Motion Detector
```

```
Clear display of
Silenced alarms,
```

```
By holding the
# key.
```

3. Press and hold the [#] key to remove the alarm messages from the keypad display. Refer to page 44 for information on View Alarm Memory, (Command 40) to see which zones had caused the alarm.

Disarming The System

You disarm your security system by entering your PIN Code. When the system is armed, you must enter through a designated entry door to prevent an alarm. Opening a designated door (For example, Front Door) will start entry time. During entry time, the keypad will emit a pulsing "beep" tone to remind you to disarm the system. Enter your PIN Code before the entry delay time expires to disarm the system .

If you enter through the wrong door or fail to disarm the system before the entry delay time expires, you may cause an alarm. If an alarm occurs, silence the alarm (by entering your PIN Code) and call your security company to let them know that it is not an emergency situation.

1. When the system is armed, the On indicator will display steady. If the system is armed in Away mode, the keypad display will show:

```
Solution 40  
Away mode Armed
```

If the system is Stay, the keypad display will show:

```
Solution 40  
Stay mode Armed
```

1. Enter your PIN Code to disarm the system. The keypad will display the idle text as shown:

```
Solution 40  
Ready to arm.
```


Arming The System in Away mode, (Command 1)

I have this feature.

I do not have this feature.

Use this function to arm the entire system. Once you have pressed the [Away] key, exit time starts to count down. Your security company programs the length of exit delay time. Check with them to find out how much exit time your system has been programmed for.

In this example, exit delay is 45 seconds. You should leave before the exit time expires. Leaving after exit delay expires causes an alarm event.

1. Make sure that all zones are normal (not faulted).
2. Press the [Away] key.
If a valid PIN Code is required, the keypad will prompt you to enter your PIN Code:

```
Please enter  
your PIN.
```

3. Enter your PIN Code.
If your PIN Code is valid and if all zones are normal, exit delay time begins. You should leave now. If your system has a faulted zone, you should return it to normal, or bypass the zones. Refer to page 34 for information on Bypassing Zones.

```
45 seconds to  
armed in Away.
```

During exit delay, you may stop the system from arming by entering your PIN Code.

If you wish to, you may bypass zones by pressing the [Bypass] key. Refer to page 34 for more information on Bypassing Zones. The system prompts you through this procedure:

```
To bypass zones  
press Bypass.
```

If you wish to, you can arm the system in Away mode with no entry delay by pressing the [No Delay] key.

```
For no delay  
press No Delay.
```

If you wish to, you can arm the system in Stay mode by pressing the [Stay] key.

```
To arm in Stay  
Mode press Stay.
```

4. When exit delay time expires, the keypad beeps three times and the system will be armed in Away mode.

```
Solution 40  
Away mode Armed
```

5. To disarm the system enter your PIN Code.

Arming The System in Stay mode, (Command 2)

I have this feature.

I do not have this feature.

Stay mode turns on only part of your system, leaving the rest of the system disarmed. Only the security company can program zones for Stay mode.

Once you've pressed the [Stay] key, exit delay time starts to count down. You should leave all zones that are active when the system is Stay before exit delay time expires. Leaving active zones after exit delay expires causes an alarm event. Use Stay when you want part of your system armed.

1. Make sure that Part zones are normal (not faulted).
2. Press the [Stay] key.
If all Part zones are normal, exit delay time will start. If your system has faulted zones, you should return them to normal, or bypass the zones. Refer to page 34 for information on Bypassing Zones. If a PIN Code is required, the keypad will prompt you to enter a valid PIN Code:

Please enter
your PIN.

3. Enter your PIN Code.
If the PIN Code is valid, the keypad display will scroll the following.

45 seconds to
armed in Stay.

To bypass zones
Press Bypass.

For no delay
Press No Delay.

Press Away to
switch to

Away mode

18 seconds to
armed in Stay.

- During exit delay, you may stop the system from arming by entering your PIN Code. If you wish, you can arm the system in Stay mode with no entry delay by pressing the [No Delay] key, or you can bypass zones by pressing the [Bypass key]. You can switch from Stay mode to Away mode by pressing the [Away] key. The keypad display will prompt you through these procedures.
4. During the last 10 seconds of the exit delay timer, the keypad buzzer will sound two short beeps every second and the display warns that the time is expired. When exit time has expired, the keypad will display the system is in Stay mode.

Stay mode.
Armed now!

5. To disarm the system, enter your PIN Code.

Arming The System in Stay Mode 2, (Command 3)

I have this feature.

I do not have this feature.

Stay Mode 2 turns on only part of your system, leaving the rest of the system disarmed. Refer to page 28 to Set Stay 2 Zones, (Command 65). Once you've pressed the [Select]key followed by the [3] key, exit delay time starts to count down. You should leave all zones that are active when the system is in Stay Mode 2 before exit delay time expires. Leaving active zones after exit delay expires causes an alarm event. Use Stay Mode 2 when you want part of your system armed.

1. Make sure that Part zones are normal (not faulted).
2. Press the [Select] [3] to arm the system in Stay 2 Mode.
If a valid PIN Code is required, the keypad will prompt you to enter your PIN Code.

Please enter
your PIN.

3. Enter your PIN Code.
If your PIN Code is valid, the keypad display scrolls the following:

45 seconds to
arm in Stay 2.

To bypass zones
Press Bypass.

For no delay
Press No Delay.

Press Away to
switch to

Away mode

18 seconds to
armed in Stay 2.

During exit delay, you may stop the system from arming by entering your PIN Code. If you wish, you can arm the system in Stay Mode 2 with no entry delay by pressing the [No Delay] key, or you can bypass zones by pressing the [Bypass key]. You can switch from Stay 2 mode to Away mode by pressing the [Away] key. The keypad display will prompt you through these procedures.

4. During the last 10 seconds of the exit delay timer, the keypad buzzer will sound two short beeps every second and the display warns that the time is expired. When exit time has expired, the keypad will display the system is Stay.

Stay 2 mode.
Armed now!

5. To disarm the system, enter your PIN Code.

Set Stay 2 Zones, (Command 65)

I have this feature.

I do not have this feature.

This command allows you to program which zones are active each time you arm the system in Stay 2 mode. This allows you to arm part of the system on to detect intrusion, whilst the remaining part of the system allows you to move freely without sounding an alarm. Refer to page 27 for information on arming the system in Stay 2 mode.

1. Make sure that the system is disarmed (On indicator is off).
2. Press [Select] [6] [5].
If a valid PIN Code is required, the keypad will prompt you to enter your PIN Code:

```
Please enter  
your PIN.
```

3. Enter your PIN Code.
If your PIN Code is valid, the keypad display will scroll which zones can be programmed for Stay 2 mode:

```
Zn 2 Stay 2 No  
Front Door
```

```
Press 2 * for  
Zn 2 Stay 2 Yes
```

```
Zn 3 Stay 2 Yes  
Hallway
```

```
Press 3 * for  
Zn 3 Stay 2 No
```

```
To exit  
Press #.
```

4. Enter the Zone Number (1 - 40) that you want to toggle 'Yes' or 'No' for Stay 2 mode followed by the [*] key. Repeat this step until all zones have been toggled 'Yes' or 'No' for Stay 2 mode (Yes = Active, ready to detect intrusion / No = Non-Active, you can move freely without sounding an alarm).
5. Press the [#] key to exit this command and return to the off display.

Arming The System With No Entry Delay

I have this feature.

I do not have this feature.

Use this command to arm the system in Away mode or Stay mode without entry delay. Remember that arming the system with no delay, allows no entry delay time through the designated entry/exit delay zone (e.g. front door etc).

1. Make sure that all zones are normal (not faulted).
2. Press the [Away] key if you want to arm the system in Away mode. Press the [Stay] key if you want to arm the system in Stay mode. Press [Select][3] if you want to arm the system in Stay 2 mode. If a valid PIN Code is required, the keypad will prompt you to enter a valid PIN Code:

```
Please enter
your PIN.
```

3. Enter your PIN Code.
If your PIN Code is valid, the keypad display will show the following for arming the system in Away mode:

If all zones are normal, the display will show the following for Away:

```
30 seconds to
Away.
```

```
To bypass zones
press Bypass.
```

```
For no delay
press No Delay.
```

If all zones are normal, the display will show the following for Stay or Stay 2:

```
45 seconds to
Arm in Stay.
```

```
To bypass zones
press, Bypass.
```

```
For no delay
press No Delay.
```

4. To arm the system in (Away, Stay or Stay 2) modes with no entry delay, press the [No Delay] key.
5. When the system is in Away mode with no entry delay, the keypad will display the following:

Armed in
Away mode

with No Delay

If the system is armed in Stay or Stay 2 mode with no entry delay, the keypad will display the following:

Armed in
Stay mode

with No Delay

6. To disarm the system , enter your PIN Code.

Arming The System With No Exit Tone (Silent Delay)

I have this feature.

I do not have this feature.

This feature allows you to arm the entire system in Away or Stay mode without exit tones and at the same time, double the exit delay time.

1. Make sure that all zones are normal (not faulted).
2. Press and hold the [Away] key if you want to arm the system in Away mode with no exit tone, press and hold the [Stay] or [2] key if you want to arm the system in Stay mode with no exit tone, or press and hold the [3] key if you want to arm the system in Stay 2 mode with no exit tone. If a valid PIN Code is required, the keypad will prompt you to enter a valid PIN Code:

Please enter
your PIN.

3. Enter your PIN Code.
If your PIN Code is valid, the keypad display will show the following for Away mode:

60 seconds to
Away.

To bypass zones
press Bypass.

For no delay
press No Delay.

If all zones are normal, the display will show the following for Stay or Stay 2:

60 seconds to
Arm in Stay.

To bypass zones
press, Bypass.

For no delay
press No Delay.

4. To disarm the system, enter your PIN Code.

Arming The System, With Zones Faulted (Force Arm)

I have this feature.

I do not have this feature.

The force arm feature is used to arm the system in Away or Stay mode with zones still faulted. Alternatively, if you try to arm your system and there is a faulted zone (door or window open), you can either close it or bypass it prior to arming the system. You can bypass a zone even if it is not faulted.

1. Press the [Away] or [Stay] keys to arm the system in Away or Stay mode.
2. If a zone is faulted, the keypad will display each faulted zone (in this example Zone 5), followed by instructions for bypassing the zone:

```
Zn 5 faulted,  
Zone Text
```

```
To Bypass Zn 5  
Press 5 *.
```

3. To force arm the system Away or Stay, press the [Away] or [Stay] key again. If the keypad prompts you to enter your code, enter your PIN Code.
4. The keypad will now display that you have forced armed the system.

```
Forced Armed!
```

5. The keypad will now scroll through the exit delay text options until the system arms in Away or Stay mode at the end of exit delay.

If a zone becomes faulted after exit delay has already started, the keypad will display the following:

```
Zn 5 faulted.  
Zone Text
```


Viewing Faulted Zones, (Command 0)

I have this feature.

I do not have this feature.

To correctly arm your system, all doors and windows must be normal (not faulted condition). Use this feature to locate faulted zones.

1. Ensure that the system is disarmed (On indicator off).
2. Press the [Select] key. If zones are faulted, the keypad will display:

```
System OK.
```

```
Zones faulted.  
Press 0 to view.
```

3. Press [0] to view faulted zones. If the keypad prompts you to enter your code, enter your PIN Code. The keypad will scroll through all faulted zones:

```
Zn 2 faulted,  
Front Door
```

```
To bypass Zn 2  
Press 2 *.
```

```
Zn 7 faulted,  
Back Door
```

```
To bypass Zn 7  
Press 7 *.
```

4. Now that you know which zones are faulted, you can return them to normal. In this example, you would close the front door and the back door. Alternatively, you may choose to bypass the faulted zones.
5. When the faulted zones have been returned to normal or have been bypassed, the system is ready to be armed.
6. To exit this command, press [#].

Bypassing Zones

I have this feature.

I do not have this feature.

This command allows you to bypass one or more zones before arming the system in Away, Stay or Stay 2 mode. When a zone has been bypassed, assess is allowed into that zone during the armed state without activating an alarm.

Example

You may need to bypass a zone before arming the system when any detection device has become faulty and will cause a false alarm or, when you need to leave a pet inside a particular room where a detection device will detect the pet moving around.

1. Ensure that the system is disarmed (On indicator is Off).
2. Press the [Bypass] key.
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad display will scroll all zones that can be bypassed:

```
Zn 1,
Smoke Detector
```

```
To bypass Zn 1
Press 1 *.
```

```
Zn 2,
Front Door
```

```
To bypass Zn 2
Press 2 *.
```

4. Enter the Zone Number (1 - 40) that you want to bypass followed by the [*] key (For example, If you want to bypass Zone 10, enter [1] [0] [*]). Repeat this step until all zones that need to be bypassed have been programmed.

If a zone is already programmed to be bypassed, the keypad will display:

```
Zn 3,
Hallway
```

```
To unbyypass 3
Press 3 *.
```

If a zone is faulted, the keypad will display:

```
Zn 4 faulted,
Living Room
```

If you attempt to bypass a zone that is not designated as bypassable, the keypad will display:

```
Zn 4 can not
Be bypassed!
```

An error tone will sound from the keypad when you attempt to bypass a zone that has been programmed by your security company as non-bypassable.

5. Press the [#] key to exit this function and return to the off display.

Date and Time, (Command 45)

I have this feature.

I do not have this feature.

This command allows you to program the systems date and time.

1. Press [Select] [4] [5].
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad will display:

```
Please Enter  
Date And Time
```

```
DD/MM/YY HH:MM  
01/01/01 00:01
```

3. Enter the date and time using the (DD, MM, YY, HH, MM) format (i.e. DD = Day of the month, MM = Month of the year, YY = Current year, HH = Hour of the day, MM = Minute of the hour).

Example

If you want to program the 11 June 2003, 08:35 pm for the date and time, you would enter [1] [1] [0] [6] [0] [3] for the date and [2] [0] [3] [5] for the time.

4. After you enter the date and time, the keypad displays the both the date and time you have programmed before returning the keypad to the off state. In this example, if you entered the 11 June 2003 for the date and 8:35 pm for the time, the keypad will display:

```
Current Date  
11/06/03
```

```
Current Time  
20:35
```

The keypad will automatically exit this command.

Changing PIN Codes, (Command 55)

I have this feature.

I do not have this feature.

The Command 55 prohibited by default, to enable Command 55 consult your installer.

This command lets you change your own PIN Code. It is recommended that you write down your old PIN Code and the new one before you begin.

1. Make sure that your system is disarmed (On indicator is off).
2. Press [Select] [5] [5]. The OK tone sounds and the keypad will display:

```
Please enter  
old PIN.
```

3. Enter your current PIN Code. As you enter your PIN Code, the keypad will display:

```
Entering PIN  
***
```

4. If the PIN Code you've entered is valid, you will be prompted to enter your new PIN Code:

```
Please enter  
new PIN.
```

5. Enter a new PIN Code with the same number of digits as your old PIN Code. If the error tone sounds, try a different new PIN Code. As you enter your new PIN Code, the keypad will display:

```
Entering PIN  
***
```

6. If you've entered a valid new PIN Code, the keypad will prompt you to enter the new PIN Code again:

```
Please enter  
new PIN again.
```

7. Enter your new PIN Code again. As you enter your new PIN Code, the keypad will display:

```
Entering PIN  
***
```

8. The keypad will display the following to confirm that you have successfully changed your PIN Code.

```
PIN changed.
```

The keypad will automatically exit this command.

Change Other PIN Codes, (Command 56)

I have this feature.

I do not have this feature.

This command allows those with the applicable authority level to change the PIN Code for each user in the system.

1. Make sure that the system is armed (On indicator is off).
2. Press [Select] [5] [6].
If the keypad prompts you to enter your code, enter your PIN Code..
3. The keypad will scroll the following:

Press 1 to
change PINs.

To change
Authority Level,

press 2.

To change Areas
assigned press 3.

To exit,
Press #.

4. Press [1] to change PIN codes (refer to page 37 to continue)
or
Press [2] to change the PIN Code authority level (refer to page 39 to continue).
or
Press [3] to change the PIN Code area assignment (refer to page 40 to continue).

Your security company should fill in the following:

Authority Level 1 Include These Commands:

Authority Level 2 Include These Commands:

Authority Level 3 Include These Commands:

Authority Level 4 Include These Commands:

Change Other PIN Codes

This page continues from Step 5 on page 37.

5. The keypad will scroll all PIN codes that are available to change:

```
To change PIN 1  
press 1 *.
```

```
To change PIN 2  
press 2 *.
```

```
To exit,  
Press Select
```

6. Enter the PIN Code number (1 - 32) that you want to change followed by the [*] key (eg. Press [2] [*] to change PIN Code 2). The keypad will now prompt you to enter the new PIN Code.

```
Please enter new  
PIN 2.
```

7. Enter the new PIN Code.
If the error tone sounds, try a different new PIN Code. As you enter the new PIN Code, the keypad will display:

```
Entering PIN  
***
```

8. If you've entered a valid new PIN Code, the keypad will prompt you to enter the new PIN Code again.

```
Please enter new  
PIN 2 again.
```

9. Enter the new PIN Code again. As you enter the new PIN Code, the keypad will display:

```
Entering Code  
***
```

10. The keypad will display the following to confirm the PIN Code change.

```
PIN 2 changed.
```

11. The keypad will return you back to Step 5. Press [#] to exit or select another PIN Code to change.

Change PIN Code Authority Level

This page continues from Step 5 on page 37.

You cannot change your own PIN Code authority level.

5. After you press 2 (See Step 4 on page 37), the keypad display will scroll:

```
To change level
for PIN 3,
```

```
Press 3 *.
```

```
To change level
for PIN 4,
```

```
Press 4 *.
```

```
To exit,
press #
```

6. Enter the PIN Code number (1 - 32) that you want to change the authority level for, followed by the [*] key (eg. Press [3] [*] to change the authority level for PIN Code 3). The keypad display will scroll the following:

```
PIN 3 level 2.
Enter new level.
```

```
Level choices
are 1 to 4,
```

```
To exit,
press #
```

7. Enter the new authority level (1 - 4).
The keypad will display the following to confirm the PIN Code change and return you to Step 5. Authority levels are determined by your security company.

```
PIN 3 changed.
```

8. Pressing the [#] key exits this command.

Change PIN Code Area Assignment

This page continues from Step 5 on page 37.

You cannot change your own PIN Code area assignment.

5. After you press 3 (See Step 4 on page 37), the keypad display will scroll:

```
To change areas
for PIN 1,

Press 1 *.

To change level
for PIN 2,

Press 2 *.

To exit,
Press #
```

6. Enter the PIN Code number (1 - 32) that you want to change the area assignment for, followed by the [*] key (eg. Press [2] [*] to change the authority level for PIN Code 2).

The keypad will display the following if the PIN Code is not assigned to any area:

```
PIN 2 Areas:
-----
```

The keypad will display the following if the PIN Code is assigned to Area 1, Area 2, Area 3 and Area 4.

```
PIN 2 Areas:
1234
```

7. Enter the area number that you want to assign (or not assign) to the PIN Code. The corresponding area number will display (e.g. If you want to assign PIN Code 2 to Area 1, press [1], press [2] to assign the PIN Code to Area 2 etc).
8. Press the [#] key to return to Step 5, press the [#] key again to exit this command, otherwise, select another PIN Code to assign areas to.

Delete PIN codes, (Command 58)

I have this feature.

I do not have this feature.

The command allows those users with the applicable authority level to delete other PIN codes. If you try to delete your own PIN code, the keypad will sound an error tone.

1. Make sure that the system is disarmed (On indicator is off).
2. Press [Select] [5] [8].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad will scroll the following:

```
Delete PIN 1?  
Press 1 *.
```

```
Delete PIN 2?  
Press 2 *.
```

```
To exit  
Press #
```

4. Enter the PIN Code number (1 - 32) that you want to delete followed by the [*] key.
(eg. Press [2] [*] to delete PIN Code 2).

```
PIN 2  
deleted.
```

```
Press * to  
continue.
```

You cannot delete your own PIN Code. If you attempt to delete your own PIN Code, the keypad will display:

```
Cannot delete  
your own PIN.
```

5. Press the [*] key to return to Step 3, otherwise, press [#] to exit this command.

Renew One-Time PIN codes, (Command 53)

I have this feature.

I do not have this feature.

One-Time PIN codes can only be used once to disarm the system. This feature allows those with the applicable authority level to renew One-Time PIN codes that have been used. Once renewed, the One-Time PIN Code will again be able to disarm the system only once.

1. Make sure that the system is disarmed (On indicator is off).
2. Press [Select] [5] [3].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad will scroll the following:

```
To renew all
One-time PINs
```

```
press 0 *.
```

```
To renew PIN 5
press 5 *.
```

If no one-time PIN codes are programmed, or all one-time PIN codes have already been renewed, the keypad will display:

```
No One-Time
PINs to renew.
```

4. Press [0] [*] key if you wish to renew all one-time PIN codes, alternatively, press the number of the user whose one-time code you wish to renew followed by the [*] key (eg. If you want to renew PIN Code 5, press [5] [*]).

If you renew all one-time PIN codes, the keypad will display:

```
All one-time
PINs renewed!
```

If you renew a single PIN Code (eg. PIN Code 5), the keypad will display:

```
One-time PIN 5
renewed.
```

5. The keypad will automatically exit this command.

Checking System Troubles, (Command 4)

Your system emits a trouble tone and displays the System Trouble message to alert you to a system trouble event (eg Low Battery etc). Use this feature to learn what is causing the trouble and what steps to take to correct it.

1. The system may be armed or disarmed when a system trouble occurs. If the system is armed, turn it off. The keypad will display:

```
Trouble! to view  
Press Select 4
```

2. Press [Select] [4] key, alternatively, press and hold the [5] key to view check system troubles. The trouble tone will be silenced and the keypad will scroll through the list of troubles. Follow the keypad display instructions to see the trouble events.

```
Zone Trouble!  
Press 8 to view.
```

```
Alarm Memory!  
Press 0 to view.
```

```
Date/time lost!  
Press 5 to set.
```

```
System Trouble!  
Press 2 to view.
```

```
To Test System,  
press 1.
```

```
To Walk Test,  
press 4.
```

```
To reset,  
Press 7.
```

```
System OK!  
Press #
```

3. Pressing the [#] key will exit this command.

Note

The system will replace the display message 'To Test System, press 1.' with the display message 'System Test Due, Press 1.' when a weekly test of the system is due.

View Alarm Memory, (Command 40)

I have this feature.

I do not have this feature.

After an alarm has been silenced and cleared from the display, you may still review the zones that had been in alarm.

1. Ensure that the system is disarmed (On indicator is off).
2. Press [Select] [4] [0].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad will display all zones that are in alarm memory.
In this example, the keypad displays that there was an alarm on Zone 5:

```
Alarm Zn 5  
Bedroom 1 Window
```

If you enter your PIN Code before the system reports to your alarm company, the keypad will display:

```
Abort Zn 8  
Bedroom 1 Window
```

When the last alarm has been shown, the keypad will display:

```
To clear memory,  
turn system On.
```

If no alarm memory is present, the keypad will display:

```
No alarms in  
system memory.
```

4. Arm the system again to clear alarm memory.

View System Trouble, (Command 42)

I have this feature.

I do not have this feature.

This command allows you to view system trouble. A system trouble condition may include that the system is running only on the backup battery, communications trouble, or it is time for the system to be serviced by your security company.

1. Ensure that the system is disarmed (On indicator is off).
2. Press [Select] [4] [2].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad will display all system trouble events (if any) one at a time.

If AC power has disappeared for very short period of time less than 10sec, Power LED will be flashing until AC power comes back. For any period of time greater than 10sec the keypad will display:

```
System running  
on battery only.
```

When AC power comes back this message will stay on for another 2min.

If the system detects that the telephone line is missing, or there is no dial tone, the keypad will display:

```
Line 1 trouble.  
Check dial tone.
```

If the system fails to communicate with the security company, the keypad will display:

```
Comm Failure  
destination 1
```

If the system is programmed to be serviced by your security company at the service interval, (or a trouble condition that requires the security company to attend), the keypad will display:

```
Call for service
```

If there are no system troubles, the keypad will display:

```
There are no  
system troubles!
```

4. Press the [#] key to exit this command.

View Zone Trouble, (Command 48)

I have this feature.

I do not have this feature.

This command allows you to view which zone (if any) is in trouble.

1. Ensure that the system is disarmed (On indicator is off).
2. Press [Select] [4] [8].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad will display all zones that are in trouble (if any) one at a time:

In this example, the keypad will display that Zone 5 is in trouble:

```
Trouble Zn 5
Bedroom 1 Window
```

If a fire zone is in trouble (eg. Zone 1), the keypad will display:

```
Fire Trble Zn 1
Kitchen
```

If a wireless zone is missing (eg. Zone 40), the keypad will display:

```
No signal Zn 40
Hallway
```

If a wireless zone has registered a low battery (eg. Zone 40), the keypad will display:

```
Low Battrry, Zn40
Hallway
```

If the tamper circuit of a zone has activated (eg. Zone 40), the keypad will display:

```
Tamper, Zn 40
Hallway
```

If a zone (eg. Zone 40) has not registered as faulted during the disarmed state for a period of time programmed by your security company (eg. Zone 40), the system will register the zone as failed and the keypad will display:

```
Sensor trouble,
Zone text
```

```
Zn 40
Zone text
```

Make sure that no objects are blocking the zone, when it registers as a sensor trouble.

If no zones are in trouble, the keypad will display:

```
There are no
zone troubles.
```

4. Press the [#] key to exit this command. Arm the system and disarm again to clear alarm memory.

System Test, (Command 41)

I have this feature.

I do not have this feature.

This command allows you to ensure that your system is operating correctly by testing the system's siren, strobe, battery and telephone line. Only those programmed by your security company will be tested (e.g. Your system may only be programmed to test the back-up battery and the siren output).

You may test the telephone line connection if you press and hold the [9] key to force the control panel to send a 'Test' report. Depending on the authority level, a PIN code may be required.

If any of these components fails to test, contact your security company for assistance. Be sure to contact your security company before you begin the system test.

1. Make sure that the system is disarmed (On indicator is off).
2. Press [Select] [4] [1], alternatively, press and hold the [1] key to test the system. If the keypad prompts you to enter your code, enter your PIN Code.
3. The system will start the test. The siren output is first tested. The siren sound for approximately 2 - 3 seconds. The keypad will display:

```
Testing siren.
```

The strobe is next to be tested. This test will automatically reset after 20 minutes, however, you can press the [*] key to toggle onto the next system test, or press the [Select] key to end the system test.

```
Testing strobe.  
press * to end
```

The back-up battery will now be tested. This test may take up to 4 minutes.

```
Testing battery  
may take 4 min.
```

If the battery passes the test, the keypad will display:

```
Battery test  
passed.
```

If the battery fails the test, the keypad will display:

```
Battery test  
failed!
```

```
Please call for  
service.
```

Finally, the communication via the telephone line is tested. This test may take up to 10 minutes:

```
Testing phone.  
may take 10 min.
```

If the phone line passes the test, the keypad will display:

```
Phone test  
passed.
```

If the phone line fails the test, the keypad will display:

```
Phone test  
failed!
```

```
Please check for  
dial tone.
```

4. When the test is complete, the system returns to the off state.

Walk Test, (Command 44)

I have this feature.

I do not have this feature.

This command allows you to test detection devices connected to your system. Walk test should be carried out on a weekly basis.

1. Make sure that the system is disarmed (On indicator is off).
2. Press [Select] [4] [4].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The system will start the walk test.

```
Walk Test
Started
```

The keypad display will scroll all zones that are allowed to be tested one at a time. To successfully test each zone, you will need to fault the corresponding detection device (eg. reed switch or PIR etc).

```
Zn 2 Untested
Front Door
```

```
Zn3 Untested
Hallway
```

```
Zn4 Untested
Living Room
```

```
To stop test
press #.
```

As each zone has been tested, the keypad display will scroll:

```
Zn2 tested OK
Front Door
```

```
Zn3 tested OK
Hallway
```

If a zone that is being tested has a trouble condition, the keypad display will scroll:

```
Zn2 trouble
Front Door
```

4. To exit walk test, press the [#] key. The keypad will display the following before returning to the off display.

```
Walk Test
stopped
```

Note

If you fail to exit this command, the system will automatically terminate the test after 20 minutes. To warn you that walk test is still active, the keypad will sound (beep) the keypad buzzer during the last 5 minutes before it automatically terminates walk test.

Resetting The System, (Command 47)

I have this feature.

I do not have this feature.

This command will allow you to reset the system (including fire zones) after an alarm. Detection devices, such as smoke detectors and shock sensors, must be reset after being activated. Resetting the system takes about 20 seconds.

If zones do not reset, contact your alarm company for help.

1. Ensure that your system is disarmed (On indicator is off).
2. Press [Select] [4] [7], alternatively, press and hold the [7] key to reset the system. If the keypad prompts you to enter your code, enter your PIN Code.
3. The system will now reset smoke detectors, outputs and call for service displays that reference to Command 47. The keypad will display:

Resetting...

After the system has reset, the system will automatically terminate this command.

Turn Chime On/Off, (Command 61)

I have this feature.

I do not have this feature.

Chime mode allows you to monitor zones when the system is disarmed (e.g. You can monitor a front door of a shop. When you are in the back room, a keypad or output can sound and alert you when someone enters through the front door).

This command allows you to turn Chime mode on and off. (Refer to Selecting Chime Tone, (Command 62) on page 52 and Selecting Chime Zones, (Command 63) on page 53), you need to turn Chime on and off.

1. Ensure that your system is off (On indicator is off).
2. Press [Select] [6] [1], alternatively, press and hold the [4] key to toggle chime mode on or off. If the keypad prompts you to enter your code, enter your PIN Code.
3. If Chime mode is turned on, the keypad will display:

```
Chime is On, to  
turn Off, press 2
```

```
To exit,  
press #.
```

If Chime mode is turned off, the keypad will display:

```
Chime is Off, to  
turn On, press 1
```

```
To exit,  
press #.
```

4. Follow the above and press [2] to turn Chime mode off, or press [1] to turn Chime mode on.
5. Press the [#] key to exit this command.

Selecting Chime Tone, (Command 62)

I have this feature.

I do not have this feature.

This feature gives you the ability to "Chime" zones when the system is disarmed. This means that the system can be programmed to alert you to opened doors and windows. For example, parents with small children may want a tone to sound whenever a door or window is opened as a way of monitoring the whereabouts of the children.

Use this command to set the type of response your system produces when a Chime zone is faulted. If you wish, you may tell your system to display the identity of the zone and sound a short tone whenever Chime door or window is opened. Refer to page 53 to program zones that are to be "Chimed".

1. Ensure that your system is disarmed (On indicator is off).
2. Press [Select] [6] [2].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad will display the current Chime tone selected. In this example, the current Chime tone setting is Short Beep:

```
Chime tone is
Short Beep.
```

4. Select the type of Chime tone you want by pressing the corresponding digit (1 - 4).

```
Press 1 for
Off.
```

```
Press 2 for
Short Beep.
```

```
Press 3 for
Beep till Key.
```

```
Press 4 for
Beep till closed
```

```
To exit,
press #.
```

5. After making your selection (for example, Option 3), the display confirms the choice you've made before returning to the off state:

```
Chime Tone is
Beep till Key.
```

Chime Tone	Description
Off	Display zone identity, but sound no tone when zones are faulted.
Short Beep	Display zone identity and sound a short tone when zones are faulted.
Beep Till Key	Display zone identity and sound a tone until the [Select] key is pressed.
Beep Till Closed	Display zone identity and sound a tone until the zone is returned to normal (Door or window is closed). Pressing the [Select] key will also silence the tone.

Table 3: Chime Tone Beep Descriptions

6. Press the [#] key to exit this command.

Selecting Chime Zones, (Command 63)

I have this feature.

I do not have this feature.

This command allows you to program which zones are to be ‘Chimed’ when Chime mode is turned on via Command 61 on page 51. To set the Chime tone, refer to Selecting Chime Tone, (Command 62) on page 52. You cannot program 24 hour and 24-hour fire zones for Chime mode.

Choosing which zones to chime depends upon your security objective. If you have small children, you may choose to chime zones of entry and exit. Each time a Chime zone is faulted (door or window is opened), the keypad responds as programmed. For example, you may tell your system to produce a short beep when a Chime zone is faulted.

1. Ensure that your system is disarmed (On indicator is off).
2. Press [Select] [6] [3].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad will display all zones that are currently being Chimed (Chime On) and those that are not (Chime Off), followed by instructions for changing the current setting. The example below shows that Chime is Off for Zone 2.

```
Turn Chime off
for all zones by
```

```
pressing 0 *
```

```
Zn 2 Chime Off
Front Door
```

```
Press 2 * to
Turn Zn 2 On
```

```
Zn 7 Chime On
Back Door
```

```
Press 7 * to
Turn Zn 7 Off
```

```
To exit,
press #.
```

4. Follow the instructions to change the current setting. In this case, to program Zone 2 a Chime zone, you would press [2] [*]. The keypad display confirms your choice:

```
Zn 2 Chime On
Front Door
```

The display continues to scroll the remaining zones. You may continue to program as many Chime zones as are available.

5. When you are finished, press the [#] key exit this command.

Extend Auto On Time, (Command 51)

I have this feature.

I do not have this feature.

This command allows you to delay the auto-on time (automatic arming time) by one hour when you enter this command during the auto-on pre-alert time. The auto-on pre-alert time sounds the keypad buzzer to warn you that the system will automatically arm in Away, Stay or Stay 2 mode.

1. Make sure that the system is disarmed (On indicator is off).
2. Press [Select] [5] [1].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad display will scroll the new time the system is going to arm the system.

```
Auto-On Time  
moved to:15:59
```

```
To exit,  
press #.
```

4. Press [#] to exit this command.

The system will revert back to the normal auto-on time the next time the system automatically arms in Away, Stay or Stay 2 mode.

Change Skeds, (Command 52)

I have this feature.

I do not have this feature.

This command allows you to change the time and the days of the week that the sked will automatically arm the system in Away, Stay, or Stay 2 mode, disarm the system, or operate an output programmed by your security company. An output can be programmed by your security company to switch 'On' or 'Off' a pool pump or lighting etc. The minimum time before the skeds could be set up is defined by a parameter called: "Auto-Arming Pre-Alert Time", programmed in the address 233. Always check the default value before activating the skeds.

1. Make sure that the system is disarmed (On indicator is off).
2. Press [Select] [5] [2].
If the keypad prompts you to enter your code, enter your PIN Code.
3. If your PIN Code is valid, the keypad display will scroll all available options:

To change Away
Skeds, press 1.

To change Stay
Skeds, press 2

To change Stay 2
On Skeds press 3

To change Off
Skeds, press 4.

To change Output
On Skeds press 5

To change Output
Off skeds,

press 6.

4. Press the key (1 - 6) that corresponds to the sked type that you want to change or program.
Press [1] if you want to program the Away Skeds on page 56.
Press [2] if you want to program the Stay Skeds on page 56.
Press [3] if you want to program the Stay 2 Skeds on page 58.
Press [4] if you want to program the Off Skeds on page 59.
Press [5] if you want to program the Output On Skeds on page 60.
Press [6] if you want to program the Output Off Skeds on page 61.

Away Skeds

Refer to Change Skeds, (Command 52) on page 55 for Steps 1 - 4.

- The keypad display will scroll all skeds that have been programmed to arm the system in Away mode.

```
Sk1, Ar1 Auto-On
Time 18:00
```

```
Sk1, Ar1 12345678
days    MTWTF
```

```
To change Sked 1
Press 1 *
```

```
Sk2, Ar1 Auto-On
Time 13:00
```

```
Sk2, Ar1 12345678
days:   S     S
```

```
To change Sked 2
Press 2 *
```

- Enter the sked number that you want to change followed by the [*] key. (eg. If you want to change Sked 1, you would press [1] [*]).
- Enter the time that you want to automatically arm the system in Away mode (HH:MM). (eg. If you want to change Sked 1 from 18:00 hours to 18:35 hours, you would enter [1] [8] [3] [5]).

```
Sk1, Ar1 Auto-On
Time 22:35
```

- Enter the days that you want to automatically arm the system in Away mode (Sunday = 1, Saturday = 7 and every day = 8). In this example, if you want to automatically arm the system in Away mode for Monday, Tuesday, Wednesday, Thursday and Friday, you would press keys [2] [3] [4] [5] [6].

```
Sk1, Ar1 12345678
days:   MTWTF
```

Note

If the option for all days is selected (8 = A (Everyday), you must first disabled the all day selection by pressing [8]. Then you can select the desired day by selecting the corresponding number assigned to that day.

- Press the [#] key to exit.

Stay Skeds

Refer to Change Skeds, (Command 52) on page 55 for Steps 1 - 4.

- The keypad display will scroll all skeds that have been programmed to arm the system in Stay mode.

```
Sk3, Ar1 Stay
Time 20:00
```

```
Sk3, Ar1 12345678
days:   SMTWTFSA
```

```
To Change Sked 3
press 3 *
```

- Enter the sked number that you want to change followed by the [*] key. (e.g. If you want to change Sked 3, you would press [3] [*]).
- Enter the time that you want to automatically arm the system in Stay mode (HH:MM). In this example, if you want to program the sked 3 to automatically arm the system in Stay mode at 5:00 pm, you would press [1] [7] [0] [0].

```
Sk3, Ar1 Stay
Time 17:00
```

- Enter the days that you want to automatically arm the system in Stay mode (Sunday = 1, Saturday = 7 and every day = 8). In this example, if you want to automatically arm the system in Stay mode for Sunday and Saturday, you would press keys [1] and [7].

```
Sk3 Ar1 12345678
days:   S      S
```

Note

If the option for all days is selected (8 = A (Everyday), you must first disabled the all day selection by pressing [8]. Then you can select the desired day be selecting the corresponding number assigned to that day.

- Press the [#] key to exit.

Stay 2 Skeds

Refer to Change Skeds, (Command 52) on page 55 for Steps 1 - 4.

- 5. The keypad display will scroll all skeds that have been programmed to arm the system in Stay 2 mode.

```
Sk4, Ar2 Stay 2
On, time 20:00
```

```
Sk4 Ar2 12345678
days:  -----
```

```
To Change Sked 4
press 4 *
```

- 6. Enter the sked number that you want to change followed by the [*] key. (e.g. If you want to change Sked 4, you would press [4] [*]).
- 7. Enter the time that you want to automatically arm the system in Stay 2 mode (HH:MM). In this example, if you want to program the sked 4 to automatically arm the system in Stay 2 mode at 5:00 pm, you would press [1] [7] [0] [0].

```
Sk4, Ar2 Stay 2
On, time 17:00
```

- 8. Enter the days that you want to automatically arm Area 2 in Stay 2 mode (Sunday = 1, Saturday = 7 and every day = 8). In this example, if you want to automatically arm Area 2 in Stay 2 mode every day, you would press [8].

```
Sk4 Ar2 12345678
days:  SMTWTFSA
```

Note

If the option for all days is selected (8 = A (Everyday), you must first disabled the all day selection by pressing [8]. Then you can select the desired day be selecting the corresponding number assigned to that day.

- 9. Press the [#] key to exit.

Off Skeds

Refer to Change Skeds, (Command 52) on page 55 for Steps 1 - 4.

- The keypad display will scroll all skeds that have been programmed to disarm the system.

```
Sk5, Ar3 Disarm
Time 00:00
```

```
Sk5 Ar3 12345678
days:  -----
```

```
To change Sked5
press 5 *
```

- Enter the sked number that you want to change followed by the [*] key. (eg. If you want to change Sked 5, you would press [5] [*]).
- Enter the time that you want to automatically disarm the system (HH:MM). In this example, if you want to program the Sked 5 to automatically disarm the system at 7:00 am, you would press [0] [7] [0] [0].

```
Sk5, Ar3 Disarm
Time 07:00
```

- Enter the days that you want to automatically disarm the area (Sunday = 1, Saturday = 7 and every day = 8). In this example, if you want to automatically disarm Area 3 every Monday, Tuesday, Wednesday, Thursday and Friday, you would press keys [2] [3] [4] [5] and [6].

```
Sk1 Ar3 12345678
days:  MTWTF
```

Note

If the option for all days is selected (8 = A (Everyday), you must first disabled the all day selection by pressing [8]. Then you can select the desired day be selecting the corresponding number assigned to that day.

- Press the [#] key to exit.

Output On Skeds

Refer to Change Skeds, (Command 52) on page 55 for Steps 1 - 4.

- 5. The keypad display will scroll all skeds that have been programmed to turn outputs on.

```
Sk6 Ar1 Output 01
Time 00:00
```

```
Sk6 Ar1 12345678
days:  -----
```

```
To change Sked 6
press 6 *
```

- 6. Enter the sked number that you want to change followed by the [*] key. (eg. If you want to change Sked 6, you would press [6] [*]).
- 7. Enter the time that you want to automatically turn the output on (HH:MM). In this example, if you want to program the Sked 6 to automatically turn the output on at 06:45 am, you would press [0] [6] [4] [5].

```
Sk6, Ar1 Output 1
Time 06:45
```

- 8. Enter the days that you want to automatically turn the output on (Sunday = 1, Saturday = 7 and every day = 8). In this example, if you want to automatically turn Output 1 on every Saturday and Sunday, you would press keys [1] and [7].

```
Sk6 Ar1 12345678
days:  S    S
```

Note

If the option for all days is selected (8 = A (Everyday), you must first disabled the all day selection by pressing [8]. Then you can select the desired day be selecting the corresponding number assigned to that day.

- 9. Press the [#] key to exit.

Output Off Skeds

Refer to Change Skeds, (Command 52) on page 55 for Steps 1 - 4.

- The keypad display will scroll all skeds that have been programmed to turn outputs off.

```
Sk7 Ar1 Output 02  
Time 00:00
```

```
Sk7 Ar1 12345678  
days:  -----
```

```
To change Sked 7  
press 7 *
```

- Enter the sked number that you want to change followed by the [*] key. (eg. If you want to change Sked 7, you would press [7] [*]).
- Enter the time that you want to automatically turn the output off (HH:MM). In this example, if you want to program the Sked 7 to automatically turn the output off at 06:45 pm, you would press [1] [8] [4] [5].

```
Sk7, Ar1 Output 2  
Time 18:45
```

- Enter the days that you want to automatically turn the output off (Sunday = 1, Saturday = 7 and every day = 8). In this example, if you want to automatically turn output on every Saturday and Sunday, you would press keys [1] and [7].

```
Sk1 Ar1 12345678  
days:  S      S
```

Note

If the option for all days is selected (8 = A (Everyday), you must first disabled the all day selection by pressing [8]. Then you can select the desired day be selecting the corresponding number assigned to that day.

- Press the [#] key to exit.

Toggle Outputs On/Off (Command 54)

I have this feature.

I do not have this feature.

This command allows you to turn outputs that have been programmed by your security company on or off. These outputs can control outside lighting, pool pumps, watering systems etc.

1. Ensure that the system is disarmed (On indicator is off).
2. Press [Select] [5] [4].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad display will scroll:

```
Turn all Outputs  
off Press 0 *
```

```
Output 1 is  
On,
```

```
to turn Off,  
press 1 *.
```

4. Press [0] [*] if you want to turn all outputs off or, alternatively, press the output number (1 - 20) that you want to turn off followed by the [*] key.

For example, if you want to turn Output 1 off, you would press [1] [*]. The keypad would display:

```
Output 1 is  
Off,
```

```
to turn On press  
1 *
```

5. Press the [#] key to return the keypad to the off state.

Remote Program, (Command 43)

I have this feature.

I do not have this feature.

This command will force the control panel to connect to your security company's remote PC computer for programming alterations via the telephone line. Only use this command when your security company instructs you to.

1. Ensure that the system is disarmed (On indicator Off).
2. Press [Select] [4] [3].
If the keypad prompts you to enter your code, enter your PIN Code.
3. The keypad will display:

```
Remote program  
in progress.
```

If your system is busy and cannot call your security company's remote PC computer, the keypad will display:

```
System busy.  
try again later.
```

4. The keypad will return to the off display.

Disarm All Areas, (Command 81)

I have this feature.

I do not have this feature.

This command allows you to disarm all areas at the same time when the system has been partitioned into two or more individual areas. A maximum of four areas can be programmed by your security company.

1. Press [Select] [8] [1].
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad will display:

All Areas
Disarmed.

Arm All Areas, (Command 80)

I have this feature.

I do not have this feature.

This command allows you to arm all areas at the same time when the system has been partitioned into two or more individual areas. Your security company can program a maximum of four areas.

1. Press [Select] [8] [0].
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad will display:

```
All Areas Armed
Exit Now!
```

The keypad will now scroll through the exit delay response

If there is an alarm when you try to arm all areas in Away mode, the keypad display will scroll:

```
Alarm Area 1!
Smiths Residence
```

```
All Areas Armed,
```

```
Command 80
Denied!
```

If there is an area that has a faulted zone (s) when you try to arm all areas in Away mode, the keypad will scroll:

```
Area 2 not ready
Smiths Residence
```

```
Area 4 not ready
Smiths Residence
```

```
To force area on
hold Away key.
```

```
To stop,
press #.
```

If you press and hold down the [Away] key for 2 seconds, it will force all areas to be armed in Away mode.

```
All Areas Armed
Exit Now!
```

The keypad will now display all areas that have been forced on, one at a time before scrolling the exit delay response.

```
A 2 Forced Armed
Smiths Residence
```

```
A 4 Forced Armed
Smiths Residence
```

Move To Area, (Command 50)

I have this feature.

I do not have this feature.

This command allows you to operate multiple areas from the same keypad when the system has been partitioned into more than one area. Before operating another area, you will need to move the keypad to the area that you want to operate.

1. Press [Select] [5] [0].
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad will scroll through all available areas (1 - 4) that you can move to. In this example, you are at Area 1 keypad which prompts you to press [2] to go to Area 2 or to press [3] to go to Area 3:

To go to Area 2
Sales Office

press 2.

To go to Area 3
Warehouse

press 3.

To exit,
press #.

3. Press the area number (1 – 4) that you want to move to, alternatively, press [#] to exit.
4. The keypad will display the following in this example if you pressed [2].

You have moved
to Area 2

Sales Office

5. If you have already moved the keypad to another area when you enter [Select] [5] [0], the keypad will display:

To return home
to Area 1

Lobby Area
press 1

To go to Area 3
Warehouse

```
press 3.
```

```
To exit,  
press #
```

6. In the example above, press [1] to return the keypad to the home area allocation (Area 1), or alternatively press [3] to move to Area 3.
7. In the example above, if you pressed [1] to return the keypad to the home area allocation, the keypad will display the following:

```
You returned to  
home Area 1
```

```
Lobby Area
```

Auto-Forward On Setup, (Command 83)

I have this feature.

I do not have this feature.

This feature allows you to program the auto-forward on sequence that will redirect all incoming calls to a telephone number of your choice when you arm the system in Away mode.

1. Press [Select] [8] [3].
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad display will scroll:

Auto-forward On
setup mode.

Enter digits for
Auto-Forward On

For 'pause' (P),
press Away.

For 'flash' (F)
press Stay.

A and C keys
move cursor

To delete digit,
press B key.

To view and edit
press Bypass

To stop edit,
press Bypass

To exit,
hold #.

3. Enter the auto-forward off sequence required to redirect all incoming calls.
4. Press and hold the [#] key to exit this command.

Key	Digit / Function	Key	Digit / Function	Key	Digit / Function
1	1	6	6	Away	4 Second Pause
2	2	7	7	Stay	Flash
3	3	8	8	A-Key	Cursor Left
4	4	9	9	B-Key	Delete
5	5	0	0	C-Key	Cursor Right
*	*	Select	#		

Table 4: Command 84 - Auto-Forward Function Keys

Auto-Forward Off Setup, (Command 84)

I have this feature.

I do not have this feature.

This feature allows you to program the auto-forward off sequence that will cancel the redirecting of all incoming calls to another telephone number of your choice when you disarm the system.

1. Press [Select] [8] [4].
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad display will scroll:

Auto-Forward Off
setup mode.

Enter digits for
Auto-Forward Off

For 'pause' (P),
press Away.

For 'flash' (F)
press Stay.

A and C keys
move cursor.

To delete digit,
press B key.

To view and edit
press Bypass

To stop edit,
press Bypass

To exit,
press #.

3. Enter the auto-forward off sequence to cancel call forwarding when you disarm your system.
4. Press and hold the [#] key to exit this command.

Key	Digit / Function	Key	Digit / Function	Key	Digit / Function
1	1	6	6	Away	4 Second Pause
2	2	7	7	Stay	Flash
3	3	8	8	A-Key	Cursor Left
4	4	9	9	B-Key	Delete
5	5	0	0	C-Key	Cursor Right
*	*	Select	#		

Table 5: Command 84 - Auto-Forward Function Keys

Auto-Forward On/Off, (Command 82)

- I have this feature.
- I do not have this feature.

This feature allows you to turn on or off the auto-forward feature as necessary. The auto-forward On sequence forwards all incoming calls to the telephone number of your choice when you arm the system in Away mode. The auto-forward off sequence cancels the forwarding of incoming calls to the telephone number of your choice when you disarm the system.

1. Press [Select] [8] [2].
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad display will scroll:

```
Auto-Forward  
is On.
```

```
press 2 to turn  
Auto-forward off
```

```
To exit,  
press #.
```

If the auto-forward is already off, the keypad display will scroll:

```
Auto-Forward  
is off.
```

```
Press 1 to turn  
Auto-Forward On
```

```
To exit,  
press #.
```

3. Press [2] to toggle auto-forward on, or, press [1] to toggle auto-forward off.
4. Press the [#] key to exit this command.

Adjust Keypad Volume (Command 49)

I have this feature.

I do not have this feature.

This feature allows you to adjust the keypad's keystrokes volume.

1. Press [Select] [4] [9], alternatively, press and hold the [8] key.
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad display will scroll:

```
To set volume,  
while holding *,
```

```
press 1 (louder)  
or 4 (softer)
```

```
Press #  
to end.
```

3. To change the volume of the keypad buzzer, press and hold the [*] key, at the same time, press the [1] key to increase the buzzer tone, or press [4] to decrease the buzzer tone.
4. Press the [#] key to exit this command.

View Log, (Command 85)

I have this feature.

I do not have this feature.

This feature allows you to display the last 254 system events that have occurred in the history log. It will include alarm events, arming the system in Away, Stay and Stay 2 mode and turning the system off etc.

As you press the [*] key to step history events, you will notice that the events will step backwards in time (i.e. most recent to least recent).

Each event will toggle between two different displays. The first display will show the event description on the top line. The second line will display the area, the zone number (or user number) and communication information. The second display will again show the event description on the top line, followed by the time and date the event occurred on the bottom line.

1. Press [Select] [8] [5].
If the keypad prompts you to enter your code, enter your PIN Code.
2. The keypad display will show the last event recorded in the history log (most recent).

```
Rstr1,Cntrl,Dly
A1 Zn2          SL
```

```
Rstr1,Cntrl,Dly
02:52 10/08/01
```

3. Press the [*] key to display the next event recorded in the history log.

```
Cancel Alarm
A1          U1  SL
```

```
Cancel Alarm
02:51 10/08/01
```

4. Press the [*] key to display the next event recorded in the history log.
5. Press the [#] key to exit this command.

Display	Description
A#	Area Number
Pt##	Zone Number
Dv###	Device Number
Ln##	Telephone Line Number
Mn#	Minutes Until Auto Arm Sked
U##	User Number
##	Communication Status For Routing Destination 1 and 2
- (Dash)	Destination Not Used / Disabled
A	Aborted Report
D	Deleted Report From Pending Buffer By Panel Reset
F	Failed Report
L	Local Report (Log Only)
P	Pending Report
S	Sent Report (Reported OK)

Table 6: Command 85 - History Log Definitions/Descriptions

Equ #	System Log Display / Printer Report	Description
01	AC Fail	AC power to control panel is failed
02	AC Restore	AC power to the control panel has restored
03	Alarm, Tamper	Alarm from detection device has been tampered with
04	Alarm, Emergency	Alarm from emergency detection device, or ABC key programmed emergency response
05	Alarm, Panic	Alarm from panic/emergency detection device
06	Alarm, Invisible	Alarm from emergency detection device that does not display on keypad
07	Alarm, 24-hr Burg	Alarm from burglary detection devices that are on 24-hours a day
08	Alarm, Cntrl, Dly	Alarm from detection devices that are programmed with entry and exit delay time
09	Alarm, Cntrl	Alarm from detection devices such as PIR's that do not follow any entry or exit times
10	Cross, Tamper	Tamper alarm from detection devices with cross zone option programmed
11	Cross, Emergency	Emergency alarm from detection devices with cross zone option programmed
12	Cross, Panic	Panic alarm from detection devices with cross zone option programmed
13	Cross, Invisible	Invisible panic alarm from detection devices with cross zone option programmed
14	Cross, 24hr Burg	24-hour burglary alarm from detection devices with cross zone option programmed
15	Cross, Cntrl, Dly	Alarm from entry/exit detection devices with cross zone option programmed
16	Cross, Cntrl	Alarm from keyswitch, follower or instant detection devices with cross zone option programmed
17	Cross, Unverified	An unverified fault on one detection device with cross zone option programmed.
18	Alarm Exit Error	Entry/Exit delay zone still faulted at end of exit delay time
19	Alrm Recent Clse	Alarm event within two minutes at end of exit delay time (entry/exit delay zone)
20	Alrm Recent Clse	Alarm event within two minutes at end of exit delay time (burglary zone)
21	Auto On Extended	User delayed sked to auto arm by one hour
22	Battery Low	Backup battery supply voltage is low
23	Battery Missing	Backup battery supply is missing
24	Rstrl Batt Low	Backup battery supply has restored from low voltage
25	Rstrl Bat Missng	Backup battery supply has restored from missing
26	Bypass,Fire,User	User bypassed fire detection device
27	Bypass,Fire, RPS	RPS software bypassed fire detection device
28	Bypass,Ctrl,User	User bypassed controlled detection device
29	Bypass,Ctrl, RPS	RPS software bypassed controlled detection device
30	Bypass,24hr,User	User bypassed 24-hour non fire detection device
31	Bypass,24hr, RPS	RPS software bypassed 24-hour non fire detection device
32	Bypass,Forced Zn	Detection device forced on when area armed in Away, Stay or Stay 2 mode
33	Bypass,Swinger	Zone is swinger bypassed
34	UnBypass,Fire,Usr	User cleared bypassed (unbypass) fire detection device
35	UnBypass,Ctrl,Usr	User cleared bypassed (unbypass) controlled detection device
36	UnBypass,24hr,Usr	User cleared bypassed (unbypass) 24-hour detection device
37	Call for Service	Report sent automatically at Call for Service interval programmed by the security company
38	Cancel Alarm	User acknowledges active alarm before siren time expired for non-fire detection devices
39	Cancel Fire	User acknowledges active alarm before siren time expired for fire detection devices
40	Checksum Fail	Checksum on control panel parameters failed. Contact your security company to verify system
41	ChckSum Fail,Dbus	Checksum on option bus device failed. Contact your security company to verify system
42	Cls,All,+Dly,Skd	System armed in Away mode with entry/exit delay via Sked
43	Cls,All,+Dly,KS	System armed in Away mode with entry/exit delay via keyswitch
44	Cls,All,+Dly,RPS	System armed in Away mode with entry/exit delay via RPS software
45	Cls,All,+Dly,Tel	System armed in Away mode with entry/exit delay via telephone
46	Cls,All +Dly,Usr	System armed in Away mode with entry/exit delay via user
47	Cls,All,-Dly,RPS	System armed in Away mode with no entry/exit delay via RPS software
48	Cls,All,-Dly,Usr	System armed in Away mode with no entry/exit delay via User

Table 7: Panel Events (Command 85)

Equ #	System Log Display / Printer Report	Description
49	Cls,Prt,+Dly,Skd	System armed in Stay mode with entry/exit delay via Sked
50	Cls,Prt,+Dly,KS	System armed in Stay mode with entry/exit delay via keyswitch
51	Cls,Prt,+Dly,RPS	System armed in Stay mode with entry/exit delay via RPS software
52	Cls,Prt,+Dly,Usr	System armed in Stay mode with entry/exit delay via user
53	Cls,Prt,-Dly,RPS	System armed in Stay mode with no entry/exit delay via RPS software
54	Cls,Prt,-Dly,Usr	System armed in Stay mode with no entry/exit delay via user
55	Frc,All,+Dly,Skd	System forced in Away mode with entry/exit delay via Sked
56	Frc,All,+Dly,KS	System forced in Away mode with entry/exit delay via keyswitch
57	Frc,All,+Dly,RPS	System forced in Away mode with entry/exit delay via RPS software
58	Frc,All,+Dly,Tel	System forced in Away mode with entry/exit delay via telephone
59	Frc,All,+Dly,Usr	System forced in Away mode with entry/exit delay via user
60	Frc,All,-Dly,RPS	System forced in Away mode with no entry/exit delay via RPS software
61	Frc,All,-Dly,Usr	System forced in Away mode with no entry/exit delay via user
62	Frc,Prt,+Dly,Skd	System forced in Stay mode with entry/exit delay via Sked
63	Frc,Prt,+Dly,KS	System forced in Stay mode with entry/exit delay via keyswitch
64	Frc,Prt,+Dly,RPS	System forced in Stay mode with entry/exit delay via RPS software
65	Frc,Prt,+Dly,Usr	System forced in Stay mode with entry/exit delay via user
66	Frc,Prt,-Dly,RPS	System forced in Stay mode with no entry/exit delay via RPS software
67	Frc,Prt,-Dly,Usr	System forced in Stay mode with no entry/exit delay via user
68		Reserved
69	CommFail	Report failed to reach routing destination
70	CommFail,AltComm	Report failed to reach routing destination configured for alternate communication
71	Comm Restoral	After communication fail, report sent successfully to routing destination
72	CommRstl,AltComm	After communication fail, report sent successfully to routing destination configured for alternate communication
73	Date/Time Changed	Date/time in control panel changed
74	Duress	User entered Duress PIN or pressed Panic key sequence on RF keyfob
75	Fire, Alarm	Alarm event on fire detection device
76	Fire,Cross	Verified alarm event on fire detection devices with cross zone option programmed
77	Fire,Unverified	Unverified alarm event on fire detection devices with cross zone option programmed
78	Fire,Missing	Fire detection devices assigned to zone expander (wired or RF) not responding to panel status poll
79	Fire,Alrm,Rstl	Restoral from alarm, fire detection devices
80	Fire,Trouble	Trouble condition on fire detection devices
81	Fire,Trbl,Rstl	Restoral from trouble on fire detection devices
82	Instl Mode,Start	Installer PIN entered. Installer mode accessed
83	Instl Mode,End	Installer mode exited
84	Log Overflow	Panel log overflow condition. Oldest events being overwritten in history log
85	Log Threshold	Panel log reached threshold. Contact security company
86	AltCom Log Signl	Low signal strength detected on alternate communication device
87	Missing,Alarm	Zone assigned to zone expander (wired or RF) not responding to panel's status poll when armed
88	Missing,Trouble	Zone assigned to zone expander (wired or RF) not responding to panel's status poll when disarmed
89	Open, Skd	Opening by sked (Disarm/turn off)
90	Open, RPS	Opening by RPS software (Disarm/turn off)
91	Open, User	Opening by user (Disarm/turn off)
92	Open, KS	Opening by keyswitch (Disarm/turn off)
93	Open, Skd, Alarm	Opening after alarm by Sked
94	Open, RPS, Alarm	Opening after alarm by RPS software
95	Open, Usr, Alarm	Opening after alarm by user
96	Open, KS, Alarm	Opening after alarm by keyswitch

Panel Events (Command 85) - Continued

Equ #	System Log Display / Printer Report	Description
97		Reserved
98	Params Changed	Panel parameters changed
99	Phone Line Fail	Telephone line voltage below 3V for continuously for 40 seconds
100	Phone Line Rstl	After telephone line fail event, telephone line detected above 3V continuously for 40 seconds
101	Bad Call to RPS	Panel attempted to call RPS, but failed
102	RPS Access Fail	RPS attempted to connect to control panel, but failed
103	RPS Access OK	RPS successfully connected to and disconnected from control panel.
104	Re-boot, Panel	Normal start-up or reset with installer switch
105	Re-boot, Dbus	Unexpected reset (reboot) from option bus device
106	Output Reset, Usr	Output reset by user
107	Output Reset, Skd	Output reset by sked
108	Output Reset, RPS	Output reset by RPS software
109	Output Set, Usr	Output set by user
110	Output Set, Skd	Output set by sked
111	Output set, RPS	Output set by RPS software
112	Rstl, Tamper	Restoral from alarm, tamper zone type
113	Rstrl, Emergency	Restoral from alarm, emergency zone type
114	Rstrl, Panic	Restoral from alarm, panic zone type
115	Rstrl, Invisible	Restoral from alarm, invisible zone type
116	Rstr, 24-hr Burg	Restoral from alarm, 24-hr burglary zone type
117	Rstrl, Cntrl, Dly	Restoral from alarm, controlled entry/exit delay zone type
118	Rstrl, Cntrl	Restoral from alarm, controlled keyswitch, follower or instant zone type
119	Rcvr Jam	Jammed condition detected on premises RF receiver
120	Rcvr Jam Rstl	Jammed condition detected on premises RF receiver cleared
121	RF Battery Low	Low battery detected on premises RF transmitter
122	RF Battery Rstl	Low battery detected on premises RF transmitter cleared
123	RF Tamper Trbl	Premises RF transmitter tamper trouble
124	RF Tamper Rstl	Premises RF transmitter tamper restored
125	DBus Missing	Option bus device not responding to polling
126	DBus Missing, Rstl	Option bus device declared as missing is now responding to polling
127	DBus Tamper	Tamper circuit on option bus device is faulted
128	DBus Tamper, Rstl	Tamper circuit on option bus device has restored
129	DBus Trouble	Trouble detected on option bus device
130	DBus Trouble, Rstl	Option bus device trouble condition has restored
131	DBus Overcurrent	Over current condition detected on option bus device
132	DBusOverCur, Rstl	Over current condition detected on option bus device has restored
133	Sensor Mon Trbl	Sensor trouble detected
134	Sensor Mon Rstl	Sensor trouble detected restored
135	Sensor Reset	User entered System Reset function (Command 47)
136	System Inactive	Area was not armed in inactive interval. System reset function or arming area resets this trouble
137	Test, OK	No system troubles at automatic test report time
138	Test, Off-Normal	System trouble present at automatic test report time
139	Trbl, Tamper	Trouble condition on tamper or voice active detection device
140	Trbl, Emergency	Trouble condition on emergency detection device
141	Trbl, Panic	Trouble condition on panic detection device
142	Trbl, Invisible	Trouble condition on invisible detection device
143	Trbl, 24-hr Burg	Trouble condition on 24-hour burglary detection device
144	Trbl, Cntrl, Dly	Trouble condition on entry/exit delay detection device
145	Trbl, Cntrl	Trouble condition on controlled keyswitch, follower or instant detection device
146	Rstl, Trbl, Tmpr	Restoral from trouble condition on tamper or voice active detection devices
147	Rstl, Trbl, Emerg	Restoral from trouble condition on emergency detection devices
148	Rstl, Trbl Panic	Restoral from trouble condition on panic detection devices

Panel Events (Command 85) - Continued

Equ #	System Log Display / Printer Report	Description
149	Rstl,Trbl,Invis	Restoral from trouble condition on invisible detection device
150	Rstl,Trbl,24-hr	Restoral from trouble condition on 24-hour burglary detection device
151	Rstl,Trbl,Dly	Restoral from trouble condition on controlled entry/exit detection device
152	Rstl,Trbl,Cntrl	Restoral from trouble condition on controlled keyswitch, follower, instant detection devices
153	User Code Area Set	User PIN code added by assigning area
154	User Code Change	User PIN code changed
155	User Code Delete	User PIN code deleted
156	User Code Tamper	Invalid PIN code entered at keypad exceeded user tamper retry count
157	User Level Set	User PIN code level set.
158	Walk Test Start	Walk test started with Command 44
159	Walk Test End	Walk test ended by user or time-out
160	Siren Trouble	Control panel detected output device missing from PO2 (output 2 – programmed as supervised)
161	Siren Restoral	Missing device from PO2 (output 2) is no longer missing
162	Grnd Fault	Ground fault detected on the control panel's zone loops
163	Grnd Fault,Rstl	Ground fault detected on the control panel's zone loops have cleared
164	First Open	Control panel is partitioned for multiple areas. First area is open (disarmed)
165	Last Close	Control panel is partitioned for multiple areas. Last area to close (turn on / arm)
166	AltComm Cond	Trouble detected on alternate communication network
167	AltComm Fail	Network failure detected on alternate communication network
168	AltComm Rstl	Network failure detected on alternate communication network restored
169		Reserved
170		Reserved
171		Reserved
172		Reserved
173	Rstrl, Swinger	Restoral from swinger bypass
174	Rstrl,Fire,Miss	Restoral from missing fire detection device (local event only)
175	Rstrl,Alarm,Miss	Restoral from missing alarm detection device (local event only)
176	Rstrl,Trble,Miss	Restoral from missing trouble detection device (local event only)
177	Rstl,Low,Signl	Restoral from alternate communication low signal strength
178	UnBypss,Fire,RPS	Bypass on fire zone type cleared
179	UnBypss,Ctrl,RPS	Bypass on controlled zone type cleared
180	UnBypss,24hr,RPS	Bypass on 24-hour zone type cleared
181	RF Battery Low	Low battery condition on RF keyfob
182	RF Batter Rstl	Low battery condition on RF keyfob restored/cleared
183	Trbl,Default PIN	Factory default Installer or User PIN's have not been changed
184	Rstl,Default PIN	Factory default Installer or User PIN's have been changed
185	Bad Set	Bad Set Condition
186	Confirmed Alarm	Confirmed Alarm or Verified Alarm
187	DBus Missing Alarm	Data Bus device not responding to polling
188	DBus Mssng Alm Rstl	Data Bus device declared as missing now responding to polling
189	DBus Tamper Alm	Tamper Open on Data Bus Device Tamper
190	DBus Tmp Alm Rstl	Data Bus Tamper Restoral
191	DBus Trbl Alm	Trouble Detected on data Bus Device
192	DBus Trbl Alm Rstl	Data Bus Trouble Condition cleared
193	Siren Missing Alarm	Trouble condition detected on PO2, configured as siren output
194	Siren Alm Rstl	Trouble condition on supervised siren output cleared.

Panel Events (Command 85) - Continued

Security System Limitations

Not even the most advanced security system can guarantee protection against burglary, fire, or environmental threats. All security systems are subject to possible compromise or failure-to-warn for a variety of reasons including, but not limited to, the following:

- If sirens or horns are placed outside the hearing range of people in remote areas of the building or in areas, which are frequently closed off, they do not provide the intended protection.
- If intruders gain access through unprotected zones of entry, the system will not detect their entrance.
- If intruders have the technical means of bypassing, jamming, or disconnecting all or part of the system, they will not be detected.
- If the AC power supply is OFF and the back up battery is either missing or dead, sensors will not detect intrusion.
- Smoke detectors cannot detect smoke in chimneys, walls, or roofs, or smoke blocked by a closed door. They may not detect smoke or fire on a level of the building different from the one on which they are located. Smoke detectors may not be able to warn in time about fires started by explosions, improper storage of flammables, overloaded electrical circuits, or other types of hazardous conditions.
- If phone lines are out of service, reports from the security system to the security company cannot be sent. Telephone lines are vulnerable to compromise by several means. Inadequate maintenance and failure to test are the most common causes of alarm failure. It is strongly recommended that you test your system once a week to be sure that all system components are working properly. Although having a security system may make you eligible for reduced insurance premiums, the system is no substitute for insurance. Warning devices cannot compensate you for loss of life or property.

Fire Safety and Evacuation

Residential fire is a leading cause of accidental death. Most fire related deaths occur at night when occupants suffocate in their sleep from smoke and toxic gases, rather than from burns. To help reduce this risk, the following program should be implemented.

1. Minimize fire hazards. Smoking in bed, cleaning with flammable liquids such as gasoline, leaving children home alone, and using unsafe holiday decorations are some of the common causes of household fire.
2. Install a fire alarm system. The primary purpose of this system is to protect lives by giving the earliest possible warning of danger.
3. A smoke detector should be provided to protect each sleeping area in a home.
4. Practice an escape plan. Because there may be very little time between detection of a fire and the time it becomes deadly, it is important that every member of the family understand how to quickly evacuate according to the plan.
5. Plan both primary and alternate escape routes. Since stairwells and hallways may be blocked during a fire, exiting through a bedroom window must be a part of the escape plan. If the sleeping area is above the ground floor, install a means of safely descending outside the building if one does not already exist.
6. As a part of this plan, all family members should arrange to meet at a location away from the house (such as a neighbours house) so you will know that everyone is accounted for.
7. If it is determined that the alarm was accidentally sounded, the siren should be silenced, the detectors reset, and your security company notified immediately that there is no emergency situation.

Maintenance and Service

This security system requires very little maintenance, however, you should test the system weekly to ensure it is working properly. A test schedule and maintenance program can be arranged. If you notice a change in operation during normal use or testing, call for service as soon as possible. Do not attempt to repair the control panel, keypads, or detectors yourself.

Call _____ before testing.
The security system is connected to this telephone number:

The security control panel is connected to the phone jack located: _____.

RF Receiver location: _____.

Power Failure

If the keypad indicates a power failure, and you have power in the rest of your premises, there may be a problem with the electrical transformer or circuit breaker supplying power to your security control panel. First, check to be sure that the transformer is securely plugged into the electrical outlet. If it appears to be damaged in any way, do not attempt to repair it. Call your security company for service.

AC Power Supply location: _____

If the transformer is plugged in, check the circuit breaker supplying power to the outlet. If the breaker is tripped, check the appliances on the circuit for signs of electrical problems. Make sure someone has not intentionally turned the breaker off. When all is clear, reset the breaker.

Circuit breaker number: _____

How To Clean The Keypad

If your keypad gets dirty, apply a household glass cleaner to a clean cloth or paper towel and wipe the surface. Do not spray any liquid directly onto the keypad. It could run inside the case and damage electrical circuits.

Programming Via A 'Text' Keypad

You can only program the system via text keypad when the system is disarmed (All areas = Off). To program the system, generally you would enter programming mode, change parameters and then terminate the programming session.

The system parameters are divided up into addresses, each address holding a single value (0 to 15). Some addresses only contain one parameter (or telephone digit), other address program multiple parameters (Option Bits) where you add multiple options together and program a single value.

Enter Installer's Programming Mode

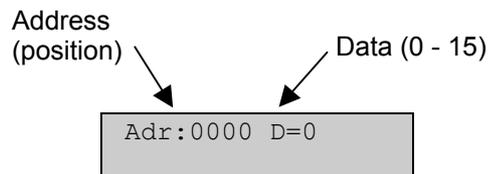
1. Disarm all areas.
2. Enter the [installer code] (default = 6543).
3. Press [Select] [4] [1].
The installer menu will display and scroll through all available functions.
4. Press [8] to select **Keypad Program**.
The keypad will display the software version of the control panel and then automatically positions you to Address 0000 (Phone Number 1 For Destination 1).

```
Solution 40
Revision v#.##
```

```
Adr:0000 D=0
```

Viewing Addresses

Each programming parameter is composed of one or more addresses. Each address has its own value programmed.



Stepping Addresses

To step forward one Address, press the [Select] key. To step backwards one Address, press the [*] key. To jump from one Address to another Address, enter the Address number followed by the [Select] key (eg. If you are at Address 0000 and you want to jump to Address 0064, press [6] [4] [Select]).

Programming Addresses

To program an Address:-

1. Go to the Address that you want to change (refer to Stepping above).
2. Enter the new value (0 – 15) followed by the [*] key.
As you enter the new value, it will display on the second line of the display.

Repeat Steps 1 and 2 until all Addresses you want to program have been set.

Programming Option Bit Addresses

You will notice option bits throughout the quick reference guide. This allows you to program any combination of the four different options in the one location by adding the options together. Programming a zero (0) will disable all four options.

Example

If at LOCATION 258 you only want options 1, 2 and 4, add the numbers together and the total is the number to be programmed. In this example, the number to be programmed is 7 (Eg. $1 + 2 + 4 = 7$).

Option	Description
0	No Options Programmed
1	Away - No Exit Option Allowed
2	Answering Machine Bypass Only When Away or Stay
4	Arm Area 1 Via Telephone Allowed
8	Reserved

Table 8: Example Option Bit Address

Programming Text Addresses

When programming keypad text via the keypad, selecting any text Address will put you in a different programming mode that allows you to edit text blocks. Text blocks comprise of a maximum of 16 characters (each character uses two Addresses).

When programming text, various keys on the keypad operate differently. A group of characters are assigned to each of the numeric keys on the keypad. Pressing the same numeric key again will toggle to the next character assigned to the key (eg. Press the 2 key will display the 'A' character, press the 2 key again will toggle to the 'B' character, press the 2 key again will toggle to the 'C' character etc). Refer to the table below for more information.

Key	Characters Assigned To Each Numeric Key On Keypad								
1	.	,	?	!	-	&	<	>	1
2	A	B	C	a	b	c	2		
3	D	E	F	d	e	f	3		
4	G	H	I	g	h	i	4		
5	J	K	L	j	k	l	5		
6	M	N	O	m	n	o	6		
7	P	Q	R	S	p	q	r	s	7
8	T	U	V	t	u	v	8		
9	W	X	Y	Z	w	x	y	z	9
0	SPACE	→	_	@	#	\$	%	*	0

Table 9: Text Address Character Set

Key	Description
*	Moves back to previous text block
Select	Moves forward to next text block
A-Key	Moves the cursor backwards one character
B-Key	No Function
C-Key	Moves the cursor forward one character

Table 10: Text Address Keys

Exit Installer's Programming Mode

When all programming parameters (that need to change) are set, you press and hold the [#] key to exit programming mode. The keypad will update all programming parameters and display:

```
Solution40 Re#.#
Please Wait...
```


Installer's Menu

Installer's menu allows the installer to program and test many functions that are not available to the end user.

Enter Installer's Menu

1. Disarm all areas.
2. Enter the [installer code] (default = 6543).
3. Press [Select] [4] [1].
The installer menu will display and scroll through all available functions.

Press 1 for
Siren Test.

Press 2 for
Strobe Test.

Press 3 for
Battery Test.

Press 4 for
Test Report.

Press 5 for
Zone Status.

Press 6 for
Output Test.

Press 7 for
RF Menu.

Press 8 for
Keypad Program.

Press 9 for
Program Key.

Press 0 for
Call For Service

4. Press the numeric key (1 – 0) that corresponds to the function you want to test or program.

Press [1] to test the siren outputs for 2 seconds, refer to page 82.

Press [2] to test the strobe output refer to page 82.

Press [3] to test the battery (may take 4 minutes) , refer to page 82

Press [4] to send a 'test' report (may take 10 minutes), refer to page 83.

Press [5] to check zone status, refer to page 84.

Press [6] to test outputs, refer to page 85.

Press [7] to add/delete and test RF devices, refer to page 86.

Press [8] to enter Installer's Programming Mode, refer to page 79 (the Installer Switch must be closed to enter programming mode).

Press [9] to transfer programming data between the panel and the programming key (PK32), refer to page 90.

Press [0] to display 'Call For Service' trouble conditions, refer to 95.

5. Press [#] to exit Installer's Menu.

Test Siren

This function allows you to test the siren output for two seconds.

1. Enter the installer PIN Code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Press [1] to select siren test.
The keypad will display the following.

```
Testing siren.
```

Test Strobe

This function allows you to test the strobe output.

1. Enter the installer PIN Code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Press [2] to select strobe test.
The keypad will display the following.

```
Testing Strobe,
```

```
To end,  
Press #.
```

4. Press [#] to exit.

Test Battery

This function allows you to test the control panel's back-up battery.

1. Enter the installer PIN Code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Press [3] to select battery test.
The keypad will display the following.

```
Testing Battery  
May take 4 min
```

```
Testing Battery,  
Voltage = 13.7V.
```

In the above example, the battery voltage is reading 13.7 volts DC.

4. The battery test will automatically terminate after 4 minutes if successful test or when the test fails, otherwise, press [#] to exit.

Test Report

This function allows you to test the control panel's ability to report to the receiving party (eg. monitoring station) via the telephone line.

1. Enter the installer PIN Code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Press [4] to send a test report.
The keypad will display the following.

```
Testing phone,  
may take 10 min.
```

If the phone test is successful, the keypad will display

```
Phone test  
passed.
```

If the phone test has failed, the keypad will display

```
Phone test  
failed!
```

Checking Zone Status

This function allows you to scroll through all zones to check their status.

Checking zone status will display information about the zone including the location number (zone number 1 – 40), the area (1 – 4) that the zone is assigned to and the zone number (the zone number that you want the zone to display as) on the first line. The second line will display the zone condition as normal, shorted, or open. Refer to the example shown below:

1. Enter the installer PIN code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Press [5] to select Zone Status mode.
The keypad will display the status of the first zone (location 1).

```
Loc-1 A 1 Zn 1  
Normal
```

If the zone is shorted, the keypad will display:

```
Loc-1 A 1 Zn 1  
Short
```

If the zone is open-circuit, the keypad will display:

```
Loc-1 A 1 Zn 1  
Open
```

If the zone is missing, the keypad will display:

```
Loc-1 A 1 Zn 1  
not detected.
```

5. Press * to scroll and check the status of the next zone, otherwise, press [#] to return to Installer's Mode on page 81.

Test Outputs

This function allows you to test all programmed outputs by turning the output on and off.

1. Enter the installer PIN Code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Press [6] to select test outputs.
The keypad will display the status of the first output (Output 1).

```
Output 1
Hold * for ON.
```

5. Press and hold the [*] key to turn the output on.
The output will turn on, the keypad will now prompt:

```
Output 1
Hold * for OFF.
```

6. Press and hold the [*] key to turn the output off.

```
Output 1
Hold * for ON.
```

7. Press the [*] key to toggle to the next available output to test.

```
Output 2
Hold * for ON.
```

8. Press the [*] key to toggle to the next available output to test, or press and hold the [*] key to turn the output on, otherwise press the [#] key to return to Installer's Mode on page 81.

RF Menu

This installer mode function allows you to add, delete and test RF devices. RF devices can be a combination of RF Zones or RF Keyfobs. To program RF devices, a minimum of one RF Receiver needs to be programmed in Address 1249 on page 223.

Refer to Address 2930 - 2937 on page 234 to program RF keypad options / assignment. To program RF keyfob options and RF receiver assignment, refer to page 235. Refer to Input Device on page 178 to assign zones to RF Receiver 1 (Option 4) and RF Receiver 2 (Option 5).

The number of RF devices and their RF Location is listed in the table below:

Device	# Devices Allowed	RF Location
RF Zones	40	01 - 40
RF Keyfobs*	32	45 – 76

* A maximum of 24 RF keyfobs can be assigned to a single RF Receiver. Therefore, if you require 32 RF keyfobs, both RF Receiver 1 and RF Receiver 2 need to be programmed in Address 1249 on page 223.

1. Enter the installer PIN Code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Press [7] to select the RF Menu.
The keypad will display the RF menu options.

```
Add RF ID?
press 1.
```

```
Test RF Devices?
press 2.
```

```
View or Remove
RF ID? press 3.
```

5. Press the numeric key (1 – 3) that corresponds to the RF menu you want.

Press [1] to add RF devices (refer to page 87 to continue).

Press [2] to test RF devices (refer to page 88 to continue).

Press [3] to view or remove the RF device ID (refer to page 89 to continue).

If no RF receiver has been programmed, the keypad will display the following:

```
No RF devices
connected,
```

```
to exit,
press #.
```

6. To exit this function, press [#] to return to the Installer's Menu.

Adding RF Devices

This page continues from Step 5 in the RF Menu on page 86.

- The keypad will scroll all available RF devices that can be added. Press the [*] key to scroll to the next RF device.

The keypad will first scroll all zones (1 – 40) that require an ID number programmed.

```
Loc1 A 1 Zn 1.  
To add press 1*
```

The keypad will then scroll any RF keypads (1 – 4) that require an ID number programmed (future release).

```
Loc41 Kp1,  
To add press 41*
```

The keypad will finally scroll any RF keyfobs (1 – 32) that require an ID number programmed.

```
Loc45 Kf1,  
To add press 45*
```

- Enter the device number (1 – 76) that you want to add followed by the [*] key. (eg. Press [4] [5] [*] to add an ID number for keyfob 1).

```
Enter ID for  
Loc45 Kf 1
```

- Enter the ID number displayed on the back of the RF device. As you enter the ID number, the digits will be displayed on the top line.

```
ID =  
Loc45 Kf1
```

- After you enter the last digit of the ID number, the keypad will display that the ID number has been added and prompts you to press [#] to return to Step 6.

```
ID added to  
exit press #.
```

If you attempt to enter an ID that already exists in the system, the keypad will display:

```
Duplicate ID,  
Press #.
```

- To exit this command, press the [#] key again to return to the RF menu. Pressing the [#] key a third time returns you to the Installer's Menu.

Test RF Devices

This page continues from Step 5 in the RF Menu on page 86.

6. The keypad will scroll all available RF devices that can be tested. Press the [*] key to advance scroll to the next RF device.

The keypad will first scroll all zones (1 – 40) that can be tested.

```
Loc1 A 1 Zn 1
Test? Press 1*
```

The keypad will then scroll any RF keypads (1 – 4) that can be tested (future release).

```
Loc41 Kp1
Test? Press 41*
```

The keypad will finally scroll any RF keyfobs (1 – 32) that can be tested.

```
Loc45 Kf1
Test? Press 45*
```

7. Enter the device number (1 – 76) that you want to test followed by the [*] key. (eg. Press [4] [5] [*] to test keyfob 1).

The keypad display will prompt to activate the device.

```
Activate Device!
Loc45 Kf1
```

8. Activate the RF device.
If the device is an RF sensor, you will need to fault the sensor, if the device is an RF keypad, you will need to press a key on the RF keypad and if the device is an RF keyfob, you will need to press a key on the RF keyfob.
9. The keypad will display the following information for the device that you are testing as soon as a signal is received from the RF device.

```
L01      M01 P02
Loc45 Kf1
```

On the top line the keypad displays:

Lxx = Device Operation – **L01** recognises that the RF device must be relocated, **L02** recognises that the device operation is fair and **L03** recognises that the RF device is operating correctly.

Mxx = Message Count – Displays the number of activations received by the RF device.

Pxx = Packet Count – Number of packets (0 – 8) received from the signal of the RF device (Higher number of packets, better the signal received).

- Alarm, Panic and Restoral messages are transmitted with 8 packets.
- Supervisory and test transmissions (smoke detectors) consist of 4 packets.
- RF keyfobs transmit 4 packets for normal operation and 8 packets for panic operation.

10. Press the [#] key to return to Step 6. Press [#] again will return you to the RF menu. Pressing the [#] key a third time returns you to the Installer's Menu.

View / Remove RF Devices

This page continues from Step 5 in the RF Menu on page 86.

6. The keypad will scroll all available RF devices that can be viewed and removed. Press the [*] key to advance scroll to the next RF device.

If there are no RF devices programmed, the keypad will display:

```
No RF to remove,
press #.
```

The keypad will first scroll all zones (1 – 40) that can be viewed or removed.

```
Loc1 A 1 Zn 1
ID = xxxxxxxxxx
```

```
To remove ID
press 1 *.
```

The keypad will then scroll any RF keypads (1 – 4) that can be viewed or removed (future release).

```
Loc41 Kp1
ID = xxxxxxxxxx
```

```
To remove ID
press 4 1 *.
```

The keypad will finally scroll any RF keyfobs (1 – 32) that can be viewed or removed.

```
Loc45 Kf1
ID = xxxxxxxxxx
```

```
To remove ID
press 4 5 *.
```

7. Enter the device number (1 – 76) that you want to remove followed by the [*] key. (eg. Press [4] [5] [*] to remove keyfob 1).

The keypad display will prompt you to re-enter the device number to confirm the deletion of the RF device.

```
Confirm remove,
press 4 5 *.
```

8. Re-enter the RF device number again. (eg. Press [4] [5] [*] to remove keyfob 1).
9. The keypad will display the following information to verify that you removed (deleted) the ID number of the RF device that you selected.

```
Loc 45 Kf 1,
ID removed.
```

10. Press the [#] key to return to Step 6, press [#] again to return to the RF Menu. Pressing the [#] key a third time returns you to the Installer's Menu.

Program Key

This installer function allows you to copy programming configuration between the control panel and the key. The programming key (PK32) is a unique device that allows you to store information from your control panel. When programming information of one control panel is stored in the key, the key can be used to download the same information onto other control panels with the same software version.

1. Enter the installer PIN Code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Plug the programming key onto the control panel pins marked Auxiliary.
4. Press [9] to select Program Key.
The keypad will display the Program Key menu options.

To copy Key to
Panel, press 1.

To copy Panel to
Key, press 2.

To check Key,
press 3.

To erase Key,
press 4.

To exit,
press Select.

6. Press the numeric key (1 – 4) that corresponds to the program key function you want.

Press [1] to copy the programming key information to the control panel – See page 91 to continue.

Press [2] to copy the control panel information to the programming key – see page 92 to continue.

Press [3] to verify that the programming key is not corrupt – See page 93 to continue.

Press [4] to erase programming key information (can be used to restore corrupt key) – see page 94 to continue.

Press [#] to exit this function.

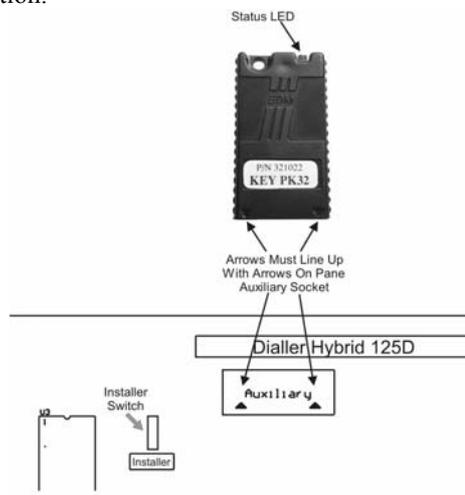


Figure 9: PK32 To Control Panel Connections

Copy Key To Panel

These steps continue from Step 6 on page 90.

7. The keypad will verify that you are sure that you want to copy the key information to the control panel.

Are you sure?,

To copy Key to
Panel, hold 1.

To exit,
press #.

8. Press and hold the [1] key to send key information to the control panel (else press [Select] to exit).

Copying to Panel
please wait.

9. When the key configuration has successfully been copied to the control panel, the keypad will prompt you to press the [#] key to exit.

Program sent,

to exit,
press #.

If the key failed to copy to the control panel, the keypad will display:

Program failed,

to exit,
press #.

10. Press [#] to exit.

Copy Panel To Key

These steps continue from Step 6 on page 90.

7. The keypad will verify that you are sure that you want to copy the control panel information to the key.

Are you sure?,

to copy panel to
Key, hold 2.

To exit,
press #.

8. Press and hold the [2] key to send control panel configuration to the key (else press [#] to exit).

Copying to Key,
please wait.

9. When the panel configuration has successfully been copied to the programming key, the keypad will prompt you to press the [#] key to exit.

Program sent,

to exit,
press #.

If the control panel failed to copy to the key, the keypad will display:

Program failed,

to exit,
press #.

10. Press [#] to exit.

Check Key

These steps continue from Step 6 on page 90.

7. The control panel will verify that the data locations on the programming key can be read and written to and read again before restoring original data stored on the key.

```
Checking Key,  
please wait.
```

```
To exit,  
Press #.
```

8. If the programming key checked OK, the keypad will display:

```
Check OK, to exit  
Press #.
```

If the programming key check failed, the keypad will display:

```
Check failed,
```

```
to exit,  
press #.
```

9. Press the [#] key to exit.

Erase Key

These steps continue from Step 6 on page 90.

7. The keypad will verify that you are sure that you want to erase the information on the programming key.

```
Are you sure?  
Hold 4 to erase.
```

```
To exit,  
press #.
```

8. Press and hold the [4] key to erase the programming key information (else press [#] to exit).
9. The keypad will now display.

```
Erasing Key,  
please wait.
```

10. When the programming key has been erased, the keypad will display:

```
Key erased,
```

```
to exit,  
press #.
```

If the control panel failed to erase the key, the keypad will display:

```
Failed to erase,
```

```
to exit,  
press #.
```

11. Press the [#] key to exit. The programming key has now been erased.

Call For Service

Call for service allows the installer (or security company) to verify what trouble condition exists that requires the installer's attention. The call for service trouble conditions is not shown to the end user because they can service none of the conditions.

When an end user enters [Select] [4] [2] (Command 42) to check system trouble conditions, the keypad will display 'Call For Service' for any trouble condition that requires them to contact the installer (security company) to rectify.

1. Enter the installer PIN Code (default 6543).
2. Press [Select] [4] [1].
The installer mode options will now scroll on the keypad display.
3. Press [0] to select Call for Service.
The keypad will display any current call for service trouble conditions.

Comm failure,
Destination #.

System battery
voltage is low.

System battery
not detected.

Bus device ###
not detected

Bus device ###
tamper

Bus device ###
trouble

Siren Supervision
Fault PO 2

RF Rcvr trouble
Device ###

RF Rcvr jammed
Device ###

Ground Fault

Installer switch
closed.

Checksum failure
Control Panel

Telephone Line
not detected.

PINs must be
Changed!

4. Press the [*] key to advance scroll to the next trouble condition, alternatively, press the [Select] key to exit this command.

Details of the following Call For Service trouble conditions are listed below.

Trouble Condition	Description
Comm Fail	This trouble condition will display when the control panel fails to communicate successfully via the telephone line. The trouble condition will display which destination (1 or 2) that failed to communicate. The system will clear this trouble condition when the control panel has successfully communicated via the failed destination.
Low Battery	This condition will display when the control panel registers that the backup battery voltage has fallen below 12.1 volts. The system will clear this trouble condition when the battery voltage has restored above 13.1 volts.
Missing Battery	This trouble condition will display when the control panel has registered that the backup battery voltage has fallen below 10.2 volts. The system will clear this trouble condition when the battery voltage has restored above 13.1 volts.
Data Bus Missing	This trouble condition will display when the control panel registers an SDI expansion device (eg. Zone exp board, output relay board etc) has been disconnected from the option bus terminals, or not communicating – polling. The system will clear this trouble condition when the control panel has successfully communicated with the SDI expansion device.
Data Bus Tamper	This trouble condition will display when the control panel registers the tamper circuit on the SDI expansion device has become open circuit. The control panel will clear this trouble condition when the tamper circuit of the SDI expansion device has restored.
Data Bus Trouble	This trouble condition will display when the SDI expansion device has registered a trouble condition (eg. Overcurrent condition etc). The trouble condition will clear when the trouble condition has restored. Refer to the instructions that are included with the expansion device to determine the nature of the trouble condition.
Siren Supervision Fail	This trouble condition will display if PO2 (Output 2) has registered the output device as missing. To program the control panel to monitor PO2 (Output 2), refer to Output 2 Is Supervised Horn Speaker on page 201. This trouble condition will clear when the output device has restored.
RF Receiver Trouble	This trouble condition will display when the RF receiver has not received a signal from any transmitter in a calculated interval (eg. If RF supervision is not programmed, the control panel will register a RF receiver trouble only, if the RF supervision is programmed, the control panel will register both an RF trouble condition and also a Zone Missing report). This trouble condition will clear when the RF receiver has received a signal from any transmitter.

Trouble Condition	Description
RF Receiver Jammed	This trouble condition will display when the RF receiver senses that it is being jammed. The trouble condition will clear when the jammed condition clears.
Ground Fault	This trouble condition occurs when any (-) zone terminal has been shorted to the earth terminal. This trouble condition will clear when the short between the (-) zone terminal and the earth terminal has been removed.
Installer Switch Closed	This trouble condition occurs when the installer switch remains shorted (closed) when you are not in Installers Programming Mode. The trouble condition will clear when the switch is open circuit.
Checksum Fail	This trouble condition occurs on start-up when you change an address value and reset the power supply of the control panel without exiting programming mode first.
Telephone Line Missing	This trouble condition occurs when the control panel registers that the telephone line has been disconnected continuously for a minimum of 40 seconds.
PINs Must Be Changed	This trouble will occur when the default PIN codes for either User 1 or the Installer PIN have not been changed.

Routing Tables

The following tables will explain how the system will communicate using Destination #1, Destination #2, or, both Destination #1 and Destination #2 programmed.

If the system fails to report, the system will send a 'Communication Fail' report [Equ 69]. When the system successfully reports again, the system will send a 'Communication Fail Restore' report [Equ 71].

If the system is only configured to report on one destination, the system will only log a 'Communication Fail', however, if the system is configured to report on both destinations, the system will log a 'Communication Fail' on the failed destination and report send a 'Communication Fail' report on the second destination.

Routing Option - Destination 1 Only

Phone #1 Only Programmed

Attempt	Destination 1		Destination 2	
	Phone #1	Phone #2	Phone #1	Phone #2
1	X			
2	X			
3	X			
4	X			
5	X			

Phone #1 and Phone #2 Programmed

Attempt	Destination 1		Destination 2	
	Phone #1	Phone #2	Phone #1	Phone #2
1	X			
2		X		
3	X			
4		X		
5	X			

Routing Option - Destination 2 Only

Phone #1 Only Programmed

Attempt	Destination 1		Destination 2	
	Phone #1	Phone #2	Phone #1	Phone #2
1			X	
2			X	
3			X	
4			X	
5			X	

Phone #1 and Phone #2 Programmed

Attempt	Destination 1		Destination 2	
	Phone #1	Phone #2	Phone #1	Phone #2
1			X	
2				X
3			X	
4				X
5			X	

Routing Option - Destination 1 and Destination 2

Phone #1 Programmed For Both Destination 1 and Destination 2

Attempt	Destination 1		Destination 2	
	Phone #1	Phone #2	Phone #1	Phone #2
1	X			
2	X			
3	X			
4	X			
5	X			
1			X	
2			X	
3			X	
4			X	
5			X	

Phone #1 and Phone #2 Programmed For Destination 1, Phone #1 For Destination 2

Attempt	Destination 1		Destination 2	
	Phone #1	Phone #2	Phone #1	Phone #2
1	X			
2		X		
3	X			
4		X		
5	X			
1			X	
2			X	
3			X	
4			X	
5			X	

Phone #1 & Phone #2 Programmed For Both Destination 1 and Destination 2

Attempt	Destination 1		Destination 2	
	Phone #1	Phone #2	Phone #1	Phone #2
1	X			
2		X		
3	X			
4		X		
5	X			
1			X	
2				X
3			X	
4				X
5			X	

Phone #1 Programmed For Destination 1, Phone #1 & Phone #2 For Destination 2

Attempt	Destination 1		Destination 2	
	Phone #1	Phone #2	Phone #1	Phone #2
1	X			
2	X			
3	X			
4	X			
5	X			
1			X	
2				X
3			X	
4				X
5			X	

Securitel Format

Securitel is an alternative monitoring protocol used for reporting via an existing telephone line that is supervised by the monitoring company. Telephone line faults or deliberately cut lines can be detected.

Securitel is programmed by setting Address 0064 on page 112 (Destination 1) or Address 0130 on page 113 (Destination 2) to the value of 5. The securitel unit is connected to the control panel via the special cable and interface module (See Figure 10 and 11 for details). The Securitel unit also connects to the telephone line for reporting.

The 'Securitel Interface Unit' is uniquely identified by its "Hard ID" (Area 1 Account Number) number to the monitoring station. This "Hard ID" is initialised on the start up of the control panel, which sends an initialisation command containing the first 4 digits of the Area 1 Account Number to the 'Securitel Interface Unit'. The Securitel Unit uses this 4 digit hexadecimal number as the "Hard ID" which uniquely identifies it to the monitoring station. Securitel "Hard ID" is programmed by inputting ID at Address 0276-0281 on page 256 (Area 1 Account Number).

Once the hardware connection and programming is complete confirm that H2 on the STU is flashing occasionally, this will confirm that the STU has seen the Securitel pilot tone. Alternatively to confirm that the securitel pilot tone is present, a telephone handset may be placed on the line and an audio chirp should be heard at intervals. If the Securitel pilot tone is not present, contact the monitoring station for further assistance.

To send a report to the monitoring station the panel may be armed or disarmed. It should be observed that H1 will be activated if the STU has been upped by the monitoring station. If there is no report response then the monitoring station will have to be contacted to "up the STU", which reactivates the connection to the STU. If the STU has been "Upped" correctly then activity should be observed at the monitoring station.

For full specifications on the Securitel unit, refer to the MCM electronics website www.mcmelectronics.com.au.

Note

The Security Interface does not support multiple "Hard ID" numbers (Account Numbers).

Specifications

- **Dimensions:** (H) 50 mm (with stand-off's) x (W) 85 mm x (D) 185 mm
- **Operating Voltage:** 12 VDC
- **Current Draw:** 45 mA
- **Operating Humidity:** 95 % (Non Condensing)
- **Operating Temperature:** 0 – 45 Degrees C

PCB Overlay

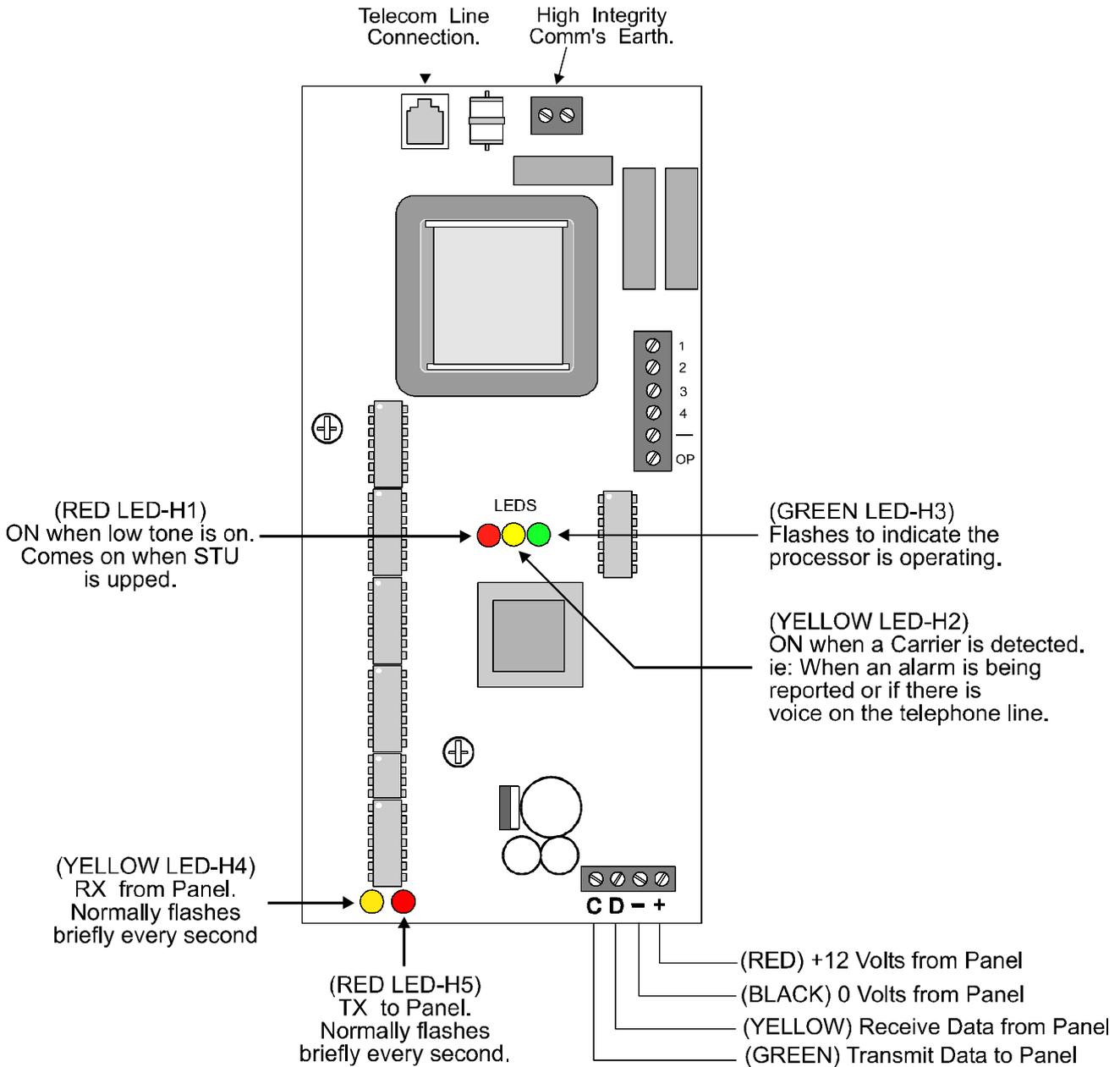


Figure 10: Securitel PCB Overlay

Securitel Connection

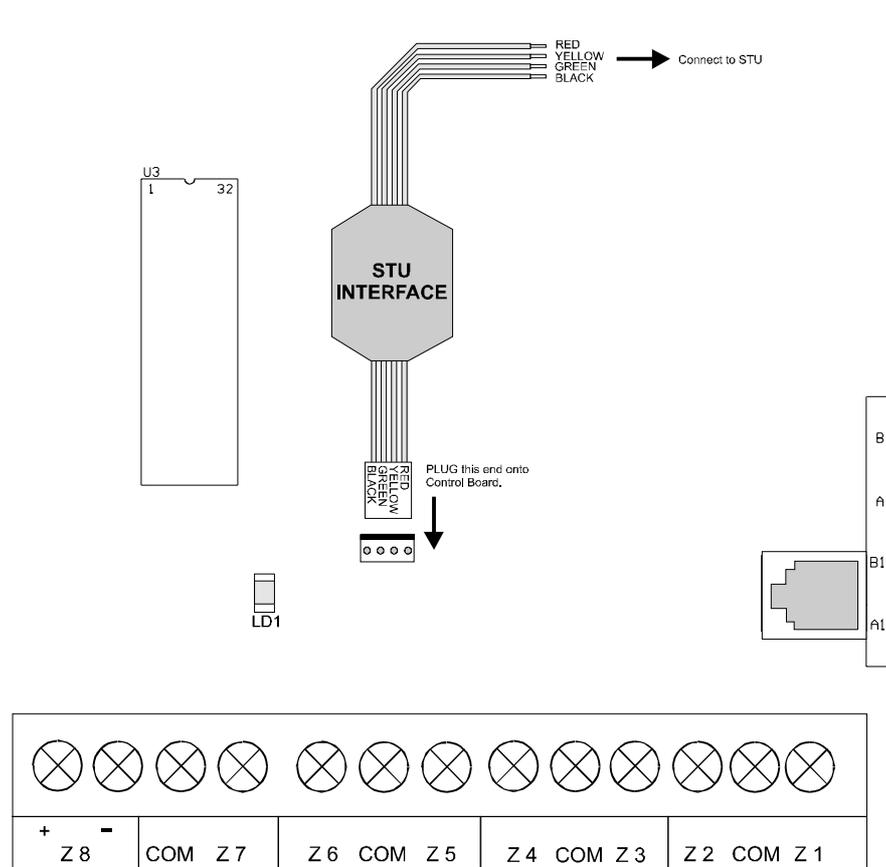


Figure 11: Securitel Connection

Securitel Telephone Line Connection Diagram

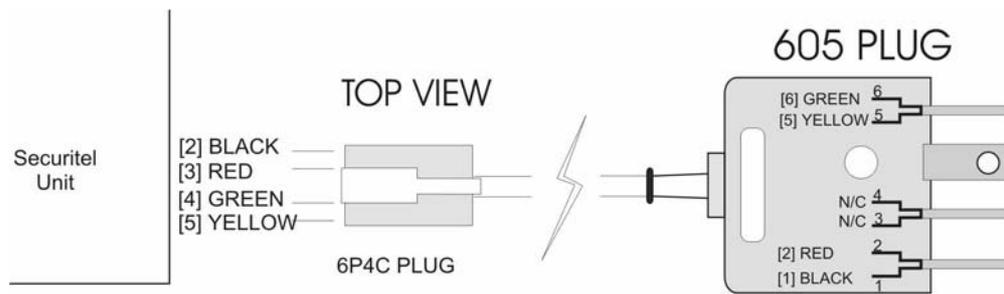


Figure 12: Securitel Telephone Wiring

Reporting Formats Table

The following table details each control panel event as it appears in the control panel log and the reports sent for each event. The last column (System Status Reports) displays whether the event report follows (S) on page 123 and/or follow System Status Report Routing (R) on page 123. When the control panel is set up to report in the pager format, the Equ number will be sent to indicate the reporting panel event.

Equ #	Description	System Log Display / Printer Report	SIA Report	CID Code	System Status Reports	
01	AC Fail	AC Fail	AC Trouble	301 AC Loss	R	S
02	AC Fail Restore	AC Restore	AC Restoral	301 AC Loss	R	S
03	24 Hr Tamper Alarm	Alarm, Tamper	Tamper Alarm	137 Tamper		
04	24 Hr Emergency Alarm	Alarm, Emergency	Emergency Alarm	101 Personal Emergency		
05	24 Hr Panic Alarm	Alarm, Panic	Panic Alarm	120 Panic		
06	24 Hr Panic (Invisible) Alarm	Alarm, Invisible	Holdup Alarm	120 Panic		
07	24 Hr Burglary Alarm	Alarm, 24-hr Burg	Burglary Alarm	133 24-Hr Safe		
08	Entry/Exit Alarm	Alarm, Cntrl, Dly	Burglary Alarm	134 Entry/Exit		
09	Burglary Alarm	Alarm, Cntrl	Burglary Alarm	130 Burglary		
10	24 Hr Tamper Cross Alarm	Cross, Tamper	Tamper Alarm	137 Tamper		
11	24 Hr Emerg Cross Alarm	Cross, Emergency	Emergency Alarm	101 Personal Emergency		
12	24 Hr Panic Cross Alarm	Cross, Panic	Panic Alarm	120 Panic		
13	24 Hr Panic Cross Alarm (Invisible)	Cross, Invisible	Holdup Alarm	120 Panic		
14	24 Hr Burg Cross Alarm	Cross, 24hr Burg	Burglary Alarm Cross-zone	133 24-Hr Safe		
15	Entry/Exit Cross Alarm	Cross, Cntrl, Dly	Burglary Alarm	134 Entry/Exit		
16	Burglary Cross Alarm	Cross, Cntrl	Burglary Alarm	130 Burglary		
17	Unverified Cross Alarm	Cross, Unverified	Unverified Event-Burglary	378 Cross-Zone Trouble		
18	Exit Error Alarm (Entry/Exit)	Alarm Exit Error	Exit Error	374 Exit Error Zone		
19	Recent Close Alarm (Entry/Exit)	Alrm Recent Clse	Recent Closing	134 Entry/Exit		
20	Recent Close Alarm (Burglary)	Alrm Recent Clse	Recent Closing	130 Burglary		
21	Auto On Extend (Arming)	Auto On Extended	Closing Extend	464 Auto-Arm Time Ext		
22	Battery Low	Battery Low	System Battery Trouble	302 Low System Battery	R	S
23	Battery Missing	Battery Missing	System Battery Trouble	311 Battery Missing	R	S
24	Battery Low Restore	Rstrl Batt Low	System Battery Restoral	302 Low System Battery	R	S

Table 12: Panel Events and Reporting Formats

Equ #	Description	System Log Display / Printer Report	SIA Report	CID Code	System Status Reports	
25	Battery Missing Restore	Rstrl Bat Missng	System Battery Restoral	311 Battery Missing	R	S
26	Bypass Fire Zone By User	Bypass,Fire,User	Fire Bypass	571 Fire Bypass		
27	Bypass Fire Zone By RPS	Bypass,Fire,RPS	Fire Bypass	571 Fire Bypass		
28	Bypass Controlled Zone By User	Bypass,Ctrl,User	Burglary Bypass	570 Zone / Sensor Bypass		
29	Bypass Controlled Zone By RPS	Bypass,Ctrl,RPS	Burglary Bypass	570 Zone / Sensor Bypass		
30	Bypass 24 Hr Zone By User	Bypass,24hr,User	Burglary Bypass	572 24-Hr Zone Bypass		
31	Bypass 24 Hr Zone By RPS	Bypass,24hr,RPS	Burglary Bypass	572 24-Hr Zone Bypass		
32	Forced Zone	Bypass,Forced Pt	Burglary Bypass	570 Zone / Sensor Bypass		
33	Swinger Bypass	Bypass,Swinger	Burglary Bypass	575 Swinger Bypass		
34	Bypass Fire Restore By User	UnBypps,Fire,Usr	Fire Unbypass	571 Fire Bypass		
35	Bypass Restore By User	UnBypps,Ctrl,Usr	Burglary Unbypass	570 Zone / Sensor Bypass		
36	Bypass 24 Hr Restore By User	UnBypps,24hr,Usr	Burglary Unbypass	572 24-Hr Zone Bypass		
37	Call For Service Interval	Call For Service	Service Required	616 Service Request	R	
38	Cancel Alarm	Cancel Alarm	Burglary Cancel	406 Cancel		
39	Cancel Fire Alarm	Cancel Fire	Fire Cancel	406 Cancel		
40	Check Sum Fail, Panel EE	Checksum Fail	Diagnostic Error	303 RAM Checksum Bad	R	S
41	Check Sum Fail, DBUS	ChckSum Fail,DBUS	Diagnostic Error	330 System Peripheral Trouble	R	S
42	Close - Away W/Delay By Sked	Cls,All,+Dly,Skd	Automatic Closing	403 Automatic O/C		
43	Close - Away W/Delay By Key/S	Cls,All,+Dly,KS	Closing Keyswitch	409 Keyswitch O/C		
44	Close - Away W/Delay By RPS	Cls,All,+Dly,RPS	Remote Closing	400 Open /Close		
45	Close - Away W/Delay By Phone	Cls,All,+Dly,Tel	Remote Closing	407 Remote Arm/ Disarm		
46	Close - Away W/Delay By User	Cls,All,+Dly,Usr	Closing Report	400 Open /Close		
47	Close - Away, No Delay By RPS	Cls,All,-Dly,RPS	Remote Closing	400 Open /Close		
48	Close - Away, No Delay By User	Cls,All,-Dly,Usr	Closing Report	400 Open /Close		
49	Close - Stay W/Delay By Sked	Cls,Prt,+Dly,Skd	Automatic Closing	456 Partial Arm		

Panel Events and Reporting Formats (Con't)

Equ #	Description	System Log Display / Printer Report	SIA Report	CID Code	System Status Reports	
50	Close - Stay W/Delay By Key/S	Cls,Prt,+Dly,KS	Closing Keyswitch	442 Keyswitch Arm/Stay		
51	Close - Stay W/Delay By RPS 4	Cls,Prt,+Dly,RPS	Remote Closing	456 Partial Arm		
52	Close - Stay W/Delay By User	Cls,Prt,+Dly,Usr	Closing Report	456 Partial Arm		
53	Close - Stay No Delay By RPS 4	Cls, Prt,-Dly,RPS	Remote Closing	456 Partial Arm		
54	Close - Stay No Delay By User	Cls,Prt,-Dly,User	Closing Report	456 Partial Arm		
55	Forced in Away mode W/Delay By Sked	Frc,All,+Dly,Skd	Automatic Closing	403 Automatic O/C		
56	Forced in Away mode W/Delay By Key/S	Frc,All,+Dly,KS	Closing Keyswitch	400 Open /Close		
57	Forced in Away mode W/Delay By RPS 4	Frc,All,+Dly,RPS	Remote Closing	400 Open /Close		
58	Forced in Away mode W/Delay By Phone	Frc,All,+Dly,Tel	Remote Closing	400 Open /Close		
59	Forced in Away mode W/Delay By User	Frc,All,+Dly,Usr	Closing Report	401 O/C By User		
60	Forced in Away mode No Delay By RPS 4	Frc,All,-Dly,RPS	Remote Closing	400 Open /Close		
61	Forced in Away mode No Delay By Usr	Frc,All,-Dly,Usr	Closing Report	401 O/C By User		
62	Forced in Stay mode W/ Delay By Sked	Frc,Prt,+Dly,Skd	Automatic Closing	456 Partial Arm		
63	Forced in Stay mode W/Delay By Keyswitch	Frc,Prt,+Dly,KS	Closing Keyswitch	456 Partial Arm		
64	Forced in Stay mode W/Delay By RPS	Frc,Prt,+Dly,RPS	Remote Closing	456 Partial Arm		
65	Forced in Stay mode W/Delay By User	Frc,Prt,+Dly,Usr	Closing Report	456 Partial Arm		
66	Forced in Stay mode No Delay By RPS	Frc,Prt,-Dly,RPS	Remote Closing	456 Partial Arm		
67	Forced in Stay mode No Delay By User	Frc,Prt,-Dly,Usr	Closing Report	456 Partial Arm		
68	Reserved					
69	Communication Fail	Comm Fail	Communications Fail	354 Fail To Communicate	R	S
70	Alternate Communication Fail	CommFail,AltComm	Communications Fail	354 Fail To Communicate	R	S
71	Communication Restore	Comm Restoral	Communications Restoral	354 Fail To Communicate	R	S
72	Alternate Communication Fail Restore	CommRstl,AltComm	Communications Restoral	354 Fail To Communicate	R	S
73	Date and Time Changed	Date/Time Change	Time Changed	625 Time/Date Reset	R	
74	Duress (Keypad/RF Panic)	Duress	Duress	121 Duress		
75	Fire Alarm	Fire,Alarm	Fire Alarm	110 Fire		
76	Fire (Verified)	Fire,Cross	Fire Alarm Crossed Zone	110 Fire		
77	Fire - Unverified	Fire,Un-verified	Unverified Event-Fire	378 Cross-Zone Trouble		
78	Fire - Missing	Fire,Missing	Missing Fire Trouble	373 Fire Trouble		

Panel Events and Reporting Formats (Con't)

Equ #	Description	System Log Display / Printer Report	SIA Reports	CID Code	System Status Reports	
79	Fire Alarm Restore	Fire,Alm,Rstl	Fire Alarm Restore	110 Fire		
80	Fire – Trouble	Fire,Trouble	Fire Trouble	373 Fire Trouble		
81	Fire – Trouble Restore	Fire,Trbl,Rstl	Fire Trouble Restore	373 Fire Trouble		
82	Installer Mode Response Start	Instl Mode,Start	Local Program	466 Service On Premises	R	
83	Installer Mode Response Terminated	Instl Mode End	Local Programming Ended	466 Service On Premises	R	
84	Log Overflow – Oldest Log Events Overwritten	Log Overflow	Log Overflow	624 Event Log Overflow	R	
85	Log Threshold – Log Events Reached Threshold	Log Threshold	Log Threshold	620 Event Low	R	
86	Alternate Communication – Low Signal Strength	AltCom Low Signl	Low Received Signal Strength	350 Communication Trouble	R	S
87	Zone Missing (Non Fire) – Zone Expander/RF Zone Missing When Armed	Missing,Alarm	Untyped Missing Alarm	140 General Alarm		
88	Missing Trouble – Zone Expander/RF Zone Missing When Disarmed	Missing,Trouble	Untyped Missing Trouble	382 Loss Of Supervision RPM		
89	Opening By Sked (Disarming)	Open,Skd	Automatic Opening	403 Automatic O/C		
90	Opening By RPS 2000+	Open,RPS	Remote Opening	400 Open/ Close		
91	Opening By User	Open,Usr	Opening Report	401 O/C By User		
92	Opening By Keyswitch Zone	Open,KS	Opening Keyswitch	409 Keyswitch O/C		
93	Opening After Alarm By Sked	Open,Skd,Alarm	Automatic Opening	403 Automatic O/C		
94	Opening After Alarm By RPS 2000+	Open,RPS,Alarm	Remote Opening	400 Open/ Close		
95	Opening After Alarm By User	Open,Usr,Alarm	Opening Report	401 O/C By User		
96	Opening After Alarm By Keyswitch	Open,KS,Alarm	Opening Keyswitch	409 Keyswitch O/C		
97	Reserved					
98	SOLUTION 40 Programming Changed	Params Changed	Parameter Changed	306 Panel Program Changed	R	
99	Phone Line Fail	Phone Line Fail	Phone Line Trouble	351 Telco 1 Fault	R	S
100	Phone Line Restore	Phone Line Rstl	Phone Line Restoral	351 Telco 1 Fault	R	S
101	Unsuccessful Panel To RPS 2000+ Call Attempt	Bad Call To RPS	Remote Programmer Call Failed	413 Unsuccessful Access	R	
102	Unsuccessful RPS 2000+ Call To Panel Call Attempt	RPS Access Fail	Remote Program Failed	413 Unsuccessful Access	R	
103	RPS 2000+ Successfully Connected and Disconnected To Panel	RPS Access OK	Valid Remote Access	412 Unsuccessful Access	R	

Panel Events and Reporting Formats (Con't)

Equ #	Description	System Log Display / Printer Report	SIA Reports	CID Code	System Status Reports	
104	Start-Up or Reset With Stand-By Jumper Closed	Re-Boot,Panel	Power Up	305 System Reset	R	S
105	Unexpected System Reset From DBUS Device	Re-Boot,DBUS	Power Up	339 Exp Module Reset	R	S
106	Output Reset By User	Output Reset,Usr	Relay Open	320 Sounder /Relay	R	
107	Output Reset By Sked	Output Reset,Skd	Relay Open	320 Sounder /Relay	R	
108	Output Reset By RPS 2000+	Output Reset,RPS	Relay Open	320 Sounder /Relay	R	
109	Output Set By User	Output Set,Usr	Relay Close	320 Sounder /Relay	R	
110	Output Set By Sked	Output Set,Skd	Relay Close	320 Sounder /Relay	R	
111	Output Set By RPS 2000+	Output Set,RPS	Relay Close	320 Sounder /Relay	R	
112	Tamper Zone Restore From Alarm	Rstrl,Tamper	Tamper Restoral	137 Tamper		
113	Emergency Zone Restore From Alarm	Rstrl,Emergency	Emergency Restoral	101 Personal Emergency		
114	Panic Zone (Visible) Restore From Alarm	Rstrl,Panic	Panic Restoral	120 Panic		
115	Panic Zone (Invisible) Restore From Alarm	Rstrl,Panic	Holdup Restoral	120 Panic		
116	24-Hr Burglary Zone Restore From Alarm	Rstrl,24-hr Burg	Burglary Restoral	133 24-Hr Safe		
117	Controlled Delay Zone Restore From Alarm	Rstrl,Cntrl,Dly	Burglary Restoral	134 Entry/Exit		
118	Controlled Follower/Instant Zone and Keyswitch Restore From Alarm	Rstrl,Cntrl	Burglary Restoral	130 Burglary		
119	RF Receiver Detects Jamming Condition	Rcvr Jam	RF Interference	344 RF Receiver Jam Detect	R	S
120	RF Receiver Jamming Condition Cleared	Rcvr Jam Rstl	RF Interference Restoral	344 RF Receiver Jam Detect	R	S
121	RF Transmitter Low Battery	RF Battery Low	Transmitter Battery Trouble	384 RF Low Battery		
122	RF Transmitter Low Battery Restore	RF Battery Rstl	Transmitter Battery Restoral	384 RF Low Battery		
123	RF Transmitter Tamper Trouble	RF Tamper Trbl	RF Receiver Tamper	383 Sensor Tamper		
124	RF Transmitter Tamper Trouble Restore	RF Tamper Rstl	RF Receiver Tamper Restoral	383 Sensor Tamper		
125	DBUS (Option Bus) Device Not Responding	DBUS Missing	Expansion Device Missing	333 Exp Module Failure	R	S
126	DBUS (Option Bus) Device Restore	DBUS Missing,Rstl	Expansion Device Restore	333 Exp Module Failure	R	S
127	DBUS (Option Bus) Device Has Tamper Open	DBUS Tamper	Expansion Device Tamper	341 Exp Module Tamper	R	S
128	DBUS (Option Bus) Device Tamper Restoral	DBUS Tamper,Rstl	Expansion Tamper Restore	341 Exp Module Tamper	R	S
129	DBUS (Option Bus) Peripheral Trouble	DBUS Trouble	Expansion Trouble	330 System Peripheral	R	S

Panel Events and Reporting Formats (Con't)

EQU #	Description	System Log Display / Printer Report	SIA Report	CID Code	System Status Reports	
130	DBUS (Option Bus) Peripheral Trouble Restore	DBUS Trouble,Rstl	Expansion Restoral	330 System Peripheral	R	S
131	DBUS Current Overload	DBUS OverCurrent	Overcurrent Trouble	330 System Peripheral	R	S
132	DBUS Current Overload Restoral	DBUS OverCur,Rstl	Overcurrent Restore	330 System Peripheral	R	S
133	Sensor Chime Fail	Sensor Mon Trbl	Untyped Zone Trouble	391 Sensor Watch Trouble		
134	Sensor Chime Fail Restoral	Sensor Mon Rstl	Untyped Trouble Restor	391 Sensor Watch Trouble		
135	Sensor Reset (Command 47)	Sensor Reset	Sensor Reset			
136	System Inactive	System Inactive	Closing Delinquent		R	
137	Test Report (No Troubles)	Test, OK	Automatic Test	602 Periodic Test		
138	Test Report (Trouble Exist)	Test,Off-Normal	Test Off Normal	608 Periodic Test - Trouble		
139	Trouble - Tamper/Voice Active Zone	Trbl,Tamper	Tamper Trouble	380 Sensor Trouble		
140	Trouble - Emergency Zone	Trbl,Emergency	Emergency Trouble	380 Sensor Trouble		
141	Trouble – Panic Zone (Visible)	Trbl,Panic	Panic Trouble	375 Panic Zone Trouble		
142	Trouble – Panic Zone (Invisible)	Trbl,Invisible	Holdup Trouble	375 Panic Zone Trouble		
143	Trouble – 24 Hr Burg Zones	Trbl,24-Hr Burg	Burglary Trouble	380 Sensor Trouble		
144	Trouble – Delay Zones	Trbl,Cntrl,Dly	Burglary Trouble	380 Sensor Trouble		
145	Trouble – Keyswitch/Follower/Instant Zones	Trbl,Cntrl	Burglary Trouble	380 Sensor Trouble		
146	Trouble Restore – Tamper/Voice Active Zone	Rstrl,Trbl,Tmpr	Tamper Trouble Restore	380 Sensor Trouble		
147	Trouble Restore – Emergency Zone	Rstrl,Trbl,Emerg	Emergency Trouble Restore	380 Sensor Trouble		
148	Trouble Restore – Panic (Visible)	Rstrl,Trbl,Panic	Panic Trouble Restore	375 Panic Zone Trouble		
149	Trouble Restore – Panic (Invisible)	Rstrl,Trbl,Invis	Holdup Trouble Restore	375 Panic Zone Trouble		
150	Trouble Restore – 24 Hr Burg	Rstrl,Trbl,24-hr	Burglary Trouble Restore	380 Sensor Trouble		
151	Trouble Restore – Delay Zones	Rstrl,Trbl,Dly	Burglary Trouble Restore	380 Sensor Trouble		
152	Trouble Restore – Keyswitch/Follower/Instant Zones	Rstrl,Trbl,Cntrl	Burglary Trouble Restore	380 Sensor Trouble		
153	User Code Area Set	User Code Area Set	User Code Added		R	
154	User Code Change	User Code Change/Added	User Code Changed		R	
155	User Code Deleted	User Code Delete	User Code Deleted		R	

Panel Events and Reporting Formats (Con't)

EQU #	Description	System Log Display / Printer Report	SIA Report	CID Code	System Status Reports	
156	Access Denied – User Code Invalid	User Code Tamper	User Code Tamper	461 Wrong Code Entry	R	
157	User Authority Level Set	User Level Set	User Level Set		R	
158	Walk Test Start (Command 44)	Walk Test Start	Test Start	607 Walk Test		
159	Walk Test End	Walk Test End	Test End	607 Walk Test		
160	Output 2 Supervision Fail	Siren Trouble	Siren Fault	320 Sounder Relay	R	S
161	Output 2 Supervision Fail Restore	Siren Restoral	Siren Restored	320 Sounder Relay	R	S
162	Ground Fault Detected On Zone Loops	Grnd Fault	Equipment Failure Condition	310 Ground Fault	R	S
163	Ground Fault On Zones Restored	Grnd Fault,Rstl	Equipment Fail Restoral	310 Ground Fault	R	S
164	First To Open/Last To Close (Open Report)	First Open	Opening Report	400 Open/ Close		
165	First To Open/Last To Close (Close Report)	Last Close	Closing Report	400 Open/ Close		
166	Alternate Communication Trouble	AltCom Cond	Network Condition	350 Communication Trouble	R	S
167	Alternate Communication Fail	AltComm Fail	Network Failure	350 Communication Trouble	R	S
168	Alternate Communication Restore	AltComm Rstrl	Network Restoral	350 Communication Trouble	R	S
169	Reserved		Printer Paper Out			
170	Reserved		Printer Paper In			
171	Reserved		Printer Offline			
172	Reserved		Printer Online			
173	Swinger Bypass Restore	Rstrl, Swinger	Burglary Unbypass	575 Swinger Bypass		
174	Fire Missing Restore	Rstrl,Fire,Miss				
175	Missing Alarm Restore	Rstrl,Alarm,Miss				
176	Missing Trouble Restore	Rstrl,Trble,Miss				
177	Alternate Communication Low Signal Restore	Rstl,Low Signl	Low Received Signal Strength		R	S
178	Bypassed Fire Zone Restore By RPS 2000+	UnBypss,Fire,RPS	Fire Unbypass	571 Fire Bypass		
179	Bypassed Controlled Zone (Delay, Instant, Follower, Keyswitch) Restore By RPS 2000+	Unbypss,Cntl,RPS	Burglary Unbypass	570 Zone/ Sensor Bypass		
180	Bypassed 24-Hour Zone Restore By RPS 2000+	Unbypss,24hr,RPS	Burglary Unbypass	570 Zone/ Sensor Bypass		
181	RF Keyfob Low Battery	RF Battery Low	Transmitter Battery Trouble	384 RF Low Battery	R	
182	RF Keyfob Low Battery Restore	RF Battery Rstl	Transmitter Battery Restoral	384 RF Low Battery	R	
183	Installer/User Pins Have Not Been Changed From Default	Default PINS	Local	Local		
184	Installer/User Pins Have Been Changed From Default	Default PINS Rstl	Local	Local		
185	Bad Set	Bad Set	Exit Error	454 Failed to close		
186	Confirmed Alarm	Confirmed Alarm	Burglary Verified Alarm	139 Intrusion Verifier		
187	Data Bus Device Missing	DBus Missing Alrm	Tamper Alarm	137 Tamper Alarm	R	S

188	Data Bus Missing Restoral	DBus Missing Rstl	Tamper Restoral	137 Tamper Alarm	R	S
189	Data Bus Tamper Alarm	DBus Tamper Alrm	Tamper Alarm	137 Tamper Alarm	R	S
190	Data Bus Tamper Alarm Restoral	DBus Tmper Alrm Rstl	Tamper Restoral	137 Tamper Alarm	R	S
191	Data Bus Trouble Alarm	DBus Trbl Alrm	Tamper Alarm	137 Tamper Alarm	R	S
192	Data Bus Trouble Alarm restore	DBus Trbl Alrm Rstrl	Tamper Restoral	137 Tamper Alarm	R	S
193	Siren Missing Alarm	Siren Missng Alrm	Tamper Alarm	137 Tamper Alarm	R	S
194	Siren Alarm Restoral	Siren Missng Rstl	Tamper Restoral	137 Tamper Alarm	R	S

Panel Events and Reporting Formats (Con't)

Basic Pager Format

Setting the reporting format as Basic pager configures the panel to send to a numeric pager.

To set this up:

Enter the phone number for the pager in the “Phone number 1” parameter for the routing destination you have chosen.

Set the “Format for Destination X” where X = 1 or 2, parameter to “Basic Pager” for the routing destination you have chosen.

Set the routing for any reports you would like sent to the pager to the routing destination (1 or 2) you have chosen as the Basic Pager Configuration.

Report digits are dialed as 100 millisecond DTMF tone pulses with 100 millisecond pauses between the digits.

Note: The panel’s Basic Pager format does not wait for an acknowledgement tone from the pager service provider to send its report to the pager. It dials the phone number, waits 250milliseconds and then sends the report. To increase the delay, add delay characters as needed to the end of the phone number.

Configuring a Pager Display

All the information the panel needs to format and send events to a pager is contained in the Phone Number for the Routing Destination configured for Basic Pager format.

The panel dials the number you enter in the Digits to Dial field to contact the paging service. Add one or more pauses at the end of the number to allow the paging service time to answer the phone and prepare to accept the message. The Digits to Dial field ends with a field terminator (0).

The Format Field follows the Digits to Dial field. It defines what information follows the account number in the paging message.

The Format Field ends with a Field Terminator (0).

The End Page Field follows the Format Field. The digits you enter in this field are sent after the paging message. For many paging services, a # indicates the end of the end of the paging message. The End Page Field ends with a Field Terminator (0).

Phone Number for Routing Destination configured for Basic Pager Format					
9765 5674	0	***	0	#9	0
↓	↓	↓	↓	↓	↓
Digits to Dial Field	Field Terminator	Format Field	Field Terminator	End Page Field	Field Terminator
Enter the phone number for the paging service followed by pauses if necessary.	Every field must end with a terminator digit always 0.	Use this field to configure how the message appears in the pager’s display. See Table below for Format Field Options.	Every field must end with a terminator digit always 0.	Enter the digits that tell your paging service you are done sending your page.	Every field must end with a terminator digit always 0.

Digit to be Dialed	Enter at the Keypad
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	10
*	11
P (4 second pause)	13
F (on hook, pause, off hook)	14
Reserved	15
T (terminate)	0

Table 15: Phone Number Selections

Digits to Enter	Resulting Pager Display	
None	Account, Event, Area and Zone Numbers with separator characters	1234-008-03-21
#	Account, Event, Area and Zone Numbers without separator characters	12340080321
***	Account, Event, and Area numbers with separator characters	1234-008-03
#***	Account, Event and Area Numbers without separator characters	123400803
**	Account and Event Numbers with separator characters	1234-008
#**	Account and Event Numbers without separator characters	1234008
*	Account Number only	1234

Table 16: Format Field Options

Note: If zone / user number is three digits, the leading digit is omitted. E.g. “252” displays as “52”. Do not use alpha characters for the account number in basic pager format.

DTMF / Pulse Dialling

Address 0132

0

Option	Format
0	DTMF
1	Pulse

Table 17: DTMF / Pulse Dialling

Program the method that you want the system to dial the telephone number digits here. Program 1 for DTMF (tone) or 2 for pulse (decadic). This address is global for both Destination 1 and Destination 2.

Answer Ring Count

Address 0213

15

Option	Format
0	No Answer
1 - 13	Answer Ring Count
14	Answering Machine Bypass 1
15	Answering Machine Bypass 2

Table 18: RPS Answer Ring Count

This address programs the number of times the telephone line will ring before the alarm system will answer an incoming call. This address only has an effect if remote arming and/or RPS sessions are programmed. If this address is programmed as zero (0), then the answering of any incoming call will be disabled, therefore, if remote upload/download sessions are allowed, Command 43 will need to be used to request an upload/download session.

Answering Machine Bypass

Answering machine bypass has been incorporated so that it is possible to make a connection with the alarm system for remote arming or RPS upload/download sessions when there is an answering machine or facsimile machine on the same telephone line. It will reduce the chance of the control panel incorrectly answering incoming calls. There are two different methods of using answering machine bypass as explained below.

To program 'Answering Machine Bypass' only when the system is in Away or Stay mode, refer to Option 2 in Address 0258 on page 137.

Answering Machine Bypass 1

1. Call the telephone number that the alarm system is connected to and let the phone ring no more than 2 times before hanging up.
2. Wait a minimum of 8 seconds (but no more than 45 seconds) before calling the alarm system again. The alarm system will answer the incoming call as soon as it registers the first ring.

Answering Machine Bypass 2

1. Call the telephone number that the alarm system is connected to and let the phone ring no more than 4 times before hanging up.
2. Call the telephone number that the alarm system is connected to within 45 seconds and the alarm system will answer the incoming call as soon as it registers the first ring.

Phone Line Fail Response

Address 0220

0

Option	Format
0	Do Not Supervise Phone Line
1	Enable Supervision of Phone Line
2	Activate Burglary Alarm & Strobe Output Functions (Away/Stay)
4	Activate Burglary Alarm & Strobe Output Functions (Off)
8	Reserved

Table 19: Phone Line Fail Response Options

Note

Option 2 and Option 4 will not operate unless Option 1 is also programmed (e.g. If you want Option 2 to operate, you will need to program 3 into this address).

Do Not Supervise Phone Line

If no options have been programmed in this address, the control panel will not monitor the telephone line. However, Output type 0, 12 - Phone Line Fail will continue to operate when the telephone line fails even though this address is programmed as zero (0).

Enable Supervision of Phone Line

If this option is programmed, the keypad will slowly flash the SERVICE indicator and sound the keypad buzzer (4 short beeps followed by 6 Seconds Off - continuously repeating) when the alarm system detects that the telephone line voltage has dropped below 3 volts continuously for 40 seconds. The trouble condition will clear when the control panel has registered that the telephone line has restored for a minimum period of 40 seconds.

This option also allows both 'Phone Line Fail' [Equ 99] reports and 'Phone Line Fail Restore' [Equ 100] reports. Both these two reports follow the System Status Report Swinger Count **on page 123** and System Status Report Routing **on page 123**.

Activate Burglary Alarm & Strobe Output Functions (Away/Stay)

If this option is programmed, the alarm system will operate alarm and strobe outputs when the system detects that the telephone line has failed when the system is armed in Away mode or Stay (or Stay 2). The trouble condition will clear when the telephone line has restored.

The outputs will sound until the siren timer has expired, when the output's time setting has expired, or when a valid PIN Code has been entered.

Activate Burglary Alarm & Strobe Output Functions (Off)

If this option is programmed, the alarm system will operate alarm and strobe outputs when the system detects that the telephone line voltage has failed when the system is disarmed. The trouble condition will clear when the telephone line has restored.

The outputs will sound until the siren timer has expired, when the output's time setting has expired, or when a valid PIN Code has been entered.

Global Reporting Options

Address 0221

1

Option	Format
0	Local System
1	Reporting Allowed
2	Extend Handshake Wait Time From 45 Seconds To 60 Seconds
4	Delay Alarm Outputs Until Comm's OK Or Comm's Failed Twice
8	Burglar Alarm after two failed attempts

Table 20: Global Reporting Options

Local System

If this option has been programmed, the system will not send any reports via the dialler.

Reporting Allowed

If this option has been programmed, the control panel will send reports as programmed. You need to program at least one telephone number that will follow either Destination 1 or Destination 2.

Extend Handshake Wait Time From 45 Seconds To 60 Seconds

If this option has been programmed, the system will extend the wait time from 45 seconds to 60 seconds for receipt of a valid handshake tone from the security company's base station receiver. The handshake tone indicates to the control panel that it has reached the security company's base station receiver and can now send its pending reports.

If this option has not been programmed, the handshake wait time is set to 45 seconds.

Burglar Alarm After Two Failed Attempts

If this option has been programmed, the system will delay all audible alarm outputs (1,8 / 1,9 / 1,10) including the keypad buzzer/display from sounding when an audible alarm (except fire alarms) until communication to the security company's base station receiver is complete, or, after the system registers two failed dialling attempts.

If this option is NOT programmed, it will sound alarm outputs as soon as the alarm condition occurs.

Silent Zones Sound Alarm If Comm's Fail Twice When On

If this option has been programmed, the audible alarm outputs (1,8 / 1,9 / 1,10 – see page 207 for output event types) will sound for any zone that has been programmed as silent (Option 2 in Zone Options 2 = disabled) if the control panel fails to communicate on the second attempt to the receiving party (e.g. base station receiver). This option is only applicable when the system is in Away, Stay or Stay 2 mode.

If this option is not programmed, it will prevent alarm outputs (1,8 / 1,9 / 1,10) from sounding when a silent zone fails to report to the receiving party.

Ack Wait Time

Address 0222

5

Address	Description
0222	Increments Of 1 second (1 - 15 Sec's)

Table 21: Ack Wait Time

This address programs the time that the control panel will wait for an acknowledgement tone before sending the report. This applies only to Contact ID Format.

AC Power Supervision Options

Address 0223

4

Option	Format
0	No Options Selected
1	Delay AC Fail / AC Fail Restore Report Until Next Report
2	Ignore AC Fail Supervision At Keypads
4	Arm/Disarm & Bypass Tracking Allowed
8	Internal Crystal To Keep Time

Table 22: AC Power Supervision Options

The keypad will display a 'Trouble' condition within 10 seconds of when the AC mains supply has failed, however, the control panel will only send an 'AC Loss' report only when the AC supply has been missing for the time programmed in Address 0242 and 0243 on page 256. The keypad will clear the trouble condition when the control panel registers the AC supply has been restored for a minimum of two minutes.

Refer to Option 1 to program AC fail reports and Option 2 in Address 0224 on page 122 to program AC fail restore reports. Refer to Address 1265 on page 227 to program the AC fail trouble tone.

Delay AC Fail / AC Fail Restore Report Until Next Report

If this option has been programmed, the system will not send an 'AC Loss' report [Equ 01] or an 'AC Loss Restore' report [Equ 02] when the AC fail condition is registered, but delays the 'AC Loss' and/or 'AC Loss Restore' report until the system sends another report (e.g. Alarm, Automatic Test Report etc).

In RPS this is referred to as AC Fail / AC Fail Restore report being “tag along”.

If this option is not programmed, the system will send an 'AC Loss' report when the AC supply has failed continuously for two minutes or an 'AC Loss Restore' report as soon as the control panel registers an AC loss restore condition (AC supply restored continuously for two minutes).

Ignore AC Fail Supervision At Keypads

If this option has been programmed, the keypad will not display a 'trouble' condition when the control panel registers an AC fail condition, however, the control panel will still send an 'AC Loss' report [Equ 01] if programmed in Address 0224 on page 122. Output Type 0, 14 - AC Fail will still operate irrespective of this option. Any timer that is programmed for an AC fail output (0,14) will commence as soon as the control panel has registered an 'AC Loss' event.

Arm/Disarm & Bypass Tracking Allowed

If this option has been programmed, the control panel will keep its current armed status in non-volatile memory. If for any reason the system is restarted due to a power failure, the control panel will return to the armed status (On or Off status) that the control panel was before the power failed (Any zone that is programmed as bypassed will remain bypassed when the power supply has restored).

If this option is not programmed, the system will always power up in the disarmed state 'Off'. Any zones bypassed prior to power loss will power up as un-bypassed zones.

Internal Crystal To Keep Time

If this option has been programmed, it will force the system to use internal crystal (XTAL) to keep track of time instead of using the AC mains frequency (50/60 Htz). If you are only using DC to power the control panel, it is recommended that you enable this option.

AC Fail, Low/Missing Battery Report Options

Address 0224

15

Option	Format
0	No Options Selected
1	AC Fail Reports Allowed
2	AC Fail Restore Reports Allowed
4	Low Battery, Battery Missing Reports and Restore Reports Allowed
8	Ground Fault Reports and Restore Reports Allowed

Table 23: AC Fail, Low/Missing Battery Report Options

AC Fail Reports Allowed

If this option has been programmed, the system will send an 'AC Loss' report [Equ 01] when the AC mains supply has been disconnected continuously for two minutes. To delay an 'AC Loss' report until the next system report is sent, program Option 1 in Address 0223 on page 121.

To ignore AC fail supervision at the keypads, program Option 2 in Address 0223 on page 121.

AC Fail Restore Reports Allowed

If this option has been programmed, the control panel will send an 'AC Loss Restore' report [Equ 02] when the AC mains supply has been restored continuously for two minutes.

Low Battery, Battery Missing Reports Allowed

If this option has been programmed, the control panel will send a 'Low Battery' report [Equ 22] when it detects that the battery voltage has dropped to or below 12.1 volts. A 'Low Battery Restore' report [Equ 24] will be sent when the control panel detects that the battery voltage has restored above 13.1 volts.

If the control panel has failed to detect a back-up battery connected, or has detected that the battery voltage has fallen below 10.2 volts, a 'Battery Test Failed' report [Equ 23] will be sent. When the control panel has detected that the back-up battery has been reconnected / restored, a 'Battery Test Failed Restore' report [Equ 25] will be sent.

Refer to Option 4 in Address 0244 on page 128 to program Command 41 to test the back-up battery.

Ground Fault Reports Allowed

If this option has been programmed, the control panel will send 'Ground Fault' report [Equ 162] when it detects that a zone has earth ground connected (Earth Connected to the COM terminal). A 'Ground Fault Restore' report [Equ 163] will be sent when the panel detects that the earth ground has been removed. Refer to Address 1265 on page 227 to program the Ground Fault trouble tone.

System Status Report Swinger Count

Address 0225

0

Address	Description
225	Swinger Shutdown Count For System Status Reports (0 - 15)

Table 24: System Status Report Swinger Count

Programming this address as zero (0) will disable this feature allowing all system status reports marked as (S) in Table 12 on page 104 to be sent (unlimited) as they occur. Programming a value between one (1) and fifteen (15) will set how many times each system event can report during the same arming cycle before locking out (stops reporting). As soon as you arm the system or disarm the system, the swinger shutdown count for any system status report will be reset, allowing system status events to report again.

System Status Report Routing

Address 0226

1

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 25: System Status Report Routing

This address allows you to program where all system status reports marked as (R) in Table 12 on page 104 will be sent. At factory default, the system will report only to Destination 1 and record events in the system log (Command 85).

Call For Service Interval

Address 0227 - 0228

00

Address	Description
227	Increments Of Weeks (Tens Digit)
228	Increments Of Weeks (Units Digit)

Table 26: Call For Service

These two addresses program the call for service repeat interval (00 - 99 weeks). The keypad will display on the first line 'Call for service' followed by the second line of text programmed in Address 1266 - 1297 on page 229. To clear this message from the keypad display, enter Command 47. Using Command 47 to reset the 'Call For Service' display will not restart the call for service interval.

Refer to Option 1 in Address 0231 to program 'Call For Service' Display At Call For Service Interval and Option 2 in Address 0231 on page 124 to program 'Call For Service' Report At Call For Service Interval [Equ 37].

System Inactive Interval

Address 0229 - 0230

0	0
---	---

Address	Description
229	Increments Of Weeks (Tens Digit)
230	Increments Of Weeks (Units Digit)

Table 27: System Inactive Interval

These two addresses program the system inactive interval (00 - 99 Weeks). If the system is not armed (in Away, Stay or Stay 2 mode) within the system inactive interval, the system will display 'System Inactive' (Optional). When the system is partitioned, the system inactive interval is area specific.

Refer to Option 4 in Address 0231 to program 'System Inactive' Display At System Inactive Interval on page 124.

Call For Service/System Inactive Options

Address 0231

0

Option	Description
0	No Options Selected
1	'Call For Service' Display At Call For Service Interval
2	'Call For Service' Report At Call For Service Interval
4	'System Inactive' Display At System Inactive Interval
8	'Weekly Test' Reminder Allowed

Table 28: Call For Service/System Inactive Options

'Call For Service' Display At Call For Service Interval

This option allows the keypad to display the call for service text programmed in Address 1266 - 1297 on page 229 at the call for service interval programmed in Address 0227 - 0228 on page 123. When a user enters [Select] [4] [7] to reset and clear the 'Call For Service' display, it will not restart the call for service interval.

'Call For Service' Report At Call For Service Interval

This option allows the system to send a 'Call For Service' report [Equ 37] at the call for service interval programmed in Address 0227 - 0228 on page 123.

'System Inactive' Display At System Inactive Interval

This option allows the keypad to display 'System Inactive' at the system inactive interval programmed in Address 0229 - 0230 on page 124. To clear the 'System Inactive' display, you will need to arm the system (or area) in Away, Stay or Stay 2 mode and wait until exit time expired before disarming the system. A 'System Inactive' report [Equ 136] will be sent when the system has not been armed during the inactive interval.

'Weekly Test' Reminder Allowed

Programming this option allows the keypad to display a trouble event (no trouble tone is sounded) to remind you to test the system on a weekly basis (every 8 days). When a user enters [Select] [4] to view the trouble condition, the keypad will display 'System Test Due, Press 1 to test'. Press [1] to test the system and clear the weekly test trouble condition.

Log Threshold/Overflow Options

Address 0232

0

Option	Description
0	No Log Threshold Events / Log Overflow Events
1	Log Threshold At 50% + Report
2	Log Threshold At 75% + Report
3	Log Threshold At 90% + Report
4	Log Threshold At 50% (Local)
5	Log Threshold At 75% (Local)
6	Log Threshold At 90% (Local)

Table 29: System Log Threshold/Overflow Options

The control panel can store up to a maximum of 254 system events in its history log (Command 85). A new control panel has 100% of its log available for new events (0% full). As the control panel starts to log events in history, the capacity for new events is reduced. The history log is 100% full when event 254 is stored in memory. Event 255 will start to overwrite the oldest events.

No Log Threshold Events / Log Overflow Events

If this option is programmed, the system will not log threshold limits or log overflow events for the RPS 2000 + event log.

Log Threshold At 50% + Report

If this option is programmed, the system will send a 'Log Threshold' report [Equ 85] when the RPS event log reaches 50% capacity since the last RPS connection. If the RPS event log reaches 100% capacity since the last RPS connection, the system will send a 'Log Overflow' report [Equ 84]. The system will also log these events in the system log (Command 85).

Log Threshold At 75% + Report

If this option is programmed, the system will send a 'Log Threshold' report [Equ 85] when the RPS event log reaches 75% capacity (175 events logged) since the last RPS connection. If the RPS event log reaches 100% capacity since the last RPS connection, the system will send a 'Log Overflow' report [Equ 84]. The system will also log these events in the system log (Command 85).

Log Threshold At 90% + Report

If this option is programmed, the system will send a 'Log Threshold' report [Equ 85] when the RPS event log reaches 90% capacity since the last RPS connection. If the RPS event log reaches 100% capacity since the last RPS connection, the system will send a 'Log Overflow' report [Equ 84]. The system will also log these events in the system log (Command 85).

Log Threshold At 50% (Local)

If this option is programmed, the system will log a 'Log Threshold' event [Equ 85] in the system log when the RPS event log reaches 50% capacity since the last RPS connection. If the RPS event log reaches 100% capacity since the last RPS connection, the system will store a 'Log Overflow' event [Equ 84] in the system log (Command 85).

Log Threshold At 75% (Local)

If this option is programmed, the system will log a 'Log Threshold' event [Equ 85] in the system log when the RPS event log reaches 75% capacity since the last RPS connection. If the RPS event log reaches 100% capacity since the last RPS connection, the system will store a 'Log Overflow' event [Equ 84] in the system log (Command 85).

Log Threshold At 90% (Local)

If this option is programmed, the system will log a 'Log Threshold' event [Equ 85] in the system log when the RPS event log reaches 90% capacity since the last RPS connection. If the RPS event log reaches 100% capacity since the last RPS connection, the system will store a 'Log Overflow' event [Equ 84] in the system log (Command 85).

Auto Arming Pre-Alert Time

Address 0233

6

Address	Description
233	Increments Of 5 Minutes (Time = Value x 5 Minutes)

Table 30: Auto Arming Pre-Alert Time

This address programs the duration (0 – 75 minutes) that the keypad will sound a no-delay exit tone to warn users before the system will automatically arm in Away, Stay or Stay 2 mode. Refer to Skeds on page 219 for information on programming a schedule to arm the system in Away, Stay or Stay 2 mode.

If you enter [Select] [5] [1] during the auto arming pre-alert time, the system will delay the automatic arming time by 60 minutes (1 hour) and if programmed, the system will send an 'Auto On Extend' report [Equ 21].

Example

If you program a Sked to arm the system in Away mode at 6:00 pm everyday with a pre-alert time of fifteen minutes (Address 233 = 3), the keypad will sound the auto arm pre-alert tone from 5:45 pm until the system arms in Away mode at 6:00 pm.

If you wish to delay the auto arm time by 60 minutes (1 hour), enter [Select] [5] [1] during the pre-alert time. The control panel will now automatically arm at 7:00 pm. The next day, the system will revert back to automatically arm at 6:00 pm.

Cancel Alarm Reports

Address 0234

0

Option	Description
0	No Cancel Alarm Reports Allowed
1	Cancel Alarm Reports Allowed

Table 31: Cancel Report Options

If this address is programmed as a one (1), a 'Cancel Window' starts as soon as an alarm occurs and follows siren time. However, the 'Cancel Window' starts at the end of the Alarm Report Abort Allowed described on page 189. If a PIN Code is used to acknowledge the alarm during the 'Cancel Window', a 'Cancel' report [EQU 38] for alarms or a 'Cancel Fire' [EQU 39] for fire alarms will be sent via the dialler.

Refer to page 200 to program the Alarm Report Abort Time and page 202 to program Siren Time.

Date and Time Display/Disable Pin Trouble

Address 0235

3

Option	Description
0	Display Date As MM/DD/YY
1	Display Date As DD/MM/YY
2	Default PIN Display Trouble Allowed

Table 32: Date & Time Display/Disable PIN Trouble Options

Display Date As MM/DD/YY

If Option 0 is programmed, the system will display the date is MM (Month) / DD (Day) / YY (Year).

Display Date As DD/MM/YY

If Option 1 is programmed, the system will display the date is DD (Day) / MM (Month) / YY (Year).

Default PIN Display Trouble

If Option 2 is programmed, the control panel will display a trouble condition if the default Installer PIN code or default User 1 PIN code is not changed. Refer to Address 0383 - 0389 on page 165 to change the Installer PIN code and page 165 to change PIN Codes.

Daylight Savings Calendar Options

Address 0236

1

Option	Description
0	Daylight Savings Disabled
1	Australia
2	European
3	USA

Table 33: Daylight Savings Calendar Options

This address allows you to select the region that the control panel is used for daylight savings. The control panel can automatically adjust the time for daylight savings. Refer to Address 0238 - 0239 on page 128 to program the which hour the clock will advance one hour and Address 0240 - 0241 on page 128 to program which hour the clock will go backwards one hour.

Australia

Programming this address as one selects the Australian calendar. The Australian calendar moves the clock forward one hour on the last Sunday of October and moves the clock backwards one hour on the last Sunday of March.

European

Programming this address as two selects the European calendar. The European calendar moves the clock forward one hour on the last Sunday in March and moves the clock backwards one hour on the last Sunday of October.

USA

Programming this address as three selects the USA calendar. The USA calendar moves the clock forward one hour on the first Sunday in April and moves the clock backwards one hour on the last Sunday in October.

Daylight Savings – Forward One Hour

Address 0238 - 0239

0 2

Address	Description
238	Hour Of The Day (Tens Digit)
239	Hour Of The Day (Units Digit)

Table 34: Daylight Savings - Forward

These two addresses program which hour the clock is advanced one hour for daylight savings. When the time in the control panel matches the value programmed in these addresses, the clock will advance forward one hour. Refer to Address 0236 on page 127 to program which daylight savings calendar this address will follow.

Daylight Savings – Backwards One Hour

Address 0240 - 0241

0 3

Address	Description
240	Hour Of The Day (Tens Digit)
241	Hour Of The Day (Units Digit)

Table 35: Daylight Savings - Forward

These two addresses program which hour the clock is reversed one hour for daylight savings. When the time in the control panel matches the value programmed in these addresses, the clock will go backwards one hour. Refer to Address 0236 on page 127 to program which daylight savings calendar this address will follow.

AC Fail Report Delay

Address 0242 - 0243

3 12

Address	Description
242	Increments of 16 minutes (Time = Value x 16 minutes)
243	Increments of 1 minutes (Time = Value x 1 minute)

Table 36: Daylight Savings - Forward

These two addresses program how long in minutes before an AC Fail Report is generated after an AC failure on the system. Refer to 0224 on page 1271 to enable AC Fail reporting.

System Test (Command 41) Configuration Options

Address 0244

15

Option	Description
0	Command 41 Disabled
1	Test Siren
2	Test Strobe
4	Test Battery
8	Send Test Report

Table 37: System Test - Command 41 Configuration Options

Command 41 can only be used on keypads assigned to the areas that have been programmed in **Error! Reference source not found.** on page **Error! Bookmark not defined.**. Refer to Command 41 on page 47 for user operation.

Test Siren

Programming this option will allow the control panel to sound the siren output for 3 seconds when you enter [Select] [4] [1]. Refer to the table below for a complete list of output event types that will activate when Command 41 is used.

Output Event Type	Description	Page #
1, 5	Siren Time	209
1, 8	Alarm - Away, Stay & Stay 2	210
1, 9	Alarm - Stay & Stay 2	210
1, 10	Alarm - Away	210
1, 11	Fire Alarm (Follows Siren Time)	210
1, 12	Fire Alarm - Latching	210

Table 38: Command 41 - Test Siren Option Output Types

Test Strobe

Programming this option will allow the control panel to operate any output programmed for strobe operation when you enter [Select] 4] [1]. The output programmed as strobe (1,6) will operate for 20 minutes (time out) or until you press the [*] key to continue to the next test or you press the [#] key to terminate.

Test Battery

Programming this option will allow the control panel to test the back-up battery when you enter [Select] [4] [1]. The control panel will automatically disconnect the AC mains supply and only operate from the back-up battery for a four-minute period before restoring the AC mains supply.

If the battery test fails to detect a back-up battery, or, detects that the battery voltage falls below 12.1 volts, a trouble condition will be registered until the system detects that the back-up battery has been restored (13.1 volts).

Send Test Report

Programming this option will allow the control panel to test the dialler by sending a 'Period Test' report [Equ 137] to the base station receiver when you enter [Select] [4] [1]. If a trouble condition is registered by the control panel at the time the control panel tests the dialler, it will send a 'Period Test, System Trouble' report [Equ 138]. The test report will follow the routing of the automatic test reports programmed in Address 0255 on page 134.

System Test (Command 41) Area Assignment

Address 0245

15

Option	Description
0	Command 41 Disabled
1	Command 41 Allowed In Area 1
2	Command 41 Allowed In Area 2
4	Command 41 Allowed In Area 3
8	Command 41 Allowed In Area 4

Table 39: System Test - Command 41 Area Assignment

Command 41 can only be used to test the system on keypads assigned to the areas that have been programmed here in Address 0245.

Example

If you program into Address 0245 the value 5 (Option 1 and Option 4 added together), Command 41 will only work on keypads that have been assigned to Area 1 and Area 3.

Walk Test (Command 44) Configuration Options

Address 0246

8

Option	Description
0	Command 44 Disabled
1	Start With System Test (Command 41)
2	Include Fire Zones
4	Include 24-Hour Zones
8	Include Controlled Zones

Table 40: Walk Test Configuration Options

Walk test allows you to test each zone to check that the zone still registers a faulted state without sounding or reporting an alarm. Only the zone types that are programmed in this address (i.e. Option 2, Option 4 and Option 8) will be tested.

A 'Walk Test Start' report [Equ 158] (includes user id number) will be sent at the start of the test. A 'Walk Test End' report [Equ 159] (includes user id number as zero) will be sent when walk test is terminated.

When you enter walk test, the control panel starts a 20-minute timer. After 15 minutes with no activity, the keypad will beep to remind you that walk test is still active. The walk test will automatically terminate after 20 minutes of no activity.

Note

If you test a zone during walk test that registers as a 'Trouble' condition, the zone will send a 'Trouble' report (if programmed) and not register as tested. The zone will only register as tested when the system detects that the zone has been faulted and restored.

Start With System Test (Command 41)

If this option is programmed, the control panel will first test the system (Command 41) before starting the walk test. Refer to System Test (Command 41) Configuration Options on page 128 for more information.

Include Fire Zones

If this option is programmed, walk test will include all fire zones that are assigned to the same area that Command 44 was issued (e.g. If you enter Command 44 in Area 1, all fire zones assigned to Area 1 can be tested). Refer to Address 0247 on page 131 to program which areas can test fire zones using the walk test command.

Include 24-Hour Zones

If this option is programmed, walk test will include all 24-hour zones that are assigned to the same area that Command 44 was issued (e.g. If you enter Command 41 in Area 1, all 24-hour zones assigned to Area 1 can be tested). Refer to Address 0247 on page 131 to assign which areas can test 24-hour zones using the walk test command.

Include Controlled Zones

If this option is programmed, walk test will include all controlled zones that are assigned to the same area that Command 44 was issued (e.g. If you enter Command 41 in Area 1, all controlled zones assigned to Area 1 can be tested). Refer to Address 0247 on page 131 to assign which areas can test controlled zones using the walk test command.

Walk Test (Command 44) Area Assignment

Address 0247

15

Option	Description
0	Command 44 Disabled
1	Assigned To Area 1
2	Assigned To Area 2
4	Assigned To Area 3
8	Assigned To Area 4

Table 41: Walk Test Area Assignment

This address programs which areas allow you to test zones connected to the system. At factory default, walk test (Command 44) will operate at any area (e.g. Option 1 + 2 + 4 + 8 = 15).

Refer to Address 0246 on page 130 to program the type of zones that can be tested during walk test (i.e. Controlled, Fire and / or 24-hour zone types).

Walk Test (Command 44) Start / End Report Routing

Address 0248

5

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 42: Walk Test Start/End Report Routing

This address programs the 'Walk Test Start' [Equ 158] and 'Walk Test End' [Equ 159] report routing. Walk test report routing is global for all areas when the system is partitioned. Programming this address as zero (0) will disable walk test reports.

Test Report Options

Address 0249

0

Option	Description
0	No Test Report Options Programmed
1	Test Reports Only When System Is in Away or Stay mode
2	Test Reports Only If No Other Report In Repeat Interval
4	Test Reports For All Areas
8	Call RPS At Test Report Time

Table 43: Test Report Options

This address allows you to configure when a periodic 'Test' report [Equ 137] is sent. If a trouble condition is current when the control panel sends a test report, the control panel will send a 'Test, Off-Normal' report [Equ 138].

Refer to Address 0250 - 0253 on page 133 to program the periodic test report time and Address 0254 on page 133 to program the periodic test report repeat interval.

Test Reports Only When System Is Armed

If this option is programmed, the system will only send a periodic (automatic) test report [Equ 137] when the system is in Away, Stay or Stay 2 mode.

Test Reports Only If No Other Report In Repeat Interval

If this option is programmed, the system will only send a periodic test report [Equ 137] if no other system report is sent within the repeat interval of the periodic test.

Test Reports For All Areas

If this option has been programmed, the system will send a periodic test report [Equ 137] for each area that has been programmed (i.e. If the system has been partitioned into four (4) separate areas, the system will send four (4) test reports).

Call RPS At Test Report Time

If this option has been programmed, the system will attempt to connect to the security company's remote computer after the system as sent a periodic test report [Equ 137]. For this option to work, you will need to program the RPS Call Back Phone Number.

Test Report Time

Address 0250 - 0253

0	0	0	0
H	H	M	M

Address	Description
250	Hour Of The Day (Tens Digit)
251	Hour Of The Day (Units Digit)
252	Minute Of The Day (Tens Digit)
253	Minute Of The Day (Units Digit)

Table 44: Test Report Time

A periodic 'Test' report [Equ 137] will be sent at the time programmed in these addresses to test the dialling ability of the control panel. When sending periodic test reports, the system will need to know the hour and minute of the day the report is to be sent, as well as how often to send the report. Program the test report time between 00:01 - 24:00 hour (i.e. 24-hour format – 00:01 = 12:01am / 24:00 = 12:00 pm). Programming these addresses as zero (0) will disable the periodic test reports.

Refer to Address 0249 on page 132 to program test report options and Address 0254 on page 133 to program the periodic test report repeat interval (i.e. how often to report).

Test Report Interval

Address 0254

2

Option	Description
0	No Periodic Test Reports
1	Every Hour
2	Every Day
3	Every 7 Days
4	Every 28 Days

Table 45: Test Report Interval

Programming this address as zero (0) will disable periodic (automatic) test reports. You can only program one (1) of the available options in the table above for the test report repeat interval and is global for all areas.

If you programmed automatic test reports every hour, it is incremented on the minute. For example, if you set the automatic test report to 10:20 am, the automatic test report interval is one hour. If you exit programming mode at 11:10 am, the control panel will send it's first automatic test report at 11:20 am. The next test report would be sent at 12:20 pm.

Automatic test report intervals for Option 2 (every day), Option 3 (every 7 days) and Option 4 (every 28 days) are incremented at midnight (24:00 hrs). Therefore, if the current time is 12:00 pm and you programmed the automatic test report time as 4:00 pm every day, the first automatic test report will not report until 4:00 pm the next day.

Test Report Routing

Address 0255

1

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 46: Test Report Routing

This address programs test report routing for 'Period Test' reports [Equ 137] and 'Period Test, System Trouble' reports [Equ 138]. Both these reports follow Command 41 - Send Test Report on page 129 and automatic test reports. Automatic test reports require the following programmed; Test Report Options on page 132, Test Report Time on page 133 and the Test Report Interval on page 133.

Remote Programming Options (RPS)

Address 0256

1

Option	Description
0	Remote Programming Not Allowed
1	Remote Programming Allowed
2	Remote Programming Call Back Allowed
4	Terminate Remote Programming Connection On Alarm
8	Reserved

Table 47: Remote Programming Options

The following reports follow the System Status Report Routing on page 123 when RPS upload/download software is used to remotely program the system.

[Equ 98] - Parameters Changed	This report is sent if any system parameters have been changed during the remote programming session.
[Equ 102] - Invalid Remote Access	This report is sent if the remote programming session is not completed successfully.
[Equ 103] - Valid Remote Access	This report is sent if the remote programming session is completed successfully.
[Equ 104] - Reboot	This report is sent if the remote programming session is terminated with a 'reset bye' from the RPS upload/download software. This report also follows System Status Report Swinger Count on page 123.

Refer to Address 0213 on page 118 to program the RPS answer ring count and Address 0181 - 0212 on page 117 to program the RPS Call Back Phone Number only if Option 2 below and / or Command 43 on page 63 is required.

Remote Programming Allowed

If this option is programmed, it will allow you to remotely program the alarm system via the telephone line using RPS upload/download software.

Remote Programming Call Back Allowed

Option 1 in this address also needs to be programmed for remote programming call back to work. If this option is programmed, when making a remote programming call (dialling into the alarm system for programming changes), the system will answer the incoming call. After the system answers the call, both the remote programming software and alarm system will hang up the phone line. The remote programming software will then wait for the system to dial the telephone number programmed in the RPS Call Back Phone Number on page 117 before connection will be made.

If the system fails to call back to the RPS upload/download software, the system will send a 'Bad Call' report [Equ 101].

Note

Command 43 - Remote Program will not work unless this option is programmed.

Terminate Remote Programming Connection On Alarm

If this option is programmed, the system will terminate the remote programming session if a zone alarm (includes A, B, C key alarms) that needs to report has occurred.

If this option is not programmed, the alarm report will be sent when the programming session has terminated.

Programming/Daylight Savings Options

Address 0257

12

Option	Description
0	No Options Selected
1	Reserved
2	Auto Adjust For DST (Daylight Savings)
4	Keypad Programming Allowed
8	PK32 (Programming Key) Allowed

Table 48: Programming/Daylight Savings Options

Auto Adjust For DST (Daylight Savings)

Programming this option will allow the control panel to automatically adjust the time for daylight savings (Australia). DST will commence at 2 am on the last Sunday in October each year (Clocks should be turned forward one hour to read 3 am) and will end at 2 am on the last Sunday in March (Clocks should be turned back one hour to read 2 am).

Keypad Programming Allowed

If this option is programmed, the programming parameters of the control panel can be changed via the keypad (or Installer's keypad). You can only program the control panel via the keypad if the installer switch is shorted (closed). Refer to Programming Via A 'Text' Keypad on page 79 for additional information.

If this option is not programmed, you can only program the control panel via RPS upload/download software or PK32 programming key (if programmed).

Note

If the installer switch is still shorted, the short will disable the following:

- **All system reporting, including alarms.**
- **A, B, C key functions.**
- **Alarm Outputs.**
- **Activate the 'Call for service' trouble display at all keypads.**

PK32 (Programming Key) Allowed

If this option is programmed, you can transfer programming information between the control panel and the PK32 programming key.

If this option is not programmed, transferring information will not be allowed between the control panel and the key. For additional information on using a Program Key, refer to page 90.

Arming Options 1

Address 0258

4

Option	Description
0	No Options Selected
1	Away - No Exit Option Allowed
2	Answering Machine Bypass Only When Away or Stay mode is on
4	Arm Area 1 Via Telephone Allowed
8	Reserved

Table 49: Arming Options 1

Away - No Exit Option Allowed

With this option programmed, if you arm the system in Away mode and no exit/entry zone has faulted during the exit delay time, the system will automatically switch from Away to Stay at the end of the exit delay time.

Answering Machine Bypass Only When Away or Stay mode is on

If this option has been programmed, Answering Machine Bypass will only operate when the system is armed in Away, Stay or Stay 2 mode. When the system is disarmed, the system will not answer any incoming call. Refer to Address 0213 on page 118 to program answering machine bypass. It is not recommended that you program this option when you program 'Arm Area 1 Via Telephone Allowed' below.

Arm Area 1 Via Telephone Allowed

If this option has been programmed, it will allow you to remotely arm Area 1 in Away mode via the telephone. Refer to Address 0213 on page 118 to program the number of rings before the system will answer an incoming call. You cannot disarm any area via the telephone.

When the system answers your incoming call:

- If the system is already in Away or Stay mode, it will sound three (3) beeps and will emit the handshake tone for a remote programming session.
- If the panel is disarmed, the system will sound one short beep and waits 3 seconds for you to press the [5] key on your touch tone telephone before sounding one long beep (handshake tone) for remote programming. You need to press the [5] key on your touch-tone telephone, between the short beep and the long beep to remotely arm Area 1 in Away mode.
- When the system detects you pressing the [5] key, Area 1 will be armed in Away mode with Delay. The system will sound another three beeps before releasing the telephone line (hangs up).

Arming Options 2

Address 0259

12

Option	Description
0	No Options Selected
1	First To Open/Last To Close Allowed
2	Area 1 Is Common Area
4	Command 80 - All Areas Arm With Delay Allowed
8	Command 81 - All Areas Disarm Allowed

Table 50: Arming Options 2

First To Open/Last To Close

If this option has been programmed, an 'Open' report [Equ 164] will be sent when the any area is first to be disarmed. A 'Close' report [Equ 165] will only be sent when the last area has been armed in Away mode or Stay or Stay 2 mode.

Area 1 Is Common Area

All other areas are common to Area 1. Area 1 arms when all the other areas are armed in Away mode and will disarm when any other area is disarmed.

Command 80 - All Areas Arm with Delay Allowed

This option allows any user that has the appropriate authority level to arm all areas in Away mode at the same time. Refer to PIN Codes on page 165 to program the user code authority level. Refer to Authority Level Option 8 on page 160 to program which authority levels can access Command 80.

Command 81 - All Areas Disarm Allowed

This option allows any user that has the appropriate authority level to disarm all areas at the same time. Refer to PIN Codes on page 165 to program the user code authority level. Refer to Authority Level Option 8 on page 160 to program which authority levels can access Command 81.

Zone Bypass / Force Arm Limit

Address 0260

0

Address	Description
260	0 = Unlimited / 1 - 15 = Maximum Number Of Zones

Table 51: Zone Bypass/ Force Arm Limit

This address allows you to program the maximum number of zones that can be forced on or manually bypassed for each area. If the number of zones exceeds the maximum allowed, the keypad will sound an error tone when you attempt to arm the system (or area) or bypass additional zones.

Only those zones assigned to a zone index group that have Option 4 - Can Be Bypassed / Forced Armed programmed in Zone Index Options 2 on page 191 can be bypassed or forced armed. To assign individual zones to a zone index group, refer to Guard Code Options

Open/Close Report Options

Address 0261

15

Option	Description
0	No Open, Close, Exit Error Or Recent Close Reports Allowed
1	Open Reports Allowed
2	Close Reports Allowed
4	Exit Error Reports Allowed
8	Recent Close Reports Allowed

Table 52: Open/Close Report Options

Note

The report routing for 'Open' reports and 'Close' reports follow the Open/Close Report Routing on page 141.

Open Reports Allowed

If this option has been programmed, it will allow 'Open' reports [Equ 89 – 96] and 'First to Open' reports [164] to be sent for any area.

Close Reports Allowed

If this option has been programmed, it will allow 'Close' reports [Equ 42 - 54], 'Force Close' reports [Equ 55 - 67], 'Auto On Extend' report [Equ 21] and 'Last to Close' reports [Equ 165] to be sent for any area.

Exit Error Reports Allowed

If this option is programmed, it will allow 'Exit Error' reports [Equ 18] to be sent. Exit error events are always enabled (i.e. You cannot disable Exit Error events).

An exit error occurs when an Entry/Exit zone becomes faulted during exit delay and remains faulted at the end of exit delay. If this happens, the entry delay will start. If the system is not disarmed before the entry delay time expires, an alarm report for the zone in question will be sent. If this option is not programmed, only a 'Alarm Restore' report will be sent if the zone restores after the exit error entry delay timer expires.

An exit error will:

- Sound local alarm (Keypads and outputs).
- Start Entry Delay (Keypad will sound alarm for a Follower zone or entry delay for Entry/Exit Delay zone).
- If the system is not disarmed at the end of entry delay, send alarm report (including exit error report if this option is programmed).

Note

Exit Error reports follow the alarm report routing of the zone index group that the delay zone is assigned to.

Recent Close Reports Allowed

If this option is programmed, the system will send a 'Recent Close' report [Equ 19 - 20] when an Controlled Entry Exit Delay (1 or 2) zone, Controlled Follower, Controlled Instant or Controlled Keyswitch zone is faulted within two (2) minutes after the end of exit time.

'Recent Close' reports follow the alarm report routing of the zone index group that the controlled zone is assigned to.

Note

If a controlled zone (delay, follower, instant) becomes faulted during exit delay time and remains faulted at the end of exit time, an exit error event will occur and a recent close report will be sent.

Open/Close Report Routing

Address 0262

1

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 53: Open/Close Report Routing Options

This address programs Open/Close report routing. Open/Close report routing is global for all areas programmed when the system is partitioned. Programming this address as zero (0) will disable the following reports: Auto On Extend [Equ 21], Closing [Equ 42 – 54], Forced Closing [Equ 55 – 67], Open [Equ 89 – 96], First To Open [Equ 164, Last To Close [Equ 165]:

Exit Time Restart

Address 0263

1

Option	Description
0	No Exit Time Restart
1	Restart (SIA FALSE ALARM REDUCTION REQUIREMENT)

Table 54: Exit Time Restart

If you program this address as one (1), the exit delay timer will restart (once per arming cycle) when the same Controlled Entry/Exit Delay (1 or 2) zone is faulted a second time during exit delay.

Example

When you arm the system and leave the premises via a Controlled Entry/Exit Delay zone (i.e. Open and Close front door as you leave the premises), during exit time, if you re-enter the premises through the same Controlled Entry/Exit Delay zone for any reason (ie. Open front door again), the exit timer will restart.

Entry/Exit Timers

Programming

This section allows you to program entry delay and exit delay timers. Each delay timer is programmed using two (2) addresses. The system multiplies the first address by sixteen (x 16) and adds it to the value programmed in the second address (x 1).

Example

If you want to program Entry Delay Time 1 on page 142 as fifty (50) seconds, you would program a three (3) in Address 264 (3 x 16 seconds = 48 seconds) and then program a two (2) in Address 265 (2 x 1 second = 2 seconds). The system will then add the total values in the first and second address together (48 + 2 = 50 seconds).

Entry Delay Time 1

Address 0264 - 0265



Address	Description
264	Increments Of 16 Seconds (0 - 240 Seconds)
265	Increments Of 1 Second (0 - 15 Seconds)

Table 55: Entry Delay Time 1

Entry Delay Time 1 is factory default as 30 seconds. Entry Delay-1 is the time the system allows you to disarm the system (30 – 255 seconds) when you enter the premises via a Controlled Entry/Exit Delay 1 zone. If you fail to disarm the system during the entry delay time, an alarm event will occur as soon as the entry time expires. The keypad will sound the entry delay tone during the entry delay time.

Only those zones programmed as Controlled Entry/Exit Delay 1 (Zone Type 11) will use the entry time programmed in Address 0264 - 0265.

If a user enters via a Controlled Entry/Exit Delay 1 zone and then through a zone programmed as Controlled Entry/Exit Delay 2, the system **will not** switch from Entry Delay Time 1 to Entry Delay Time 2.

If a Controlled Entry/Exit Delay 1 zone becomes faulted during the exit delay time and has not restored before the exit delay time expires, the system will sound an alarm.

Note

If you arm the system with no delay, it will override only the entry delay. Therefore, when you go through the Controlled Entry/Exit Delay zone, an alarm will immediately occur. An exit delay will still occur when the system is armed with no delay.

Entry Delay Time 2

Address 0266 - 0267

7	8
16 S	1 S

Address	Description
266	Increments Of 16 Seconds (0 - 240 Seconds)
267	Increments Of 1 Second (0 - 15 Seconds)

Table 56: Entry Delay Time 2

Entry Delay Time 2 is factory default as 120 seconds. Entry Delay-2 is the time the system allows you to disarm the system (30 – 255 seconds) when you enter the premises via a Controlled Entry/Exit Delay-2 zone. If you fail to disarm the system during the entry delay time, an alarm event will occur as soon as the entry time expires. The keypad will sound the entry delay tone during the entry delay time.

Only those zones programmed as Controlled Entry/Exit Delay 2 (Zone Type 12) will use the entry time programmed in Address 0266 - 0267.

If a user enters via a Controlled Entry/Exit Delay 2 zone and then through a zone programmed as Controlled Entry/Exit Delay 1, the system **will not** switch from Entry Delay Time 2 to Entry Delay Time 1.

Stay Mode Delay Time

Address 0268 - 0269

0	0
16 S	1 S

Address	Description
268	Increments Of 16 Seconds (0 - 240 Seconds)
269	Increments Of 1 Second (0 - 15 Seconds)

Table 57: Part Mode Delay Time

Stay Mode delay time is factory default as 0 seconds. Stay mode delay time is only applicable when you arm the system in Stay or Stay 2 mode. When the system is Stay, any zone programmed as Controlled Entry/Exit Delay (1 and 2) or Controlled Follower will have an entry delay time programmed in Address 0268 - 0269.

Any zone that becomes faulted during the delay time and remains faulted at the end of the part mode delay time will sound an alarm.

Note

If you arm the system with no delay, it will override the Part Mode Delay Time. Therefore, as soon as a controlled zone has been faulted, an alarm will immediately occur.

Exit Delay Time 1

Address 0270 - 0271

3	12
16 S	1 S

Address	Description
270	Increments Of 16 Seconds (0 - 240 Seconds)
271	Increments Of 1 Second (0 - 15 Seconds)

Table 58: Exit Delay Time 1

Exit delay is the time (45 – 255 seconds) the system allows you to exit the premises. Users must leave the premises before exit delay expires (via an Entry/Exit Delay-1 zone). When the system is armed in Away mode or Stay (or Stay 2) with delay, the system will use Exit Delay Time 1.

If a zone programmed as Entry/Exit Delay-2 is faulted when the exit delay has already started, the system will switch over to Exit Delay Time 2.

If the system is forced in Away mode or Stay (or Stay 2) with a Entry/Exit Delay-2 zone faulted, the system will automatically use Exit Delay 2. The system will then use the Entry Delay-2 timer unless the Entry/Exit Delay-2 zone has restored before you enter the premises to disarm the system. If the Entry/Exit Delay-2 zone has restored after the system has been armed, the system will revert back to Entry Delay 1.

Exit Delay Time 2

Address 0272 - 0273

7	8
16 S	1 S

Address	Description
272	Increments Of 16 Seconds (0 - 240 Seconds)
273	Increments Of 1 Second (0 - 15 Seconds)

Table 59: Exit Delay Time 2

Exit Delay Time 2 will only be used if an Entry/Exit Delay-2 zone becomes faulted during Exit Delay Time 1 (switches from Exit Delay Time 1 to Exit Delay Time 2), or, the system is forced in Away, Stay or Stay 2 mode with a Entry/Exit Delay-2 zone faulted.

Exit Delay Time 2 can be programmed as a minimum of 45 seconds up to 255 seconds.

Areas

Area 1 Account Number For Destination 1

Address 0276 - 0281

10	10	10	10	0	0
----	----	----	----	---	---

Each area can report to two different destinations, each destination having its own (or same) account number. The account number you program here identifies to the security company which alarm system is reporting information.

Programming From The Keypad

Use the table below to program each address for the account number. Each address will hold one digit of the account number.

Account Digit	Number To Program	Account Digit	Number To Program
1	1	9	9
2	2	0	10
3	3	B	11
4	4	C	12
5	5	D	13
6	6	E	14
7	7	F	15
8	8	Terminate	0

Table 60: Account Number Digit Selections

Area 1 Account Number For Destination 2

Address 0286 - 0291

10	10	10	10	0	0
----	----	----	----	---	---

Refer to Area 1 Account Number For Destination 1 above for more information.

Area 1 - Open/Close Report Options

Address 0296

1

Option	Description
0	No Open/Close Reports For Area 1
1	Open/Close Reports For Area 1 Allowed
2	Open Reports Only After Alarm/Close Reports Only On Force Arm
4	Open/Close Reports For Stay and Stay 2 mode
8	1 Second Siren Test On Closing Acknowledge

Table 61: Area 1 Open/Close Report Options

Open/Close Reports For Area 1 Allowed

If this option is programmed, 'Open' and 'Close' reports for Area 1 will be allowed to report. If this option is not programmed, 'Open' and 'Close' reports for Area 1 will not report. This option requires the following to be programmed to send open/close reports for Area 1:

- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Only those PIN codes assigned to Authority Level Option 6 on page 159 will send Open/Close reports.

Note

If this option (Option 1) is not programmed, will disable the following reports for Area 1 – Auto On Extend [Equ 21], Closing [Equ 42 – 54], Forced Closing [Equ 55 – 67], Open [Equ 89 – 96], First To Open [Equ 164] and Last To Close [Equ 165].

Open Reports Only After Alarm/Close Reports Only On Force Arm

If this option is programmed, an 'Open' report will only be sent when a user has disarmed the area after an alarm has occurred. A 'Close' report will only be sent if the system is forced on (Away, Stay or Stay 2). This option requires the following to be programmed to operate:

- Option 1 - Open/Close Reports For Area 1 Allowed in Address 0296 on page 145.
- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Open/Close reports disabled for each PIN code in Authority Level Option 6 on page 159 (Any PIN code that has open/close reports allowed will always send open/close reports).
- Only those PIN codes assigned to Authority Level Option 7 on page 159 can force arm the system.

Note

If the option “Open Reports only after an Alarm / Close Reports Only on Force Arm” is enabled it overrides the “First to Open / Last to Close” option.

Open/Close Reports For Stay and Stay 2 mode

If this option is programmed, 'Open' and 'Close' reports will be sent when the system is armed in Stay or Stay 2 mode. If this option is not programmed, 'Open' and 'Close' reports will not be sent when the system is armed in Stay or Stay 2 mode. This option requires the following to be programmed to operate:

- Option 1 - Open/Close Reports For Area 1 Allowed in Address 0296 on page 145.
- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Only those PIN codes assigned to Authority Level Option 6 on page 159 will send Open/Close reports.
- Only those PIN codes assigned to Authority Level Option 2 on page 157 (arm in Stay mode) and Authority Level Option 3 on page 158 (arm in Stay 2 mode) can arm the system in Stay and Stay 2 mode.

1 Second Siren Test On Closing Acknowledge

If this option is programmed, the system will activate any output programmed with an output event type (1,8), (1,9) or (1,10) assigned to Area 1 for one second when exit time has expired.

Area 1 - Lock Reporting

Address 0297

Option	Description
0	Lock Area Reporting Disabled
1	Lock Area 1 Reports To Destination 1
2	Lock Area 1 Reports To Destination 2

Table 62: Area 1 - Lock Reporting

If no option is programmed in this address, all reports for Area 1 will follow the report routing programmed for that individual report.

Lock Area 1 Reports To Destination 1

If this option is programmed, it will lock all reports that are programmed for Area 1 to report only to Destination 1. The report routing for the individual report will be ignored.

Lock Area 1 Reports To Destination 2

If this option is programmed, it will lock all reports that are programmed for Area 1 to report only to Destination 2. The report routing for the individual report will be ignored.

Example

If you program this address as 1, all zones in the area are sent to Destination 1. If you program this address as 2, all zones in the area are sent to Destination 2.

Area 2 Account Number For Destination 1

Address 0298 - 0303

10	10	10	10	0	0
----	----	----	----	---	---

Each Area can report to two different destinations, each destination having it's own (or same) account number. The account number you program here identifies to the security company which alarm system is reporting information.

Programming From The Keypad

Use the table below to program each address for the account number. Each address will hold one digit of the account number.

Account Digit	Number To Program	Account Digit	Number To Program
1	1	9	9
2	2	0	10
3	3	B	11
4	4	C	12
5	5	D	13
6	6	E	14
7	7	F	15
8	8	Terminate	0

Table 63: Account Number Digit Selections

Area 2 Account Number For Destination 2

Address 0308 - 0313

10	10	10	10	0	0
----	----	----	----	---	---

Refer to Area 2 Account Number For Destination 1 above for more information.

Area 2 - Open/Close Report Options

Address 0318

1

Option	Description
0	No Open/Close Reports For Area 2
1	Open/Close Reports For Area 2 Allowed
2	Open Reports Only After Alarm/Close Reports Only On Force Arm
4	Open/Close Reports For Stay and Stay 2 mode
8	1 Second Siren Test On Closing Acknowledge

Table 64: Area 2 - Open/Close Report Options

Open/Close Reports For Area 2 Allowed

If this option is programmed, 'Open' and 'Close' reports for Area 2 will be allowed to report. If this option is not programmed, 'Open' and 'Close' reports for Area 2 will not report. This option requires the following to be programmed to send open/close reports for Area 2:

- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Only those PIN codes assigned to Authority Level Option 6 on page 159 will send Open/Close reports.

Note

If this option (Option 1) is not programmed, will disable the following reports for Area 2 – Auto On Extend [Equ 21], Closing [Equ 42 – 54], Forced Closing [Equ 55 – 67], Open [Equ 89 – 96], First To Open [Equ 164] and Last To Close [Equ 165].

Open Reports Only After Alarm/Close Reports Only On Force Arm

If this option is programmed, an 'Open' report will only be sent when a user has disarmed the area after an alarm has occurred. A 'Close' report will only be sent if the system is forced on (Away, Stay or Stay 2). This option requires the following to be programmed to operate:

- Option 1 - Open/Close Reports For Area 2 Allowed in Address 0318 on page 149.
- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Open/Close reports disabled for each PIN code in Authority Level Option 6 on page 159 (Any PIN code that has open/close reports allowed will always send open/close reports).
- Only those PIN codes assigned to Authority Level Option 7 on page 159 can force arm the system.

Open/Close Reports For Stay and Stay 2 mode

If this option is programmed, 'Open' and 'Close' reports will be sent when the system is armed in Stay or Stay 2 mode. If this option is not programmed, 'Open' and 'Close' reports will not be sent when the system is armed in Stay or Stay 2 mode. This option requires the following to be programmed to operate:

- Option 1 - Open/Close Reports For Area 2 Allowed in Address 0318 on page 149.
- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Only those PIN codes assigned to Authority Level Option 6 on page 159 will send Open/Close reports.
- Only those PIN codes assigned to Authority Level Option 2 on page 157 (arm in Stay mode) and Authority Level Option 3 on page 158 (arm in Stay 2 mode) can arm the system in Stay and Stay 2 mode.

1 Second Siren Test On Closing Acknowledge

If this option is programmed, the system will activate any output programmed with an output event type (1,8), (1,9) or (1,10) assigned to Area 1 for one second when exit time has expired.

Area 2 - Lock Reporting

Address 0319

0

Option	Description
0	Lock Area Reporting Disabled
1	Lock Area 2 Reports To Destination 1
2	Lock Area 2 Reports To Destination 2

Table 65: Area 2 - Lock Reporting

If no option is programmed in this address, all reports for Area 1 will follow the report routing programmed for that individual report.

Lock Area 2 Reports To Destination 1

If this option is programmed, it will lock all reports that are programmed for Area 2 to report only to Destination 1. The report routing for the individual report will be ignored.

Lock Area 2 Reports To Destination 2

If this option is programmed, it will lock all reports that are programmed for Area 2 to report only to Destination 2. The report routing for the individual report will be ignored.

Example

If you program this address as 1, all zones in the area are sent to Destination 1. If you program this address as 2, all zones in the area are sent to Destination 2.

Area 3 Account Number For Destination 1

Address 0320 - 0325

10	10	10	10	0	0
----	----	----	----	---	---

Each Area can report to two different destinations, each destination having its own (or same) account number. The account number you program here identifies to the security company which alarm system is reporting information.

Programming From The Keypad

Use the table below to program each address for the account number. Each address will hold one digit of the account number.

Account Digit	Number To Program	Account Digit	Number To Program
1	1	9	9
2	2	0	10
3	3	B	11
4	4	C	12
5	5	D	13
6	6	E	14
7	7	F	15
8	8	Terminate	0

Table 66: Account Number Digit Selections

Area 3 Account Number For Destination 2

Address 0330 - 0335

10	10	10	10	0	0
----	----	----	----	---	---

Refer to Area 3 Account Number For Destination 1 above for more information.

Area 3 - Open/Close Report Options

Address 0340

1

Option	Description
0	No Open/Close Reports For Area 3
1	Open/Close Reports For Area 3 Allowed
2	Open Reports Only After Alarm/Close Reports Only On Force Arm
4	Open/Close Reports For Stay and Stay 2
8	1 Second Siren Test On Closing Acknowledge

Table 67: Area 3 - Open/Close Report Options

Open/Close Reports For Area 3 Allowed

If this option is programmed, 'Open' and 'Close' reports for Area 3 will be allowed to report. If this option is not programmed, 'Open' and 'Close' reports for Area 3 will not report. This option requires the following to be programmed to send open/close reports for Area 3:

- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Only those PIN codes assigned to Authority Level Option 6 on page 159 will send Open/Close reports.

Note

If this option (Option 1) is not programmed, will disable the following reports for Area 3 – Auto On Extend [Equ 21], Closing [Equ 42 – 54], Forced Closing [Equ 55 – 67], Open [Equ 89 – 96], First To Open [Equ 164] and Last To Close [Equ 165].

Open Reports Only After Alarm/Close Reports Only On Force Arm

If this option is programmed, an 'Open' report will only be sent when a user has disarmed the area after an alarm has occurred. A 'Close' report will only be sent if the system is forced on (in Away, Stay or Stay 2 mode). This option requires the following to be programmed to operate:

- Option 1 - Open/Close Reports For Area 3 Allowed in Address 0340 on page 152.
- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Open/Close reports disabled for each PIN code in Authority Level Option 6 on page 159 (Any PIN code that has open/close reports allowed will always send open/close reports).
- Only those PIN codes assigned to Authority Level Option 7 on page 159 can force arm the system.

Open/Close Reports For Stay and Stay 2 mode

If this option is programmed, 'Open' and 'Close' reports will be sent when the system is armed in Stay or Stay 2 mode. The system will not send open/close reports for Stay mode unless Option 1 in this address is programmed. This option requires the following to be programmed to operate:

- Option 1 - Open/Close Reports For Area 3 Allowed in Address 0340 on page 152.
- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Only those PIN codes assigned to Authority Level Option 6 on page 159 will send Open/Close reports.
- Only those PIN codes assigned to Authority Level Option 2 on page 157 (arm in Stay mode) and Authority Level Option 3 on page 158 (arm in Stay 2 mode) can arm the system in Stay and Stay 2 mode.

1 Second Siren Test On Closing Acknowledge

If this option is programmed, the system will activate any output programmed with an output event type (1,8), (1,9) or (1,10) assigned to Area 1 for one second when exit time has expired.

Area 3 - Lock Reporting

Address 0341

0

Option	Description
0	Lock Area Reporting Disabled
1	Lock Area 3 Reports To Destination 1
2	Lock Area 3 Reports To Destination 2

Table 68: Area 3 - Lock Reporting

If no option is programmed in this address, all reports for Area 3 will follow the report routing programmed for that individual report.

Lock Area 3 Reports To Destination 1

If this option is programmed, it will lock all reports that are programmed for Area 3 to report only to Destination 1. The report routing for the individual report will be ignored.

Lock Area 3 Reports To Destination 2

If this option is programmed, it will lock all reports that are programmed for Area 3 to report only to Destination 2. The report routing for the individual report will be ignored.

Example

If you program this address as 1, all zones in the area are sent to Destination 1. If you program this address as 2, all zones in the area are sent to Destination 2.

Area 4 Account Number For Destination 1

Address 0342 - 0347

10	10	10	10	0	0
----	----	----	----	---	---

Each Area can report to two different destinations, each destination having it's own (or same) account number. The account number you program here identifies to the security company which alarm system is reporting information.

Programming From The Keypad

Use the table below to program each address for the account number. Each address will hold one digit of the account number.

Account Digit	Number To Program	Account Digit	Number To Program
1	1	9	9
2	2	0	10
3	3	B	11
4	4	C	12
5	5	D	13
6	6	E	14
7	7	F	15
8	8	Terminate	0

Table 69: Account Number Digit Selections

Area 4 Account Number For Destination 2

Address 0352 - 0357

10	10	10	10	0	0
----	----	----	----	---	---

Refer to Area 4 Account Number For Destination 1 above for more information.

Area 4 - Open/Close Report Options

Address 0362

1

Option	Description
0	No Open/Close Reports For Area 4
1	Open/Close Reports For Area 4 Allowed
2	Open Reports Only After Alarm/Close Reports Only On Force Arm
4	Open/Close Reports For Stay and Stay 2 mode
8	1 Second Siren Test On Closing Acknowledge

Table 70: Area 4 - Open/Close Report Options

Open/Close Reports For Area 4 Allowed

If this option is programmed, 'Open' and 'Close' reports for Area 4 will be allowed to report. If this option is not programmed, 'Open' and 'Close' reports for Area 4 will not report. This option requires the following to be programmed to send open/close reports for Area 4:

- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Only those PIN codes assigned to Authority Level Option 6 on page 159 will send Open/Close reports.

Note

If this option (Option 1) is not programmed, will disable the following reports for Area 4 – Auto On Extend [Equ 21], Closing [Equ 42 – 54], Forced Closing [Equ 55 – 67], Open [Equ 89 – 96], First To Open [Equ 164] and Last To Close [Equ 165].

Open Reports Only After Alarm/Close Reports Only On Force Arm

If this option is programmed, an 'Open' report will only be sent when a user has disarmed the area after an alarm has occurred. A 'Close' report will only be sent if the system is forced on (in Away, Stay or Stay 2 mode). This option requires the following to be programmed to operate:

- Option 1 - Open/Close Reports For Area 4 Allowed in Address 0362 on page 155.
- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Open/Close reports disabled for each PIN code in Authority Level Option 6 on page 159 (Any PIN code that has open/close reports allowed will always send open/close reports).
- Only those PIN codes assigned to Authority Level Option 7 on page 159 can force arm the system.

Open/Close Reports For Stay and Stay 2 mode

If this option is programmed, 'Open' and 'Close' reports will be sent when the system is armed in Stay or Stay 2 mode. The system will not send open/close reports for Stay mode unless Option 1 in this address is programmed. This option requires the following to be programmed to operate:

- Option 1 - Open/Close Reports For Area 4 Allowed in Address 0362 on page 155.
- Option 1 - Open Reports Allowed in Address 0261 on page 140.
- Option 2 - Close Reports Allowed in Address 0261 on page 140.
- Open/Close Report Routing in Address 0263 on page 141.
- Only those PIN codes assigned to Authority Level Option 6 on page 159 will send Open/Close reports.
- Only those PIN codes assigned to Authority Level Option 2 on page 157 (arm in Stay mode) and Authority Level Option 3 on page 158 (arm in Stay 2 mode) can arm the system in Stay and Stay 2 mode.

1 Second Siren Test On Closing Acknowledge

If this option is programmed, the system will activate any output programmed with an output event type (1,8), (1,9) or (1,10) assigned to Area 1 for one second when exit time has expired.

Area 4 - Lock Reporting

Address 0363

0

Option	Description
0	Lock Area Reporting Disabled
1	Lock Area 4 Reports To Destination 1
2	Lock Area 4 Reports To Destination 2

Table 71: Area 4 - Lock Reporting

If no option is programmed in this address, all reports for Area 4 will follow the report routing programmed for that individual report.

Lock Area 4 Reports To Destination 1

If this option is programmed, it will lock all reports that are programmed for Area 4 to report only to Destination 1. The report routing for the individual report will be ignored.

Lock Area 4 Reports To Destination 2

If this option is programmed, it will lock all reports that are programmed for Area 4 to report only to Destination 2. The report routing for the individual report will be ignored.

Example

If you program this address as 1, all zones in the area are sent to Destination 1. If you program this address as 2, all zones in the area are sent to Destination 2.

Authority Levels

The authority level allows and restricts which commands are available to each PIN Code. Each PIN Code needs to be assigned to an authority level. Refer to PIN Codes on page 165 to program authority levels for each PIN Code.

Authority Level Option 1

Address 0364

15

Commands	Page
Command 1 - Away With Delay	25
Command 1 - Away With Delay, Silent	31
Command 1 - Away With No Entry Delay	29
Away Key - Away With Delay	25
Away Key - Away With Delay, Silent	31
Away Key - Away With No Entry Delay	29

Authority Level 1 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 72: Authority Level Option 1

This authority level allows (or restricts) PIN codes that can arm the system in Away mode. Refer to the page numbers above for additional information for keypad operations.

If a PIN is required and not entered, the system asks for it after the command is entered. Exit time is doubled when arming the system in Away mode with delay, silent.

Authority Level Option 2

Address 0365

0

Commands	Page
Command 2 - Stay With Delay	26
Command 2 - Stay With Delay, Silent	31
Command 2 - Stay With No Entry Delay	29
Stay Key - Away With Delay	25
Stay Key - Away With Delay, Silent	31
Stay Key - Away With No Entry Delay	29

Authority Level 2 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 73: Authority Level Option 2

This authority level allows (or restricts) PIN codes that can arm the system Stay. Refer to the page numbers above for additional information for keypad operations.

If a PIN is required and not entered, the system asks for it after the command is entered. Exit time is doubled when arming the system in Stay mode with delay, silent. To configure zones for Stay mode, refer to Zone Index Options 1 (Non Keyswitch) - Armed For Stay on page 189.

Authority Level Option 3

Address 0366

0

Commands	Page
Command 3 - Stay 2 With Delay	27
Command 3 - Stay 2 With Delay, Silent	31
Command 3 - Stay 2 With No Entry Delay	29

Authority Level 3 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 74: Authority Level Option 3

This authority level allows (or restricts) PIN codes that can arm the system in Stay 2 mode. Refer to the page numbers above for additional information for keypad operations.

If a PIN is required and not entered, the system asks for it after the command is entered. Exit time is doubled when arming the system in Stay mode with delay, silent.

Authority Level Option 4

Address 0367

15

Commands	Page
Disarm	24

Authority Level 4 Option Bits
0 = Disarm Not Assigned
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 75: Authority Level Option 4

This authority level allows (or restricts) PIN codes that can disarm the system. Refer to the page numbers above for additional information on keypad operations.

Note

If you program this address as zero, no PIN Code can disarm the system or area.

Authority Level Option 5

Address 0368

8

Commands	Page
One-Time Disarm	42

Authority Level 5 Option Bits
0 = One-Time Disarm Not Assigned
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 76: Authority Level Option 5

This authority level allows (or restricts) PIN codes that can disarm the system once only. Refer to the page numbers above for additional information on keypad operations.

Authority Level Option 6

Address 0369

0

Commands	Page
Send Open/Close Reports	140, 141, 145, 149, 152, 155

Authority Level 6 Option Bits
0 = Open/Close Reports Not Restricted
1 = Authority Level 1 Restricted
2 = Authority Level 2 Restricted
4 = Authority Level 3 Restricted
8 = Authority Level 4 Restricted

Table 77: Authority Level Option 6

If you do not want to restrict open/close reports for any authority level, program this address as zero (0). If you wish to restrict open/close reports for any authority level, program the relevant authority level option bits (i.e. If you want to restrict open/close reports for PIN codes assigned to Authority Level 1 and Authority Level 4, program a nine (9) into this address).

If the system has been partitioned and Option 1 'First to Open/Last To Close Reporting' is programmed in Address 0259 on page 138, only those authority levels that have been restricted in this address will apply to first to open/close to close reporting.

Authority Level Option 7

Address 0370

0

Commands	Page
Force Arm	32
Command 0 - Bypass	34
Bypass Key	

Authority Level 7 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 78: Authority Level Option 7

This authority level allows PIN codes to force arm the system with zones still faulted or to bypass zones. Refer to the page numbers above for additional information on keypad operations.

Zones must be configured for Can Be Bypassed / Forced Armed operations on page 191.

Authority Level Option 8

Address 0371

1

Commands	Page
Command 80 - Away With Delay - All Areas	65
Command 81 - Disarm, All Areas	64

Authority Level 8 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 79: Authority Level Option 8

This authority level allows (or restricts) which PIN codes that can arm or disarm all areas that they are assigned to at the same time. Refer to the page numbers above for additional information on keypad operations.

This authority level requires Option 4 (Command 80) and Option 8 (Command 81) programmed in Address 0259 on page 138.

Authority Level Option 9

Address 0372

0

Commands	Page
Command 40 - View Alarm Memory	44
Command 41 - System Test	47
Command 42 - View System Trouble	45
Command 43 - Remote Program	63
Command 44 - Walk Test	49
Command 47 - Reset Sensors	50
Command 48 - View Zone Trouble	46

Authority Level 9 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 80: Authority Level Option 9

This authority level allows (or restricts) PIN codes that can access the commands in Table 80. Refer to the page numbers above for additional information on keypad operations.

Authority Level Option 10

Address 0373

1

Commands	Page
Command 45 - Set Date and Time	35
Command 52 - Change Skeds	55
Command 53 - Renew One-Time PIN Code	42
Command 56 - Add/Change Other PIN codes	37
Command 58 - Delete PIN Codes	41
Command 62 - Set Chime Tone	52
Command 63 - Set Chime Zones	53
Command 65 - Set Stay 2 Zones	28
Command 83 - Auto-Forward On Sequence	68
Command 84 - Auto-Forward Off Sequence	69

Authority Level 10 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 81: Authority Level Option 10

This authority level allows (or restricts) PIN codes that can access the various commands in Table 81. Refer to the page numbers above for additional information on keypad operations.

Authority Level Option 11

Address 0374

1

Commands	Page
Command 50 - Move To Area #	66

Authority Level 11 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 82: Authority Level Option 11

This authority level allows (or restricts) PIN codes that can access Command 50 to move the keypad display between different areas. Refer to the page numbers above for additional information keypad operations.

Authority Level Option 12

Address 0375

1

Commands	Page
Command 51 - Extend Close (Automatic Arming)	54

Authority Level 12 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 83: Authority Level Option 12

This authority level allows (or restricts) PIN codes that can access Command 51 to delay the automatic arming time by one hour. Refer to the page numbers above for additional information on keypad operations. To program the automatic pre-alert time (0 – 75 minutes), refer to Address 0233 on page 126. To program the system to automatically arm, you will need to program a sked (scheduled event). Refer to Skeds on page 219 for more information.

Authority Level Option 13

Address 0376

1

Commands	Page
Command 49 – Adjust Keypad Key Volume	71
Command 54 – Outputs Toggle On/Off	62
Command 61 – Chime Toggle On/Off	51
Command 82 – Auto-Forward Toggle On/Off	70

Authority Level 13 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 84: Authority Level Option 13

This authority level allows (or restricts) PIN codes that can access the various commands listed in Table 84. Refer to the page numbers above for additional information on keypad operations.

Authority Level Option 14

Address 0377

1

Commands	Page
Command 55 – Change PIN Code	36

Authority Level 14 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 85: Authority Level Option 14

This authority level allows (or restricts) PIN codes that can change their own PIN Code. Refer to the page number above for additional information on keypad operations.

Note

The default value prohibits Command 55; therefore no PIN Code can be changed by the user by default.

Authority Level Option 15

Address 0378

1

Commands	Page
Command 85 - View Log	72

Authority Level 15 Option Bits
0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

Table 86: Authority Level Option 15

This authority level allows (or restricts) PIN codes that can access Command 85 to view the history log. Refer to the page number above for additional information on keypad operations.

PIN Code Configurations

The control panel has a maximum of 32 PIN (Personal Identification Number) codes. Each PIN code can be assigned to one or multiple areas and is allowed (or restricted) access to various commands via its programmed authority level.

PIN Code Length

Address 0379

4

Address	Description
379	Minimum Length = 3 Digits / Maximum Length = 7 Digits

Table 87: PIN Code Length

All PIN codes (including the installer code) follow the length programmed in this address.

Note

If you shorten the PIN Code length, you could duplicate PIN codes (e.g. If you have PIN Code 3 as 1235 and PIN Code 5 as 1236, programming the PIN Code length as three (3) will shorten both PIN codes to 123.

If you increase the PIN Code length, you may disable some codes (e.g. If you have PIN Code 2 programmed with a code as 2580 and you change the PIN Code length from four digits to seven digits, the PIN code would become 2580FFF and PIN code 2 would no longer operate, as F=blank).

Code Tamper Option

Address 0380

1

Option	Description
0	No Code Tamper Events
1	User Code Tamper Reports Allowed
2	User Code Tamper Event Activates Alarm Output
4	Reserved
8	Reserved

Table 88: User Tamper Options

A user tamper event is when a user enters a PIN code that is not programmed into the control panel, or a user entering a PIN code that is programmed in the control panel but does not have the correct authority level for the desired function. When the user enters an invalid PIN code the number of times programmed in the User Code Tamper, Retry Count on page 164, a user tamper condition registers.

User Code Tamper Reports Allowed

If this option is programmed, the system will send a 'User Code Tamper' report [Equ 156] as soon as the number of incorrect PIN code attempts equals that programmed in Address 0381 on page 164. To program the keypad that registered the user tamper alarm to lock out, refer to Address 0382 on page 164.

The user code tamper report follows the System Status Report Routing on page 123 and reports on group zero (Area 0). This report does not follow the option 'Lock Area Reporting to Destination 1 or Destination 2' for each area. User tamper reports do not follow the System **Status Report Swinger Count on page 123**.

User Code Tamper Activates Alarm Output

If this option is programmed, the system will sound an alarm only on alarm outputs that have been assigned to the area that the user tamper alarm occurred. Any keypad assigned to the same area will display [User Tamper Alarm, Enter code to silence.]

If this option is not programmed, keypads in the area that the tamper alarm occurred will display [User Tamper Alarm]. To program the keypad that registered the user tamper alarm to lock out, refer to Address 0382 on page 164.

User Code Tamper, Retry Count

Address 0381

4

Address	Description
381	0 = Unlimited / 15 = Maximum Incorrect Code Attempts

Table 89: User Tamper Retry Count

This address programs the number of times an invalid PIN Code can be entered at the keypad before the system will register a user tamper alarm event. Programming this address as zero (0) will disable this feature and therefore no user tamper alarm will occur.

To program the system to send a 'User Code Tamper' report [Equ 156] when a user tamper alarm occurs, program Option 1 in Address 0380 on page 163.

To program the system to sound an alarm when a user tamper alarm occurs, program Option 2 in Address 0380 on page 163. To program the keypad that registered the user tamper alarm to lock out, refer to Address 0382 on page 164.

User Code Tamper Time

Address 0382

2

Address	Description
382	Increments Of 1 Minute (0 = No Keypad Lockout / 15 = 15 Min's)

Table 90: User Tamper Time

This address allows you to program how long the keypad that registered the user tamper alarm will be locked out (0 - 15 minutes). Programming this address as zero (0) disables the keypad from locking out.

Refer to Address 0381 on page 164 to program how many times an invalid PIN Code can be entered before the keypad will lock out.

To program the system to send a 'User Code Tamper' report [Equ 156] report when a user tamper alarm has occurred, program Option 1 in Address 0380 on page 163. To program the system to sound an alarm when a user tamper alarm has occurred, program Option 2 in Address 0380 on page 163.

Installer Code

Address 0383 - 0389

6	5	4	3	2	1	0
---	---	---	---	---	---	---

As the PIN Code length in Address 0379 on page 163 is programmed as four (4), the default installer code is 6543. The installer code can arm the system and is able to use all other commands, however, cannot disarm the system.

When you enter Installer's Programming Mode (refer to Programming Via A 'Text' Keypad on page 79), the system will send an 'Install Mode Start' [Equ 82] report. If any programming changes are made, the system will send a 'Params Changed' report [Equ 98]. When you exit Installer's Programming Mode, the system will send an 'Install Mode End' [Equ 83] report. The installer code reports as User 0.

When viewing Command 85 (System Log), the keypad will display the area the installer accessed programming mode.

PIN Codes

The purpose of PIN codes is to arm the system and off as well as use various commands outlined throughout the manual. The PIN Code length is global for all thirty-two PIN codes. The length for all PIN codes is determined in Address 0378 on page 162.

Each PIN Code has two option bits that assign the code to an authority level and programs which area(s) the PIN Code can operate.



Authority Level	Area Assignment
0 = No Authority Level	0 = Not Assigned To An Area
1 = Access Authority Level 1	1 = Assigned To Area 1
2 = Access Authority Level 2	2 = Assigned To Area 2
3 = Access Authority Level 3	4 = Assigned To Area 3
4 = Access Authority Level 4	8 = Assigned To Area 4

Table 91: PIN Code Authority Level/Area Assignment

Authority Level

When programming this address, you will notice that there are four authority levels that may be selected. Only one authority level can be programmed for each PIN Code.

The authority level defines what access each PIN Code has in relation to arming or disarming the system, as well as various commands detailed throughout the manual. Refer to Authority Levels on page 157 for more information.

Area Assignment

When programming this location, you will notice that there are four options in this location. You may select one, two, three or all of these options, however; only one number needs to be programmed. This number is calculated by adding the option bit numbers together.

Example

If you require a user code to operate Area 1, Area 2 and Area 3, simply add the Option Bit Numbers (1, 2 & 4) together and the total is the number to be programmed. In this example, the number to be programmed is 7 (i.e. 1 + 2 + 4 = 7).

Default PIN Codes

PIN Code 1

Address 0390 - 0396

1 2 3 4 5 6 7
PIN Code

0397

1
Authority Level

0398

15
Area Assignment

PIN Code 11

Address 0480 - 0486

0 0 0 0 0 0 0
PIN Code

0487

2
Authority Level

0488

1
Area Assignment

PIN Code 2

Address 0399 - 0405

0 0 0 0 0 0 0
PIN Code

0406

2
Authority Level

0407

1
Area Assignment

PIN Code 12

Address 0489 - 0495

0 0 0 0 0 0 0
PIN Code

0496

2
Authority Level

0497

1
Area Assignment

PIN Code 3

Address 0408 - 0414

0 0 0 0 0 0 0
PIN Code

0415

2
Authority Level

0416

1
Area Assignment

PIN Code 13

Address 0499 - 0504

0 0 0 0 0 0 0
PIN Code

0505

2
Authority Level

0506

1
Area Assignment

PIN Code 4

Address 0417 - 0423

0 0 0 0 0 0 0
PIN Code

0424

2
Authority Level

0425

1
Area Assignment

PIN Code 14

Address 0507 - 0513

0 0 0 0 0 0 0
PIN Code

0514

2
Authority Level

0515

1
Area Assignment

PIN Code 5

Address 0426 - 0432

0 0 0 0 0 0 0
PIN Code

0433

2
Authority Level

0434

1
Area Assignment

PIN Code 15

Address 0516 - 0522

0 0 0 0 0 0 0
PIN Code

0523

2
Authority Level

0524

1
Area Assignment

PIN Code 6

Address 0435 - 0441

0 0 0 0 0 0 0
PIN Code

0442

2
Authority Level

0443

1
Area Assignment

PIN Code 16

Address 0325 - 0531

0 0 0 0 0 0 0
PIN Code

0532

2
Authority Level

0533

1
Area Assignment

PIN Code 7

Address 0444 - 0450

0 0 0 0 0 0 0
PIN Code

0451

2
Authority Level

0452

1
Area Assignment

PIN Code 17

Address 0534 - 0540

0 0 0 0 0 0 0
PIN Code

0541

2
Authority Level

0542

1
Area Assignment

PIN Code 8

Address 0453 - 0459

0 0 0 0 0 0 0
PIN Code

0460

2
Authority Level

0461

1
Area Assignment

PIN Code 18

Address 0543 - 0549

0 0 0 0 0 0 0
PIN Code

0550

2
Authority Level

0551

1
Area Assignment

PIN Code 9

Address 0462 - 0468

0 0 0 0 0 0 0
PIN Code

0468

2
Authority Level

0470

1
Area Assignment

PIN Code 19

Address 0552 - 0558

0 0 0 0 0 0 0
PIN Code

0559

2
Authority Level

0560

1
Area Assignment

PIN Code 10

Address 0471 - 0477

0 0 0 0 0 0 0
PIN Code

0478

2
Authority Level

0479

1
Area Assignment

PIN Code 20

Address 0561 - 0567

0 0 0 0 0 0 0
PIN Code

0568

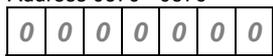
2
Authority Level

0569

1
Area Assignment

PIN Code 21

Address 0570 - 0576



PIN Code

0577



Authority Level

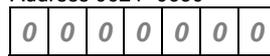
0578



Area Assignment

PIN Code 27

Address 0624 - 0630



PIN Code

0631



Authority Level

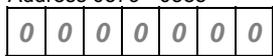
0632



Area Assignment

PIN Code 22

Address 0579 - 0585



PIN Code

0586



Authority Level

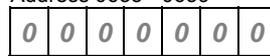
0587



Area Assignment

PIN Code 28

Address 0633 - 0639



PIN Code

0640



Authority Level

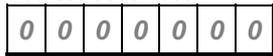
0641



Area Assignment

PIN Code 23

Address 0588 - 0594



PIN Code

0595



Authority Level

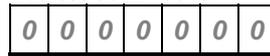
0596



Area Assignment

PIN Code 29

Address 0642 - 0648



PIN Code

0649



Authority Level

0650



Area Assignment

PIN Code 24

Address 0597 - 0603



PIN Code

0604



Authority Level

0605



Area Assignment

PIN Code 30

Address 0651 - 0657



PIN Code

0658



Authority Level

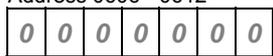
0659



Area Assignment

PIN Code 25

Address 0606 - 0612



PIN Code

0613



Authority Level

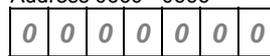
0614



Area Assignment

PIN Code 31

Address 0660 - 0666



PIN Code

0667



Authority Level

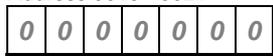
0668



Area Assignment

PIN Code 26

Address 0615 - 0621



PIN Code

0622



Authority Level

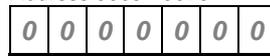
0623



Area Assignment

PIN Code 32

Address 0669 - 0675



PIN Code

0676



Authority Level

0677



Area Assignment

Note

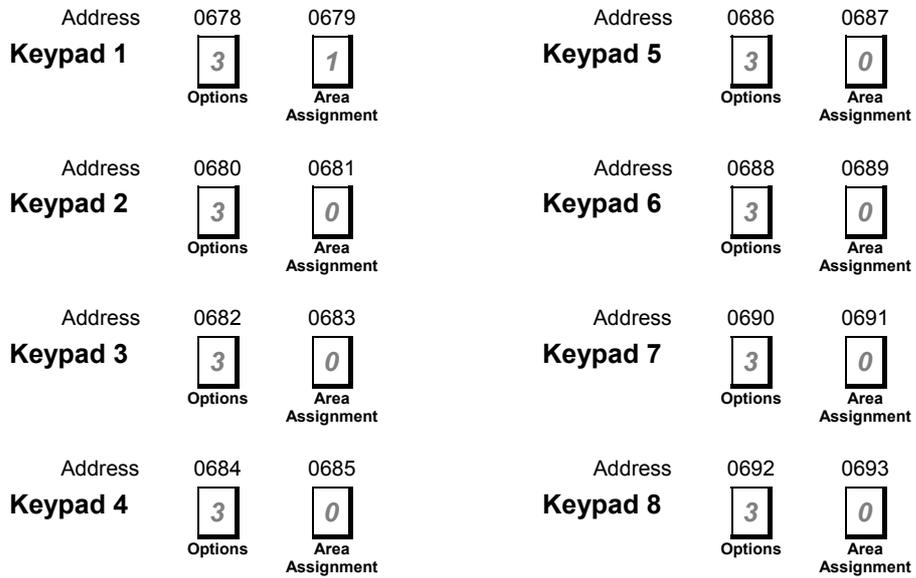
The control panel reserves the following User ID's for automated functions:

- User ID 252 = Sked Operation
- User ID 253 = Remote Telephone Communication
- User ID 254 = RPS Communication
- User ID 255 = Keyswitch Operation

Keypads

The system allows up to eight (8) wired keypads to be connected to the Option Bus terminals (+, -, Grn, Ylw). All keypads are fully supervised. Supervision reports (missing, user code tamper etc) follow the on page 123 and the System Status Report Routing on page 123.

Refer to page 250 for details to set the correct DIP switch address settings and connect the keypad to the control panel.



Keypad Options

Option	Description
0	No Keypad Options Selected
1	Beep Keypad On System Trouble
2	Exit Tone Allowed
4	Area Display Allowed
8	Disable Zone Status On Keypads

Table 92: Keypad Options

Beep Keypad On System Trouble

If this option is programmed, the keypad buzzer will sound the trouble tone when a system trouble condition has occurred.

Exit Tone Allowed

If this option is programmed, the keypad buzzer will beep once every second for the duration of the exit delay time. During the last 10 seconds of exit delay time, the keypad will beep twice every second to warn you exit delay is about to expire.

Area Display Allowed

If this option has been programmed, the keypad will show the current state of each area via the four area icons. Each area icon will follow the conditions listed in Table 93 to display the condition of the corresponding area.

If this option is not programmed, the keypad displays the area it is currently assigned to. If the keypad is assigned to another area (use Move To Area, (Command 50) on page 66 to toggle the keypad display between areas), the corresponding area icon will display.

Area Icon	Condition
Flashing Fast	Area Is In Alarm
Steady On	Area Is Armed, But Not In Alarm
Flashing Slow	Trouble Condition Exist, Or Zone Is Bypassed
Off	Area Is Disarmed, No Trouble/Alarm Condition, No Zones Area Bypassed

Table 93: Area Display Functions

Disable Zone Status On Keypads

If this option is programmed, keypads, the second line will always display the default Area Idle Text displays as 'Not Ready' when the system is disarmed. Therefore, you need to change the text that the Area Idle Text display for each area. Refer to Keypad Text Displays on page 228 to program keypad text.

If this option is not programmed, when all zones are normal, the second line of the keypad will 'OK for Away'. If a zone that is programmed to be armed in Stay Mode becomes faulted, the keypad will display 'Not Ready' until the zone is returned to normal. If a zone that is not programmed to be armed in Stay Mode becomes faulted, the keypad will display 'OK for Stay'.

Keypad Area Assignment

Option	Description
0	Keypad Not Assigned To An Area
1	Assign Keypad To Area 1
2	Assign Keypad To Area 2
3	Assign Keypad To Area 3
4	Assign Keypad To Area 4

Table 94: Keypad Area Assignment

The keypad assignment allows you to assign each keypad to one of the available four areas. Keypads cannot be assigned to more than one area.

A-Key Area Assignment

Address 0694

15

Option	Description
0	A-Key Disabled
1	A-Key Assigned To Area 1
2	A-Key Assigned To Area 2
4	A-Key Assigned To Area 3
8	A-Key Assigned To Area 4

Table 95: A-Key Area Assignment

This address allows you to assign the A-Key on each keypad to operate only for those areas required. At factory default, the A-Key is assigned to all four areas. The A-Key reports as Zone 100 for all areas.

A-Key Alarm Response Options

Address 0695

0

Option	Description
0	No Alarm Response
1	Activate Fire Alarm
2	Activate Panic Alarm
3	Activate Emergency Alarm
4	Reserved

Table 96: A-Key Alarm Response Options

This address allows you program how the A-Key on each keypad is going to operate. Only one option can be programmed in this address. Refer to Address 1298 - 1329 on page 229 to program the A-key text.

Activate Fire Alarm

If this option is programmed, the A-Key when pressed twice will display on the keypad 'Fire Alarm Key A'. Refer to Option 4 in Address 0700 on page 173 to program the system to sound an alarm when the A-Key is used. In the history log, a fire key will be reported as [Equ 75] and report with an ID number of Zn 100.

Activate Panic Alarm

If this option is programmed, the A-Key when pressed twice will NOT display an alarm message on the keypad or sound an alarm. In the history log, a panic key will be reported as [Equ 06] and report with an ID number of Zn 100.

Activate Emergency Alarm

If this option is programmed, the A-Key when pressed twice will display on the keypad 'Alarm Key A'. Refer to Option 4 in Address 0700 on page 173 to program the system to sound an alarm when the A-Key is used. In the history log, an emergency key will be logged as [Equ 04] and report with an ID number of Zn 100.

Note

To program the A-Key to operate an output without sounding an alarm, program the A-Key as 'No Alarm Response' (Option 0) and program an output with the event type '2,3 - A-Key Activated'. Refer to Outputs on page 204 for more information on programming outputs. Output 2,3 will operate irrespective of what is programmed in this address.

B-Key Area Assignment

Address 0696

15

Option	Description
0	B-Key Disabled
1	B-Key Assigned To Area 1
2	B-Key Assigned To Area 2
4	B-Key Assigned To Area 3
8	B-Key Assigned To Area 4

Table 97: B-Key Area Assignment

This address allows you to assign the B-Key on each keypad to operate only for those areas required. At factory default, the B-Key is assigned to all four areas. The B-Key will report as Zone 101 for all areas.

B-Key Alarm Response Options

Address 0697

0

Option	Description
0	No Alarm Response
1	Activate Fire Alarm
2	Activate Panic Alarm
3	Activate Emergency Alarm
4	Reserved

Table 98: B-Key Alarm Response Options

This address allows you program how the B-Key on each keypad is going to operate. Only one option can be programmed in this address. Refer to Address 1330 - 1361 on page 229 to program the B-key text.

Activate Fire Alarm

If this option is programmed, the B-Key when pressed twice will display on the keypad 'Fire Alarm Key B'. Refer to Option 4 in Address 0700 on page 173 to program the system to sound an alarm when the B-Key is used. In the history log, a fire key will be reported as [Equ 75] and report with an ID number of Zn 101.

Activate Panic Alarm

If this option is programmed, the B-Key when pressed twice will NOT display an alarm message on the keypad or sound an alarm. In the history log, a panic key will be reported as [Equ 06] and report with an ID number of Zn 101.

Activate Emergency Alarm

If this option is programmed, the B-Key when pressed twice will display on the keypad 'Alarm Key B'. Refer to Option 4 in Address 0700 on page 173 to program the system to sound an alarm when the B-Key is used. In the history log, an emergency key will be logged as [Equ 04] and report with an ID number of Zn 101.

Note

To program the B-Key to operate an output without sounding an alarm, program the B-Key as 'No Alarm Response' (Option 0) and program an output with the event type '2,4 - B-Key Activated'. Refer to Outputs on page 204 for more information on programming outputs. Output 2,4 will operate irrespective of what is programmed in this address.

C-Key Area Assignment

Address 0698

15

Option	Description
0	C-Key Disabled
1	C-Key Assigned To Area 1
2	C-Key Assigned To Area 2
4	C-Key Assigned To Area 3
8	C-Key Assigned To Area 4

Table 99: C-Key Area Assignment

This address allows you to assign the C-Key on each keypad to operate only for those areas required. At factory default, the C-Key is assigned to all four areas. The C-Key will report as Zone 102 for all areas.

C-Key Alarm Response Options

Address 0699

0

Option	Description
0	No Alarm Response
1	Activate Fire Alarm
2	Activate Panic Alarm
3	Activate Emergency Alarm
4	Reserved

Table 100: C-Key Alarm Response Options

This address allows you program how the C-Key on each keypad is going to operate. Only one option can be programmed in this address. Refer to Address 1362 - 1393 on page 229 to program the C-key text.

Activate Fire Alarm

If this option is programmed, the C-Key when pressed twice will display on the keypad 'Fire Alarm Key C'. Refer to Option 4 in Address 0700 on page 173 to program the system to sound an alarm when the C-Key is used. In the history log, a fire key will be reported as [Equ 75] and report with an ID number of Zn 102.

Activate Panic Alarm

If this option is programmed, the C-Key when pressed twice will NOT display an alarm message the keypad, or sound an alarm. In the history log, a panic key will be reported as [Equ 06] and report with an ID number of Zn 102.

Activate Emergency Alarm

If this option is programmed, the C-Key when pressed twice will display on the keypad 'Alarm Key C'. Refer to Option 4 in Address 0700 on page 173 to program the system to sound an alarm when the C-Key is used. In the history log, an emergency key will be logged as [Equ 04] and report with an ID number of Zn 102.

Note

To program the C-Key to operate an output without sounding an alarm, program the C-Key as 'No Alarm Response' (Option 0) and program an output with the event type '2,5 - C-Key Activated'. Refer to Outputs on page 204 for more information on programming outputs. Output 2,5 will operate irrespective of what is programmed in this address.

Alarm Output For A, B, C Keys

Address 0700

0

Option	Description
0	No Alarm Output For Keypad Alarms
1	Alarm Output For A-Key
2	Alarm Output For B-Key
4	Alarm Output For C-Key
8	Reserved

Table 101: Alarm Output For ABC Keys

This address allows you to assign which keys sound an alarm when the corresponding key has been pressed twice in quick succession. This is a global parameter that affects all areas.

Note

If any of the A, B, C keys are not programmed for alarm output, the corresponding key will not display to 'Enter code to silence alarm' on text keypads.

A, B, C Key Reports, Acknowledgement Beep

Address 0701

0

Option	Description
0	No Reports, No Acknowledgment Beep
1	A, B, C Key Reporting Allowed
2	Beep For A-Key Acknowledgment
4	Beep For B-Key Acknowledgment
8	Beep For C-Key Acknowledgment

Table 102: ABC Key Reports, Ack Beep

These options are global for all areas.

A, B, C Key Reporting Allowed

If this option is programmed, the A, B and C keys will report their corresponding alarm report when activated. The A-Key will be identified as Zn 100, B-Key as Zn 101 and the C-Key as Zn 102.

Beep For A-Key Acknowledgement

If this option is programmed, the keypad will sound a one second tone when the security company's base station receiver has acknowledged the alarm report for the A-key. If the A-key is not programmed to report, the keypad will sound a one second tone as soon as the key is activated.

Beep For B-Key Acknowledgement

If this option is programmed, the keypad will sound a one second tone when the security company's base station receiver has acknowledged the alarm report for the B-key. If the B-key is not programmed to report, the keypad will sound a one second tone as soon as the key is activated.

Beep For C-Key Acknowledgement

If this option is programmed, the keypad will sound a one second tone when the security company's base station receiver has acknowledged the alarm report for the C-key. If the C-key is not programmed to report, the keypad will sound a one second tone as soon as the key is activated.

Duress Code Options

Address 0702

1

Option	Description
0	No Duress Reports
1	PIN Code 32 Is Duress PIN Code
2	PIN Code 31 Is Duress PIN Code
4	PIN Code 30 Is Duress PIN Code
8	PIN Code 29 Is Duress PIN Code

Table 103: Duress Code Options

This address allows you to assign PIN codes (29 – 32) as ‘duress’ codes. Refer to PIN Codes on page 165 to program PIN codes 29 - 32.

Depending on the authority level assigned to each of these duress PIN codes, a duress PIN Code may access other command functions.

Note

PIN codes 29 - 32 will send a ‘Duress’ report [Equ 74] every time the PIN Code is entered at the keypad (even if the code is used to enter one of the many commands or to arm the system). A panic alarm initiated via an RF keyfob will also send a ‘Duress’ report [Equ 74]. ‘Duress’ reports follow the report routing programmed in Address 0703 on page 175.

A, B, C Key and Duress Report Routing

Address 0703

1

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 104: ABC Key and Duress Report Routing

This address programs the A, B, C key and duress alarm report routing. The report routing is global for all areas. Programming this address as zero (0) will disable all A, B, C key and duress alarm reports.

Option 1 in Address 0701 on page 173 needs to be programmed for A, B and C keys to follow the report routing programmed in this address.

Only the following reports will be routed via this address - 'Emergency' report [Equ 04], 'Panic' report [Equ 06] and 'Fire' report [Equ 75] for any of the ABC keys. At least one PIN Code (29 – 32) needs to be programmed in Address 0702 on page 173 as a duress PIN code to send a 'Duress' report [Equ 74].

Note

RF keyfob 'Panic' alarms are also routed via the A, B, C key and duress report routing. The RF keyfob ID number will be included in the duress report to identify which RF keyfob was used to send a 'Duress' report. Refer to Address 2939 on page 236 to program keyfob options.

Keypad Tamper Response

Address 0704

0

Option	Description
0	Disabled
1	Keypad Tamper Response Allowed
2	Enable Extinguish Mode
4	Extinguish Mode Displays Date

Table 105: Keypad Tamper Response

If you program a one (1) in this address, the control panel checks for a keypad tamper response. The control panel will send a 'SDI Tamper' report [Equ 127] when it detects a keypad tamper event. The control panel will send a 'SDI Tamper Restore' report [Equ 128] when it detects the keypad tamper event has restored. Both [Equ 127] and [Equ 128] reports follow the Address 0226 on page 123.

If this option is not programmed, the control panel will ignore the keypad tamper response.

If Option2 is selected, the keypad will extinguish when there is no activity. The only indicator that remains is the POWER. Entering a valid PIN enables to text to restore to the keypad.

The final option, Extinguish Mode displays Date, when selected will display date and time on the first line of text and "Call for Service" on the second line when the keypad is in extinguish mode.

Guard Code Options

Address 0705

0

Option	Description
0	No Duress Reports
1	PIN Code 28 Is Guard Code

Table 1064: Guard Code Options

This address allows you to assign PIN code 28 as 'duress' codes. The Guard code only works in areas where PIN 28 is assigned. The authority level assigned to the Guard Code (User 28) dictates which key pad functions the guard can use.

Zones

The control panel supports eight on-board zones with the expandability of up to a maximum of forty zones via optional Zone Input Expansion Modules (DX2010) and RF Receivers (RF3227E).

Each of the 40 zones allows you to program the Input Device (*Page 178*), Zone Index Configuration (*Page 179*), Area Assignment (*Page 179*) and the Zone Number (*Page 179*).

Zone / SDI Device Table

Zone #	On-Board	Option Bus Addresses			
		Wired Zone Expander	Zone Doubled Expander	Option Bus RF Receiver 1	Option Bus RF Receiver 2
1		101	N/A	50	51
2		101	N/A	50	51
3		101	N/A	50	51
4		101	N/A	50	51
5		101	N/A	50	51
6		101	N/A	50	51
7		101	N/A	50	51
8		101	N/A	50	51
9	N/A	102	106	50	51
10	N/A	102	106	50	51
11	N/A	102	106	50	51
12	N/A	102	106	50	51
13	N/A	102	106	50	51
14	N/A	102	106	50	51
15	N/A	102	106	50	51
16	N/A	102	106	50	51
17	N/A	103	106	50	51
18	N/A	103	106	50	51
19	N/A	103	106	50	51
20	N/A	103	106	50	51
21	N/A	103	106	50	51
22	N/A	103	106	50	51
23	N/A	103	106	50	51
24	N/A	103	106	50	51
25	N/A	104	107	50	51
26	N/A	104	107	50	51
27	N/A	104	107	50	51
28	N/A	104	107	50	51
29	N/A	104	107	50	51
30	N/A	104	107	50	51
31	N/A	104	107	50	51
32	N/A	104	107	50	51
33	N/A	105	107	50	51
34	N/A	105	107	50	51
35	N/A	105	107	50	51

36	N/A	105	107	50	51
37	N/A	105	107	50	51
38	N/A	105	107	50	51
39	N/A	105	107	50	51
40	N/A	105	107	50	51

Table 107: Zone/Option Bus Device Table

Input Device

Option	Description
0	Zone Disabled
1	On-Board Zone (Zone Inputs 1 - 8)
2	Wired Zone Expander
3	Zone Doubled Expander
4	Option Bus RF Receiver 1
5	Option Bus RF Receiver 2

Table 108: Zone Input Device

Disabled

If this option is programmed, the zone is disabled.

On-Board Zone

This option allows you to assign Zones 1 - 8 to be wired to zone inputs 1 - 8 (L-1 to L-8) on the control panel using single EOL resistor values. Each zone functions independently and does not interfere with the operation of other zones.

At factory default, each zone (1 – 8) is programmed to operate with 2K2 EOL (End Of Line) resistors.

Below shows an example of connecting on-board zones using either (or combination) Normally-Open or Normally-Closed contacts with a 2K2 EOL (End Of Line) resistor.

On- Board Zone Doubling

The Solution 40 can also be zone –doubled enabling you to expand the on-board zones to 16 zones.

In order to do this,install 3k65 ohm EOL resistors for zones 1 to 8 and then install 2k2 ohm EOL resistors for zones 9 to 16. The panel can be configured to function with either normally open or normally closed contacts.

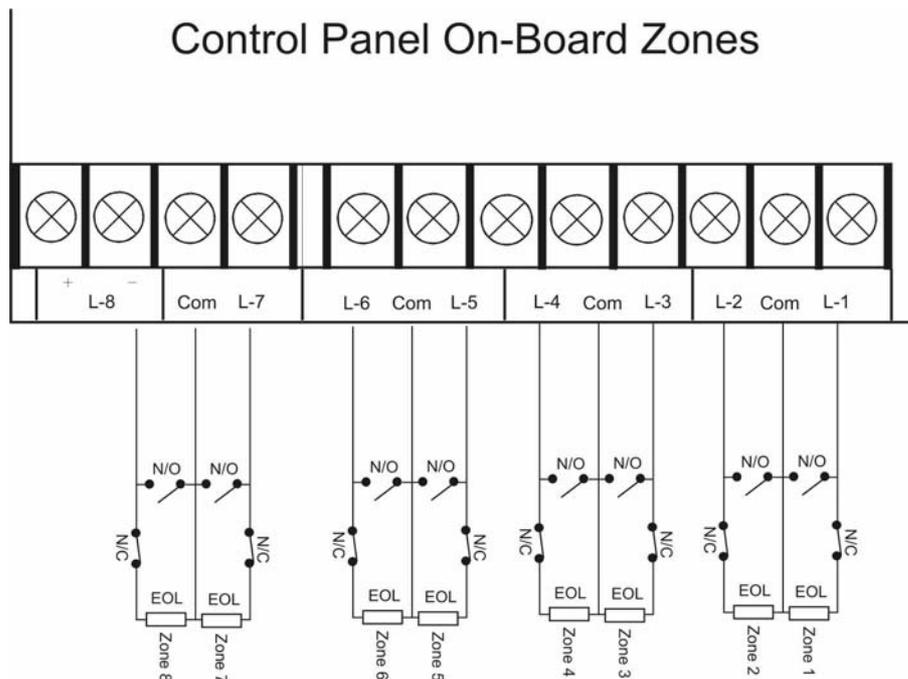


Figure 13: Wiring Diagram For On-Board Zones (1 – 8)

Wired Zone Expander

If this option is programmed, it will assign the zone to a zone expander (DX2010) using a single 2K2 EOL resistor. Refer to page 252 to correctly set up and connect the DX2010 Zone Input Expansion Module.

Zone Doubled Expander

If you wish to zone double any of the expander boards, 3k65 and 2k2 ohm resistors are required. Zones 9 – 24, the DX2010 must have address set to 106 and Zones 25 – 32, the DX2010 must have the address set to 107. Refer to the section on DX2010 Expander boards for dip switch settings and wiring guides.

RF Receiver 1

If this option is programmed, it will assign the zone to RF Receiver 1 (Option Bus Address 50). Option 1 in Address 1249 on page 223 needs to be programmed for RF Receiver 1 to work. To program RF zone devices ID numbers, refer to RF Menu - Adding RF Devices on page 87.

RF Receiver 2

If this option is programmed, it will assign the zone to RF Receiver 2 (Option Bus Address 51). Option 2 in Address 1249 on page 223 needs to be programmed for RF Receiver 2 to work. To program RF zone devices ID numbers, refer to RF Menu - Adding RF Devices on page 87.

Zone Index Configuration

This address assigns a zone to a zone index. Multiple zones can be assigned to the same zone index. The zone index configures how a group of zones will operate (includes, zone type, pulse count + pulse count time, zone options, alarm and trouble reports and report routing). Up to fifteen (15) different zone indexes can be programmed. Programming the zone index as zero (0) will disable the zone index.

To program zone index group, refer to Zone Index Configuration on page 182 for more information.

Area Assignment

This address allows you to assign the zone to an area (Each zone can only be assigned to a single area). Multiple zones can be assigned to the same area. The control panel can be split (partitioned) up to a maximum of four (4) separate areas.

Zone Number

This address allows you to program the zone number (01 - 40) that will appear on the keypad display, the control panel's event log, the security company's base station receiver and at the optional printer (if programmed and connected). You may program numerous zones to display as the same zone number on each area (e.g. It is possible to have a Zone 1 for each area).

Zone Defaults

Address 0706 - 0905

Input Device	Zone Index	Area Assignment	Zone Number
0 = Zone Disabled	Enter Value 1 – 15 Assign The Zone To A Zone Index.	1 = Assign Zone To Area 1	This determines the Zone Number (00 – 40) that appears in the keypad display, the panel log, the optional printer & the central station. It is possible to have a Zone 1 for each area.
1 = On-Board Zone (1-8)		2 = Assign Zone To Area 2	
2 = Wired Zone Expander		3 = Assign Zone To Area 3	
3 = Zone Doubled Expander		4 = Assign Zone To Area 4	
4 = Option Bus RF Receiver 1			
5 = Option Bus RF Receiver 2			

Address 706
Zone 1
Default Entry/Exit Delay-1

706 1 Input Device	707 11 Zone Index	708 1 Area Assignment	709/710 0 1 Zone Number
--------------------------	-------------------------	-----------------------------	-------------------------------

Address 711
Zone 2
Default Follower

711 1 Input Device	712 13 Zone Index	713 1 Area Assignment	714/715 0 2 Zone Number
--------------------------	-------------------------	-----------------------------	-------------------------------

Address 716
Zone 3
Default Follower

716 1 Input Device	717 13 Zone Index	718 1 Area Assignment	719/720 0 3 Zone Number
--------------------------	-------------------------	-----------------------------	-------------------------------

Address 721
Zone 4
Default Follower

721 1 Input Device	722 13 Zone Index	723 1 Area Assignment	724/725 0 4 Zone Number
--------------------------	-------------------------	-----------------------------	-------------------------------

Address 726
Zone 5
Default Instant

726 1 Input Device	727 14 Zone Index	728 1 Area Assignment	729/730 0 5 Zone Number
--------------------------	-------------------------	-----------------------------	-------------------------------

Address 731
Zone 6
Default Instant

731 1 Input Device	732 14 Zone Index	733 1 Area Assignment	734/735 0 6 Zone Number
--------------------------	-------------------------	-----------------------------	-------------------------------

Address 736
Zone 7
Default Instant

736 1 Input Device	737 14 Zone Index	738 1 Area Assignment	739/740 0 7 Zone Number
--------------------------	-------------------------	-----------------------------	-------------------------------

Address 741
Zone 8
Default 24-Hr Tamper

741 1 Input Device	742 8 Zone Index	743 1 Area Assignment	744/745 0 8 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 746
Zone 9
Default

746 0 Input Device	747 0 Zone Index	748 1 Area Assignment	749/750 0 9 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 751
Zone 10
Default

751 0 Input Device	752 0 Zone Index	753 1 Area Assignment	754/755 1 0 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 756
Zone 11
Default

756 0 Input Device	757 0 Zone Index	758 1 Area Assignment	759/760 1 1 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 761
Zone 12
Default

761 0 Input Device	762 0 Zone Index	763 1 Area Assignment	764/765 1 2 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 766
Zone 13
Default

766 0 Input Device	767 0 Zone Index	768 1 Area Assignment	769/770 1 3 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 771
Zone 14
Default

771 0 Input Device	772 0 Zone Index	773 1 Area Assignment	774/775 1 4 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 776
Zone 15
Default

776 0 Input Device	777 0 Zone Index	778 1 Area Assignment	779/780 1 5 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 781
Zone 16
Default

781 0 Input Device	782 0 Zone Index	783 1 Area Assignment	784/785 1 6 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 786
Zone 17
Default

786 0 Input Device	787 0 Zone Index	788 1 Area Assignment	789/790 1 7 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 791
Zone 18
Default

791 0 Input Device	792 0 Zone Index	793 1 Area Assignment	794/795 1 8 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 796
Zone 19
Default

796 0 Input Device	797 0 Zone Index	798 1 Area Assignment	799/800 1 9 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address 801
Zone 20
Default

801 0 Input Device	802 0 Zone Index	803 1 Area Assignment	804/805 2 0 Zone Number
--------------------------	------------------------	-----------------------------	-------------------------------

Address	806	807	808	809/810
Zone 21	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="1"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	811	812	813	814/815
Zone 22	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="2"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	816	817	818	819/820
Zone 23	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="3"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	821	822	823	824/825
Zone 24	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="4"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	826	827	828	829/830
Zone 25	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="5"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	831	832	833	834/835
Zone 26	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="6"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	836	837	838	839/840
Zone 27	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="7"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	841	842	843	844/845
Zone 28	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="8"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	846	847	848	849/850
Zone 29	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/> <input type="text" value="9"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	851	852	853	854/855
Zone 30	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="0"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	856	857	858	859/860
Zone 31	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="1"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	861	862	863	864/865
Zone 32	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="2"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	866	867	868	869/870
Zone 33	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="3"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	871	872	873	874/875
Zone 34	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="4"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	876	877	878	879/880
Zone 35	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="5"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	881	882	883	884/885
Zone 36	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="6"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	886	887	888	889/890
Zone 37	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="7"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	891	892	893	894/895
Zone 38	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="8"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	896	897	898	899/900
Zone 39	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="3"/> <input type="text" value="9"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Address	901	902	903	904/905
Zone 40	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="4"/> <input type="text" value="0"/>
Default	Input Device	Zone Index	Area Assignment	Zone Number

Zone Index Configuration

The control panel monitors up to 40 sensor loops / RF sensors (zones). Each zone needs to be assigned to a zone index. Multiple zones (group of zones) can be assigned to the same zone index. The zone index allows you to program the zone type, pulse count/pulse count time, zone options, alarm/trouble reports and restore reports and report routing.

Address	1	0	0	4	0	11	1	1
Zone Index X								
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Refer to page :	184	188	188	189/190	191	192	193	193

Zone Index Defaults

Address 0906 - 1025

Address	906	907	908	909	910	911	912	913
Zone Index 1	1	0	0	0	2	9	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
24-Hr Fire								
Address	914	915	916	917	918	919	920	921
Zone Index 2	2	0	0	0	2	11	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
24-Hr Fire With Verification								
Address	922	923	924	925	926	927	928	929
Zone Index 3	3	0	0	1	0	10	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Reserved								
Address	930	931	932	933	934	935	936	937
Zone Index 4	4	0	0	0	7	9	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
24-Hr Tamper								
Address	938	939	940	941	942	943	944	945
Zone Index 5	5	0	0	1	7	9	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
24-Hr Emergency								
Address	946	947	948	949	950	951	952	953
Zone Index 6	6	0	0	1	7	9	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
24-Hr Visible Panic With Alarm Output								
Address	954	955	956	957	958	959	960	961
Zone Index 7	7	0	0	1	5	9	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
24-Hr Invisible Panic								
Address	962	963	964	965	966	967	968	969
Zone Index 8	8	0	0	0	2	9	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
24 Hr Burglary								
Address	970	971	972	973	974	975	976	977
Zone Index 9	0	0	0	0	0	9	1	1
Default:	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Chime								

Address	978	979	980	981	982	983	984	985
Zone Index 10	10	0	0	8	2	11	1	1
Default: Keyswitch	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Address	986	987	988	989	990	991	992	993
Zone Index 11	11	0	0	5	7	9	1	1
Default: Entry/Exit Delay-1	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Address	994	995	996	997	998	999	1000	1001
Zone Index 12	12	0	0	5	7	9	1	1
Default: Entry/Exit Delay-2	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Address	1002	1003	1004	1005	1006	1007	1008	1009
Zone Index 13	13	0	0	1	7	9	1	1
Default: Follower	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Address	1010	1011	1012	1013	1014	1015	1016	1017
Zone Index 14	14	0	0	1	7	9	1	1
Default: Instant	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Address	1018	1019	1020	1021	1022	1023	1024	1025
Zone Index 15	14	0	0	5	7	9	1	1
Default: Instant / Arms In Stay	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing

Zone Type

The zone type allows you to program how each zone index will operate. There are thirteen different zone types to choose from.

Zone Type	Description	Zone Type	Description
0	Chime	8	24-Hour, Burglary
1	24-Hour, Fire	9	Reserved
2	24-Hour, Fire With Verification	10	Controlled, Keyswitch
3	Reserved	11	Controlled, Entry/Exit Delay 1
4	24-Hour, Tamper	12	Controlled, Entry/Exit Delay 2
5	24-Hour, Emergency	13	Controlled, Follower
6	24-Hour, Panic	14	Controlled, Instant
7	24-Hour, Panic (Invisible)	15	24 Hr Door

Table 109: Zone Types

Chime

This zone type will program all zones assigned to the zone index as chime only. If chime mode is turned on, a faulted chime zone will sound the chime tone via the keypad buzzer. A chime only zone does not report or respond to alarm and trouble conditions.

For keypad operations, refer to Turn Chime On/Off, (Command 61) on page 51, Selecting Chime Tone, (Command 62) on page 52 and Selecting Chime Zones, (Command 63) on page 53 for programming other controlled zone types.

24-Hour, Fire

This zone type will program all zones assigned to the zone index as 24-hour fire and will sound an alarm at any time when the panel is armed (Away, Stay) or disarmed.

A distinct fire sound will be emitted through the horn speaker output (if programmed) to indicate that it is a fire zone that has registered. The fire sound via the horn speaker is different than the burglary sound.

This zone type can send the following reports: - Bypass, Fire, User/RPS [Equ 26 – 27], Swinger Bypass [Equ 33], UnBypss, Fire, User [Equ 34], Cancel Fire [Equ 39], Fire, Alarm [Equ 75], Fire, Unverified [Equ 77], Fire, Missing [Equ 78], Fire, Alrm, Rstl [Equ 79], Fire, Trouble [Equ 80], Fire, Trbl, Rstl [Equ 81], Swinger Bypass Restore [Equ 173], Rstl, Fire, Miss [Equ 174].

24-Hour, Fire With Verification

This zone type will program all zones assigned to the zone index as 24-hour fire with verification. This means that the fire zone will need to register a second faulted condition (short) within 120 seconds from the first faulted condition to sound an alarm (regardless of the pulse count and pulse count time programmed). An output programmed as 24-Hour, Fire With Verification will power down for four seconds on the first faulted condition to reset the smoke detector. Refer to Outputs on page 204 for information on programming outputs.

A distinct fire sound will be emitted through the horn speaker output to indicate that it is a fire zone that has registered. The fire sound via the horn speaker is different than the burglary sound.

This zone type can send the following reports: - Bypass, Fire, User/RPS [Equ 26 – 27], Swinger Bypass [Equ 33], UnBypss, Fire, User [Equ 34], Cancel Fire [Equ 39], Fire, Alarm [Equ 75], Fire, Unverified [Equ 77], Fire, Missing [Equ 78], Fire, Alrm, Rstl [Equ 79], Fire, Trouble [Equ 80], Fire, Trbl, Rstl [Equ 81], Swinger Bypass Restore [Equ 173], Rstl, Fire, Miss [Equ 174].

24-Hour, Tamper

This zone type is ideal to connect tamper switches from control panel boxes or tamper switches on sensor devices to sound an alarm at any time when the panel is armed (Away, Stay) or disarmed. The control panel will send a 'Tamper' report [Equ 3] when this zone type has registered a faulted condition.

This zone type can send the following reports: - Tamper [Equ 3], Cross, Tamper [Equ 10], Cross, Unverified [Equ 17], Bypass, 24hr, User/RPS [Equ 30 - 31], Bypass, Swinger [Equ 33], UnBypass, 24hr User [Equ 36], Cancel Alarm [Equ 38], Missing, Trouble [Equ 88], Rstrl, Tamper [Equ 112], Trbl, Tamper [Equ 139], Rstrl, Trbl, Tmpr [Equ 146], Swinger Bypass Restore [Equ 173], Rstrl, Trble, Miss, [Equ 176].

24-Hour, Emergency

This zone type is used for personal emergency alarms (i.e. medical etc). It will sound an alarm at any time if the zone becomes faulted when the panel is armed (Away, Stay) or disarmed.

This zone type can send the following reports: - Alarm, Emergency [Equ 4], Cross, Emergency [Equ 11], Cross, Unverified [Equ 17], Bypass, 24hr, User/RPS [Equ 30 - 31], Bypass, Swinger [Equ 33], UnBypass, 24hr User [Equ 36], Cancel Alarm [Equ 38], Missing, Trouble [Equ 88], Rstrl, Emergency [Equ 113], Trbl, Emergency [Equ 140], Rstrl, Trbl, Emerg [Equ 147], Swinger Bypass Restore [Equ 173], Rstrl, Trble, Miss [Equ 176]

24-Hour, Visible Panic

This zone type is used for a general type of emergency including the presence of one or more unwanted persons trying to gain entry to the premises. It will sound an alarm at any time when the zone becomes faulted when the panel is armed (Away, Stay), or disarmed.

This zone type can send the following: - Alarm, Panic [Equ 5], Cross, Panic [Equ 12], Cross, Unverified [Equ 17], Bypass, 24hr, User/RPS [Equ 30 - 31], Bypass, Swinger [Equ 33], UnBypass, 24hr User [Equ 36], Cancel Alarm [Equ 38], Missing, Trouble [Equ 88], Rstrl, Panic [Equ 114], Trbl, Panic [Equ 141], Rstrl, Trbl, Panic [Equ 148], Swinger Bypass Restore [Equ 173], Rstrl, Trble, Miss [Equ 176].

24-Hour, Invisible Panic

This zone type is used for a general type of emergency and is used when there is a presence of one or more unwanted persons trying to gain entry to the premises. When faulted, the zone will not display on the keypad(s) that a panic alarm has occurred or sound any tones at the keypad (even if the alarm output option is programmed).

This zone type can send the following reports: - Alarm, Invisible [Equ 6], Cross, Invisible [Equ 13], Cross, Unverified [Equ 17], Bypass, 24hr, User/RPS [Equ 30 - 31], Bypass, Swinger [Equ 33], UnBypass, 24hr User [Equ 36], Cancel Alarm [Equ 38], Missing, Trouble [Equ 88], Rstrl, Invisible [Equ 115], Trbl, Invisible [Equ 142], Rstrl, Trbl, Invis [Equ 149], Swinger Bypass Restore [Equ 173], Rstrl, Trble, Miss [Equ 176].

24-Hour, Burglary

This zone type can sound an alarm at any time when the zone becomes faulted when the panel is armed (Away, Stay) or disarmed.

This zone type can send the following reports : - Alarm, 24-hr Burg [Equ 7], Cross, 24-hr Burg [Equ 14], Cross, Unverified [Equ 17], Bypass, 24hr, User/RPS [Equ 30 - 31], Bypass, Swinger [Equ 33], UnBypass, 24hr User [Equ 36], Cancel Alarm [Equ 38], Missing, Alarm [Equ 87], Missing, Trouble [Equ 88], Rstrl, 24-hr Burg [Equ 150], Swinger Bypass Restore [Equ 173], Rstrl, Alarm, Miss [Equ 175], Rstrl, Trble, Miss [Equ 176].

Controlled, Key-Switch

A controlled key-switch allows you to connect momentary or maintained switches to arm the control panel in Away or Stay mode or disarm. The keyswitch will register as PIN Code 255.

For maintained switches, connect the EOL (End Of Line) resistor in series with the maintained switch. When the switch becomes open-circuit, it will toggle on or off the arming cycle. A short on the circuit produces an alarm if the area is armed and a trouble condition when the area is disarmed.

For momentary switches, connect the EOL (End Of Line) resistor in parallel to the switch. When the switch operates, the switch will short the EOL resistor to toggle on or off the arming cycle. An open circuit produces an alarm when the area is armed and a trouble condition when the area is disarmed.

This zone type can send the following reports : - Alarm, Cntrl [Equ 9], Bypass, Cntrl, User/RPS [Equ 28 - 29], Bypass, Forced, Zn [Equ 32], Bypass, Swinger [Equ 33], UnBypass, Cntrl, User [Equ 35], Cancel Alarm [Equ 38], Missing, Alarm [Equ 87], Missing, Trouble [Equ 88], Rstrl, Cntrl [Equ 118], Trbl, Cntrl [Equ 145], Rstrl, Trbl, Cntrl [Equ 152], Swinger Bypass Restore [Equ 173], Rstrl, Alarm, Miss [Equ 175], Rstrl, Trble, Miss [Equ 176].

Controlled Entry/Exit Delay 1

This zone type allows you to enter the premises and disarm the system before sounding an alarm. If you fail to disarm the system before the entry delay time has expired, an alarm will occur (Refer to Address 0264 - 0265 on page 142 to program the entry time). A controlled entry/exit delay zone will not sound an alarm during the disarmed state (Off).

This zone type can send the following reports : - Alarm, Cntrl, Dly [Equ 8], Cross, Cntrl, Dly [Equ 15], Cross, Unverified [Equ 17], Bypass, Cntrl, User/RPS [Equ 28 - 29], Bypass, Forced, Zn [Equ 32], Bypass, Swinger [Equ 33], UnBypass, Cntrl, User [Equ 35], Cancel Alarm [Equ 38], Missing, Alarm [Equ 87], Missing, Trouble [Equ 88], Rstrl, Cntrl, Dly [Equ 117], Trbl, Cntrl, Dly [Equ 144], Rstrl, Trbl, Dly [Equ 151], Swinger Bypass Restore [Equ 173], Rstrl, Alarm, Miss [Equ 175], Rstrl, Trble, Miss [Equ 176].

Controlled Entry/Exit Delay 2

This zone type allows you to enter the premises and disarm the system before sounding an alarm. If you fail to disarm the system before the entry delay time has expired, an alarm will occur (Refer to Address 0266 - 0267 on page 143 to program the entry time). A controlled entry/exit delay zone will not sound an alarm during the disarmed state (Off).

This zone type can send the following reports : - Alarm, Cntrl, Dly [Equ 8], Cross, Cntrl, Dly [Equ 15], Cross, Unverified [Equ 17], Bypass, Cntrl, User/RPS [Equ 28 - 29], Bypass, Forced, Zn [Equ 32], Bypass, Swinger [Equ 33], UnBypass, Cntrl, User [Equ 35], Cancel Alarm [Equ 38], Missing, Alarm [Equ 87], Missing, Trouble [Equ 88], Rstrl, Cntrl, Dly [Equ 117], Trbl, Cntrl, Dly [Equ 144], Rstrl, Trbl, Dly [Equ 151], Swinger Bypass Restore [Equ 173], Rstrl, Alarm, Miss [Equ 175], Rstrl, Trble, Miss [Equ 176].

Controlled, Follower

A controlled follower zone will not sound an alarm during the disarmed state (Off). A controlled follower zone will operate as a controlled instant zone if it becomes faulted during the armed state if it is not faulted during the delay time of a controlled entry/exit delay zone.

This zone type can send the following reports: - Alarm, Cntrl, Dly [Equ 9], Cross, Cntrl [Equ 16], Cross, Unverified [Equ 17], Bypass, Cntrl, User/RPS [Equ 28 - 29], Bypass, Forced, Zn [Equ 32], Bypass, Swinger [Equ 33], UnBypass, Cntrl, User [Equ 35], Cancel Alarm [Equ 38], Missing, Alarm [Equ 87], Missing, Trouble [Equ 88], Rstrl, Cntrl [Equ 118], Trbl, Cntrl [Equ 145], Rstrl, Trbl [Equ 152], Swinger Bypass Restore [Equ 173], Rstrl, Alarm, Miss [Equ 175], Rstrl, Trble, Miss [Equ 176].

Controlled, Instant

A controlled instant zone will sound an alarm during the armed state (Away, Stay) as soon as it becomes faulted. A controlled instant zone will not register or sound an alarm during the disarmed state.

This zone type can send the following reports: - Alarm, Cntrl, Dly [Equ 9], Cross, Cntrl [Equ 16], Cross, Unverified [Equ 17], Bypass, Cntrl, User/RPS [Equ 28 - 29], Bypass, Forced, Zn [Equ 32], Bypass, Swinger [Equ 33], UnBypass, Cntrl, User [Equ 35], Cancel Alarm [Equ 38], Missing, Alarm [Equ 87], Missing, Trouble [Equ 88], Rstrl, Cntrl [Equ 118], Trbl, Cntrl [Equ 145], Rstrl, Trbl [Equ 152], Swinger Bypass Restore [Equ 173], Rstrl, Alarm, Miss [Equ 175], Rstrl, Trble, Miss [Equ 176].

24-Hour Door

When this zone function is assigned to a zone in an area that is armed, the zone functions the same as an Instant zone.

When the area is disarmed, the zone function becomes a 24hr function. If faulted zones are programmed to report a trouble, a trouble will be reported as soon as the zone is in the trouble condition.

The zone, if not set up to send troubles, will create an alarm condition.

When the zone is faulted, a timer starts. If the zone remains faulted for the programmed time, the zone creates an alarm. If the zone restores before the programmed time, then no alarm condition is created.

Zone pulse counts and count time can be applied to this zone type.

This zone type can send the following reports: - Alarm, 24hr Burg [Equ 7], Rstrl, 24hr Burg [Equ 116], Trbl, 24hr Burg [Equ 143], Rstrl, Trbl, 24hr Burg [Equ 150].

RF Transmitters and Zone States

With the exception of the door / window transmitter, all RF transmitters show only two electrical states.(Normal and Faulted)

Note: The Door / Window transmitter RF3401E has the ability to monitor both a reed switch (magnet) and a supervised sensor loop. After the ID for the door/window transmitter is added, the control panel shows the status for the zone as normal. If the first message from the transmitter is “no magnet and open loop”, the control panel reports the zone as faulted. If a “normal magnet” message is received, the loop is supervised.

Cut out the reed switch if not used.

Zone Pulse Count

Zone pulse count is the number of times a zone must be faulted before the zone registers an alarm condition. The number of pulses can be programmed between 1 and 15 (0 = 1 pulse when no pulse count time programmed). The number of pulses programmed need to register during the Zone Pulse Count Time.

Note

Zones assigned to Chime mode also follow pulse count and pulse count time when Chime mode is active. Chime tone will not sound unless the zone has faulted the number of times programmed in the pulse count (or the zone is faulted continuously for 10 seconds). However, if the Chime zone is faulted, the keypad will display 'Chime Zone' even though the number of valid pulses has not been reached. Refer to Selecting Chime Tone, (Command 62) on page 52 .

Zone Pulse Count Time

50 ms Loop Response Time		160 ms Loop Response Time	
Option	Pulse Count Time	Option	Pulse Count Time
0	0.5 Seconds	8	20 Seconds
1	1 Second	9	30 Seconds
2	2 Seconds	10	40 Seconds
3	3 Seconds	11	50 Seconds
4	4 Seconds	12	60 Seconds
5	5 Seconds	13	90 Seconds
6	10 Seconds	14	120 Seconds
7	15 Seconds	15	200 Seconds

Table 110: Zone Pulse Count Time Options

Zone pulse count time is the time frame or period of time that the programmed number of pulses must register before an alarm condition is generated. If a zone is faulted continuously for 20 seconds, it will sound an alarm irrespective of the number of pulses and the pulse count time programmed.

Note

Zones connected to point expansion boards (DX2010) can only use pulse count time options 8 - 15.

Pulse Count Handover (Cross-zone)

If you program Option 8 in Zone Index Options 2 on page 191, it will fix the zone index for two pulses within the time frame you program in the pulse count time. The zone index will need two or more zones to be assigned to the same zone index for this to work. Two separate zones will need to register as faulted within the pulse count time to sound an alarm condition.

Zone Index Options 1 (Non Keyswitch)

These options below are only applicable for zones indexes programmed other than controlled keyswitch input zones. For zone indexes programmed as keyswitch input types, refer to Zone Index Options 1 (Keyswitch) on page 190.

Option	Description
0	No Options Programmed
1	Alarm Report Abort Allowed
2	Reserved
4	Armed For Stay mode
8	Sensor Trouble Monitor

Table 111: Zone Index Options 1 (Non Keyswitch Zones)

Alarm Report Abort Allowed

If this option is programmed, it will allow the user to stop (abort) the alarm from reporting by disarming the system (or silence the alarm) before the Alarm Report Abort Time on page 200 has expired. A 3-beep tone will be heard at the keypad if they enter their code within the alarm report abort and cancel time.

Note

This option is not applicable on fire zone function types. Also this option does not apply to alarm events initiated by the ABC keys, the Duress PIN or the keyfob panic function.

If the user disarms the system (or silence the alarm) after the alarm report abort time has expired, but before the siren time has expired, a cancel report [Equ 38 = Alarm Cancel or Equ 39 = Fire Cancel] will be sent along with the zone alarm report.

Armed For Stay

If this option is programmed, all zones assigned to the zone index will be ready to detect intrusion when the system is armed in Stay mode. If this option is not programmed, all zones assigned to the zone index will be automatically disabled (isolated) and therefore not detect intrusion when the system is armed in Stay mode.

Sensor Trouble Monitor

This option allows the control panel to monitor sensor devices (zones) assigned to the zone index group. If a sensor device (zone) fails to register a faulted condition whilst the panel is disarmed (Off) during the sensor trouble time, the system registers a sensor trouble fault condition.

To program the sensor trouble time (01 - 99 days), refer to Address 1032 - 1033 on page 199.

Zone Index Options 1 (Keyswitch)

The options below are only applicable for zones indexes programmed as controlled keyswitch input zones. For zone indexes programmed other than keyswitch input types, refer to Zone Index Options 1 (Non Keyswitch) on page 189.

Option	Latching Keyswitch Operation	Option	Momentary Keyswitch Operation
0	Away, Off (Away, Stay & Stay 2)	8	Away, Off (Away, Stay & Stay 2)
1	Away	9	Away
2	Off (Away, Stay & Stay 2)	10	Off (Away, Stay & Stay 2)
3	Not Used	11	Not Used
4	Stay, Off (Away, Stay & Stay2)	12	Stay, Off (Away, Stay & Stay2)
5	Stay	13	Stay
6	Off (Stay & Stay 2)	14	Off (Stay & Stay 2)
7	Not Used	15	Not Used

Table 112: Zone Index Options (Keyswitch Zones)

The keyswitch zone can only be used with N/O (Normally Open) contact switches.

For maintained switches, connect the EOL (End Of Line) resistor in series with the maintained switch. When the switch becomes open-circuit, it will toggle on or off the arming cycle. A short on the circuit produces an alarm if the area is armed and a trouble condition when the area is disarmed.

For momentary switches, connect the EOL (End Of Line) resistor in parallel to the switch. When the switch operates, the switch will short the EOL resistor to toggle on or off the arming cycle. An open circuit produces an alarm when the area is armed and a trouble condition when the area is disarmed. The descriptions outlined below are for both latching and momentary keyswitch operations.

Away, Off (Away, Stay & Stay 2)

This option allows the keyswitch zone to arm the system in Away mode. The keyswitch zone can also be used to disarm the system from Away, Stay or Stay 2 mode.

Away

This option allows the keyswitch zone to arm the system in Away mode. However, the keyswitch cannot be used to disarm the system.

Off (Away, Stay & Stay 2)

This option allows the keyswitch zone to disarm the system from Away, Stay and Stay 2 mode.

Stay, Off (Away, Stay & Stay 2)

This option allows the keyswitch zone to arm the system in Stay mode. The keyswitch zone can disarm the system from Away, Stay and Stay 2 mode.

Stay

This option allows the keyswitch zone to arm the system in Stay mode. However, the keyswitch zone cannot be used to disarm the system.

Off (Stay & Stay 2)

This option allows the keyswitch zone to disarm the system from Stay and Stay 2 modes.

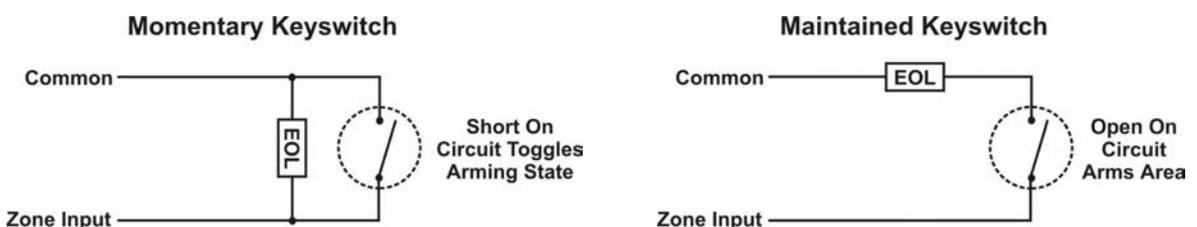


Figure 14: Momentary/Maintained Keyswitch Inputs

Zone Index Options 2

Option	Description
0	No Options Selected
1	Swinger Bypass
2	Alarm Output
4	Can Be Bypassed / Forced Armed
8	Cross-Zone (Pulse Count Handover)

Table 113: Zone Options 2

Swinger Bypass

This option allows the control panel to lockout the dialler and alarm outputs for each point index. Each point index can activate the dialler or alarm outputs between 1 - 15 times (0 = unlimited) per arming sequence before lockout.

Refer to Address 1029 on page 197 to program how many times the alarm outputs can sound and Address 1030 on page 197 to program how many times the dialler can report per arming sequence.

Alarm Output

Any zone that is assigned to a zone index with this option set will sound an audible alarm via the keypad buzzer and any output that is programmed as follows:

(1, 8) = Alarm - Away, Stay and Stay 2 (Non-Fire Zones), (1, 9) = Alarm - Stay and Stay 2 (Non-Fire Zones), (1, 10) = Alarm - Away, Stay and Stay 2 (Include Fire Zones), (1, 11) = Fire Alarm, (1, 12) = Fire Alarm Latching

If this option is not programmed, all zones assigned to the zone index will not activate an audible alarm and the keypad will not prompt you to enter a code to silence the alarm.

Can Be Bypassed / Forced Armed

This option allows any zone assigned to the zone index be manually bypassed or allows the user to arm the system in Away, Stay or Stay 2 mode with a zone still faulted.

24-hour zones (fire and non-fire) can be programmed so that you can bypass them. 24-hour zones cannot be made to force arm since they are always armed.

Cross-zone (Pulse Count Handover)

This option creates a 'Cross-Zone' zone index. A cross-zone index fixes the zone pulse count as two (2) and uses the two pulses and the pulse count time as described below:

- When any zone assigned to the cross-zone index detects a valid pulse, the control panel starts pulse count time (refer to Zone Pulse Count Time on page 188).
- If a second zone assigned to the same cross-zone index detects a pulse within the programmed pulse count time, the control panel creates a cross-zone alarm event for both zones.
- A second pulse on the first zone does not create an alarm event.
- If a cross-zone is faulted continuously for 5 seconds, the zone will register an alarm event.
- If programmed for unverified event reporting, the control panel will send an 'Unverified Cross' report [Equ 17] or 'Unverified Fire' report [Equ 77] that detects a pulse without another 'cross-zone' pulse to verify it. Refer to Address 1027 on page 195 to program Trouble On 'Unverified' Event.

Cross-zone handover will be ignored when no other zones are assigned to the same zone index group, all other zones in the zone index group are bypassed or forced armed, all other zones in the zone index group are faulted.

Alarm / Trouble Response and Reporting Options

Option	Description
0	No Alarm / Alarm Restore Reports
1	Alarm Reports Allowed
2	Trouble Reports On Open
4	Trouble Reports On Short
8	Restore Reports Allowed

Table 114: Alarm/Trouble Restore Report Options

Alarm Reports Allowed

This option allows the control panel to send 'Alarm' reports, 'Cross Alarm' reports and 'Alarm Cancel' or 'Fire Cancel' reports for any zone assigned to the zone index. Refer to page 193 to program the Alarm Report Routing for the above reports.

Trouble Reports On Open

This option allows the control panel to send 'Trouble' reports and 'Trouble Restore' reports for any zone assigned to the zone index when the zone loop becomes open circuit. To program report routing for 'Trouble' reports on open, refer to Address 1038 on page 200.

Note

Fire zone types always have a trouble response on open-circuit and alarm response on short.

Trouble Reports On Short

This option allows the control panel to send 'Trouble' reports and 'Trouble Restore' reports for any zone assigned to the zone index when the zone loop has a short across the EOL (End Of Line) resistor. To program report routing for 'Trouble' reports on short, refer to Address 1038 on page 200.

Restore Reports Allowed

This option allows the control panel to send 'Alarm Restore' reports for any zone assigned to the zone index. Refer to page 193 to program the Alarm Restore Report Routing for the 'Missing Alarm Restore' report.

Alarm Report Routing

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 115: Alarm Report Routing Options

This address programs the zone index group report routing for 'Alarm', 'Missing Alarm', 'Cancel' and 'Exit Error' reports. This report routing is global for all zones assigned to the zone index group. Programming this address as zero (0) will disable all zone alarm reporting for the zone index.

Alarm Restore Report Routing

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 116: Alarm Restore Report Routing Options

This address programs the zone index group report routing for 'Alarm Restore' and 'Fire Alarm Restore', reports. This report routing is global for all zones assigned to the zone index group. Programming this address as zero (0) will disable all zone alarm restore reporting for the zone index.

Global Zone Configuration

The following addresses will effect all zone index configurations programmed.

EOL Resistor Value (On-Board Zones Only)

Address 1026

3

Option	EOL Resistor	Option	EOL Resistor	Option	EOL Resistor
0	No EOL				
1	1K (+/- 20%)	6	4K7 (+/- 20%)	11	22K (+/- 20%)
2	1K5 (+/- 20%)	7	5K6 (+/- 20%)	12	Reserved
3	2K2 (+/- 20%)	8	6K8 (+/- 20%)	13	Reserved
4	3K3 (+/- 20%)	9	10K (+/- 20%)	14	Reserved
5	3K9 (+/- 20%)	10	12K (+/- 20%)	15	Zone Doubled

Table 117: On-Board EOL Resistor Value

Away-board zones are factory default to be connected using 2K2 EOL (End Of Line) resistors.

You can use either N/O (Normally Open) contacts in parallel to the EOL resistor, or N/C (Normally Closed) contacts in series with the EOL resistor. When using No EOL resistor (Option 0), only N/C contacts can be used.

The Solution 40 can be zone doubled so that the main PCB supports 16 zone inputs. Zones can be doubled using 2k2 EOL and 3.65k EOL resistors. Refer to page 178 for more Zone doubling information.

Note

24 Hour Fire zones (Zone Type 1 and 2) and Controlled Keyswitch Input zones (Zone Type 10) do not work when programming Option 0 - No EOL resistor required.

Option 0 - No EOL resistor required is not effected by trouble on open or trouble on short options when programming Alarm / Trouble Response and Reporting Options on page 192.

The total resistance for wire length and contacts, minus the EOL (End-Of-Line) resistor, must not exceed 100 ohms.

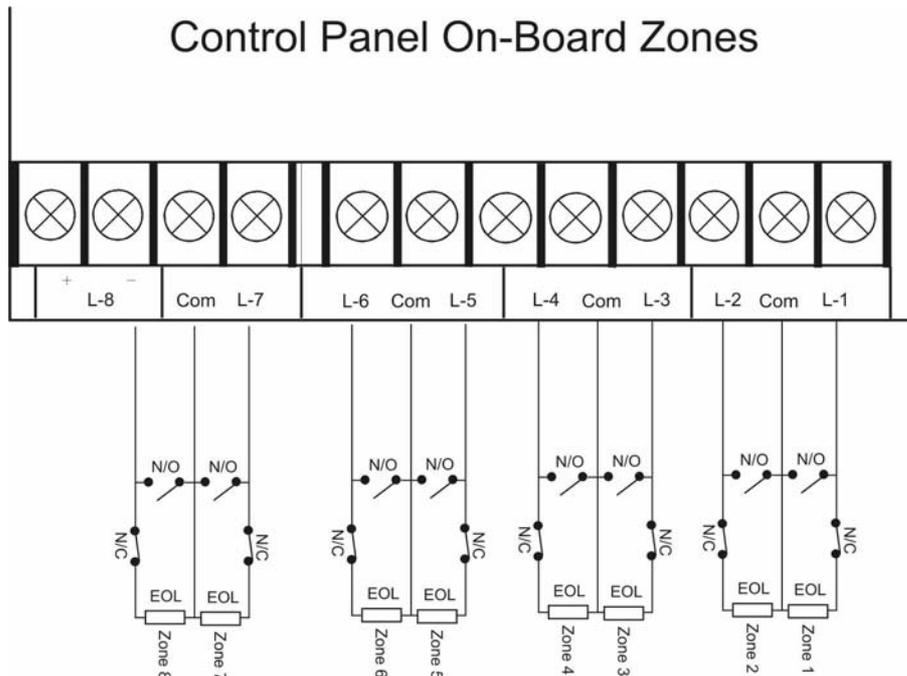


Figure 15: Wiring Diagram For On-Board Zones (1 – 8)

Zone Response Options

Address 1027

0

Option	Description
0	No Options Selected
1	Smart Swinger Lockout
2	Trouble Report On 'Unverified' Event
4	Entry Delay Is Sequential
8	Reserved

Table 118: Zone Response Options

Smart Swinger Lockout

This option allows zones that have been swinger bypassed to again report only during the siren time of a different zone alarm. However, if a zone that has already been locked out is again faulted whilst the siren time is not active, the locked out zone will not send an alarm report.

For this option to be effective, at least one zone index group will need Swinger Bypass on page 191 programmed and the number of times each zone can report via the dialler before locking out at Address 1030 (Swinger Count For Zone Reports) on page 197.

Trouble On 'Unverified' Event

This option allows a zone index that is programmed as '24-Hour Fire With Verification' or a zone index that has two or more zones (assigned to the same area) programmed with the option of 'cross-zone' to send an 'Unverified Event' report [Equ 17] when the zone index only registers a single faulted pulse within the pulse count time.

For more information, refer to 24-Hour, Fire With Verification on page 184 and Cross-zone (Pulse Count Handover) on page 191. To program the pulse count and pulse count time, refer to page 188.

'Unverified Cross' reports [Equ 17] and 'Unverified Fire' reports [Equ 77] follow both Alarm Reports Allowed on page 192 and Alarm Report Routing on page 193.

Entry Delay Is Sequential

When enabled, the delay zones must be faulted in order by location (lowest to highest). If the sequence is broken, entry delay is ended and an alarm response begins. Entry delay sequence starts when the location with an Entry/Exit delay zone type is faulted and continues with the faulting of consecutive locations assigned to Follower zone types. The sequence of zone types must be consecutive and without any gaps.

Bypass/Force Bypass Report Routing

Address 1028

1

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 119: Bypass/Force Bypass Report Routing Options

This address programs the zone bypass and forced zone bypass report routing. This report routing is global for all areas programmed when the system is partitioned into multiple areas. Programming this address as zero (0) will disable all zone bypass and forced zone bypass reports.

The report routing for bypass reports require Option 1 - Zone Bypass, Swinger Bypass Reports Allowed and for bypass restore reports require Option 2 - Zone Bypass, Swinger Bypass Restore Reports Allowed on page 198 programmed.

To program/restrict the number of zones that can be bypassed or forced armed, you will need to program the Zone Bypass / Force Arm Limit on page 139. Only zones that are assigned to a zone index group with the option Can Be Bypassed / Forced Armed on page 191 programmed can send 'bypass' or 'bypass restore' reports.

A 'Swinger Bypass' report or 'Swinger Bypass Restore' report can only be sent if one or more zones are assigned to a zone index group with the option Swinger Bypass on page 191 programmed.

To bypass zones, refer to Bypassing Zones on page 34.

Swinger Count For Alarm Output

Address 1029

1

Each individual zone has a swinger count for alarm output. 'Swinger Bypass' reports are not sent for swinger bypass for alarm output. 'Swinger Bypass' reports have their own swinger count (see next parameter). The swinger count is reset on both arming and disarming of the system, allowing the swinger bypass feature to work for both controlled and 24-hour zones.

Example

Assume the swinger bypass option is enabled, the panel is armed, no zones are in alarm and the swinger count for alarm output is set to 2, Zones 1, 3 and 5 go into alarm. At the end of siren time, the swinger count for alarm output for zones 1, 3 and 5 decrement from 2 to 1. Since the counter does not reach zero, no zones are bypassed. A second alarm event for any of those zones bypasses that zone.

Note

When the Swinger Count is set to zero (0), zones with swinger bypass enabled are bypassed on one activation.

Swinger Count for alarm output is required for SIA control panel standard for false alarm reduction.

Swinger Count For Zone Reports

Address 1030

2

Swinger shutdown for the dialler is global for each zone index programmed with the option Swinger Bypass on page 191. Every time the system is armed (in Away, Stay or Stay 2 mode) and disarmed, the swinger count for zone reports is reset.

Example

Assume the system is armed in Away or Stay mode and there are no alarms. When the zone sends an 'Alarm' or 'Trouble' report, the swinger count for zone reports is checked. If the counter is zero (0), the zone is bypassed from reporting and a 'Swinger Bypass' report [Equ 33] is sent. If the counter is not zero (0), the swinger count will decrement by one (1) and an 'Alarm' or 'Trouble' report will be sent.

If you program Option 1 - Smart Swinger Lockout on page 195 in Address 1027, zones that have become swinger bypassed can again report if faulted during the active siren time of another faulted zone.

Note

If a zone is locked out from reporting (swinger bypassed), the system no longer registers the zone in the system log (Command 85) or registers a sensor Chime trouble condition until the swinger count has been reset or smart swinger lockout takes effect. Refer to Smart Swinger Lockout on page 195 for more information.

Both 'Alarm' and 'Trouble' reports follow the swinger count.

Bypass, Swinger Bypass, Sensor Monitor Report Options

Address 1031

3

Option	Description
0	No Bypass, Sensor Trouble Reports and Restore Reports Allowed
1	Zone Bypass, Swinger Bypass Reports Allowed
2	Zone Bypass, Swinger Bypass Restore Reports Allowed
4	Sensor Trouble Reports Allowed
8	Sensor Trouble Restore Reports Allowed

Table 120: Bypass, Swinger Bypass, and Sensor Monitor Report Options

Zone Bypass, Swinger Bypass Reports Allowed

This option allows the system to send the following reports:

- 'Bypass' reports for all zones that you manually bypass using the Bypass command (see page 34), or bypass via the RPS Upload/Download software.
- 'Forced Bypass' reports for all zones that are faulted when you arm the system in Away or Stay mode.
- 'Swinger Bypass' reports for all zones that have become locked out from reporting again.

Only zones assigned to a zone index that has the option 'Can Be Bypassed / Forced Armed' programmed on page 191 can be bypassed or forced armed. To program the bypass/forced arm limit, refer to page 139.

For a zone index group to send a 'Swinger Bypass' report [Equ 33], you will need to program Zone Index Options 2 on page 191 as swinger bypass and also program the Swinger Count For Zone Reports on page 197. The swinger count for zone reports programs the number of times each zone can send alarm and/or trouble reports per arming sequence before locking out.

These reports follow the Bypass/Force Bypass Report Routing on page 196.

Zone Bypass, Swinger Bypass Restore Reports Allowed

This option allows the system to send the following restore reports:

- 'Bypass Restore' reports for zones that you manually un-bypass using the Bypass command (see page 34), or bypass via the RPS Upload/Download software.
- 'Forced Bypass Restore' reports for zones that have restored after you have armed the system in Away or Stay mode.
- 'Swinger Bypass Restore' reports for zones when you arm the system or when you disarm it.

These reports follow the Bypass/Force Bypass Report Routing on page 196.

Note

To program/restrict the number of zones that can be bypassed or forced armed, you will need to program the Zone Bypass / Force Arm Limit on page 139. Only zones that are assigned to a zone index group with the option Can Be Bypassed / Forced Armed on page 191 programmed can send 'bypass' or 'bypass restore' reports.

Sensor Trouble Reports Allowed

This option allows the system to send the following trouble reports.

[Equ 121] - RF Battery Low, [Equ 123] - RF Tamper Trouble, [Equ 133] - Sensor Monitor Trouble.

These reports follow the Zone Trouble Report / Restore Report Routing on page 200. The 'Sensor Monitor Trouble' report [Equ 133] needs Sensor Trouble Monitor on page 189 programmed for any zone index group that requires this report to be sent.

Sensor Trouble Restore Reports Allowed

This option allows the system to send the following trouble reports.

[Equ 122] - RF Battery Low Restore, [Equ 124] - RF Tamper Trouble Restore, [Equ 134] - Sensor Monitor Trouble Restore.

These reports follow the Zone Trouble Report / Restore Report Routing on page 200. The 'Sensor Monitor Trouble Restore' report [Equ 134] needs Sensor Trouble Monitor on page 189 programmed for any zone index group that requires this report to be sent.

Sensor Monitor Time

Address 1032 - 1033

0	7
---	---

Address	Description
1032	Increments Of Days (Tens Digit)
1033	Increments Of Days (Units Digit)

Table 121: Sensor Monitor Time

These addresses program how many days (00 – 99) a sensor device (zone) can remain sealed before registering as a faulty device (trouble condition). The sensor monitor time is only active when the area is disarmed (off). When the area is armed (Away or Stay), the sensor monitor time is not active (pauses). The sensor monitor time will continue when the area is next disarmed.

Only zones assigned to a zone index group that has Sensor Trouble Monitor on page 189 programmed will be monitored by the control panel. Refer to page 199 to program Option 4 - Sensor Trouble Reports Allowed and Option 8 - Sensor Trouble Restore Reports Allowed. These two reports follow the Zone Trouble Report / Restore Report Routing on page 200.

Alarm Report Abort Time

Address 1034

2

Option	Alarm Report Abort Time
0 & 1	15 Seconds
2	30 Seconds
3 - 15	45 Seconds

Table 122: Alarm Report Abort Time

These addresses program how many seconds the control panel will delay reporting the pending zone alarm report. If you enter your PIN code during this delay time, the control panel will abort the zone alarm report (Non-Fire zones only). If you do not enter your PIN code within the delay time programmed, the alarm report will be sent.

If you enter your PIN Code after the alarm report abort time has expired, but before the siren timer has expired, the system will send a 'Cancel' report.

Only zones assigned to a zone index group that has Alarm Report Abort Allowed on page 189 programmed can have their alarm reports aborted or send a cancel report.

Note

The 'Cancel Alarm' report [Equ 38] and 'Cancel Fire' report [Equ 39] can be disabled by programming Address 0234 on page 126 as zero.

Zone Trouble Report / Restore Report Routing

Address 1038

1

Option	Description
0	No Report, No Events To Log / Printer
1	Report To Destination 1, Events To Log / Printer
2	Report To Destination 2, Events To Log / Printer
3	Report To Destination 1 & 2, Events To Log / Printer
4	Report To Destination 2 If Destination 1 Fail, Events To Log / Printer
5	No Report, Events To Log / Printer

Table 123: Zone Trouble Report/Restore Report Routing Options

This address programs the report routing for zone trouble and zone trouble restore reports. This report routing is global for all areas.

Programming This address as zero (0) will disable the following reports: - Fire, Missing [Equ 78], Fire, Trouble [Equ 80], Fire, Trouble Restore [Equ 81], Missing Trouble [Equ 88], RF Battery Low [Equ 121], RF Battery Restore [Equ 122], RF Tamper Trouble [Equ 123], RF Tamper Restore [Equ 124], Sensor Monitor Trouble [Equ 133], Sensor Monitor Restore [Equ 134], Trouble, Tamper [Equ 139], Trouble, Emergency [Equ 140], Trouble, Panic (Visible) [Equ 141], Trouble, Panic (Invisible) [Equ 142], Trouble, 24-Hr Burg [Equ 143], Trouble, Delay [Equ 144], Trouble, Follower, Instant, K/S [Equ 145], Trouble Restore, Tamper [Equ 146], Trouble Restore, Emergency [Equ 147], Trouble Restore, Panic (Visible) [Equ 148], Trouble Restore, Panic (Invisible) [Equ 149], Trouble Restore, 24-Hr Burg [Equ 150], Trouble Restore, Delay [Equ 151], Trouble Restore, Follower, Instant, K/S [Equ 152], Fire, Missing Restore (Log Only) [Equ 174], Trouble, Missing Restore (Log Only) [Equ 176].

Global Output Configurations

The control panel supports up to a total of 20 programmable outputs. The 20 programmable outputs include 4 on-board outputs and a additional 16 outputs via two Octo Output Modules (DX3010).

Outputs 5 - 12 require an Octo Output Module that is assigned to Option Bus Address 150. Outputs 13 - 20 require an Octo Output Module that is assigned to Option Bus Address 151.

Global Output Options

Address 1039

1

Option	Description
0	No Options Programmed
1	Output 2 Is Supervised Horn Speaker
2	Output Set/Reset Reports Allowed
4	Strobe Output To Indicate RF and Keyswitch Arm/Disarm
8	Alarm Output(s) To Indicate RF and Keyswitch Arm/Disarm

Table 124: Global Output Options

Output 2 Is Supervised Horn Speaker

If this option is programmed, Output 2 becomes supervised for a 8 ohm - 10 watt horn speaker. When the control panel detects that the output device is missing from the PO2 terminal, the system registers a siren trouble event and sends a 'Siren Trouble' report [Equ 160]. When the system registers that the output as restored, the system will send a 'Siren Trouble Restore' report [Equ 161].

Output Set/Reset Reports Allowed

If this option is programmed, every time a PIN code, Sked or RPS software is used to turn an output on, the control panel will send an 'Output Set' report [Equ 109 – 111]. Every time a PIN code, Sked or RPS software is used to turn an output off, the control panel will send an 'Output Reset' report [Equ 106 – 108].

Strobe Output To Indicate RF & Keyswitch Arm/Disarm

If this option is programmed, the strobe will flash to indicate that an RF keyfob or keyswitch zone has been used to arm or disarm the system. The strobe will flash for 3 seconds when disarming the system and flash for 6 seconds when arming the system in Away, Stay or Stay 2 mode.

Alarm Output(s) To Indicate RF & Keyswitch Arm/Disarm

If this option is programmed, any of the alarm outputs listed below will sound to indicate RF keyfob or keyswitch zone has been used to arm or disarm the system. The alarm outputs will sound 1 beep when you disarm the system, 2 beeps when you arm the system in Away mode and 3 beeps when you arm the system in Stay or Stay 2 mode.

Only the following output event types will beep to indicate keyfob and keyswitch operations:

- 1, 8 - Alarm All, Stay and Stay 2
- 1, 9 - Alarm Stay and Stay 2
- 1, 10 - Alarm Off, Away, Stay and Stay 2

Siren Time

Address 1040

5

Siren time programs how long alarm outputs will sound when the control panel detects an alarm condition. Address 1040 is programmed in increments of 1 minute. You can program siren time as zero (0) – disabled or between one (1) minute and fifteen (15) minutes (Factory default is 5 minutes).

The following outputs will operate as soon as siren time starts:

1, 5 - Siren Time	1, 9 - Alarm In Stay or Stay 2
1, 7 – Silent Alarm	1, 10 - Alarm In Off, Away, Stay or Stay 2
1, 8 - Alarm In Away, Stay or Stay 2	1, 11 - Fire Alarm

Note

Siren time starts as soon as a zone becomes faulted and registers an alarm condition. Therefore, when you delay alarm to sound until reports have been sent (Address 0221 on page 120), the alarm outputs will not sound for the full duration of the siren time programmed.

Horn Speaker Frequency

Address 1041

2

This address is only applicable when Output 2 (PO2) is configured as a supervised horn speaker output. Refer to Option 1 - Output 2 Is Supervised Horn Speaker on page 201 for more information.

This parameter sets the warble frequency for the alarm output functions (1-8, 1-9, 1-10). The setting chosen here does not apply to other output functions.

This address allows you to program the frequency rate that the horn speaker will sound during an alarm. Programming the sound rate as zero is the slowest frequency, whilst programming a fifteen is the fastest frequency. This will allow you to determine which alarm system is sounding the horn speaker when two or more installations are close to each other (each alarm system can sound at a different frequency).

Note

This address does not change the frequency rate when sounding a fire alarm tone.

Horn Speaker Beep Volume

Address 1042

7

This address is only applicable when Output 2 (PO2) is configured as a supervised horn/speaker output. Refer to Option 1 - Output 2 Is Supervised Horn Speaker on page 201 for more information.

This address allows you to program the volume of indication beeps (0 = No Beeps / 15 = Highest Volume) that will be heard when you arm and disarm the system via RF keyfobs or keyswitch zones. Refer to Option 8 - Alarm Output(s) To Indicate RF & Keyswitch Arm/Disarm on page 201 to program alarm outputs to beep when you remotely arm and disarm the system.

Strobe Function Options

Address 1043

15

Option	Description
0	Siren Time Starts Strobe Output
1	Alarm Output Type 1, 8 Starts Strobe Function
2	Alarm Output Type 1, 9 Starts Strobe Function
4	Alarm Output Type 1, 10 Starts Strobe Function
8	Alarm Output Type 1, 11 Starts Strobe Function

Table 125: Strobe Function Options

Siren Time Starts Strobe Output

If this address is programmed as zero (0), the strobe output will operate when an alarm event starts siren time (any audible alarm).

Alarm Output Type 1, 8 Starts Strobe Function

If this option is programmed, the strobe output will operate for all alarms (except 24 hour fire) when the system is armed in Away, Stay or Stay 2 mode. The strobe will not function for 24-hour fire alarms or when the system is disarmed.

Alarm Output Type 1, 9 Starts Strobe Function

If this option is programmed, the strobe output will operate for all alarms (except 24hour fire) when the system is armed in Stay or Stay 2 mode. The strobe will not function for 24 hour fire alarms, or when the system is disarmed or in Away mode.

Alarm Output Type 1, 10 Starts Strobe Function

If this option is programmed, the strobe will only operate when there is an alarm (including fire alarms) when the system is disarmed, or in Away, Stay or Stay 2 mode.

Alarm Output Type 1, 11 Starts Strobe Function

If this option is programmed, the strobe will only operate when there is a fire alarm. The strobe will not operate for any other alarm type.

Outputs

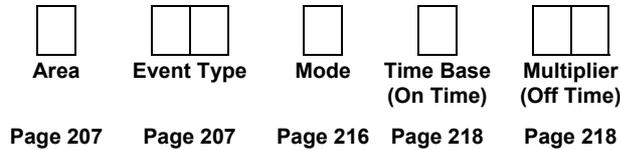
Address 1044 - 1183

The control panel has up to twenty fully programmable outputs. This includes four on-board outputs (PO1 - PO4) and sixteen additional outputs via two optional Output Expander Boards (DX3010). Outputs 5 - 12 require an DX3010 Octo Output Module that is assigned to Option Bus Address 150. Outputs 13 - 20 require an DX3010 Octo Output Module that is assigned to Option Bus Address 151.

Programming

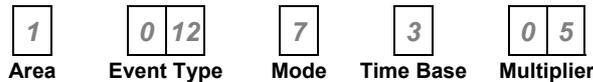
Programming outputs require five parameters to be programmed in order to operate correctly.

- Area** The area allows you to program which area (s) the output event type will operate for.
- Event Type** The event type allows you to program when the output will operate.
- Mode** The mode allows you to program how the output will operate (e.g. pulsing/one-shot etc).
- Time Base** The time base allows you to program milliseconds, seconds, minutes or hours. If the mode is programmed for pulsing, the time base will be the On time. If the mode is programmed as one-shot, the maximum time the output will operate for is the Time Base x Multiplier.
- Multiplier** The multiplier allows you to program how long the time base will operate for when the output mode is programmed as a one-shot. However, if the mode is programmed as pulsing, the multiplier is the off time.



Example

If you need to program an output to operate for five minutes when the system detects that the phone line has failed, but able to reset if the phone line has restore beforehand, you would program the following:



The output programmed above is as follows:

- Area 1 = Area 1
- Event Type 0, 12 - Phone Line Fail
- Mode 7 = One Shot, Normally Open, One-Shot Low (Can Reset)
- Time Base 3 = Units Of Minutes
- Multiplier 0, 5 = Time Base (1 Minute x 05 = 5 minutes)

On-Board Outputs

There are four on-board programmable outputs provided by the control panel.

- PO1 – Output 1 (Relay)** PO1 terminals can be configured as an alarm power output. JP2 jumper must be closed (See Figure 16 below). This output can provide up to 500 mA at 12 VDC.
- PO2 – Output 2** PO2 can be used as a supervised siren driver. When programmed as a siren driver, PO2 draws power from the Alm+ terminal. When connected to a 4-Ohm horn speaker, PO2 draws 380 mA. When connected to an 8-Ohm horn speaker, PO2 draws 330 mA. Alternatively, PO2 can provide up to 500 mA at 12 VDC.
- PO3 – Output 3** PO3 can provide up to 500 mA at 12 VDC.
- PO4 – Output 4** PO4 can provide up to 500 mA at 12 VDC.

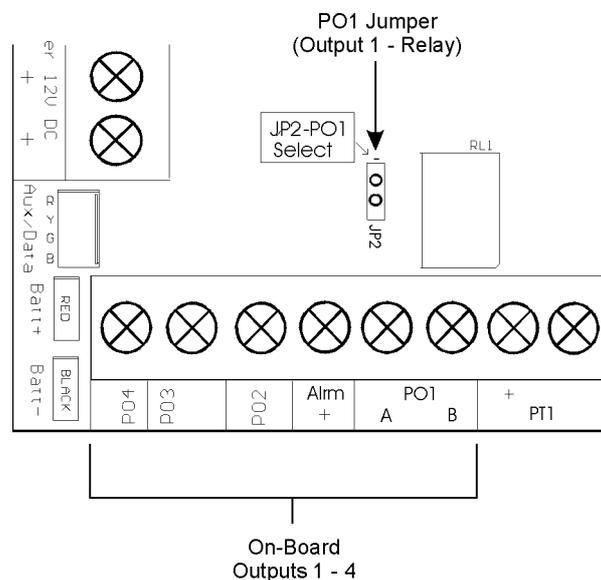


Figure 16: On-Board Outputs

Off-Board Outputs

Outputs 5 - 12 require an DX3010 Octo Output Module that is assigned to Option Bus Address 150. Outputs 13 - 20 require an DX3010 Octo Output Module that is assigned to Option Bus Address 151.

The DX3010 is an Octo-Output module that provides eight Form 'C' relay outputs. It connects to the control panel via the option bus terminals. The outputs are fully programmable. Each output operates individually from the other seven outputs. You can connect up to two DX3010 Octo-Output modules to the SOLUTION 40 control panel, expanding the total of programmable outputs to 20. Refer to DX3010 Octo-Output Module on page 254 for additional information, alternatively, you can refer to the installation instructions that are included with the octo-output module.

Output Defaults

<p>Output 1</p> <p>Address 1044 1045/1046 1047</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1048 1049/1050</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 2</p> <p>Address 1051 1052/1053 1054</p> <p>Area Event Mode</p> <p>1 1 10 7</p> <p>Default: (Speaker) Alarm All Modes</p> <p>Assignment Type</p>	<p>Address 1055 1056/1057</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 3</p> <p>Address 1058 1059/1060 1061</p> <p>Area Event Mode</p> <p>1 1 10 7</p> <p>Default: (Piezo) Alarm All Modes</p> <p>Assignment Type</p>	<p>Address 1062 1063/1064</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 4</p> <p>Address 1065 1066/1067 1068</p> <p>Area Event Mode</p> <p>1 1 6 1</p> <p>Default: Strobe</p> <p>Assignment Type</p>	<p>Address 1069 1070/1071</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 5</p> <p>Address 1072 1073/1074 1075</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1076 1077/1078</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 6</p> <p>Address 1079 1080/1081 1082</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1083 1084/1085</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 7</p> <p>Address 1086 1087/1088 1089</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1090 1091/1092</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 8</p> <p>Address 1093 1094/1095 1096</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1097 1098/1099</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 9</p> <p>Address 1100 1101/1102 1103</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1104 1105/1106</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 10</p> <p>Address 1107 1108/1109 1110</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1111 1112/1113</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 11</p> <p>Address 1114 1115/1116 1117</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1118 1119/1120</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 12</p> <p>Address 1121 1122/1123 1124</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1125 1126/1127</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 13</p> <p>Address 1128 1129/1130 1131</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1132 1133/1134</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 14</p> <p>Address 1135 1136/1137 1138</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1139 1140/1141</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 15</p> <p>Address 1142 1143/1144 1145</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1146 1147/1148</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 16</p> <p>Address 1149 1150/1151 1152</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1153 1154/1155</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 17</p> <p>Address 1156 1157/1158 1159</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1160 1161/1162</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 18</p> <p>Address 1163 1164/1165 1166</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1167 1168/1169</p> <p>Time Base Multiplier</p> <p>0 0 0</p>
<p>Output 19</p> <p>Address 1170 1171/1172 1173</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1174 1175/1176</p> <p>Time Base Multiplier</p> <p>0 0 0</p>	<p>Output 20</p> <p>Address 1177 1178/1179 1180</p> <p>Area Event Mode</p> <p>1 0 0 1</p> <p>Default: Disabled</p> <p>Assignment Type</p>	<p>Address 1181 1182/1183</p> <p>Time Base Multiplier</p> <p>0 0 0</p>

Area Assignment

Each output can be assigned to one or more areas at the same time. When you assign an output to an area (s), only those system events assigned to the same area (s) can operate the output.

Option	Description
0	Output Disabled
1	Assign Output To Area 1
2	Assign Output To Area 2
4	Assign Output To Area 3
8	Assign Output To Area 4

Table 126: Outputs - Area Assignment

Simply add the option bit numbers together to assign the output to one or more areas (e.g. program a 9 if you need the output to be assigned to both Area 1 and Area 4).

Event Types

There are 128 different output event types to choose from. Two numbers designate each output event type. These two numbers need to be programmed into the appropriate addresses of the output being used to indicate when the output should operate.

Note

All reset times are in reference to Mode 1 and Mode 8. Reset times will vary depending on the mode used.

- 0 0 Disabled**
The output will be disabled when you program this event type.
- 0 1 Armed - Away, Stay, Stay 2**
This output will operate when the system has been armed in Away, Stay or Stay 2 mode. The output will reset when the system is disarmed. If the output has been assigned to multiple areas, the output will operate when any area that the output is assigned to becomes armed. The output will reset when all areas that the output is assigned to becomes disarmed.
- 0 2 Armed - Stay or Stay 2**
This output will operate when the system has been armed in Stay or Stay 2 mode. The output will reset when the system is disarmed or armed in Away mode. If the output has been assigned to multiple areas, the output will operate when any area that the output is assigned to is armed in Stay or Stay 2 mode. The output will reset when all areas that the output is assigned to are no longer Stay or Stay 2.
- 0 3 Armed - Away**
The output will only operate when the system is armed in Away mode. The output will reset when the system is off or armed in Stay or Stay 2 mode. If the output has been assigned to multiple areas, the output will operate when any area that the output is assigned to is armed in Away mode. The output will reset when all areas that the output is assigned to are no longer in Away mode.
- 0 4 Auto Arm Pre-Alert Timer**
The output will operate when the pre-alert timer is active prior to automatically arming the system in Away, Stay or Stay 2 mode. The output will reset when the auto arm pre-alert timer has expired. Refer to Address 0233 on page 126 to program the auto arm pre-alert timer. Refer to Skeds on page 219 to program a schedule to automatically arm the system in Away, Stay or Stay 2 mode.
- 0 5 Exit Delay or Entry Delay**
The output will operate when either the exit delay (Exit Delay 1/Exit Delay 2) or entry delay timers (Entry Delay 1/Entry Delay 2 or Part Mode Delay Time) are active for Away, Stay or Stay 2 mode. The output will reset when the exit or entry timer has expired.

- 0 6 Exit Delay**
This output will operate when the exit delay time (Exit Delay 1/Exit Delay 2) is active for Away, Stay or Stay 2 mode. The output will reset when the exit delay time has expired.
- 0 7 Exit Delay Finished**
This output will operate after the exit delay time (Exit Delay 1/Exit Delay 2) has expired when the system has been armed in Away, Stay or Stay 2 mode. The output will reset when the system has been disarmed.
- 0 8 Ack After Exit Delay (Siren Test On Close)**
This output will operate when the control panel receives a 'kiss-off' from the security company's base station receiver after sending a successful closing report. If the control panel is not programmed to send closing reports, the output will operate at the end of exit delay time.
- 0 9 Entry Delay**
This output will operate when Entry Timer 1, Entry Timer 2 or Part Mode Delay time is active. The output will reset when the entry delay time has expired.
- 0 10 Entry Delay + Chime**
This output will operate when Entry Timer 1, Entry Timer 2 or Part Mode Delay time is active. The output will reset when the entry delay time has expired. The output will also operate when Chime mode is turned on (refer to Turn Chime On/Off, (Command 61) on page 51) and a zone that is programmed to operate for Chime mode is faulted. The output will reset when all zones programmed for Chime has restored, or Chime mode has been turned off.

Note

This output type follows chime tone (Selecting Chime Tone, (Command 62) on page 52 (text keypad). Therefore, if chime tone is turned off, this output will not operate when a chime zone is faulted.

- 0 11 Exit Delay, Entry Delay, Chime**
This output will operate for Exit Delay, Entry Delay or when a Chime zone is faulted during Chime mode. The output will reset when the exit delay timer has expired (Exit Delay 1 or Exit Delay 2), entry delay timer has expired (Entry Delay 1, Entry Delay 2 or Part Mode Delay), or when the Chime zone has restored when Chime mode is active.

Note

This output type follows chime tone (Selecting Chime Tone, (Command 62) on page 52). Therefore, if chime tone is turned off, this output will not operate when a chime zone is faulted.

- 0 12 Phone Line Fail**
This output will operate when the control panel detects that the phone line has failed continuously for at least 40 seconds. The output will reset when the control panel has detected that the phone line has restored continuously for at least 40 seconds.
- This output event type will operate irrespective of any options programmed in Address 0220 on page 119 even if the on-board dialler is disabled in Address 0221 on page 120.
- 0 13 Ack Received**
This output will operate after the control panel has successfully sent its report to the security company's base station receiver. For a successful report, the control panel must receive a kiss-off tone from the base station receiver.
- 0 14 AC Fail**
This output will operate when the control panel has registered that the AC mains supply has failed. The control panel takes at least two minutes to register that the AC mains supply has failed. The output will restore when the AC mains supply has been restored continuously for two minutes.

0 15 Low Battery/Missing Battery

This output will operate when the control panel detects that the battery voltage has fallen below 12.1 volts or has been disconnected (missing). The output will reset when the control panel detects that the battery voltage has restored or has been replaced and reading 13.1 volts or higher under load.

1 0 PO2 Horn Speaker Supervision Fail

This output is only applicable when you have Option 1 programmed in Address 1039 on page 201. The output will operate when the system detects that the output device connected to PO2 becomes disconnected continuously for a period of 10 seconds.

The output will restore when the control panel detects that the output device has been reconnected continuously for a period of 10 seconds.

Note

It is not recommended that you program PO2 as this output event type.

1 1 Sensor Trouble Monitor

This output will operate when a zone assigned to a Zone Index Group that has Option 8 in Zone Options 1 programmed has failed to register a valid pulse within the sensor monitor time. The sensor monitor time is only active when the system is disarmed. The output will restore when the sensor device has again registered a valid pulse.

1 2 Duress

This output will operate when a PIN code assigned as a duress code is entered. The output will reset when you enter Command 47.

1 3 User Tamper

This output will operate when an incorrect PIN Code has been entered more times than allowed in the User Code Tamper, Retry Count on page 164. The output will reset when Command 47 is used.

1 4 Disarm/Away/Stay Beeps (Keyswitch & RF Keyfob Arming)

This output will sound numerous short beeps when disarming the system, or arming in Away, Stay or Stay 2 mode via a keyswitch zone, RF keyfob or RPS software (1 beep = Off, 2 beeps = Away, 3 beeps = Stay or Stay 2). This output is intended for 12v DC buzzers or globes to be used.

1 5 Siren Time

This output will sound for the duration of siren time programmed in Address 1040 on page 202 (default is 6 minutes) when an audible alarm condition activates siren time. This output is ready to operate when the system is off, or armed in Away, Stay, or Stay 2 mode for any alarm type.

1 6 Strobe

This output will operate as soon as siren time starts and will reset when a valid PIN code is entered. Refer to Address 1043 on page 203 to program any of the following options for the strobe output:

- Siren Time Starts Strobe Output
- Output Type 1, 8 Starts Strobe Output
- Output Type 1, 9 Starts Strobe Output
- Output Type 1, 10 Starts Strobe Output
- Output Type 1, 11 Starts Strobe Output

1 7 Silent Alarm

This output will operate when any non-fire zone assigned to a zone index configuration is programmed with Option 2 - Alarm Output on page 191 as disabled. This output does not operate for any silent emergency keys or user tamper alarm events. The output will continue until a valid PIN code has been entered or siren time has expired.

- 1 8 Alarm - Away, Stay and Stay 2 (Non Fire)**
This output will operate if a user tamper alarm, emergency key alarm (non fire) or any zone alarm (non fire) has registered only when the system is armed in Away, Stay or Stay 2 mode. This output will not operate when the system is disarmed. The output will reset when a valid PIN code is entered or siren time has expired. This output will follow speaker beeps on page 201 for RF keyfob operations.
- 1 9 Alarm - Stay and Stay 2 (Non Fire)**
This output will operate if a user tamper alarm, emergency key alarm (non fire) or any zone alarm (non fire) has registered only when the system is armed in Stay mode or Stay 2. This output will not operate when the system is disarmed or armed in Away mode. The output will reset when a valid PIN code is entered or siren time has expired. This output will follow speaker beeps on page 201 for RF keyfob operations.
- 1 10 Alarm - Off, Away, Stay and Stay 2 (Including Fire Alarms)**
This output will operate if a user tamper alarm, emergency key alarm or any zone alarm has registered. The output will reset when a valid PIN code is entered or siren time has expired. This output will follow speaker beeps on page 201 for RF keyfob operations.

Note

Fire alarms will provide output in Temporal Code 3 format (pulses 3 half second pulses followed by a 1 second pause then repeat) for on-board outputs 1 – 4. Off-board outputs 5 – 20 will not provide Temporal Code 3 format for fire alarms.

- 1 11 Fire Alarm**
This output will only operate when a zone programmed as 24 hour fire or an emergency key programmed for fire has registered an alarm. The output will reset when siren time expires, or a valid PIN code is entered. Both the zone index group that is programmed for fire and the emergency key must be programmed as an audible alarm.

Note

Fire alarms will provide output in Temporal Code 3 format (pulses 3 half second pulses followed by a 1 second pause then repeat) for on-board outputs 1 – 4. Off-board outputs 5 – 20 will not provide Temporal Code 3 format for fire alarms.

- 1 12 Fire Alarm Latching**
This output will only operate when a zone programmed as 24 hour fire or an emergency key programmed for fire has registered an alarm. The output will only reset when you use Command 47. Both the zone index group that is programmed for fire and the emergency key must be programmed as an audible alarm.

1 13 Fire Alarm Verification

This output is intended supply 12V DC (and reset) four-wire smoke sensors. This feature is used on some commercial fire control panels to reduce false alarms on smoke sensors. It is very similar to zone pulse count that is used in motion detectors. This output requires a zone assigned to a zone index group programmed as fire alarm verification (fixed at two pulses within 120 seconds to activate an alarm).

When the smoke sensor registers a pulse, the output will drop power to the smoke sensor for four seconds and then restore power to the smoke sensor (No alarm registered).

If another pulse is registered within 120 seconds of the smoke sensor registering the first valid pulse, a fire alarm will register. However, power will still be maintained to the smoke sensor to allow identification of which smoke sensor registered the fire alarm.

Recommendation of the programming of the fire alarm verification output to remove power for a period of four seconds is as follows:



Area = Default is Area 1, however the area that the zone is assigned should be used.
 Event Type = 1, 13 - Fire Alarm With Verification
 Mode = 11 - Normally Low, One Shot Open (Full Duration)
 Time Base = 2 (1 Second)
 Multiplier = 04 (1 second x 4 = 4 seconds).

1 14 System Trouble

This output will operate when any system trouble condition occurs. The output will reset when the system is clear of all system trouble events. If the system has been partitioned, only those trouble events that occur to the area that the output has been assigned will operate the output.

1 15 RF Trapezoid Key

This output will operate when the trapezoid key on the RF keyfob is used.

2 0 RF Rising Sun Key

This output will operate when the rising sun key on the RF keyfob is used.

2 1 RF Panic

This output will operate when both the 'Lock' key and the 'Un-lock' key on the RF keyfob has been pressed simultaneously for two seconds. This output will reset when a valid PIN code has been entered.

2 2 RF Panic During Siren Time

This output will operate if both the 'Lock' key and the 'Un-lock' key on the RF keyfob has been pressed simultaneously for two seconds during siren time. This output will reset when a valid PIN code has been entered.

2 3 A-Key Activated

This output will operate when the A-key on the keypad has been pressed. This output will operate irrespective of what the A-key is programmed as (e.g. Fire, Panic, Emergency, Audible or Non Audible etc). This output will reset when Command 47 is entered (See page 50).

Note

Steady and Pulse modes (Polarity) will follow siren time unless reset via Command 47 before siren time expires.

- 2 4 **B-Key Activated**
This output will operate when the B-key on the keypad has been pressed. This output will operate irrespective of what the B-key is programmed as (e.g. Fire, Panic, Emergency, Audible or Non Audible etc). This output will reset when Command 47 is entered (See page 50).

Note

Steady and Pulse modes (Polarity) will follow siren time unless reset via Command 47 before siren time expires.

- 2 5 **C-Key Activated**
This output will operate when the C-key on the keypad as been pressed. This output will operate irrespective of what the C-key is programmed as (e.g. Fire, Panic, Emergency, Audible or Non Audible etc). This output will reset when Command 47 is entered (See page 50).
- 2 6 **Communication Fail After 3 Attempts**
This output will operate if the control panel fails to successfully communicate after 3 attempts with the security company's base station receiver (or receiving party). The output will reset when Command 47 has been used, or after the first successful call.

Note

Steady and Pulse modes (Polarity) will follow siren time unless reset via Command 47 before siren time expires.

- 2 7 **Communication Fail**
This output will operate if the control panel fails to successfully communicate to the security company's base station receiver (or receiving party) after the maximum number of attempts. This output will reset when Command 47 is entered (See page 50).
- 2 8 **Panel Off Hook**
This output will operate when the control panel seizes the telephone line. The output will reset once the control panel has released the telephone line.
- 2 9 **Ring Detect**
This output will operate when the control panel detects an incoming call. The output will reset when the control panel no longer detects an incoming call, or has answered the call. Refer to Address 0213 on page 118 to program how many times the telephone should ring before the control panel will answer an incoming call.
- 2 10 **Reserved**
- 2 11 **Follow Keypad Buzzer**
This output will mimic the sound from the keypad buzzer. The output mode (polarity) is not applicable for this output event type. Therefore, programming the mode as zero will not disable the output.
- 2 12 **Chime**
This output will follow Chime tone option set in Command 62 (See page 52). The options include, Off, Short Beep (1 Second), Beep Till Key and Beep Till Closed. However, if the Chime tone is programmed as 'Off', the output will not operate, irrespective of the output mode.
- 2 13 **Ready To Armed - No Controlled Zone Faulted**
This output will only operate when the area is off and no controlled zone is faulted (e.g. Delay, Follower, Instant). The output will reset when the area is armed in Away, Stay or Stay 2 mode.

Note

This output will remain active when the system is armed with or without a faulted zone.

- 2 14 Exit Error**
This output will operate when a Controlled Entry/Exit Delay zone faulted at the end of exit time. The output will reset when the system has been disarmed. Refer to Exit Error Reports Allowed on page 140 for more information.
- 2 15 AC 60 Hz/50 Hz**
This output will operate if the AC mains supply frequency is 60 Htz. The output will reset when the AC mains supply frequency is 50 Htz.
- 3 0 Ground Start**
This is an output programmed to activate for 0.5 seconds when the telephone line is seized. It is intended for use with ground start telephone systems that require a momentary short to ground for a dial tone to be obtained.
- | | |
|--------------------------------|----------------------------------|
| 3 1 Follow Zone Index 1 | 3 9 Follow Zone Index 9 |
| 3 2 Follow Zone Index 2 | 3 10 Follow Zone Index 10 |
| 3 3 Follow Zone Index 3 | 3 11 Follow Zone Index 11 |
| 3 4 Follow Zone Index 4 | 3 12 Follow Zone Index 12 |
| 3 5 Follow Zone Index 5 | 3 13 Follow Zone Index 13 |
| 3 6 Follow Zone Index 6 | 3 14 Follow Zone Index 14 |
| 3 7 Follow Zone Index 7 | 3 15 Follow Zone Index 15 |
| 3 8 Follow Zone Index 8 | |

The above outputs will operate when a zone assigned to the corresponding zone index becomes faulted. The output will reset when all zones assigned to the corresponding zone index have restored (normal). The output will operate irrespective of the system being disarmed, armed in Away, Stay or Stay 2 mode.

The output will also operate if a zone that is faulted has been bypassed, or if the zone expansion module that the zone has been assigned to has failed (missing).

- | | |
|-------------------------------|---------------------------------|
| 4 1 Alarm Zone Index 1 | 4 9 Alarm Zone Index 9 |
| 4 2 Alarm Zone Index 2 | 4 10 Alarm Zone Index 10 |
| 4 3 Alarm Zone Index 3 | 4 11 Alarm Zone Index 11 |
| 4 4 Alarm Zone Index 4 | 4 12 Alarm Zone Index 12 |
| 4 5 Alarm Zone Index 5 | 4 13 Alarm Zone Index 13 |
| 4 6 Alarm Zone Index 6 | 4 14 Alarm Zone Index 14 |
| 4 7 Alarm Zone Index 7 | 4 15 Alarm Zone Index 15 |
| 4 8 Alarm Zone Index 8 | |

The above outputs will operate when a zone assigned to the corresponding zone index is in alarm, irrespective of the system being disarmed, armed in Away, Stay or Stay 2 mode (depending on the zone type programmed). The above outputs will operate for both audible and silent alarms.

The output will also operate for exit error alarms or a zone trouble condition (if programmed) when the system is in Away, Stay or Stay 2 mode.

For 24 hour zone types, the output will reset when the zone returns to normal. For controlled zone types, the output will reset when the zone returns to normal or the system has been disarmed.

- 5 0 Change Outputs**
This output is only used via Command 54. Use Command 54 to toggle on and off this output. Refer to Toggle Outputs On/Off (Command 54) on page 62.

5	1	Trouble Zone Index 1	5	9	Trouble Zone Index 9
5	2	Trouble Zone Index 2	5	10	Trouble Zone Index 10
5	3	Trouble Zone Index 3	5	11	Trouble Zone Index 11
5	4	Trouble Zone Index 4	5	12	Trouble Zone Index 12
5	5	Trouble Zone Index 5	5	13	Trouble Zone Index 13
5	6	Trouble Zone Index 6	5	14	Trouble Zone Index 14
5	7	Trouble Zone Index 7	5	15	Trouble Zone Index 15
5	8	Trouble Zone Index 8			

The outputs above will operate when a zone assigned to the corresponding zone index is in a trouble condition. The output will reset when the zone has been restored.

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

These outputs will operate when the corresponding PIN code is entered. The output will reset the next time the corresponding PIN code is entered, or Command 54 has been used to reset the output.

- 8 1 Sked**
You need to program a sked for this output to operate. The Sked will need to be assigned to the output that you want to turn on or turn off. Only outputs 1 - 15 can be used for this output event type.

The output will reset when the one-shot timer has expired, Command 54 has been used to turn off the output, or another sked programmed to turn the output off. Refer to Skeds on page 219.

- 8 2 Command 54**
This output can only be turned on and turned off via Command 54. Refer to Toggle Outputs On/Off (Command 54) on page 62. Command 54 can turn on and off other outputs.
- 8 4 Confirmed / Verified Alarm**
This output activates when the requirements for a confirmed / verified alarm are met. Resets when the confirmed alarm is reset.
- 8 5 Unconfirmed / Unverified Alarm**
This output activates when an unconfirmed / unverified alarm occurs. Resets when the confirmation alarm timer resets or a PIN is entered.
- 8 6 Tamper**
This output activates on any tamper condition. Resets when the tamper condition restores.
- 8 7 Bypass**
This output activates when any input is bypassed. Resets when all input bypasses are cleared.
- 8 8 Enhanced Siren**
This output activates on exit delay, entry delay, chime, alarm, tamper or bad set. Resets at the end of bell time or when a PIN is entered.

-
- 8 9 Alarm Cancelled**
This output activates on cancelled alarm. Reset when alarm is cleared.
 - 8 10 Rf Transmitter Missing**
This output activates when any zone RF Transmitter is missing. Resets when the Rf Transmitter missing resets.
 - 8 11 RF Transmitter Low Battery**
This output activates when any RF Transmitter, including zones as well as key fobs report a low battery condition. Resets when the low battery condition resets.
 - 8 12 RF Receiver Jamming**
This output activates when the receiver is in a jammed condition for five minutes. Resets when the RF receiver is no longer jammed.
 - 8 13 Fire Alarm Only**
This output activates on fire alarm only. Resets on user or installer System Reset using Command 47. Does not pulse in temporal code 3 format (fire siren pulse output).
 - 8 14 Personal Alarm**
This output activates on 24 Hour Visible Panic Zone Function, Duress User or RF Keyfob Panic. Clears on user or installer System Reset, Command 47.

Mode

The output mode programs how the output will operate. Only one mode can be programmed for each output. Refer to Table 127: Outputs - Mode below.

Option	Mode Description
0	Output Disabled
1	Normally Open, Going Low
2	Normally Open, Latching Low - Command 54 Reset
3	Toggle Output State
4	Normally Open, Pulsing Low
5	Normally Open, One Shot Low - Full Duration
6	Normally Open, One Shot Low - Retrigger
7	Normally Open, One Shot Low - Can Reset
8	Normally Low, Going Open
9	Normally Low, Latching Open - Command 54 Reset
10	Normally Low, Pulsing Low
11	Normally Low, One Shot Open - Full Duration
12	Normally Low, One Shot Open - Retrigger
13	Normally Low, One Shot Open - Can Reset

Table 127: Outputs - Mode

Output Disabled (0)

If an output is not required, the polarity should be programmed as zero.

Normally Open, Going Low (1)

This mode is normally open circuit and will switch to zero volts when the event occurs. The output will switch back to open circuit when the event has restored. Time parameters do not apply to this mode selection.

Normally Open, Latching Low (2)

This mode is normally open circuit and will switch to zero volts when the event occurs. The output will only switch back to open circuit when manually reset via Command 54 on page 62.

Toggle Output State (3)

This mode is normally open circuit and will switch to zero volts when the event occurs. The output will switch back to open circuit when the output event re-occurs.

Normally Open, Pulsing Low (4)

This mode is normally open circuit and will switch to pulsing zero volts when the event occurs. The output will switch back to open circuit when the output event restores or siren time expires.

Normally Open, One Shot Low - Full Duration (5)

This mode is normally open circuit and will switch to zero volts when the event occurs. The output will only switch back to open circuit when the duration of both the time base and multiplier has expired. This output cannot be manually reset, it will run for the full duration.

Normally Open, One Shot Low - Retrigger (6)

This one shot mode is normally open circuit and will switch to zero volts when the event occurs. Every time the event occurs, it will restart the one shot timer. The output will switch back to open circuit once the one shot time has expired.

This mode is ideally suited for lighting control. A PIR can be used to trigger an output for turning On indicators. While ever there is movement, the PIR will re-trigger the output and lengthen the time the lights will remain on.

Normally Open, One Shot Low - Can Reset (7)

This one shot mode is normally open circuit and will switch to zero volts when the event occurs. The output will switch back to open circuit when the one shot time has expired, or when the event has returned to normal. This means the operation of the output can be shortened regardless of the time parameter programmed.

Normally Low, Going Open (8)

This mode is normally zero volts and will switch to open circuit when the event occurs. The output will switch back to zero volts when the event has restored. Time parameters do not apply.

Normally Low, Latching Low (9)

This mode is normally zero volts and will switch to open circuit when the event occurs. The output will only switch back to zero volts manually via Command 54 on page 62.

Normally Low, Pulsing Open (10)

This mode is normally zero volts and will switch to pulsing open circuit when the event occurs. The output will switch back to zero volts when the output event restores or siren time expires.

Normally Low, One Shot Open - Full Duration (11)

This mode is normally zero volts and will switch to open circuit when the event occurs. The output will only switch back to zero volts when the duration of both the time base and multiplier has expired.

Normally Low, One Shot Open - Retrigger (12)

This one shot mode is normally zero volts and will switch to open circuit when the event occurs. Every time the event occurs, it will restart the one shot timer. The output will switch back to zero volts once the one shot time has expired.

Normally Low, One Shot Open - Can Reset (13)

This one shot mode is normally zero volts and will switch to open circuit when the event occurs. The output will switch back to zero volts when the one shot time has expired, or when the event has returned to normal. This means the operation of the output can be shortened regardless of the time parameter programmed.

Time Base

The time base is only applicable for those modes that are programmed as one shot or pulsing. The time base also requires the multiplier to be programmed to work. The time base and the multiplier work differently for both one shot and pulsing modes. The time base can only be programmed as one of the values in the table below:

Option	Time Base
0	Time Base Disabled
1	200 ms
2	1 Second
3	1 Minute (60 Seconds)
4	1 Hour (60 Minutes)

Table 128: Outputs - Time Base

One Shot Mode

The time base is the unit of time that will be multiplied by the value programmed in the multiplier (e.g. If the time base is in units of 1 second and the multiplier is programmed as 05, the total time for the one shot mode is 5 seconds (1 x 5 = 5).

Time Base	On Time	Time Multiplier	Off Time	Increments	Tolerance
0	0	N/A	N/A	N/A	N/A
1	200 ms	01 - 99	200 ms - 19.8 Sec	200 ms	+/- 200 ms
2	1 Sec	01 - 99	1 - 99 Sec	1 Sec	+/- 1 Sec
3	1 Min	01 - 99	1 - 99 Min	1 Min	+/- 1 Min
4	1 Hr	01 - 99	1 - 99 Hr	1 Hr	+/- 1 Hr

Table 129: Outputs - One Shot Mode

Pulsing Mode

The time base is the unit of time that the output will be pulsing on, whereas the multiplier is the unit of time that the output will be pulsing off (e.g. If the time base is in units of 1 minute and the multiplier is programmed as 10, the ON time is 1 minute and the OFF time is 10 minutes).

Time Base	ON Time	OFF Time	Increments	Tolerance
0	N/A	N/A	N/A	N/A
1	200 ms	200 - 19.8 ms	200 ms	+/- 200 ms
2	1 Second	1 - 99 Seconds	1 Second	+/- 1 Second
3	1 Minute	1 - 99 Minutes	1 Minute	+/- 1 Minute
4	1 Hour	1 - 99 Hours	1 Hour	+/- 1 Hour

Table 130: Outputs - Pulsing Mode

Time Base Multiplier

The multiplier is only applicable for those modes that are programmed as one shot or pulsing. The multiplier requires the time base to be programmed to work. The time base and multiplier work differently for both one shot and pulsing modes. Refer to Time Base above for more information. The multiplier can be programmed between 01 - 99.

Skeds

Address 1184 - 1247

Skeds (Schedules) are fully programmable allowing you to program the time of day and which days of the week the skeds will operate. A maximum of eight (8) separate skeds are available for you to program.

Skeds can be programmed to automatically disarm an area or arm in Away, Stay or Stay 2 mode. If desired, you can even program an output as a Sked function type and then assign a sked to turn the output on or off (this is ideal for outside lighting or a pool pump etc).

Programming Skeds require five (5) parameters to be programmed in order to operate correctly.

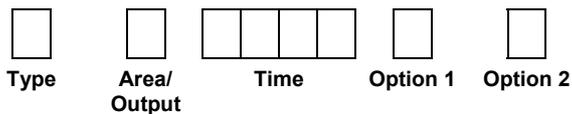
Type The type allows you to program the sked to automatically disarm the system or arm in Away, Stay or Stay 2 mode, or turn an output On or Off at the programmed time interval.

Area/Output You must assign the Sked to an area or output that you want the sked to operate.

Time The time is programmed in 24 hour format (i.e. 00:01 - 24:00).

Option 1 Option 1 allows you to program the days that the Sked will operate.

Option 2 Option 2 allows you to program the days that the Sked will operate.



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Type

Option	Description
0	Sked Disabled
1	Auto Arm - Away
2	Auto Arm - Stay
3	Auto Arm - Stay 2
4	Auto Off
5	Auto Output - On
6	Auto Output - Off

Table 131: Sked – Type

If a sked is programmed to automatically arm an area in Away, Stay or Stay 2 mode and the control panel is programmed for Auto Arming Pre-Alert Time on page 126, the control panel will sound the auto arm pre-alert tone via the keypad to warn you that the system is auto arming. If Command 51 is used during the auto arm pre-alert tone, auto arming will be extended by one hour.

Sked Disabled

If a zero (0) is programmed as the sked type, the sked will be disabled.

Auto Arm - Away

If a one (1) is programmed as the sked type, the sked will automatically arm the system in Away mode at the time programmed.

Auto Arm - Stay

If a two (2) is programmed as the sked type, the sked will automatically arm the system in Stay mode at the time programmed.

Auto Arm - Stay 2

If a three (3) is programmed as the sked type, the sked will automatically arm the system in Stay 2 mode at the time programmed.

Auto Off

If a four (4) is programmed as the sked type, the sked will automatically disarm the system at the time programmed from Away, Stay or Stay 2 mode.

Auto Output -On

If a five (5) is programmed as the sked type, the sked will automatically turn an output on. The output that the sked will operate will need to be programmed with the output event type 8,1 - Sked. Refer to Outputs on page 204 for more information. Only outputs 1 - 15 can be used as a 'sked' function.

Auto Output - Off

If a six (6) is programmed as the sked type, the sked will automatically turn an output off. The output that the sked will operate will need to be programmed with the output event type 8,1 - Sked. Refer to Outputs on page 204 for more information. Only outputs 1 - 15 can be used as a 'sked' function.

Area/Output

Option	Selection	Option	Selection
1	Area 1 or Output 1	9	Output 9
2	Area 2 or Output 2	10	Output 10
3	Area 3 or Output 3	11	Output 11
4	Area 4 or Output 4	12	Output 12
5	Output 5	13	Output 13
6	Output 6	14	Output 14
7	Output 7	15	Output 15
8	Output 8		

Table 132: Sked - Area/Output Options

The Area/Output options allow you to assign which area or output the sked will operate. For options 1 - 4, the sked type will determine if the sked will turn on/off an area or turn on/off an output. Refer to page 220 for more information on programming the sked type.

Time

This allows you to program the time of day the sked will operate. The time is programmed in 24-hour format (00:01 - 24:00). The four (4) addresses consist of both the hour of the day and the minute of the hour (HH:MM). Refer to both Option 1 and Option 2 to program which days the sked will operate at the time programmed here.

Sked Option 1

Option	Description
0	Option 1 Not Used
1	Every Day
2	Monday
4	Tuesday
8	Wednesday

Table 133: Sked - Option 1

Option 1 allows you to program the sked to operate everyday, Monday, Tuesday or Wednesday. You can add these options together so that the sked will operate multiple days or only program a single option so that the sked will only operate on a single day. Refer to Sked Option 2 to program days from Thursday to Sunday.

Sked Option 2

Option	Description
0	Option 2 Not Used
1	Thursday
2	Friday
4	Saturday
8	Sunday

Table 134: Sked - Option 2

Option 2 allows you to program the sked to operate Thursday, Friday, Saturday or Sunday. You can add these options together so that the sked will operate multiple days or only program a single option so that the sked will only operate on a single day. Refer to Sked Option 1 to program days from Monday to Wednesday.

Sked Defaults

Address 1184 - 1247

Sked #1	Address	1184	1185	1186 - 1189	1190	1191
	Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sked #2	Address	1192	1193	1194 - 1197	1198	1199
	Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sked #3	Address	1200	1201	1202 - 1205	1206	1207
	Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sked #4	Address	1208	1209	1210 - 1213	1214	1215
	Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sked #5	Address	1216	1217	1218 - 1221	1222	1223
	Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sked #6	Address	1224	1225	1226 - 1229	1230	1231
	Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sked #7	Address	1232	1233	1234 - 1237	1238	1239
	Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sked #8	Address	1240	1241	1242 - 1245	1246	1247
	Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RF Receiver Options

Address 1249

0

Option	Description
0	No RF Receivers Used
1	RF Receiver 1 Connected
2	RF Receiver 2 Connected
4	Disable RF Loop Tamper
8	Reserved

Table 135: RF Receiver Options

RF Receiver 1 Connected

This option needs to be programmed to assign RF points, RF keypads or RF keyfobs to use RF Receiver 1 (Option Bus Address 50). The address jumper on the RF receiver needs to be off (disabled) for RF Receiver 1.

Refer to Input Device on page 178 to program which RF zones will use RF Receiver 1 (Option 4). Refer to Address 2930 - 2937 on page 234 to assign RF keypads to Receiver 2. Refer to Address 2938 on page 235 to assign RF keyfobs to Receiver 1.

RF Receiver 2 Connected

This option needs to be programmed to assign RF points, RF keypads or RF keyfobs to use RF Receiver 2 (Option Bus Address 51). The address jumper on the RF receiver needs to be on (Enabled) for RF Receiver 2).

Refer to Input Device on page 178 to program which RF zones will use RF Receiver 2 (Option 5). Refer to Address 2930 - 2937 on page 234 to assign RF keypads to Receiver 2. Refer to Address 2938 on page 235 to assign RF keyfobs to Receiver 2.

Disable RF Loop Tamper

This option only applies to the RF3227E receiver.

As the RF3401E can be wired with a single 2k2 EOL or dual 2k2 resistors, the Disable RF Loop Tamper should be enabled for single resistor configuration and deselected for dual configuration.

RF Receiver Supervision Interval

Address 1250

5

Option	Description
0	No Supervision
1	1 Hours
2	2 Hours
3	4 Hours
4	12 Hours
5	24 Hours

Table 136: RF Receiver Supervision Interval

RF transmitters (sensor devices) send a supervisory signal approximately once every hour. The RF receiver expects to receive this supervisory signal from every transmitter in the interval programmed in this address. A 'Missing' report will be sent for each device that the RF receiver misses a supervisory signal. Refer to Alarm Reports Allowed on page 192 for more information.

A 'Missing Restore' report will be logged in the system history log when the RF receiver has received a signal from the missing device. The restore reports can only be logged in the history log (Command 85). Refer to Alarm Restore Report Routing on page 193 for more information.

RF Receiver Jam Detect

Address 1251

9

This address configures the RF Receivers for jamming detection. Programming this address as zero will almost always detect jamming. Programming this address as 15 will detect the least amount of jamming.

The value in this address is written to a register in the RF receiver. The receiver constantly monitors the amount of signal that the receiver is detecting. Therefore, this address sets how much background signal is enough to register a receiver being jammed.

Note

It is recommended that you leave this address as factory default unless advised by Bosch Security Systems Technical Support Personnel.

DX4010 – RS232 Serial Interface Module Supervision Options

Address 1253

0

Option	Description
0	No Options
1	RS232 Output In 'Log' Format For Printer
2	RS232 Output In 'GSP' (Gateway Serial Protocol)

Table 137: DX4010 - RS232 Serial Interface Module Supervision Options

You will need to also program DX4010 – RS232 Serial Interface Configuration Baud Rate on page 225 and DX4010 – RS232 Serial Interface Configuration Parity, Flow Control Stop Bit on page 226 for the serial printer to successfully print control panel events. Set the RS232 Serial Interface Module to Option Bus Address 250 via the address jumper pins as shown in Table 156 on page 257.

RS232 Output In 'Log' Format For Printer

This output is formatted in ASCII text similar to the text that appears in the keypad display. Each log event is printed on the printer in real time. Line breaks are included making this option suitable for connecting a serial printer to the module.

RS232 Output In 'GSP'

This output is formatted in Gateway Serial Protocol that allows you to integrate the SOLUTION 40 with future GSP-compatible devices.

DX4010 – RS232 Serial Interface Configuration Baud Rate

Address 1254

2

Option	Description
0	Reserved
1	1200
2	2400
3	4800
4	9600
5	14400

Table 138: DX4010 - RS232 Serial Interface Configuration Baud Rate

This address programs the baud rate that the control panel will send data to the DX4010. This should be set at the same baud rate as the serial device (i.e. RS232 serial printer etc).

You will need to also program DX4010 – RS232 Serial Interface Module Supervision Options on page 225 and DX4010 – RS232 Serial Interface Configuration Parity, Flow Control Stop Bit on page 226 for the serial printer to successfully print control panel events. Set the RS232 Serial Interface Module to Option Bus Address 250 via the address jumper pins as shown in Table 156 on page 257.

When communicating to a SOLUTION 40 control panel using the RS232 serial interface (direct link), you will need to set this address as 9600 baud (Option 4). Refer to the installation that came with the DX4010 module or the RPS user guide for further information on direct link communication.

DX4010 – RS232 Serial Interface Configuration Parity, Flow Control Stop Bit

Address 1255

0

Option	None	Odd Parity	Event Parity	Software Flow Control	Hardware Flow Control	1 Stop Bit	2 Stop Bit
0	Yes			Yes		Yes	
1	Yes				Yes	Yes	
2	Yes			Yes			Yes
3	Yes				Yes		Yes
4		Yes		Yes		Yes	
5		Yes			Yes	Yes	
6			Yes	Yes		Yes	
7			Yes		Yes	Yes	

Table 139: DX4010 - RS232 Serial Interface Configuration Parity, Flow Control Stop Bit

This address allows you to configure the control panel for your printer. Most printers will operate using the default value. Some printers may operate more efficiently using a different option.

You will need to also program DX4010 – RS232 Serial Interface Module Supervision Options on page 225 and DX4010 – RS232 Serial Interface Configuration Baud Rate on page 225 for the serial printer to successfully print control panel events. Set the RS232 Serial Interface Module to Option Bus Address 250 via the address DIP switches as shown in Table 156 on page 257.

This address has no effect when using the direct connect method via RPS software to program the control panel.

DX8010 - DTMF Telephone Command Module

Address 1256

0

This is a reserved address for future developments of the DX8010 DTMF Telephone Command Module.

DX2010 Configuration Options

Address 1257 - 1261

The DX2010 is a separate, eight input zone expander, that connects to the control panel via the option bus terminals. It can be mounted in the enclosure with the control panel or can be mounted separately in the AE20 enclosure.

You can connect up to four DX2010 expanders to build the SOLUTION 40 up to 40 zones. These are addresses as expander 101,102,103,104 and 105. Refer to Address 0746 onwards, to program which zones on the system are from the expander.

The DX2010 currently supports either 2k2 EOL resistors or both 2k2 and 3.65k EOL resistors in the zone doubling configuration. If zone doubled the expanders must be set to addresses 106 and/or 107 and has fixed 150 millisecond zone response time.

It can also be configured to require multiple EOL resistors in a tamper-wired configuration.

DX2010 Configuration Options			
0	300ms debounce time	+ 0	Tamper wired EOL
1	150ms debounce time	+4	Single 2k2 EOL resistor
2	75ms debounce time	+8	Single 2k2 EOL, 30%zones
3	30ms debounce time	+12	Reserved

Addresses 1257 – 1261 must be programmed to configure the DX2010 zone input configurations. For example: if you wished to make DX2010 zone expander for zones 9 – 16 all 30ms debounce time with tamper wired EOL configuration. Address 1257 would be programmed with a 3 .

AC Fail & Ground Fault Trouble Tone

Address 1265

0

Option	Description
0	No Options Programmed
1	AC Fail Trouble Tone Allowed
2	Ground Fault Display and Trouble Tone Allowed
4	PIN codes Assigned To Authority Level 3 Allowed
8	PIN codes Assigned To Authority Level 4 Allowed

Table 140: AC Fail & Ground Fault Trouble Tone

AC Fail Trouble Tone Allowed

When this option is programmed, if an 'AC Fail' trouble condition is registered by the control panel, the keypad will sound the trouble tone until the trouble has been cleared. If this option is not programmed, the keypad will not sound a trouble tone when the control panel registers an AC fail condition.

Refer to page 121 to program other AC Power Supervision Options and page 122 to program AC Fail, Low/Missing Battery Report Options.

Ground Fault Display and Trouble Tone Allowed

When this option is programmed, if a 'Ground Fault' has been registered by the control panel, the keypad will sound a trouble tone and flash the 'Service' indicator on the keypad. If this option is not programmed, the keypad will not sound a trouble tone or flash the 'Service' indicator on the keypad. Refer to page 122 to program AC Fail, Low/Missing Battery Report Options.

Keypad Text Displays

Address 1266 - 2929

When programming keypad text via the keypad, selecting any text Address will put you in a different programming mode that allows you to edit text blocks. Text blocks comprise of a maximum of 16 characters (each character uses two Addresses).

When programming text, various keys on the keypad operate differently. A group of characters are assigned to each of the numeric keys on the keypad. Pressing the same numeric key again will toggle to the next character assigned to the key (eg. Press the [2] key will display the ‘A’ character, press the [2] key again will toggle to the ‘B’ character, press the [2] key again will toggle to the ‘C’ character etc). Refer to the table below for more information.

Key	Characters Assigned To Each Numeric Key On Keypad								
1	.	,	?	!	-	&	<	>	1
2	A	B	C	a	b	c	2		
3	D	E	F	d	e	f	3		
4	G	H	I	g	h	i	4		
5	J	K	L	j	k	l	5		
6	M	N	O	m	n	o	6		
7	P	Q	R	S	p	q	r	s	7
8	T	U	V	t	u	v	8		
9	W	X	Y	Z	w	x	y	z	9
0	SPACE	→	_	@	#	\$	%	*	0

Table 141: Text Keypad Character Set

Key	Description
*	Moves back to previous text block
Command	Moves forward to next text block
A-Key	Moves the cursor backwards one character
B-Key	No Function
C-Key	Moves the cursor forward one character

Table 142: Text Keypad Key Functions

Note

The Area Idle Text will only display if a zone programmed for both Away and Stay mode is faulted when the area that the zone is assigned to is disarmed.

Address 1266 - 1297

Call For Service Text

Default = Blank

P	r	e	s	s		0		T	o		V	i	e	w	
---	---	---	---	---	--	---	--	---	---	--	---	---	---	---	--

The 'Call for Service' addresses provide 16 characters or programmable text to be displayed in the second line when the first line displays 'Call for Service'.

The following are possible example entries for the second line of text – Security company telephone number, preferred telephone number called for service or display 'Press 0 to view' which will show system trouble events.

Address 1298 - 1329

A-Key Text

Default = A Key Text

A		K	e	y		T	e	x	t						
---	--	---	---	---	--	---	---	---	---	--	--	--	--	--	--

Address 1330 - 1361

B-Key Text

Default = B Key Text

B		K	e	y		T	e	x	t						
---	--	---	---	---	--	---	---	---	---	--	--	--	--	--	--

Address 1362 - 1393

C-Key Text

Default = C Key Text

C		K	e	y		T	e	x	t						
---	--	---	---	---	--	---	---	---	---	--	--	--	--	--	--

The A, B, C key text addresses provide 16 characters for programmable text to describe the corresponding key function.

Address 1394 - 1425

Area 1 Name Text

Default = SOLUTION 40

		S	o	l	u	t	i	o	n		4	0			
--	--	---	---	---	---	---	---	---	---	--	---	---	--	--	--

The area name text addresses provides 16 characters for programming text to describe each area.

Address 1426 - 1457

Area 1 Idle Text

Default = Not Ready

N	o	t		R	e	a	d	y							
---	---	---	--	---	---	---	---	---	--	--	--	--	--	--	--

The area idle text addresses provides 16 characters for programming text to display when the area is idle (no alarms, no troubles when the area is disarmed).

If the option 'Disable Zone Status On Keypads' on page 169 is programmed, the second line of text keypads will always display the default Area Idle Text displays as 'Not Ready' when the system is disarmed. Therefore, you need to change the text that the Area Idle Text display for each area.

If the option 'Disable Zone Status On Keypads' on page 169 is not programmed, when all zones are normal, the second line of the keypad will 'OK for Away'. If a zone that is programmed to be armed in Stay Mode becomes faulted, the keypad will display 'Not Ready' until the zone is returned to normal. If a zone that is not programmed to be armed in Stay Mode becomes faulted, the keypad will display 'OK for Stay'.

Address 1458 - 1489

Area 2 Name Text

Default = SOLUTION 40

		S	o	l	u	t	i	o	n		4	0		
--	--	---	---	---	---	---	---	---	---	--	---	---	--	--

The area name text addresses provides 16 characters for programming text to describe each area.

Address 1490 - 1521

Area 2 Idle Text

Default = Not Ready

N	o	t		R	e	a	d	y						
---	---	---	--	---	---	---	---	---	--	--	--	--	--	--

The area idle text addresses provides 16 characters for programming text to display when the area is idle (no alarms, no troubles when the area is disarmed). Refer to Area 1 Idle Text on page 229 for more information.

Address 1522 - 1553

Area 3 Name Text

Default = SOLUTION 40

		S	o	l	u	t	i	o	n		4	0		
--	--	---	---	---	---	---	---	---	---	--	---	---	--	--

The area name text addresses provides 16 characters for programming text to describe each area.

Address 1554 - 1585

Area 3 Idle Text

Default = Not Ready

N	o	t		R	e	a	d	y						
---	---	---	--	---	---	---	---	---	--	--	--	--	--	--

The area idle text addresses provides 16 characters for programming text to display when the area is idle (no alarms, no troubles when the area is disarmed). Refer to Area 1 Idle Text on page 229 for more information.

Address 1586 - 1617

Area 4 Name Text

Default = SOLUTION 40

		S	o	l	u	t	i	o	n		4	0		
--	--	---	---	---	---	---	---	---	---	--	---	---	--	--

The area name text addresses provides 16 characters for programming text to describe each area.

Address 1618 - 1649

Area 4 Idle Text

Default = Not Ready

N	o	t		R	e	a	d	y						
---	---	---	--	---	---	---	---	---	--	--	--	--	--	--

The area idle text addresses provides 16 characters for programming text to display when the area is idle (no alarms, no troubles when the area is disarmed). Refer to Area 1 Idle Text on page 229 for more information.

Location text programs what the zone description displays for each zone. Location 1 text will display the zone description for Zone 1. Location 2 text will display the zone description for Zone 2 etc.

Address 1650 - 1681

Location 1 Text

Default = Zone 1

				Z	o	n	e	1							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1682 - 1713

Location 2 Text

Default = Zone 2

				Z	o	n	e	2							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1714 - 1745

Location 3 Text

Default = Zone 3

				Z	o	n	e	3							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1746 - 1777

Location 4 Text

Default = Zone 4

				Z	o	n	e	4							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1778 - 1809

Location 5 Text

Default = Zone 5

				Z	o	n	e	5							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1810 - 1841

Location 6 Text

Default = Zone 6

				Z	o	n	e	6							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1842 - 1873

Location 7 Text

Default = Zone 7

				Z	o	n	e	7							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1874 - 1905

Location 8 Text

Default = Zone 8

				Z	o	n	e	8							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1906 - 1937

Location 9 Text

Default = Zone 9

				Z	o	n	e	9							
--	--	--	--	---	---	---	---	---	--	--	--	--	--	--	--

Address 1938 - 1969

Location 10 Text

Default = Zone 10

				Z	o	n	e	1	0						
--	--	--	--	---	---	---	---	---	---	--	--	--	--	--	--

Address 1970 - 2001

Location 11 Text

Default = Zone 11

				Z	o	n	e	1	1						
--	--	--	--	---	---	---	---	---	---	--	--	--	--	--	--

Address 2002 - 2033

Location 12 Text

Default = Zone 12

				Z	o	n	e	1	2						
--	--	--	--	---	---	---	---	---	---	--	--	--	--	--	--

Address 2034 - 2065

Location 13 Text

Default = Zone 13

				Z	o	n	e	1	3						
--	--	--	--	---	---	---	---	---	---	--	--	--	--	--	--

Address 2066 - 2097

Location 14 Text

Default = Zone 14

				Z	o	n	e	1	4						
--	--	--	--	---	---	---	---	---	---	--	--	--	--	--	--

Address 2098 - 2129

Location 15 Text

Default = Zone 15

				Z	o	n	e	1	5						
--	--	--	--	---	---	---	---	---	---	--	--	--	--	--	--

Address 2130 - 2161
Location 16 Text

Default = Zone 16

				Z	o	n	e		1	6					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2162 - 2193
Location 17 Text

Default = Zone 17

				Z	o	n	e		1	7					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2194 - 2225
Location 18 Text

Default = Zone 18

				Z	o	n	e		1	8					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2226 - 2257
Location 19 Text

Default = Zone 19

				Z	o	n	e		1	9					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2258 - 2289
Location 20 Text

Default = Zone 20

				Z	o	n	e		2	0					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2290 - 2321
Location 21 Text

Default = Zone 21

				Z	o	n	e		2	1					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2322 - 2353
Location 22 Text

Default = Zone 22

				Z	o	n	e		2	2					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2354 - 2385
Location 23 Text

Default = Zone 23

				Z	o	n	e		2	3					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2386 - 2417
Location 24 Text

Default = Zone 24

				Z	o	n	e		2	4					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2418 - 2449
Location 25 Text

Default = Zone 25

				Z	o	n	e		2	5					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2450 - 2481
Location 26 Text

Default = Zone 26

				Z	o	n	e		2	6					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2482 - 2513
Location 27 Text

Default = Zone 27

				Z	o	n	e		2	7					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2514 - 2545
Location 28 Text

Default = Zone 28

				Z	o	n	e		2	8					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2546 - 2577
Location 29 Text

Default = Zone 29

				Z	o	n	e		2	9					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2578 - 2609
Location 30 Text

Default = Zone 30

				Z	o	n	e		3	0					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2610 - 2641

Location 31 Text

Default = Zone 31

					Z	o	n	e			3	1						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2642 - 2673

Location 32 Text

Default = Zone 32

					Z	o	n	e			3	2						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2674 - 2705

Location 33 Text

Default = Zone 33

					Z	o	n	e			3	3						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2706 - 2737

Location 34 Text

Default = Zone 34

					Z	o	n	e			3	4						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2738 - 2769

Location 35 Text

Default = Zone 35

					Z	o	n	e			3	5						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2770 - 2801

Location 36 Text

Default = Zone 36

					Z	o	n	e			3	6						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2802 - 2833

Location 37 Text

Default = Zone 37

					Z	o	n	e			3	7						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2834 - 2865

Location 38 Text

Default = Zone 38

					Z	o	n	e			3	8						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2866 - 2897

Location 39 Text

Default = Zone 39

					Z	o	n	e			3	9						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

Address 2898 - 2929

Location 40 Text

Default = Zone 40

					Z	o	n	e			4	0						
--	--	--	--	--	---	---	---	---	--	--	---	---	--	--	--	--	--	--

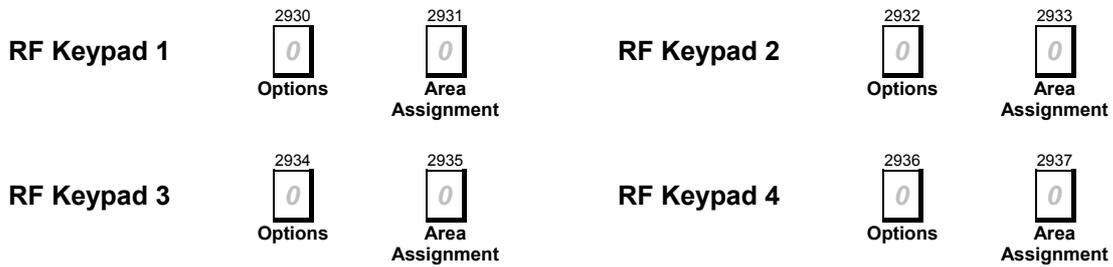
RF Keypads – Future Release

The control panel supports up to four RF keypads. Each keypad has two programming parameters that need to be programmed. The four RF keypads have fixed Option Bus Addresses and zone ID's as follows:

RF Keypad	Option Bus Address (Receiver 1)	Option Bus Address (Receiver 2)	Low Battery Report ID Number
1	52	60	255
2	53	61	254
3	54	62	253
4	55	63	252

Table 143: RF Keypad Option Bus Address/Low Battery ID Numbers

Defaults



Options / Area Assignment

Address 2930 - 2937

Option	RF Keypad Options
0	Disabled
1	Reserved
2	Assigned To RF Receiver 2
4	Supervised
8	Reserved

Option	RF Keypad Area Assignment
0	Disabled
1	Assigned To Area 1
2	Assigned To Area 2
3	Assigned To Area 3
4	Assigned To Area 4

Table 144: RF Keypad Options / Assignment

Assigned To RF Receiver 2

If this option is programmed the RF keypad will operate via RF Receiver 2. If this option is not programmed, the RF keypad will operate via RF Receiver 1. Refer to Address 1249 on page 223 to program Receiver 1 and/or Receiver 2.

Supervised

If this option is programmed, the control panel will supervise the RF keypad (i.e. Missing, low battery etc).

RF Keypad Area Assignment

An RF keypad can only be assigned to one of the available four areas. Program the option (1 – 4) that corresponds to the area that you want to assign the RF keypad.

RF Keyfobs

The SOLUTION 40 control panel can be programmed with up to a maximum of 32 RF keyfobs (RF devices 45 – 76). Each RF keyfob is assigned automatically to a PIN Code (eg. RF keyfob 1 (RF device 45) will operate with the same authority level and area assignment as PIN Code 1). Only the installer (security company) can program the RF keyfobs by entering the installer's mode response and selecting the RF menu option. Refer to RF Menu - Adding RF Devices on page 87.

If a RF keyfob has a low battery condition, the control panel will send a 'RF Low Battery' report [Equ 181]. When the RF keyfob registers a good battery, the control panel will send a 'RF Low Battery Restore' report [Equ 182]. These reports follow the System Status Report Routing on page 123.

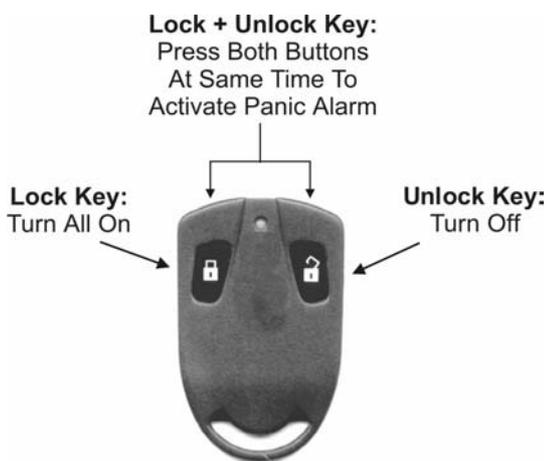


Figure 17: Two Button RF Keyfob (RF3332E)

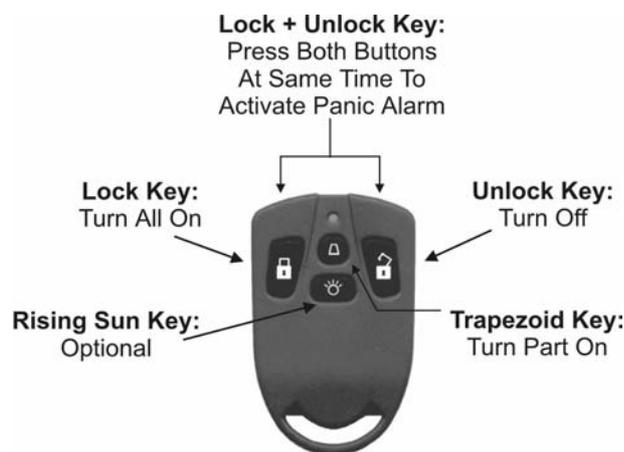


Figure 18: Four Button RF Keyfob (RF3334E)

RF Keyfob Receiver Assignment Options

Address 2938

8

Option	Description
0	Assigned To RF Receiver 1
1	Assign Keyfobs 01 - 08 To Receiver 2
2	Assign Keyfobs 09 - 16 To Receiver 2
4	Assign Keyfobs 17 - 24 To Receiver 2
8	Assign Keyfobs 25 - 32 To Receiver 2

Table 145: RF Keyfob Receiver Assignment Options

A maximum of 24 RF keyfobs can be assigned to a single RF receiver. Therefore, both RF receiver 1 and RF receiver 2 are required to assign all 32 RF keyfobs. At factory default, only keyfobs 1 – 24 are assigned to RF receiver 1.

RF Keyfob Options

Address 2939

7

Option	Description
0	No Options Programmed
1	'Panic' Alarm Allowed
2	Audible Alarm Allowed For 'Panic'
4	Assign 'O' (Trapezoid) Key To Arm the System in Stay mode
8	Assign 'P' (Rising Sun) Key To Arm the System in Stay 2 mode

Table 146: RF Keyfob Options

'Panic' Alarm Allowed

If this option is programmed, a 'Panic' alarm can be initiated by pressing both the 'lock' and 'unlock' keys simultaneously. An RF keypad panic alarm will send a 'Duress' report [Equ 74]. The 'Duress' report will follow the report routing of Address 0703 on page 175.

Audible Alarm Allowed For 'Panic'

If this option is programmed, a 'Panic' alarm that has been activated via an RF keyfob will sound an audible alarm. This option requires 'Panic' Alarm Allowed in this address programmed to operate.

Assign 'O' (Trapezoid) Key To Arm System in Stay Mode

If this option is programmed, the trapezoid key will arm the system (or Area) in Stay mode. You can also program an output to follow the trapezoid key (Output event type 1,15) but not simultaneously. Refer to Outputs on page 204 for more information.

Assign 'P' (Rising Sun) Key To Arm System in Stay 2 Mode

If this option is programmed, the sun key will arm the system (or Area) Stay 2. You can also program an output to follow the sun key (Output event type 2,0) but not simultaneously. Refer to Outputs on page 204 for more information.

Return To Factory Default

Address 2944

0

This address allows you to reset the control panel configuration back to factory default. Program a one (1) into this address to default the panel configuration.

Note:

If a panel has been defaulted the current date and time settings must be entered as the default procedure clears time and date counters..

- Enter current date and time by using [Command] [4] [5]. You may be asked to enter your PIN.
- Press [#] to exit.

Tamper Alarm / Trouble Configuration

Address 3406

15

Option	Description
0	No Trouble or Restoral Reports
1	Tamper Alarms when Armed
2	Tamper Alarms when Disarmed
4	Send Tamper Trouble Reports
8	Send Tamper Trouble Restoral Reports

Table 143: Tamper Alarm / Trouble Reporting Options

Tamper Alarms when Armed

This programming option is a global parameter. If this option is selected, then a tamper condition whilst the panel is armed creates a tamper alarm response. This includes 24hr zones as well as controlled zones. If not enabled, a tamper condition simply creates a tamper trouble condition.

Tamper Alarms when Disarmed

If this option is programmed, a tamper condition whilst the panel is disarmed creates a tamper alarm response.

If this option is not enabled, a tamper condition simply creates a tamper trouble condition. The non-zone tampers apply to all areas. A non-zone tamper follows the setting of this option, however if any area is armed a non-tamper zone follows the setting of the Tamper Alarms when Armed option.

Send Tamper Trouble Reports

If this option is programmed, then a tamper trouble report is sent to the monitoring station. For zone related events, the area and zone number are reported and event 139 is used for the Tamper Trouble and the Option Bus Module Tamper uses event 127

Send Tamper Trouble Restorals Reports

If this option is programmed, then a tamper trouble restoral report is sent to the monitoring station. Event 146 is used for the Tamper Trouble restoral on a zone related tamper. The Option Bus Module Tamper uses event 128 as its restoral report.

System Alarm Reports Configuration

Address 3407

7

Option	Description
0	No System Tamper Alarm Reports, Alarm Output
1	Send System Tamper Alarm Reports
2	Send System Tamper Alarm Restoral Reports
4	Enable System Tamper Alarm Output
8	Reserved

Table 144: System Alarm Reports Options

No System Tamper Alarm Reports, Alarm Output

If this option is selected, then no system tamper alarm reports will be generated.

Send System Tamper Alarm Reports

If this option is programmed, a tamper alarm report can be sent, when a non-zone related tamper alarm is generated, such as an Option Bus Device Tamper Alarm. The panel checks if System Alarm Reports are enabled. If they are enabled, the panel sends the alarm report using the account number and area information from area 1. If the tamper alarm occurs because the zone function type is a Tamper Alarm, the alarm reporting follows the zone function configuration. The tamper alarm is the only alarm associated with this zone function. For zone related events, event 3 is used for the Tamper Alarm report.

Send System Tamper Alarm Restoral Reports

If this option is programmed, a tamper alarm restoral report can be sent, when a non-zone related tamper alarm is generated, such as an Option Bus Device Tamper restoral. Event 112 is used for the Tamper Alarm restoral for an option bus tamper alarm restoral.

Enable System Tamper Alarm Output

If this option is programmed, it enables the activation of alarm output functions when a non-zone related tamper alarm is generated, such as an Option Bus Device Tamper alarm.

The tamper alarm causes the alarm response. The keypad displays the message to enter a PIN to silence the alarm. After the PIN is entered, the alarms are scrolled and the user is instructed to hold the # key to clear the display. If # is held to clear the display and a zone is still tampered, the alarm condition is converted to a trouble condition. The panel continues to show the zone trouble until the zone is restored. If a non-zone tamper is still present when the # key is held, the panel clears the alarms but still displays a system trouble. The system trouble continues to be displayed until the tamper condition is cleared. Since the alarm condition has already been acknowledged by the user entering his PIN, converting the alarm to a trouble condition should not cause the Enhanced Siren Output to activate.

Tamper Reset / Arming Options

Address 3408

3

Option	Description
0	No Tamper Reset / Arming Options
1	Allow User Reset of Tamper / Troubles
2	Allow Force Arming of Tamper / Troubles
4	Reserved
8	Reserved

Table 144: System Alarm Reports Options

No Tamper Reset / Arming Options

If this option is selected, the no system tamper alarm reports will be generated when a tamper condition occurs.

Allow User Reset of Tamper / Troubles

In order for a user to have this capability, the option “Allow User Reset of Tampers/Troubles” must be enabled, the user must have “Authority Level Configuration Option 9” enabled for his authority level, and have “Authority Level Configuration Option 10” enabled for his authority level. The tamper conditions are latching and can only be reset using command [#][4][7]. They do not automatically restore. The tamper condition can only be reset if the panel has detected that device operation is back to normal. In the case of a zone tamper, not only must the tamper be restored, but the zone must be normal.

Allow Force Arming of Tamper / Troubles

When this option is disabled and a tamper condition exists, the user can not set or arm the area by any method, including SKED, keyswitch, DSRPS, telephone, key fob or keypad. The area can not be armed in Stay even if the tampered zone is not a stay zone. Any controlled zones or 24-hour zones that are tampered prevent arming in their assigned area. The Option Bus Device Missing and Tamper (including keypads), RF Receiver Trouble, and Supervised Siren Missing prevent arming in all areas.

If enabled and a tamper condition exists, arming the panel from a SKED, keyswitch, DSRPS, telephone, or a key fob force arms the panel. If a zone is tampered, the zone function must have force arming enabled to allow the area to force arm. The non-zone tampers can always be force armed. The user can also force arm from a keypad using the force arming command if his authority level has “Authority Level Configuration Option 7” enabled. The area displays that it has a trouble while armed. If a zone is tampered and restores while the panel is armed, the zone remains in tamper trouble

Contact Set / Exit Delay Cancel Options

Address 3409

1

Option	Description
0	No Contact Set arming
1	Enable Contact Set in Area 1
2	Enable Contact Set in Area 2
4	Enable Contact Set in Area 3
8	Enable Contact Set in Area 4

Table 145: Contact Set / Exit Delay Cancel Options

No Contact Set Arming

Does not allow any contact set arming.

Enable Contact Set in Area

Exit delay is started, by pressing the arming sequence on one of the keypads. When any Entry/Exit Delay Zone, either type 1 or type 2, goes from its alarm condition to normal, and all other zones in the area are normal or bypassed, exit delay is terminated and the area is armed. This is a contact set. If a zone is faulted when the exit zone restores, the restoral is ignored. Contact Set only applies to arming in Away mode. If arming in Stay or Stay 2 modes, the area only arms at the end of exit delay.

Exit Terminator Areas

Address 3410

0

Option	Description
0	No Exit Terminator Arming
1	Enable Exit Terminator Arming in Area 1
2	Enable Exit Terminator Arming in Area 2
4	Enable Exit Terminator Arming in Area 3
8	Enable Exit Terminator Arming in Area 4

Table 145: Contact Set / Exit Delay Cancel Options

No Exit Terminator Arming

Does not allow any exit terminator arming. When the exit delay is active, all zones are normal, and the No Delay is pressed, the area arms immediately. If a zone is faulted when the button is pressed, the button is ignored. The exit terminator button only applies to arming in Away mode. If arming in Stay or Stay 2, the area only arms at the end of exit delay

Enable Exit Terminator in Area

Use this parameter to select which areas arm when an exit terminator button is pressed and all zones are normal. Each area can be individually selected to arm on the activation of an exit terminator button. Each button only arms the area to which its zone is assigned.

When Exit Delay is active, all zones are normal, and the exit terminator button is pressed, the control panel arms immediately.

Panel Arming Options

Address 3411

6

Option	Description
0	No Panel Arming Options
1	Enable Bad Set Operation
2	Panel is Unarmed during exit delay
4	Start Exit Delay with Faulted Zones

Table 145: Panel Arming Options

Enable Bad Set Operation

A “Bad Set” occurs when the exit timer reaches zero and unsealed zones still exist. Any panel output configured for Bad Set activates at this time if the zone is still faulted and only resets when a PIN is entered. When a Bad Set occurs, the keypad will sound a “Bad Set “ tone. The relevant areas will not arm at the end of exit time if a faulted zone is detected.

To report a Bad Set, reports (221) must be enabled, Closing reports must be enabled (261) and Area Open / Close reports (296) must be enabled and Exit Error reports must be enabled (261).

If First to Open/ Last to Close for area reporting is enabled, the Bad Set report will only be sent on the last area report.

RPS will not indicate a Bad Set.

Panel Is Unarmed During Exit Delay

If this option is selected, the relevant armed area remains in the disarmed state until the exit delay is finished. Controlled zones may fault but do not cause alarms, but will report a trouble. The ON indicator on the keypad will not illuminate until exit time has expired.

If not enabled, the ON indicator on the keypad will illuminate at the commencement of exit time. Any instant controlled zones will create an alarm if unsealed at the end of exit time.

Start Exit Delay With Faulted Zones

If this option is selected, any faulted entry/exit or follower zones are ignored and the panel proceeds with arming the area. The keypad will show “Not Ready “ if zones are faulted.

If not enabled, any faulted zone will prevent the area from arming. The area must be either force armed or faulted zones bypassed before arming can occur.

Verified Alarm Timer

Address 3412 - 3413

00

Address	Description
3412	Increments Of 16 minutes (Time =Value x 16)
3413	Increments Of 1 minute (Time = Value x 1)

Table 147: Confirmation Alarm Timer

This parameter is used to set the time for the verified alarm timer. The amount of time entered in this parameter defines the window of time in which two independent alarms must occur for the control panel to declare a verified alarm.

Personal Dialling Format Configuration

Address 3414 - 3429

Option	Selection	Option	Selection
0	No Report Sent	8	2 beeps, __, 2 beeps
1	1 beep	9	3 beeps, __, 1 beep
2	1 beep, __, 1 beep	10	4beeps
3	2 beeps	11	1 beep, __, 4 beeps
4	1 beep, __, 2 beeps	12	2 beeps, __, 3 beeps
5	2 beeps, __, 1 beep	13	3 beeps, __, 2 beeps
6	3 beeps	14	4 beeps, __, 1 beep
7	1 beep, __, 3 beeps	15	

Table 147: Personal Dialling Format

For each Personal Dialling Format Group, one of the following sixteen values is programmed for the format code. If a value of 0 is entered, no report is sent. For the other selections, the two digits represent the codes sent. For example, a report with a value of four sounds one beep, waits one second, sounds two beeps, waits three seconds, and then repeats

The panel starts by placing a phone call. The panel then sends the first digit of the report, waits one second, then sends the second digit of the report. The panel then waits three seconds, and sends the report again. The panel continues to repeat the report for a total of ten times. Some reports have zero as the second digit. In these cases, only the first digit is sent, the panel waits approximately three seconds, and then the report is repeated.

During the three second delay between each report, pressing the 5 key on the phone’s keypad acknowledges the report. The panel advances to the next event in the dialer queue and sends it in the same phone call, or hangs up if there are no more events to report.

If no one acknowledges the report, after 10 tries the panel hangs up and calls again. If two phone numbers are programmed for the destination, the second phone number is called. The panel follows the normal event phone routing. For each event, the panel tries five times or until the event is acknowledged. If no acknowledge is received in the five phone calls, the panel logs a communication failure for the destination.

Glossary

24-Hour Zone	Zones (sensors) that are always ready to detect intrusion or smoke even when the system is disarmed. There are two types of 24-hour zones – Fire and Non-Fire.
Account Number	The account number is the customer identification number the control panel sends to the security company.
Address	When the installer selects a value for a parameter, the panel stores the selection in E2 memory (called Addresses). Each parameter uses one or more Addresses. When programming from the keypad, the installer enters their selection directly into the memory (Addresses).
Alarm	An indication of an emergency condition. The condition may be that have an intrusion, a fire, a medical or panic etc. Locally, the condition usually causes visual and/or audible annunciation. In a system that is monitored, this condition is transmitted (via communication path) to the security company.
Area	The control panel can be split (divided) up to a maximum of four independent areas. A defines section that can be armed and disarmed independently. This is sometimes also referred to as a partition. When areas area used, they are numbered consecutively beginning with 1.
Arming States	
Away	All controlled zones (delay, follower, instant zones) are active (armed), ready to detect intrusion.
Stay	Only part of the system is armed. The installer programs selected controlled zones (delay, follower, instant zones) to be automatically bypassed when you arm the system in Stay mode. This feature is ideal when you want to turn on all perimeter zones (eg. doors and windows) and leave the interior zones disabled so that you can move freely within the premises without sounding an alarm.
Stay 2	Only part of the system is armed. This allows you to program selected controlled zones (delay, follower, instant zones) to be automatically bypassed when you arm the system in Stay 2 mode. This feature is ideal when you want to turn on all perimeter zones (eg. doors and windows) and leave the interior zones disabled so that you can move freely within the premises without sounding an alarm.
Off	The system is disarmed. All controlled zones (delay, follower, instant) will not detect intrusion and sound an alarm.
Authority Level	This allows or restricts each PIN Code to available commands that operate the system.
Burglary Alarm Tone	The keypad will sound continuous for any burglary alarm.
Bypass	To cause a system to ignore changes of state (open/normal/short) from a given zone (or zone) regardless of the arming state. Bypassed zones and zones do not cause alarm events.
Central Station	A security company where trained staff monitor many security control panels 24-hours a day. The control panel may be programmed to report to the central station during alarm conditions, allowing staff to dispatch the appropriate authorities to respond.
Contact ID (CID)	A communication format that the control panel uses to communicate to the security company's central station receiver that utilizes a set of standard DTMF tones for transmission of information.
Control Panel	(or Alarm Panel) The part of a security system that handles control and communication, whether as combined or separate physical units.

Controlled Zone	A zone that responds to alarm conditions only when the system is armed. When the system is disarmed, the controlled zone does not respond to alarm conditions. Controlled zones may be programmed as entry/exit (delay), follower or instant zones.
Cross-zone	A cross-zone requires two separate zones to register as faulted to initiate an alarm condition. Fire zones cannot be programmed for cross-zone operation.
Disarm	To disarm a security system (except for 24-hour sensing devices).
RPS	RPS (Remote Account Manager) IV is a windows based account management and panel programming utility designed to configure control panels from remote locations (eg. Office).
DTMF Dialling	Dual Tone Multi-Frequency. This is a standard signalling method for dialling and data transmission using a combination of two sine waves at different frequencies. Also commonly referred to as Touch-Tone signalling.
Duress PIN Code	A PIN Code that can operate like a personal PIN Code, however, when used, it sends an alarm signal to the security company without sounding / displaying an alarm on the premises.
Entry Delay	This is the time programmed to allow you to enter the premises and disarm the system before the control panel sounds an alarm.
Error Tone	The keypad buzzer will sound four beeps.
Exit Error	A signal produced by a zone that is still violated when the exit time has expired.
Exit Time/Exit Delay	The period of time allowed after arming a control panel to exit the premises before tripping an alarm.
Faulted Zone	A zone that is not in the normal state (eg. an open door or window etc).
Fire Alarm Tone	The keypad buzzer will sound for three seconds followed by a six second pause (repeating).
Follower Zone	A zone that is programmed to sound an instant alarm unless a delay zone if faulted first. When a delay zone is faulted first, the follower zone will not register as an alarm until the delay time has expired. The system will need to be armed for a follower zone to sound an alarm.
Force Arming	A method of turning the system on when controlled zones are still faulted.
Handshake	A signal sent by one end of the communication channel to the other indicating reception of signal.
Independent Zone Control	A device that allows a single zone (or zone) on a control panel to be armed or disarmed independently from the rest of the system.
Instant Alarm	A zone type that generates an alarm immediately when faulted. The zone type does not follow any entry/exit delay time.
Invisible Zone	A zone that does not display at any keypad during an alarm or trouble condition.
Keyfob	A small handheld device that consists of buttons that allow you to arm and disarm the control panel. Other functions may be allows via the keyfob such as turning outputs on and off or to activate panic alarms.
Keypad	The part of a security system from which a user can arm or disarm the system, and interact with the system via various commands and functions.

Keyswitch

Momentary	To operate a momentary keyswitch, insert the key, turn it and then release it. The key returns to its starting position automatically. The key cannot be removed unless it is in the starting position.
Maintained	A maintained keyswitch typically has two positions marked 'Armed' and 'Disarmed'. To operate, insert the key, turn the key to the desired position and remove the key.
No Delay	Arming the system without entry delay.
Options Bits	'Option Bits' are a unique type of parameter that allows the installer to configure up to four different features by programming a single value in a single Address.
Output	The SOLUTION 40 provides up to 20 outputs. The installer programs an output to operate a visual and/or sounding device when an alarm occurs. Outputs can also be programmed to operate when other system events occur.
PSTN	Public Switched Telephone Network. An assembly of communications facilities and central office equipment operated jointly by authorized common carriers that provides the general public with the ability to establish communications channels via discrete dialling codes.
Partition	See Area
Parity	A method of checking the accuracy of transmitted data by adding an extra bit to the number when necessary to make the number odd or even.
Parameter	Each program parameter sets a specific value or chooses an option.
PIN Code	A unique identification number issued to each user of the system at the time of installation of each system. This PIN codes is required to operate the system (eg. arm/disarm, test the system, initiate commands etc).
Pulse Count	This programs the maximum number of pulses a zone (sensing device) needs to register before activating an alarm. The number of pulses must be detected within the pulse count time.
Pulse Count Time	This programs the start and end period for the number of pulses programmed in the pulse count parameter to register so that the zone (sensing device) registers an alarm.
Pulse Dialling	A method of selecting the called number by pulsing the telephone line.
Recent Close	A transmission indicating that the security system has recently been armed.
Remote Programming	System programming by means of the system user's telephone line.
Report	An electronic transmission sent by the control panel to the security company containing detailed information about an event detected by the control panel (security system).
Restoral Report	A signal sent upon removal of a trouble or alarm condition from an alarm circuit.
SDI	Serial Interface
Sked	A parameter that allows a selected event (eg. auto arm) to occur at a specific time.
Swinger Bypass	A programmable feature that determines the number of alarms or trouble events the zone can send during an arming period. If the number of events exceed the swinger bypass count, the zone is then bypassed from reporting again until the arming state changes (arm/disarm).

Trouble	An event that needs to be corrected (rectified). A trouble condition could be a zone trouble or system trouble event. See Command 4 on page 43 for further information.
Trouble Tone	The keypad will sound four beeps followed by six seconds pause (repeat) when a trouble condition occurs.
Unbypass	To restore a zone (or zone) to normal functioning by removing the bypass condition.
User	The person(s) at the control panel site that operate and/or have access to the system.
Visible Zone	A zone that displays at keypads during alarm or trouble conditions.
Wink	An LED that slowly flashes to indicate a specified status condition.
Zone	A dedicated input to the control panel containing one or more sensor devices that will trip the input upon activation of any one-sensor device
Zone Index	Is used to configure one or more zones configuration and how they respond.
Zone Type	Describes what the zone does (eg. fire, burglary, 24-hour etc).

Terminals

Terminal	Description
18 VAC	A TF008 plug pack - 18 VAC, 22 VA internally fused transformer is the primary power source. The control panel AC power circuit provides 700 mA of rectified AC power. The control panel reserved 100 mA of this power for internal operations, leaving 600 mA to power external devices such as keypads, detectors and expander boards.
Earth	Connect this terminal to earth ground.
Grn (Green)	Connect the Green data terminal of any option bus device (eg. Keypads, expansion boards) to this terminal. The control panel supports up to 305 m (1000 ft) of #22 AWG (0.64 mm) / 7.02 wire on these terminals.
Yel (Yellow)	Connect the Yellow data terminal of any option bus device (eg. Keypads, expansion boards) to this terminal. The control panel supports up to 305 m (1000 ft) of #22 AWG (0.64 mm) / 7.02 wire on these terminals.
Aux Power 12 VDC (-) Aux Power 12 VDC (+)	These terminals are used to power option bus devices (including optional accessories) up to 600 mA. These terminals are PTC protected (Positive Temperature Co-efficient).
Aux/Data – JP3 (RYGB)	4-pin connector to option bus and auxiliary power. Use to connect an installer keypad for programming of the control panel.
Red (Bat +) Black (Bat -)	These two terminals are used to connect the backup battery to the control panel. Connect the (+) terminal of the battery to the Red (Bat +) terminal. Connect the (-) terminal of the battery to the Black (Bat -) terminal.
PO4 (Output 4)	Programmable output, capable of providing a maximum of 500 mA (-). This terminal is PTC protected (Positive Temperature Co-efficient).
PO3 (Output 3)	Programmable output, capable of providing a maximum of 500 mA (-). This terminal is PTC protected (Positive Temperature Co-efficient).
PO2 (Output 2)	Programmable output, capable of providing a maximum of 500 mA (-). This terminal is PTC protected (Positive Temperature Co-efficient). This output can be programmed to supervise horn speaker connection.
Alrm +	Alarm power capable of providing a maximum of 1850 mA (+). This terminal is PTC protected (Positive Temperature Co-efficient).
PO1, A PO1, B	Jumper sets PO1 terminals A and B for 'dry' Form 'A' contact or for Alarm Output.
L-8 (+)	Common positive terminal. This terminal is PTC protected (Positive Temperature Co-efficient).
L-8 (-)	Positive terminal for Sensor Loop 8 input (+).
Com	Common (-) for Sensor Loop 8 and Sensor Loop 7.
L-7	Sensor Loop 7 input (+). Only the resistance on the loop and potential EMI problems limits wire length for Sensor Loops 1 to 7. Resistance must be < 100 W with EOL resistor shorted and detection devices connected.

L-6	Sensor Loop 6 input (+).
Com	Common (-) for Sensor Loop 5 and Sensor Loop 6.
L-5	Sensor Loop 5 input (+).
L-4	Sensor Loop 4 input (+).
Com	Common (-) for Sensor Loop 3 and Sensor Loop 4.
L-3	Sensor Loop 3 input (+).
L-2	Sensor Loop 2 input (+).
Com	Common (-) for Sensor Loop 1 and Sensor Loop 2.
L-1	Sensor Loop 1 input (+).
Telephone Socket	RJ-12 Socket (6P4C)
JP2, PO1 Select	Configures PO1 for Form 'A' relay or Alarm Output.
Auxiliary Pins	Allow you to connect an auxiliary module or programming key (PK32).
Installer (Switch)	Required to enter installers programming mode via keypad programming.

Option Bus Address Chart

The following table lists all option bus addresses available in the SOLUTION 40 control panel.

Address	Device Description
0	Installer Keypad or Local Connection To RPS
1 – 8	Keypads (1 – 8)
50	RF Receiver 1
51	RF Receiver 2
101 – 105	DX2010 Wired Zone Expanders
150 – 151	DX3010 Octo Output Expanders
250	DX4010 Serial RS0232 Interface

Table 148: Option Bus Devices Addresses

Optional Accessories

Option Bus Devices

The SOLUTION 40 control panel supports a variety of option bus devices including keypads, DX2010 Input Point expander, DX3010 Octo-Output expander and the DX4010 RS-232 Serial Interface Module.

Consult the installation guide for the specific option bus device for complete instructions.

The control panel can supply a maximum of 600 mA for all external devices in stand-by mode. If all external devices connected to the control panel require a current supply excess of 600 mA, additional power supply modules will need to be used to power additional devices.

You can connect 305 m (1000 ft) of #22 AWG (0.64 mm) / 7.02 wire or 610 m (2000 ft) of 18 AWG (1.02 mm) / 14.02 wire for all option bus devices connected to the (G) green and (Y) yellow data terminals.

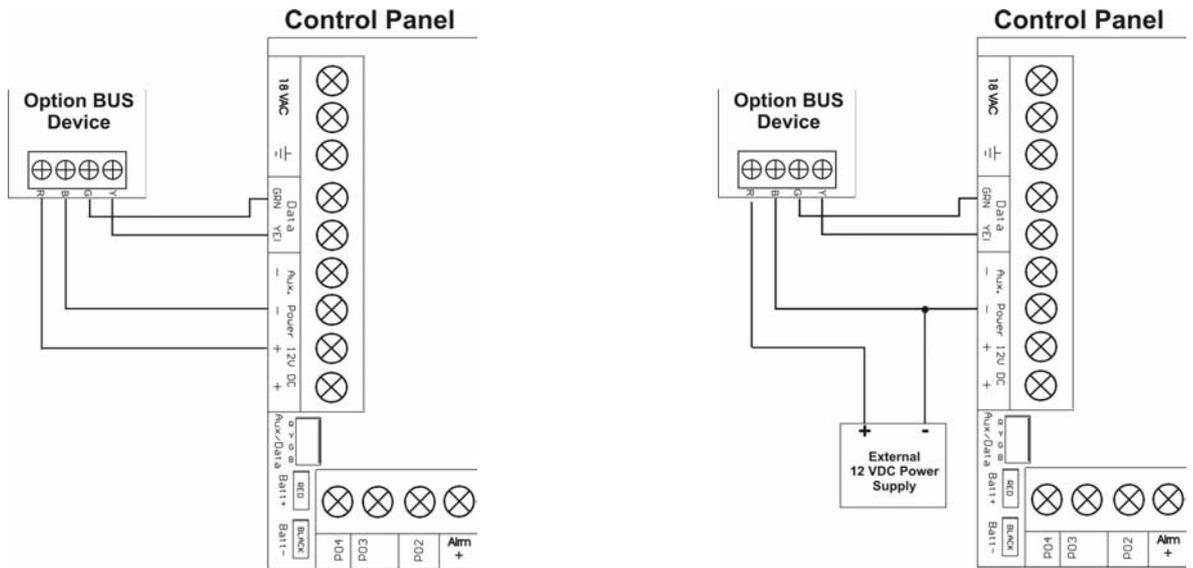


Figure 19: Wiring Option BUS Devices To The SOLUTION 40

Multiple option bus devices may be connected in parallel as shown in Figure 20: Wiring Option BUS Devices In Parallel To The SOLUTION .

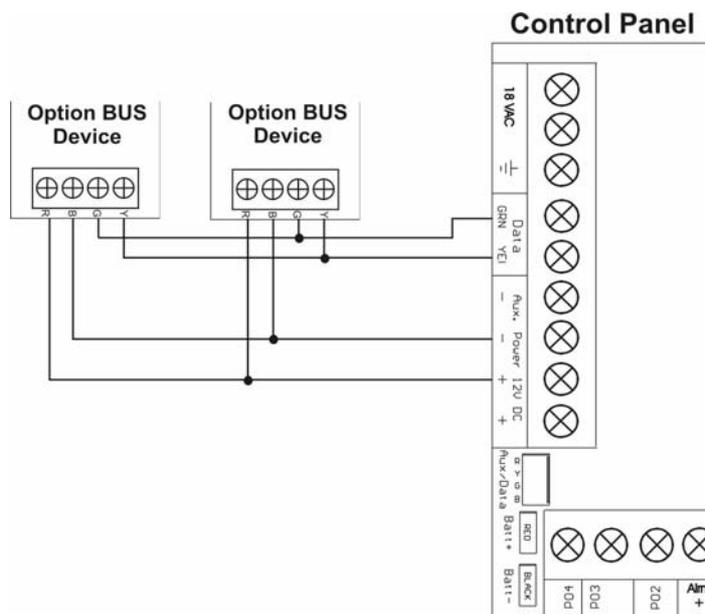


Figure 20: Wiring Option BUS Devices In Parallel To The SOLUTION 40

CP7446 Text Keypad

The CP7446 keypad is used with the SOLUTION 40 control panel. The keypad features a backlit two-line text display, an armed status indicator, three programmable emergency keys, built-in buzzer that emits several distinct tones.

The control panel supplies all power and data requirements for the keypad using simple four-wire connection.

Figure 21: CP9 Keypad

Installing The Keypad

- Select a mounting location – do not mount the keypad in areas of extreme cold (eg. Refrigeration / outdoor areas below 32°F/0°C) or areas that are exposed to direct sunlight.
- Route the wire to the keypad location. You can connect a maximum of 305 m (1000 ft) of #22 AWG (0.64 mm) / 7.02 wire or 610 m (2000 ft) of #18 AWG (1.02 mm) / 14.02 wire between the control panel and each keypad.
- Remove the front cover of the keypad from the enclosure base – open the front lid downward. Using a small flat-bladed screwdriver push the mounting clip located at the bottom.

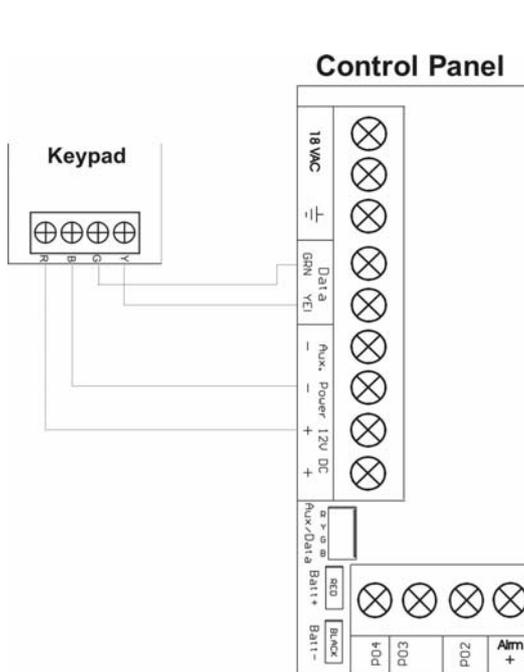


Figure 22: CP7446 Wiring Diagram

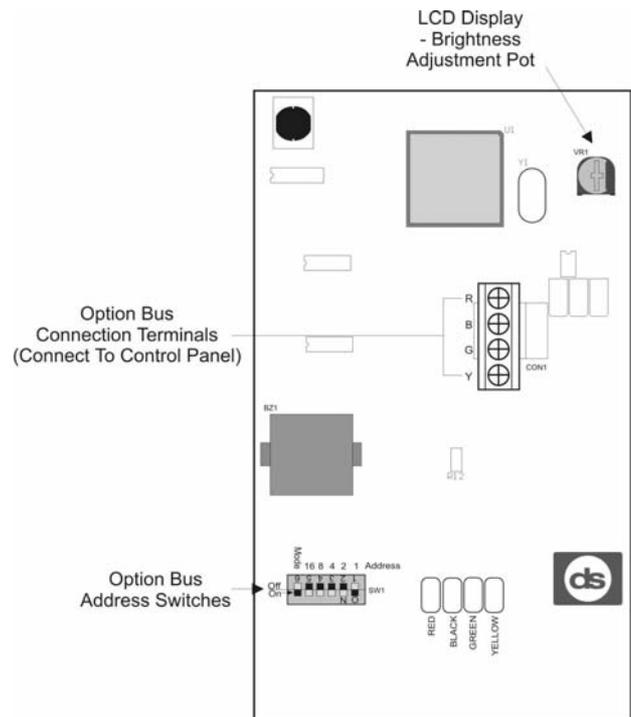


Figure 23: CP7446 Keypad PCB Overlay Diagram

Keypad Addresses

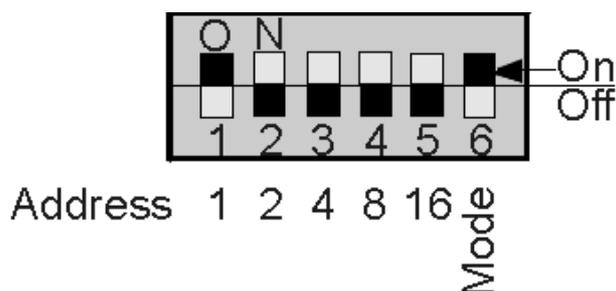


Figure 24: Keypad DIP Switch Address Settings

Keypad Address	Keypad DIP Switch Address Settings					
	S1	S2	S3	S4	S5	S6
	1	2	4	8	16	Mode
Option Bus Address 0*	Stand-by Jumper Must Be Closed					
Option Bus Address 1	On	Off	Off	Off	Off	On
Option Bus Address 2	Off	On	Off	Off	Off	On
Option Bus Address 3	On	On	Off	Off	Off	On
Option Bus Address 4	Off	Off	On	Off	Off	On
Option Bus Address 5	On	Off	On	Off	Off	On
Option Bus Address 6	Off	On	On	Off	Off	On
Option Bus Address 7	On	On	On	Off	Off	On
Option Bus Address 8	Off	Off	Off	On	Off	On

Table 149: Keypad DIP Switch Address Settings

* Sets the keypad as an installer keypad. All switches must be in the off position.

DX2010 Zone Input Expansion Module

General Information

The zone input expansion module is used to expand the number of zones on the SOLUTION 40 control panel by increments of 8 zones. Up to 5 zone input expansion modules can be used to expand the control panel from 8 zones to 40 zones. Refer to the installation instructions that are included with the zone input expansion module for full details.

- **Operating Voltage:** 8 to 14 VDC
- **Current Draw:** 35 mA (standby), 135 mA (Max with connected accessories)
- **Auxiliary Output:** 100 mA, 12 VDC supervised output for accessories
- **Sensor Loop Terminal Wire Size:** #18 (1.02 mm) to #22 (0.64 mm) AWG
- **Operating Temperature:** 0 °C to + 50 °C (+32 °F to +122 °F)
- **Sensor Loop Response Time:** 300 ms
- **Option BUS Cabling:** The external power supply module should be connected no longer than the second line in Table 150 from the Option bus device. The combined data wire length for all SDI devices must not exceed those stated in Table 150.

	22 AWG (0.64 mm) / 7.02	18 AWG (1.02 mm) / 14.02
Data Line Between Panel and DX2010 (AUX Output NOT Used)	305 m (1000 ft)*	610 m (2000 ft)*
Data Line Between Panel and DX2010 (Aux Output Supplying 100 mA)	30 m (100 ft) **	76 m (250 ft)**

Table 150: D9528 Option bus Cabling Specifications

- * Wire length may be restricted by panel limitations.
- ** If the DX2010 is powered directly by an external auxiliary power supply, use the wire lengths specified in the first row (Aux Output Not Used).

- **Maximum Loop Impedance:** 60 Ohm
- **EOL Resistor (Single Loop):** 2K2

Installation

- Install the SOLUTION 40 control panel prior to installing the octo-output module.
- Locate the mounting locations for the DX2010 on the sidewall mounting of the CX1010 case.
- Using the 3 screw provided with the module, mount the DX2010 to the CX1010 case.
- Set the address of DIP-switches accordingly and wire the DX2010 to the SOLUTION 40 option bus terminals.

Jumper Settings

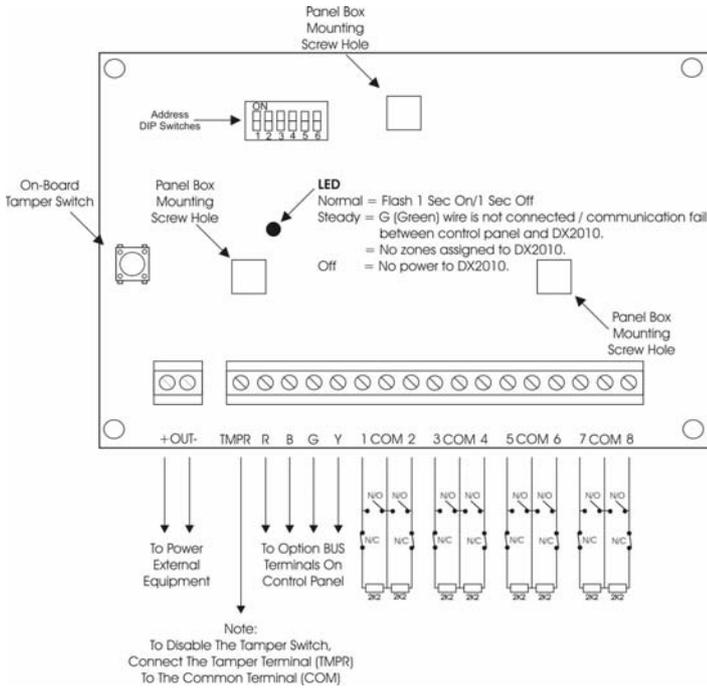
The jumper settings below are used for expansion boards connected to the SOLUTION 40 control panel.

	DIP Switch Settings						Address
	S1	S2	S3	S4	S5	S6	
Off-Board Zones 01 to 08	Off	Off	Off	Off	Off	Off	101
Off-Board Zones 09 to 16	Off	Off	Off	Off	Off	On	102
Off-Board Zones 17 to 24	Off	Off	Off	Off	On	Off	103
Off-Board Zones 25 to 32	Off	Off	Off	Off	On	On	104
Off-Board Zones 33 to 40	Off	Off	Off	On	Off	Off	105
Zone Doubled Zones 9 to 24	Off	Off	Off	On	Off	On	106
Zone Doubled Zones 25to 32	Off	Off	Off	On	On	Off	107

Table 151: DX2010 Jumper Address Settings

Wiring

The point inputs allow for the connection of both normally open or normally closed alarm contacts when using the single point configuration.



Note:

The maximum distance from the AUX Output terminals and the powered devices (PIR's etc) must be limited to 15 m (50 ft) for #22 AWG (0.64 mm) / 7.02 or 30 m (100 ft) for #18 AWG (1.02 mm) / 14.02 wire.

Table 152: DX2010 Wiring Diagram

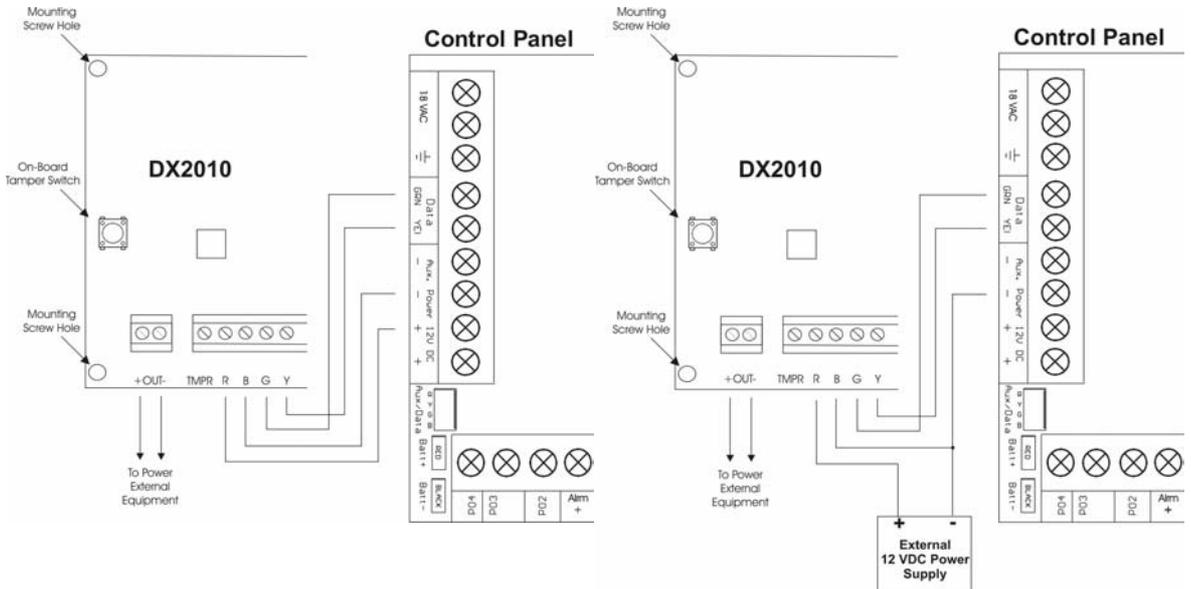


Figure 25: DX2010 Power Supply Connections

Tamper Input Connection

Each DX2010 module provides an input for tamper devices. The tamper input is in addition to the zone sensor loops. A fault on the tamper input is reported as a tamper event to which the option bus address the DX2010 is set. The tamper circuit can monitor external Normally Closed (N/C) tamper switches. Do not use an EOL resistor (End Of Line). If neither the on-board tamper nor the tamper input is used, a wire connection must be placed between the TMPR and COM terminals.

DX3010 Octo-Output Module

General Information

The DX3010 is an Octo-Output module that provides eight Form 'C' relay outputs. It connects to the control panel via the SDI option bus terminals. The outputs are fully programmable. Each output operates individually from the other seven outputs. You can connect up to two DX3010 Octo-Output modules to the SOLUTION 40 control panel, expanding the total of programmable outputs to 20. Refer to the installation instructions that are included with the octo-output module for full details.

- **Operating Voltage:** 8 to 14 VDC
- **Current Draw:** 10 mA (standby) + 40 mA for each energized relay
- **Outputs:** Dry Contacts: Rated 5.0A @ 28 VDC (max for resistive loads)
- **Output Terminal Wire Size:** #18 (1.2 mm) to #22 (0.8 mm) AWG
- **Operating Temperature:** 0 °C to + 50 °C (+32 °F to +122 °F)
- **Relative Humidity:** 5 to 85% 30 °C (86 °F) non-condensing
- **Option BUS Cabling:** The external power supply module should be connected no longer than the first line in Table 153 from the Option bus device. The combined data wire length for all option bus devices must not exceed those stated in Table 153.

	Power Source	22 AWG (0.8 mm) / 7.02	18 AWG (1.2 mm) / 14.02
Data Line Between Panel and DX3010	Control Panel	40 ft (12.2 m)	80 ft (24.4 m)
Data Line Between Panel and DX3010	External Power Supply	1000 ft (305 m)	2000 ft (610 m)

Table 153: DX3010 Option Bus Cabling Specifications

Installation

- Install the SOLUTION 40 control panel prior to installing the octo-output module.
- Locate the mounting locations for the DX3010 on the sidewall mounting of the CX1010 case.
- Using the 3 screw provided with the module, mount the DX3010 to the CX1010 case.
- Set the address of DIP-switches accordingly and wire the DX3010 to the SOLUTION 40 option bus terminals.

Power Supply Connections

Remove all power to the control panel (AC and battery) before connecting or removing the octo-output module. Connect the octo-output module to the control panel via the option bus terminals as shown in.

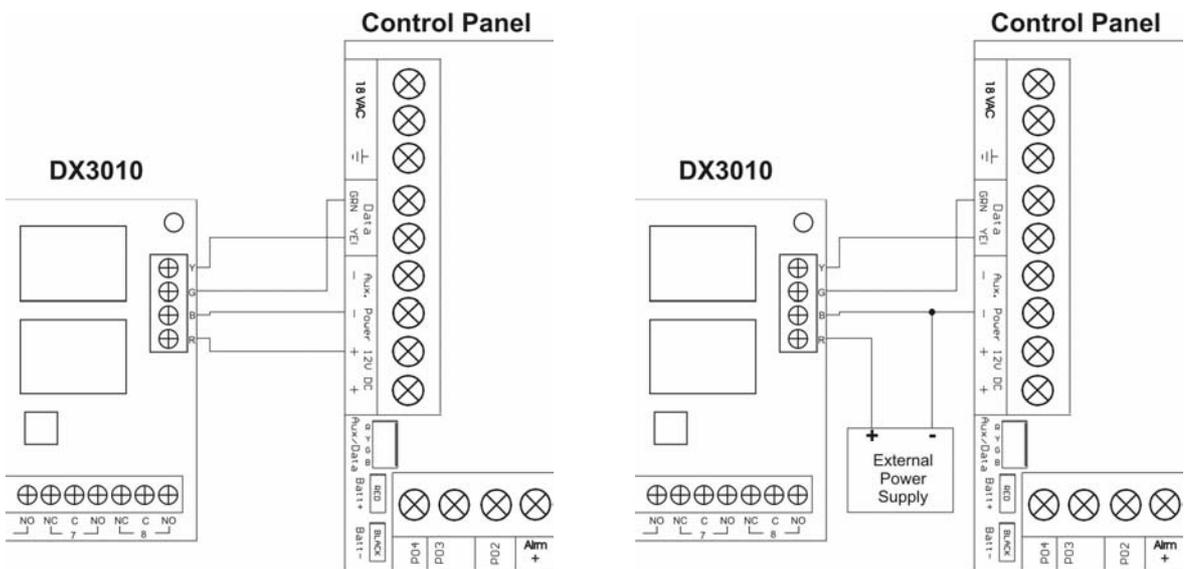


Figure 26: DX3010 Power Supply Connections

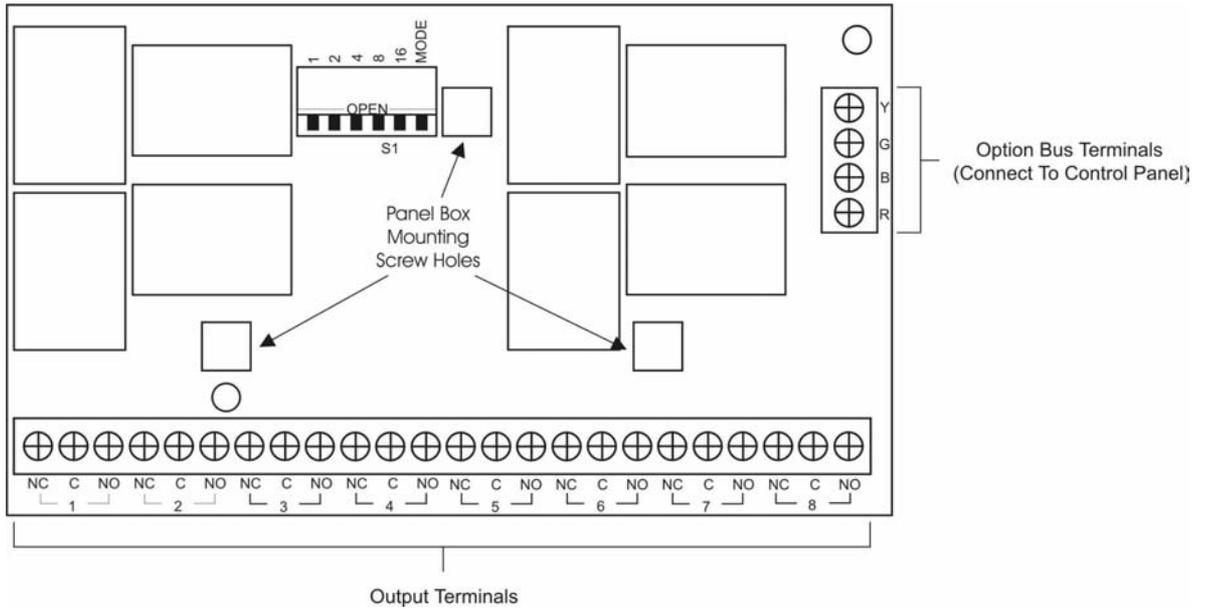


Figure 27: DX3010 PCB Overlay

Address DIP Switch Settings

The jumper settings below are used for the Octo-Output module connected to the SOLUTION 40 control panel.

	DIP Switch Settings						Address
	S1	S2	S3	S4	S5	S6	
	1	2	4	8	16	Mode	
Module 1 (Outputs 05 – 12)	Up	Up	Up	Up	Up	Down	150
Module 2 (Outputs 13 – 20)	Down	Up	Up	Up	Up	Down	151

Table 154: DX3010 Jumper Address Settings

Any time the address DIP switches are changed, you must cycle the power to the module off and then on again for the address change to take effect.

Overlay

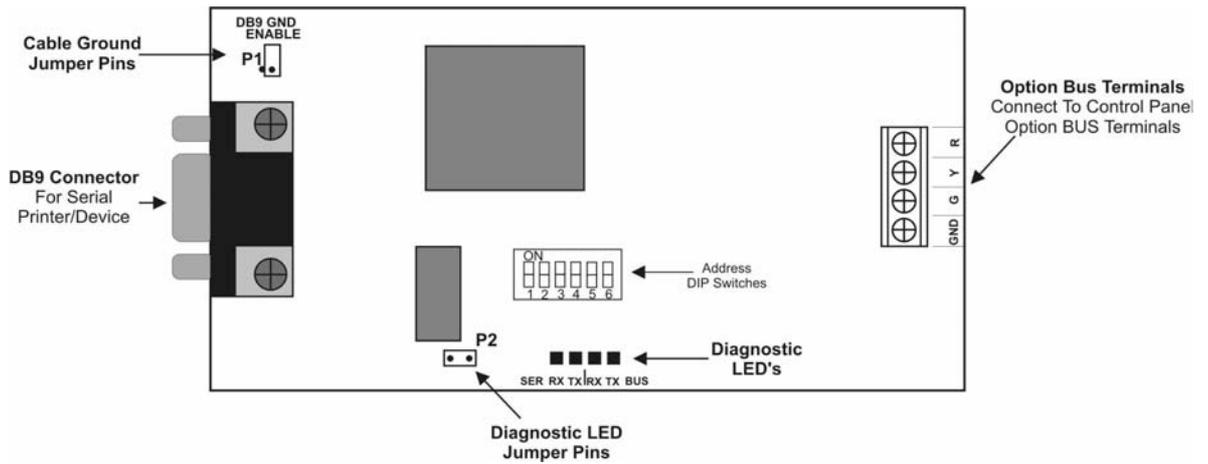


Figure 29: DX4010 Overlay

Switch	S1	S2	S3	S4	S5	S6
Address	1	2	4	8	16	Mode
Address = 250	On	On	On	On	On	On

Table 156: DX4010 - RS232 Serial Interface Address Settings

Configuration Jumpers

P2 - Diagnostic LED's

- Enable Diagnostic LED's** The diagnostic LED's can be used as a trouble shooting aid. To enable the LED's, place P2 on both pins. The DX4010 draws more current in this mode, so P2 should not be in place under normal conditions.
- Disable Diagnostic LED's**

BUS Tx = Option Bus Transmit Data To Control Panel.
BUS Rx = Option Bus Receive Data From Control Panel.
SER Tx = RS232 Receive Data From Printer.
SER Rx = RS232 Transmit Data To Printer.

P3 - RS232 Cable Ground

- Connect Cable Ground To Cabinet Ground** Some printers may cause a ground fault condition on the control panels. If this occurs, remove P3. This will disconnect the printer cable ground from cabinet ground.
- Disconnect Cable Ground** Some desktop computers can cause a ground fault event if P3 is removed. If connecting the DX4010 to a desktop PC and a ground fault occurs, use the connection only temporarily and disconnect for normal control operation.

DB9 Socket PIN Layout

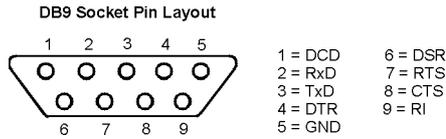


Figure 30: DB9 Connector Layout

DS7412 9-Pin Connector	DCE 9-Pin	DTE 9-Pin	DCE 25-Pin	DTE 25-Pin
1 DCD (Not Used)	1 DCD	1 DCD (6)	8 DCD	8 DCD (6)
2 RxD	2 RxD	3 TxD	3 RxD	2 TxD
3 TxD	3 TxD	2 RxD	2 TxD	3 RxD
4 DTR	4 DTR	6 DSR	20 DTR	6 DSR
5 GND	5 GND	5 GND	7 GND	7 GND
6 DSR	6 DSR	4 DTR	6 DSR	20 DTR
7 RTS	7 RTS	8 CTS	4 RTS	5 CTS
8 CTS	8 CTS	7 RTS	5 CTS	4 RTS
9 RI (Not Used)	9 RI	9 RI	22 RI	22 RI

Note

The DX4010 serial port is wired as a DTE device; therefore, if the printer is a DCE device (most common), a straight 9-pin to 9-pin or straight 9-pin to 25-pin cable may be used. If the printer is wired as a DTE device, a null modem 9-pin to 9-pin or null modem 9-pin to 25-pin cable is required. Consult the operating guide provided with your printer for wiring requirements.

If you are using a non-standard printer configuration, you must make a custom cable using the diagram and table above. Connections shown in **BOLD** are the minimum required connections when using XON/XOFF software flow control. If using the configuration, these are the only connections required.

Null Modem Cable Wiring

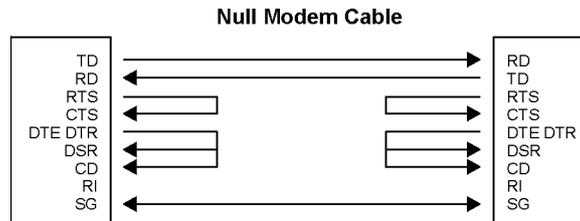


Figure 31: Null Modem Cable Wiring

RF3227E – RF Receiver (433 MHz)

General Information

The RF3227E RF Receiver allows the use of wireless devices when using the SOLUTION 40 control panel. Refer to the installation instructions that are included with the RF receiver for full details.

Specifications

- **Dimensions:** (H) 10.8 cm x (W) 15.2 cm x (D) 3.1 cm
- **Operating Voltage:** 12 VDC
- **Current Draw:** 30 mA (nominal)
- **Frequency:** 443.42.00 MHz
- **Operating Temperature:** 0 °C to + 49 °C (+32 °F to +120 °F)
- **Option BUS Cabling:** The power supply should be connected no longer than the second line of the table below from the option bus device.

	Power Source	22 AWG (0.64 mm) / 18 AWG (1.02 mm) / 7.02	18 AWG (1.02 mm) / 14.02
Data Line Between Panel and RF3227E	Control Panel	12.2 m (40 ft)	24.4 m (80 ft)
Data Line Between Panel and RF3227E	External Power Supply	305 m (1000 ft)	610 m (2000 ft)

Table 157: RF3227E Option Bus Cabling Specifications

Wiring The Receiver To The Control Panel

- Disconnect power from the control panel.
- Connect the receiver to the control panel via the option bus terminals as shown in Figure 32. The wiring should not exceed those stated in Table 157.
- Replace any covers to the receiver.
- Apply power to the control panel (The red LED of the receiver should light).

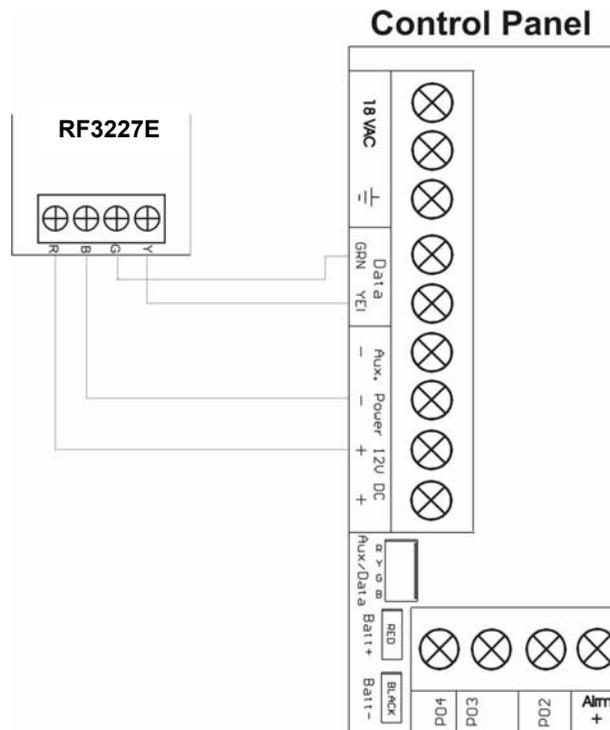


Figure 32: RF3227E Option BUS Connections

RF Receiver Overlay

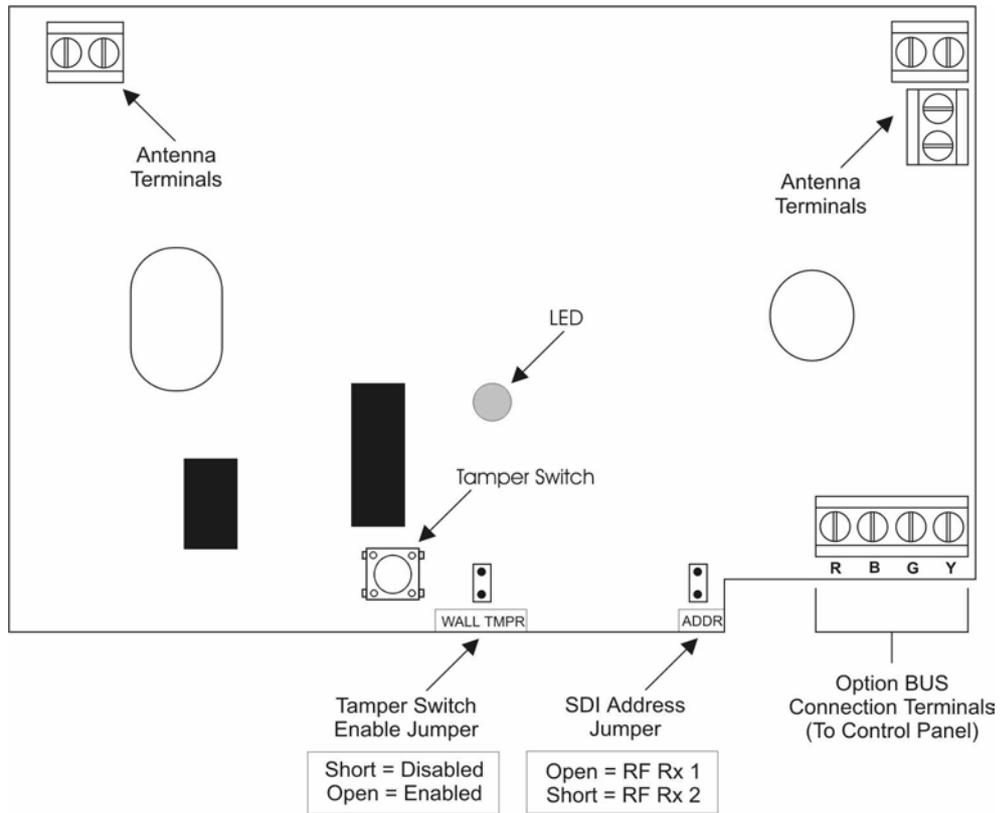


Figure 33: RF3227E PCB Overlay

LED Status

Table 158 describes the status of the receiver on the LED condition.

LED Status	Description
On	The receiver is operating correctly.
Off	A power failure has occurred or the receiver is not connected correctly.
Turns Off Momentarily	The receiver has acknowledged receiving a signal from a compatible transmitter.
Flashes Rapidly	The receiver is being programmed with transmitter ID's from the control panel.

Table 158: RF Receiver LED Status

Mounting Considerations

- The receiver should be mounted in a central location in regard to all wireless sensors.
- The receiver should be mounted on a vertical surface with at least 10 in. (25 cm) clearance for the antennas.
- Avoid mounting the receiver in areas with significant metal or electrical wiring such as furnace rooms and utility rooms. If this is unavoidable, mount the receiver with the antennas extending above any metal surface.
- Avoid mounting the receiver in areas where it may be exposed to moisture.
- Reception distances are generally improved with higher mounting locations and with no metal objects near the antennas.

Address 0221		Page 120
Global Reporting Options	0 = Local Only 1 = Reporting Allowed 2 = Extend Handshake Wait Time From 45 To 60 Seconds 4 = Delay Alarm Outputs Until Comm's OK Or Comm's Failed Twice 8 = Burglar Alarm After Two Failed Attempts	1
Address 0222		Page 121
Ack Wait Time	Increments Of 1sec (1 - 15 Sec's)	5
Address 0223		Page 121
AC Power Supervision Options	0 = No Options Selected 1 = Delay AC Fail / AC Fail Restore Report Until Next Report 2 = Ignore AC Fail Supervision At Keypads 4 = Arm/Disarm and Bypass Tracking Allowed 8 = Internal Crystal To Keep Time	4
Address 0224		Page 122
AC Fail, Low Battery Report Options	0 = No Options Selected 1 = AC Fail Reports Allowed 2 = AC Fail Restore Reports Allowed 4 = Low Battery, Battery Missing Reports and Restore Reports Allowed 8 = Ground Fault Reports and Restore Reports Allowed	15
Address 0225		Page 123
System Status Report Swinger Count	Swinger Shutdown Count For System Status Reports (0 - 15)	0
Address 0226		Page 123
System Status Report Routing	0 = No Reports, No Events To Log/Printer 1 = Report To Destination 1, Events To Log/Printer 2 = Report To Destination 2, Events To Log/Printer 3 = Report To Destination 1 & Destination 2, Events To Log/Printer 4 = Report To Destination 2 If Destination 1 Fail, Events To Log/Printer 5 = No Report, Events To Log/Printer	1
Address 0227 – 0228		Page 123
Call For Service Interval	Address 0227 = Increments Of Weeks (Tens Digit) Address 0228 = Increments Of Weeks (Units Digit)	0 0
Address 0229 – 0230		Page 124
System Inactive Interval	Address 0229 = Increments Of Weeks (Tens Digit) Address 0230 = Increments Of Weeks (Units Digit)	0 0
Address 0231		Page 124
Call For Service/System Inactive Options	0 = No Options Selected 1 = 'Call For Service' Display At Call For Service Interval 2 = 'Call For Service' Report At Call For Service Interval 4 = 'System Inactive' Display At System Inactive Interval 8 = 'Weekly Test' Reminder Allowed	0
Address 0232		Page 125
Log Threshold/ Overflow Options	0 = No Log Threshold Events / Log Overflow Events 1 = Log Threshold At 50% + Report 2 = Log Threshold At 75% + Report 3 = Log Threshold At 90% + Report 4 = Log Threshold At 50% (Local) 5 = Log Threshold At 75% (Local) 6 = Log Threshold At 90% (Local)	0
Address 0233		Page 126
Auto Arming Pre-Alert Time	Increments Of 5 Minutes (Time = Value x 5 mins)	6
Address 0234		Page 126
Cancel Alarm Report	0 = No Cancel Alarm Reports Allowed 1 = Cancel Alarm Reports Allowed	0
Address 0235		Page 127
Date and Time Display/ Disable Pin Trouble	0 = Display Date As MM/DD/YY 1 = Display Date As DD/MM/YY 2 = Default PIN Display Trouble Allowed	3
Address 0236		Page 127
Daylight Savings Calendar Options	0 = Daylight Savings Disabled 1 = Australia 2 = European 3 = USA	1

Address 0238 – 0239		Page 128								
Daylight Savings - Forward One Hour	Address 0238 = Hour Of The Day (Tens Digit) Address 0239 = Hour Of The Day (Units Digit)	<table border="1"><tr><td>0</td><td>2</td></tr></table>	0	2						
0	2									
Address 0240 – 0241		Page 128								
Daylight Savings - Backwards One Hour	Address 0240 = Hour Of The Day (Tens Digit) Address 0241 = Hour Of The Day (Units Digit)	<table border="1"><tr><td>0</td><td>3</td></tr></table>	0	3						
0	3									
Address 0242 – 0243		Page 128								
AC Fail Report Delay	Address 0242 = No of 16 minute intervals Address 0243 = No of 1 minute intervals	<table border="1"><tr><td>3</td><td>12</td></tr></table>	3	12						
3	12									
Address 0244		Page 128								
System Test - Command 41 Configuration Options	0 = Command 41 Disabled 1 = Test Siren 2 = Test Strobe 4 = Test Battery 8 = Send Test Report	<table border="1"><tr><td>15</td></tr></table>	15							
15										
Address 0245		Page 130								
System Test - Command 41 Area Assignment	0 = Command 41 Disabled 1 = Command 41 Allowed Area 1 2 = Command 41 Allowed Area 2 4 = Command 41 Allowed Area 3 8 = Command 41 Allowed Area 4	<table border="1"><tr><td>15</td></tr></table>	15							
15										
Address 0246		Page 130								
Walk Test - Command 44 Configuration Options	0 = Command 44 Disabled 1 = Start With System Test (Command 41) 2 = Include Fire Zones 4 = Include 24-Hour Zones 8 = Include Controlled Zones	<table border="1"><tr><td>8</td></tr></table>	8							
8										
Address 0247		Page 131								
Walk Test - Command 44 Area Assignment	0 = Command 44 Disabled 1 = Command 44 Allowed Area 1 2 = Command 44 Allowed Area 2 4 = Command 44 Allowed Area 3 8 = Command 44 Allowed Area 4	<table border="1"><tr><td>15</td></tr></table>	15							
15										
Address 0248		Page 131								
Walk Test Start / End Report Routing	0 = No Reports, No Events To Log/Printer 1 = Report To Destination 1, Events To Log/Printer 2 = Report To Destination 2, Events To Log/Printer 3 = Report To Destination 1 & Destination 2, Events To Log/Printer 4 = Report To Destination 2 On Destination 1 Fail, Events To Log/Printer 5 = No Report, Events To Log/Printer	<table border="1"><tr><td>5</td></tr></table>	5							
5										
Address 0249		Page 132								
Test Report Options	0 = No Test Reports Options Programmed 1 = Test Report Only When System Is Away Or Stay 2 = Test Report Only If No Other Report In Repeat Interval (To Same Destination) 4 = Test Reports For All Areas 8 = Call RPS After Test Report	<table border="1"><tr><td>0</td></tr></table>	0							
0										
Address 0250 - 0253		Page 133								
Test Report Time	Address 0250 = Hour Of The Day (Tens Digit) Address 0251 = Hour Of The Day (Units Digit) Address 0252 = Minute Of The Day (Tens Digit) Address 0253 = Minute Of The Day (Units Digit)	<table border="1"><tr><td>H</td><td>H</td><td>M</td><td>M</td></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td></tr></table>	H	H	M	M	0	0	0	0
H	H	M	M							
0	0	0	0							
Address 0254		Page 133								
Test Report Interval	0 = No Periodic Test Reports 1 = Every Hour 2 = Every Day 3 = Every 7 Days 4 = Every 28 Days	<table border="1"><tr><td>2</td></tr></table>	2							
2										
Address 0255		Page 134								
Test Report Routing	0 = No Reports, No Events To Log/Printer 1 = Report To Destination 1, Events To Log/Printer 2 = Report To Destination 2, Events To Log/Printer 3 = Report To Destination 1 & Destination 2, Events To Log/Printer 4 = Report To Destination 2 On Destination 1 Fail, Events To Log/Printer 5 = No Report, Events To Log/Printer	<table border="1"><tr><td>1</td></tr></table>	1							
1										

Address 0256 Page 135
Remote Programming Options (RPS)
 0 = Remote Programming Not Allowed
 1 = Remote Programming Allowed
 2 = Remote Programming Call Back Allowed
 4 = Terminate Remote Programming Connection On Alarm
 8 = Reserved 5

Address 0257 Page 136
Local Programming Options
 0 = No Options Selected
 1 = Reserved
 2 = Auto Adjust For DST (Daylight Savings)
 4 = Keypad Programming Allowed
 8 = PK32 (Programming Key) Allowed 12

Address 0258 Page 137
Arming Options 1
 0 = No Options Selected
 1 = Away - No Exit Allowed (Switches To Stay If Entry/Exit Zone Not Faulted Within Exit Delay)
 2 = Answering Machine Bypass Only When Away or Stay
 4 = Arm Area 1 Allowed Via Telephone
 8 = Reserved 4

Address 0259 Page 138
Arming Options 2
 0 = No Options Selected
 1 = First To Open/Last To Close Allowed
 2 = Area 1 Is Common Area
 4 = Command 80 - All Areas Away With Delay Allowed
 8 = Command 81 - All Areas All Off Allowed 12

Address 0260 Page 139
Zone Bypass / Forced Arm Limit
 0 = Unlimited / 1 – 15 = Maximum Number Of Zones 0

Address 0261 Page 140
Open/Close Options
 0 = No Open, Close, Exit Error or Recent Closing Reports Allowed
 1 = Open Reports Allowed
 2 = Closing Reports Allowed
 4 = Exit Error Reports Allowed
 8 = Recent Closing Reports Allowed 15

Address 0262 Page 141
Open/Close Report Routing
 0 = No Reports, No Events To Log/Printer
 1 = Report To Destination 1, Events To Log/Printer
 2 = Report To Destination 2, Events To Log/Printer
 3 = Report To Destination 1 & Destination 2, Events To Log/Printer
 4 = Report To Destination 2 If Destination 1 Fail, Events To Log/Printer
 5 = No Report, Events To Log/Printer 1

Address 0263 Page 141
Exit Time Restart
 0 = No Exit Time Restart
 1 = Restart (SIA False Alarm Reduction Requirement) 1

Address 0264 – 0265 Page 142
Entry Time 1
 Address 0264 = Increments Of 16 Seconds (0 - 240 Seconds)
 Address 0265 = Increments Of 1 Second (0 - 15 Seconds) 1 14

Address 0266 – 0267 Page 143
Entry Time 2
 Address 0266 = Increments Of 16 Seconds (0 - 240 Seconds)
 Address 0267 = Increments Of 1 Second (0 - 15 Seconds) 7 8

Address 0268 – 0269 Page 143
Stay Mode Delay Time
 Address 0268 = Increments Of 16 Seconds (0 - 240 Seconds)
 Address 0269 = Increments Of 1 Second (0 - 15 Seconds) 0 0

Address 0270 – 0271 Page 144
Exit Delay Time 1
 Address 0270 = Increments Of 16 Seconds (0 - 240 Seconds)
 Address 0271 = Increments Of 1 Second (0 - 15 Seconds) 3 12

Address 0272 – 0273 Page 144
Exit Delay Time 2
 Address 0272 = Increments Of 16 Seconds (0 - 240 Seconds)
 Address 0273 = Increments Of 1 Second (0 - 15 Seconds) 7 8

Note: Entry Delay 1 and 2 (including Part Mode Delay Time) has a minimum delay time of 30 seconds. Stay Mode Delay Time can be disabled by programming 0,0. Exit Delay Time 1 and 2 have a minimum delay time of 45 seconds.

Address 0276 – 0281

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**Area 1 Account Number
For Destination 1**

10	10	10	10	0	0
----	----	----	----	---	---

Address 0286 – 0291

Page 145

**Area 1 Account Number
For Destination 2**

10	10	10	10	0	0
----	----	----	----	---	---

Address 0296

Page 145

**Area 1 Open/Close
Reporting Options**

- 0 = No Open/Close Reports For Area 1
- 1 = Open/Close Reports For Area 1 Allowed
- 2 = Open Reports Only After Alarm/Close Reports Only On Force Arm
- 4 = Open/Close Reports For Stay and Stay 2
- 8 = 1 Second Siren Test On Closing Acknowledge

Note: Selection must include 1, so location always an odd value

1

Address 0297

Page 147

Area 1 - Lock Reporting

- 0 = Lock Area Reporting Disabled
- 1 = Lock Area Reports To Destination 1
- 2 = Lock Area Reports To Destination 2

0

Address 0298 – 0303

Page 148

**Area 2 Account Number
For Destination 1**

10	10	10	10	0	0
----	----	----	----	---	---

Address 0308 – 0313

Page 148

**Area 2 Account Number
For Destination 2**

10	10	10	10	0	0
----	----	----	----	---	---

Address 0318

Page 149

**Area 2 Open/Close
Reporting Options**

- 0 = No Open/Close Reports For Area 1
- 1 = Open/Close Reports For Area 1 Allowed
- 2 = Open Reports Only After Alarm/Close Reports Only On Force Arm
- 4 = Open/Close Reports For Stay and Stay 2
- 8 = 1 Second Siren Test On Closing Acknowledge

Note: Selection must include 1, so location always an odd value

1

Address 0319

Page 150

Area 2 – Lock Reporting

- 0 = Lock Area Reporting Disabled
- 1 = Lock Area Reports To Destination 1
- 2 = Lock Area Reports To Destination 2

0

Address 0320 – 0325

Page 151

**Area 3 Account Number
For Destination 1**

10	10	10	10	0	0
----	----	----	----	---	---

Address 0330 – 0335

Page 151

**Area 3 Account Number
For Destination 2**

10	10	10	10	0	0
----	----	----	----	---	---

Address 0340

Page 152

**Area 3 Open/Close
Reporting Options**

- 0 = No Open/Close Reports For Area 1
- 1 = Open/Close Reports For Area 1 Allowed
- 2 = Open Reports Only After Alarm/Close Reports Only On Force Arm
- 4 = Open/Close Reports For Stay and Stay 2
- 8 = 1 Second Siren Test On Closing Acknowledge

Note: Selection must include 1, so location always an odd value

1

Address 0341

Page 153

Area 3 - Lock Reporting

- 0 = Lock Area Reporting Disabled
- 1 = Lock Area Reports To Destination 1
- 2 = Lock Area Reports To Destination 2

0

Address 0342 – 0347

Page 154

Area 4 Account Number For Destination 1

10 10 10 10 0 0

Address 0352 – 0357

Page 154

Area 4 Account Number For Destination 2

10 10 10 10 0 0

Address 0362

Page 155

Area 4 Open/Close Reporting Options

- 0 = No Open/Close Reports For Area 1
- 1 = Open/Close Reports For Area 1 Allowed
- 2 = Open Reports Only After Alarm/Close Reports Only On Force Arm
- 4 = Open/Close Reports For Stay and Stay 2
- 8 = 1 Second Siren Test On Closing Acknowledge

Note: Selection must include 1, so location always an odd value

1

Address 0363

Page 156

Area 4 - Lock Reporting

- 0 = Lock Area Reporting Disabled
- 1 = Lock Area Reports To Destination 1
- 2 = Lock Area Reports To Destination 2

0

Address 0364

Page 157

Authority Level Option 1

- Command 1 - Away With Delay
- Command 1 - Away With Delay, Silent
- Command 1 - Away With No Entry Delay
- Away Key - Away With Delay
- Away Key - Away With Delay, Silent
- Away Key - Away With No Entry Delay

- Assign To Authority Level:**
- 0 = No PIN Code Required
 - 1 = Authority Level 1 Allowed
 - 2 = Authority Level 2 Allowed
 - 4 = Authority Level 3 Allowed
 - 8 = Authority Level 4 Allowed

15

Address 0365

Page 157

Authority Level Option 2

- Command 2 - Stay With Delay
- Command 2 - Stay With Delay, Silent
- Command 2 - Stay With No Entry Delay
- Stay Key - Stay With Delay
- Stay Key - Stay With Delay, Silent
- Stay Key - Stay With No Entry Delay

- Assign To Authority Level:**
- 0 = No PIN Code Required
 - 1 = Authority Level 1 Allowed
 - 2 = Authority Level 2 Allowed
 - 4 = Authority Level 3 Allowed
 - 8 = Authority Level 4 Allowed

0

Address 0366

Page 158

Authority Level Option 3

- Command 3 - Stay 2 With Delay
- Command 3 - Stay 2 With Delay, Silent
- Command 3 - Stay 2 With No Entry Delay

- Assign To Authority Level:**
- 0 = No PIN Code Required
 - 1 = Authority Level 1 Allowed
 - 2 = Authority Level 2 Allowed
 - 4 = Authority Level 3 Allowed
 - 8 = Authority Level 4 Allowed

0

Address 0367

Page 120

Authority Level Option 4

Disarm

- Assign To Authority Level:**
- 0 = Disarm Not Assigned
 - 1 = Authority Level 1 Allowed
 - 2 = Authority Level 2 Allowed
 - 4 = Authority Level 3 Allowed
 - 8 = Authority Level 4 Allowed

15

Address 0368

Page 158

Authority Level Option 5

One-Time Disarm

- Assign To Authority Level:**
- 0 = One-Time Disarm Not Assigned
 - 1 = Authority Level 1 Allowed
 - 2 = Authority Level 2 Allowed
 - 4 = Authority Level 3 Allowed
 - 8 = Authority Level 4 Allowed

8

Address 0369

Page 159

Authority Level Option 6

Send Open/Close Reports

- Assign To Authority Level:**
- 0 = Open/Close Reports Not Restricted
 - 1 = Authority Level 1 - Restricted
 - 2 = Authority Level 2 - Restricted
 - 4 = Authority Level 3 - Restricted
 - 8 = Authority Level 4 - Restricted

0

Address 0370

[Page 160](#)**Authority Level Option 7**

Force Arm
Command 0 - Bypass
Bypass Key

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

0

Address 0371

[Page 160](#)**Authority Level Option 8**

Command 80 - Away With Delay, All Areas
Command 81 - Off, All Areas

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

1

Address 0372

[Page 160](#)**Authority Level Option 9**

Command 40 - View Alarm Memory
Command 41 - System Test
Command 42 - View System Trouble
Command 43 - Remote Program
Command 44 - Walk Test
Command 47 - Reset Sensors
Command 48 - View Zone Trouble

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

0

Address 0373

[Page 161](#)**Authority Level Option 10**

Command 45 - Set Date and Time
Command 52 - Change Skeds
Command 53 - Renew One-Time PIN Codes
Command 56 - Add/Change Other PIN Codes
Command 58 - Delete PIN Codes
Command 62 - Set Chime Tone
Command 63 - Set Chime Zones
Command 65 - Set Stay 2 Zones
Command 83 - Auto-Forward On Sequence
Command 84 - Auto-Forward Off Sequence

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

1

Address 0374

[Page 161](#)**Authority Level Option 11**

Command 50 - Move To Area #

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

1

Address 0375

[Page 161](#)**Authority Level Option 12**

Command 51 - Extend Close (Automatic Arming)

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

1

Address 0376

[Page 162](#)**Authority Level Option 13**

Command 49 - Adjust Keypad Key Volume
Command 54 - Outputs Toggle On/Off
Command 61 - Chime Toggle On/Off
Command 82 - Auto-Forwarding Toggle On/Off

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

1

Address 0377

[Page 162](#)**Authority Level Option 14**

Command 55 - Change PIN Code

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

1

Address 0378

[Page 162](#)**Authority Level Option 15**

Command 85 - View Log

Assign To Authority Level:

0 = No PIN Code Required
1 = Authority Level 1 Allowed
2 = Authority Level 2 Allowed
4 = Authority Level 3 Allowed
8 = Authority Level 4 Allowed

1

Address 0379

PIN Code Length

Minimum Length = 3 Digits / Maximum Length = 7 Digits

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4

Address 380

Code Tamper Options

0 = No User Tamper Events
 1 = User Tamper Reports Allowed
 2 = User Tamper Event Activates Alarm Output
 4 = Reserved
 8 = Reserved

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1

Address 0381

User Code Tamper Retry Count

0 = Unlimited / 15 = Maximum Incorrect Attempts

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4

Address 0382

User Code Tamper Time

Increments Of 1 Minute (0 = No Keypad Lockout / 15 = 15 Min's)

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2

Address 0383 – 0389

Installer Code

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6 5 4 3 2 1 0

Address 0390 – 0677

PIN codes

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Authority Level	Area Assignment
0 = No Authority Level	0 = Not Assigned To An Area
1 = Access Authority Level 1	1 = Assigned To Area 1
2 = Access Authority Level 2	2 = Assigned To Area 2
3 = Access Authority Level 3	4 = Assigned To Area 3
4 = Access Authority Level 4	8 = Assigned To Area 4

PIN Code 1

Address 0390 - 0396

1 2 3 4 5 6 7

Authority Level

0397

1

Area Assignment

0398

15

PIN Code 2

Address 0399 - 0405

0 0 0 0 0 0 0

Authority Level

0406

2

Area Assignment

0407

1

PIN Code 3

Address 0408 - 0414

0 0 0 0 0 0 0

Authority Level

0415

2

Area Assignment

0416

1

PIN Code 4

Address 0417 - 0423

0 0 0 0 0 0 0

Authority Level

0424

2

Area Assignment

0425

1

PIN Code 5

Address 0426 - 0432

0 0 0 0 0 0 0

Authority Level

0433

2

Area Assignment

0434

1

PIN Code 6

Address 0435 - 0441

0 0 0 0 0 0 0

Authority Level

0442

2

Area Assignment

0443

1

PIN Code 7

Address 0444 - 0450

0 0 0 0 0 0 0

Authority Level

0451

2

Area Assignment

0452

1

PIN Code 8

Address 0453 - 0459

0 0 0 0 0 0 0

Authority Level

0460

2

Area Assignment

0461

1

PIN Code 9

Address 0462 - 0468

0 0 0 0 0 0 0

Authority Level

0469

2

Area Assignment

0470

1

PIN Code 10

Address 0471 - 0477

0 0 0 0 0 0 0

Authority Level

0478

2

Area Assignment

0479

1

PIN Code 11

Address 0480 - 0486

0 0 0 0 0 0 0

Authority Level

0487

2

Area Assignment

0488

1

PIN Code 12

Address 0489 - 0495

0 0 0 0 0 0 0

Authority Level

0496

2

Area Assignment

0497

1

PIN Code 13

Address 0498 - 0504

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0505

2

Area Assignment

0506

1

PIN Code 14

Address 0507 - 0513

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0514

2

Area Assignment

0515

1

PIN Code 15

Address 0516 - 0522

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0523

2

Area Assignment

0524

1

PIN Code 16

Address 0525 - 0531

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0532

2

Area Assignment

0533

1

PIN Code 17

Address 0534 - 0540

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0541

2

Area Assignment

0542

1

PIN Code 18

Address 0543 - 0549

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0550

2

Area Assignment

0551

1

PIN Code 19

Address 0552 - 0558

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0559

2

Area Assignment

0560

1

PIN Code 20

Address 0561 - 0567

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0568

2

Area Assignment

0569

1

PIN Code 21

Address 0570 - 0576

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0577

2

Area Assignment

0578

1

PIN Code 22

Address 0579 - 0585

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0586

2

Area Assignment

0587

1

PIN Code 23

Address 0588 - 0594

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0595

2

Area Assignment

0596

1

PIN Code 24

Address 0597 - 0603

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0604

2

Area Assignment

0605

1

PIN Code 25

Address 0606 - 0612

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0613

2

Area Assignment

0614

1

PIN Code 26

Address 0615 - 0621

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0622

2

Area Assignment

0623

1

PIN Code 27

Address 0624 - 0630

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0631

2

Area Assignment

0632

1

PIN Code 28

Address 0633 - 0639

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0640

2

Area Assignment

0641

1

PIN Code 29

Address 0642 - 0648

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0649

2

Area Assignment

0650

1

PIN Code 30

Address 0651 - 0657

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0658

2

Area Assignment

0659

1

PIN Code 31

Address 0660 - 0666

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0667

2

Area Assignment

0668

1

PIN Code 32

Address 0669 - 0675

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Authority Level

0676

2

Area Assignment

0677

1

Keypad Options/Assignment

Options	Area Assignment
0 = No Keypad Options Selected	0 = Keypad Not Assigned To An Area
1 = Beep Keypad On System Trouble	1 = Assigned Keypad To Area 1
2 = Exit Tone Allowed	2 = Assigned Keypad To Area 2
4 = Area Display Allowed	3 = Assigned Keypad To Area 3
8 = Disable Zone Status On Keypads	4 = Assigned Keypad To Area 4

<p>Keypad 1</p> <p>Options</p> <p>Address 0678</p> <p><input type="text" value="3"/></p>	<p>Area Assignment</p> <p>0679</p> <p><input type="text" value="1"/></p>	<p>Keypad 2</p> <p>Options</p> <p>Address 0680</p> <p><input type="text" value="3"/></p>	<p>Area Assignment</p> <p>0681</p> <p><input type="text" value="0"/></p>
<p>Keypad 3</p> <p>Options</p> <p>Address 0682</p> <p><input type="text" value="3"/></p>	<p>Area Assignment</p> <p>0683</p> <p><input type="text" value="0"/></p>	<p>Keypad 4</p> <p>Options</p> <p>Address 0684</p> <p><input type="text" value="3"/></p>	<p>Area Assignment</p> <p>0685</p> <p><input type="text" value="0"/></p>
<p>Keypad 5</p> <p>Options</p> <p>Address 0686</p> <p><input type="text" value="3"/></p>	<p>Area Assignment</p> <p>0687</p> <p><input type="text" value="0"/></p>	<p>Keypad 6</p> <p>Options</p> <p>Address 0688</p> <p><input type="text" value="3"/></p>	<p>Area Assignment</p> <p>0689</p> <p><input type="text" value="0"/></p>
<p>Keypad 7</p> <p>Options</p> <p>Address 0690</p> <p><input type="text" value="3"/></p>	<p>Area Assignment</p> <p>0691</p> <p><input type="text" value="0"/></p>	<p>Keypad 8</p> <p>Options</p> <p>Address 0692</p> <p><input type="text" value="3"/></p>	<p>Area Assignment</p> <p>0693</p> <p><input type="text" value="0"/></p>

Address 0694

A-Key Area Assignment

- 0 = A-Key Disabled
- 1 = A-Key Assigned To Area 1
- 2 = A-Key Assigned To Area 2
- 4 = A-Key Assigned To Area 3
- 8 = A-Key Assigned To Area 4

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Address 0695

A-Key Alarm Response Options

- 0 = No Alarm Response
- 1 = Activate Fire Alarm
- 2 = Activate Panic Alarm
- 3 = Activate Emergency Alarm

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0

Address 0696

B-Key Area Assignment

- 0 = B-Key Disabled
- 1 = B-Key Assigned To Area 1
- 2 = B-Key Assigned To Area 2
- 4 = B-Key Assigned To Area 3
- 8 = B-Key Assigned To Area 4

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Address 0697

B-Key Alarm Response Options

- 0 = No Alarm Response
- 1 = Activate Fire Alarm
- 2 = Activate Panic Alarm
- 3 = Activate Emergency Alarm

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0

Address 0698

C-Key Area Assignment

- 0 = C-Key Disabled
- 1 = C-Key Assigned To For Area 1
- 2 = C-Key Assigned To For Area 2
- 4 = C-Key Assigned To For Area 3
- 8 = C-Key Assigned To For Area 4

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15

Address 0699

C-Key Alarm Response Options

- 0 = No Alarm Response
- 1 = Activate Fire Alarm
- 2 = Activate Panic Alarm
- 3 = Activate Emergency Alarm

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0

Address 0700

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Alarm Output For A, B, C Keys

- 0 = No Alarm Output For Keypad Alarms
- 1 = Alarm Output For A-Key
- 2 = Alarm Output For B-Key
- 4 = Alarm Output For C-Key
- 8 = Reserved



Address 0701

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A, B, C Key Reports, Acknowledgment Beep

- 0 = No Reports, No Acknowledgment Beep
- 1 = A, B, C Key Reporting Allowed (A-Key = Zn 100, B-Key = Zn 101, C-Key = Zn 102)
- 2 = Beep For A-Key Acknowledgment
- 4 = Beep For B-Key Acknowledgment
- 8 = Beep For C-Key Acknowledgment



Address 0702

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Duress Code Options

- 0 = No Duress Reports
- 1 = PIN Code 32 Is Duress PIN Code
- 2 = PIN Code 31 Is Duress PIN Code
- 4 = PIN Code 30 Is Duress PIN Code
- 8 = PIN Code 29 Is Duress PIN Code



Address 0703

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A, B, C Keys and Duress Report Routing

- 0 = No Reports, No Events To Log/Printer
- 1 = Report To Destination 1, Events To Log/Printer
- 2 = Report To Destination 2, Events To Log/Printer
- 3 = Report To Destination 1 & Destination 2, Events To Log/Printer
- 4 = Report To Destination 2 If Destination 1 Fail, Events To Log/Printer
- 5 = No Report, Events To Log/Printer



Address 0704

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Keypad Tamper Response

- 0 = Disabled
- 1 = Keypad Tamper Response Allowed
- 2 = Enable Extinguish Mode
- 4 = Extinguish Mode Displays Date



Address 0705

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Guard Code Options

- 0 = No Guard Code
- 1 = User 28 is a Guard Code



Address 0706 – 0905

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Zones

Input Device	Zone Index	Area Assignment	Zone Number
0 = Zone Disabled	Enter Value 1 – 15 Assign A Zone To A Zone Index.		This determines the Zone Number (00 – 40) that appears in the keypad display, the panel log, the optional printer & the central station. It is possible to have a Zone 1 for each area.
1 = On-Board Zone (1-8)		1 = Assign Zone To Area 1	
2 = Wired Zone Expander		2 = Assign Zone To Area 2	
3 = Zone Doubled Expander		3 = Assign Zone To Area 3	
4 = Option Bus RF Receiver 1		4 = Assign Zone To Area 4	
5 = Option Bus RF Receiver 2			

<p>Address Zone 1</p> <p>706 Input Device</p> <p>707 Zone Index</p> <p>708 Area Assignment</p> <p>709/710 Zone Number</p> <p>Default Entry/Exit Delay-1</p>	<p>Address Zone 2</p> <p>711 Input Device</p> <p>712 Zone Index</p> <p>713 Area Assignment</p> <p>714/715 Zone Number</p> <p>Default Follower</p>
<p>Address Zone 3</p> <p>716 Input Device</p> <p>717 Zone Index</p> <p>718 Area Assignment</p> <p>719/720 Zone Number</p> <p>Default Follower</p>	<p>Address Zone 4</p> <p>721 Input Device</p> <p>722 Zone Index</p> <p>723 Area Assignment</p> <p>724/725 Zone Number</p> <p>Default Follower</p>
<p>Address Zone 5</p> <p>726 Input Device</p> <p>727 Zone Index</p> <p>728 Area Assignment</p> <p>729/730 Zone Number</p> <p>Default Instant</p>	<p>Address Zone 6</p> <p>731 Input Device</p> <p>732 Zone Index</p> <p>733 Area Assignment</p> <p>734/735 Zone Number</p> <p>Default Instant</p>
<p>Address Zone 7</p> <p>736 Input Device</p> <p>737 Zone Index</p> <p>738 Area Assignment</p> <p>739/740 Zone Number</p> <p>Default Instant</p>	<p>Address Zone 8</p> <p>741 Input Device</p> <p>742 Zone Index</p> <p>743 Area Assignment</p> <p>744/745 Zone Number</p> <p>Default 24-Hr Tamper</p>

Address 746 747 748 749/750
Zone 9
 Default Input Device Zone Index Area Assignment Zone Number

Address 751 752 753 754/755
Zone 10
 Default Input Device Zone Index Area Assignment Zone Number

Address 756 757 758 759/760
Zone 11
 Default Input Device Zone Index Area Assignment Zone Number

Address 761 762 763 764/765
Zone 12
 Default Input Device Zone Index Area Assignment Zone Number

Address 766 767 768 769/770
Zone 13
 Default Input Device Zone Index Area Assignment Zone Number

Address 771 772 773 774/775
Zone 14
 Default Input Device Zone Index Area Assignment Zone Number

Address 776 777 778 779/780
Zone 15
 Default Input Device Zone Index Area Assignment Zone Number

Address 781 782 783 784/785
Zone 16
 Default Input Device Zone Index Area Assignment Zone Number

Address 786 787 788 789/790
Zone 17
 Default Input Device Zone Index Area Assignment Zone Number

Address 791 792 793 794/795
Zone 18
 Default Input Device Zone Index Area Assignment Zone Number

Address 796 797 798 799/800
Zone 19
 Default Input Device Zone Index Area Assignment Zone Number

Address 801 802 803 804/805
Zone 20
 Default Input Device Zone Index Area Assignment Zone Number

Address 806 807 808 809/810
Zone 21
 Default Input Device Zone Index Area Assignment Zone Number

Address 811 812 813 814/815
Zone 22
 Default Input Device Zone Index Area Assignment Zone Number

Address 816 817 818 819/820
Zone 23
 Default Input Device Zone Index Area Assignment Zone Number

Address 821 822 823 824/825
Zone 24
 Default Input Device Zone Index Area Assignment Zone Number

Address 826 827 828 829/830
Zone 25
 Default Input Device Zone Index Area Assignment Zone Number

Address 831 832 833 834/835
Zone 26
 Default Input Device Zone Index Area Assignment Zone Number

Address 836 837 838 839/840
Zone 27
 Default Input Device Zone Index Area Assignment Zone Number

Address 841 842 843 844/845
Zone 28
 Default Input Device Zone Index Area Assignment Zone Number

Address 846 847 848 849/850
Zone 29
 Default Input Device Zone Index Area Assignment Zone Number

Address 851 852 853 854/855
Zone 30
 Default Input Device Zone Index Area Assignment Zone Number

Address 856 857 858 859/860
Zone 31
 Default Input Device Zone Index Area Assignment Zone Number

Address 861 862 863 864/865
Zone 32
 Default Input Device Zone Index Area Assignment Zone Number

Zone 33

Address	866	867	868	869/870
Default	0	0	1	3 3
	Input Device	Zone Index	Area Assignment	Zone Number

Zone 34

Address	871	872	873	874/875
Default	0	0	1	3 4
	Input Device	Zone Index	Area Assignment	Zone Number

Zone 35

Address	876	877	878	879/880
Default	0	0	1	3 5
	Input Device	Zone Index	Area Assignment	Zone Number

Zone 36

Address	881	882	883	884/885
Default	0	0	1	3 6
	Input Device	Zone Index	Area Assignment	Zone Number

Zone 37

Address	886	887	888	889/890
Default	0	0	1	3 7
	Input Device	Zone Index	Area Assignment	Zone Number

Zone 38

Address	891	892	893	894/895
Default	0	0	1	3 8
	Input Device	Zone Index	Area Assignment	Zone Number

Zone 39

Address	896	897	898	899/900
Default	0	0	1	3 9
	Input Device	Zone Index	Area Assignment	Zone Number

Zone 40

Address	901	902	903	904/905
Default	0	0	1	4 0
	Input Device	Zone Index	Area Assignment	Zone Number

Zone Indexes

Zone Type

0 = Chime	5 = 24-Hour Emergency	10 = Controlled, Keyswitch
1 = 24-Hour Fire	6 = 24-Hour Visible Panic	11 = Controlled, Entry/Exit Delay 1
2 = 24-Hour Fire With Verification	7 = 24-Hour Invisible Panic	12 = Controlled, Entry/Exit Delay 2
3 = Reserved	8 = 24-Hour Burglary	13 = Controlled, Follower
4 = 24-Hour Tamper	9 = Reserved	14 = Controlled, Instant

Pulse Count

Number Of Valid Pulses (0 - 15) Within The Pulse Count Time

Pulse Count Time

50 ms Loop Response Time Zone Pulse Count Time	160 ms Loop Response Time Zone Pulse Count Time
0 = 0.5 Second	8 = 20 Seconds
1 = 1 Second	9 = 30 Seconds
2 = 2 Seconds	10 = 40 Seconds
3 = 3 Seconds	11 = 50 Seconds
4 = 4 Seconds	12 = 60 Seconds
5 = 5 Seconds	13 = 90 Seconds
6 = 10 Seconds	14 = 120 Seconds
7 = 15 Seconds	15 = 200 Seconds

Zone Options 1
0 = No Options Selected
1 = Alarm Report Abort Allowed
2 = Reserved
4 = Armed For Stay
8 = Sensor Trouble Monitor

Zone Options 2
0 = No Options Selected
1 = Swinger Bypass
2 = Alarm Output
4 = Can Be Bypassed / Forced Armed
8 = Cross-Zone (Pulse Count Handover)

Zone Options 1 - (Controlled Keyswitch Only)	
Latching	Momentary
0 = Away, Off (Away, Stay & Stay2)	8 = Away, Off (Away, Stay & Stay 2)
1 = Away	9 = Away
2 = Off (Away, Stay & Stay 2)	10 = Off (Away, Stay & Stay 2)
4 = Stay, Off (Away, Stay & Stay 2)	12 = Stay, Off (Away, Stay & Stay 2)
5 = Stay	13 = Stay
6 = Off (Stay & Stay 2)	14 = Off (Stay & Stay 2)

Alarm / Trouble / Restoral Reporting Enable
0 = No Alarm/Alarm Restore Reports
1 = Alarm Reports Allowed
2 = Trouble Reports On Open
4 = Trouble Reports On Short
8 = Restore Reported Allowed

Alarm Report Routing & Restoral Report Routing
0 = No Reports, No Event To Log/Printer
1 = Report To Destination 1 + Log/Printer
2 = Report To Destination 2 + Log/Printer
3 = Report To Destination 1 & Destination 2 + Log/Printer
4 = Report To Destination 1 When Destination 1 Fail + Log/Printer
5 = No Report, Events To Log/Printer

Zone Index 1	Address	906	907	908	909	910	911	912	913
	Default: 24-Hr Fire	1 Zone Type	0 Pulse Count	0 Pulse Count Time	0 Zone Options 1	2 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 2	Address	914	915	916	917	918	919	920	921
	Default: 24-Hr Fire With Verification	2 Zone Type	0 Pulse Count	0 Pulse Count Time	0 Zone Options 1	2 Zone Options 2	11 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 3	Address	922	923	924	925	926	927	928	929
	Default: Reserved	3 Zone Type	0 Pulse Count	0 Pulse Count Time	1 Zone Options 1	0 Zone Options 2	10 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 4	Address	930	931	932	933	934	935	936	937
	Default: 24-Hr Tamper	4 Zone Type	0 Pulse Count	0 Pulse Count Time	0 Zone Options 1	7 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 5	Address	938	939	940	941	942	943	944	945
	Default: 24-Hr Emergency	5 Zone Type	0 Pulse Count	0 Pulse Count Time	1 Zone Options 1	7 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 6	Address	946	947	948	949	950	951	952	953
	Default: 24-Hr Visible Panic With Alarm Output	6 Zone Type	0 Pulse Count	0 Pulse Count Time	1 Zone Options 1	7 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 7	Address	954	955	956	957	958	959	960	961
	Default: 24-Hr Invisible Panic	7 Zone Type	0 Pulse Count	0 Pulse Count Time	1 Zone Options 1	5 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 8	Address	962	963	964	965	966	967	968	969
	Default: 24-Hr Burglary	8 Zone Type	0 Pulse Count	0 Pulse Count Time	0 Zone Options 1	2 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 9	Address	970	971	972	973	974	975	976	977
	Default: Chime	0 Zone Type	0 Pulse Count	0 Pulse Count Time	0 Zone Options 1	0 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 10	Address	978	979	980	981	982	983	984	985
	Default: Keyswitch	10 Zone Type	0 Pulse Count	0 Pulse Count Time	8 Zone Options 1	2 Zone Options 2	11 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 11	Address	986	987	988	989	990	991	992	993
	Default: Entry/Exit Delay-1	11 Zone Type	0 Pulse Count	0 Pulse Count Time	5 Zone Options 1	7 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing
Zone Index 12	Address	994	995	996	997	998	999	1000	1001
	Default: Entry/Exit Delay-2	12 Zone Type	0 Pulse Count	0 Pulse Count Time	5 Zone Options 1	7 Zone Options 2	9 Alarm/Trouble /Restore Allowed	1 Alarm Routing	1 Restore Routing

Zone Index 13	Address	1002	1003	1004	1005	1006	1007	1008	1009
	Default:	13	0	0	1	7	9	1	1
	Follower	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Zone Index 14	Address	1010	1011	1012	1013	1014	1015	1016	1017
	Default:	14	0	0	1	7	9	1	1
	Instant	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing
Zone Index 15	Address	1018	1019	1020	1021	1022	1023	1024	1025
	Default:	14	0	0	5	7	9	1	1
	Instant / Arms In Stay	Zone Type	Pulse Count	Pulse Count Time	Zone Options 1	Zone Options 2	Alarm/Trouble /Restore Allowed	Alarm Routing	Restore Routing

Address 1026 Page 194
EOL Resistor Value
 0 = No EOL Resistor
 1 = 1K (+/- 20%)
 2 = 1K5 (+/- 20%)
 3 = 2K2 (+/- 20%)
 4 = 3K3 (+/- 20%)
 5 = 3K9 (+/- 20%)
 6 = 4K7 (+/- 20%)
 7 = 5K6 (+/- 20%)
 8 = 6K8 (+/- 20%)
 9 = 10K (+/- 20%)
 10 = 12K (+/- 20%)
 11 = 22K (+/- 20%)
 12 = Reserved
 13 = Reserved
 14 = Reserved
 15 = Zone Doubled 2k2 / 3k65 3

Address 1027 Page 195
Zone Response Options
 0 = No Options Selected
 1 = Smart Swinger Lockout
 2 = Trouble Report On 'Unverified' Event
 4 = Entry Delay Is Sequential
 8 = Reserved 0

Address 1028 Page 196
Bypass/Forced Bypass Report Routing
 0 = No Reports, No Events To Log/Printer
 1 = Report To Destination 1, Events To Log/Printer
 2 = Report To Destination 2, Events To Log/Printer
 3 = Report To Destination 1 & Destination 2, Events To Log/Printer
 4 = Report To Destination 2 On Destination 1 Fail, Events To Log/Printer
 5 = No Report, Events To Log/Printer 1

Address 1029 Page 197
Swinger Count For Alarm Output 1

Address 1030 Page 197
Swinger Count For Zone Reports 2

Address 1031 Page 198
Bypass, Swinger Bypass, Sensor Trouble Report Options
 0 = No Bypass, Sensor Trouble Reports and Restore Reports Allowed
 1 = Zone Bypass/Swinger Bypass Reports Allowed
 2 = Zone Bypass/Swinger Bypass Restore Reports Allowed
 4 = Sensor Trouble Reports Allowed
 8 = Sensor Trouble Restore Reports Allowed 3

Address 1032 – 1033 Page 199
Sensor Monitor Time
 Address 1032 = Increments Of Days (Tens Digit)
 Address 1033 = Increments Of Days (Units Digit) 07

Address 1034 Page 200
Alarm Report Abort Time
 0 & 1 = 15 Seconds
 2 = 30 Seconds
 3 - 15 = 45 Seconds 2

Address 1038 Page 200
Zone Trouble Report / Restore Report Routing
 0 = No Reports, No Events To Log/Printer
 1 = Report To Destination 1, Events To Log/Printer
 2 = Report To Destination 2, Events To Log/Printer
 3 = Report To Destination 1 & Destination 2, Events To Log/Printer
 4 = Report To Destination 2 On Destination 1 Fail, Events To Log/Printer
 5 = No Report, Events To Log/Printer 1

Address 1039

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Global Output Options

- 0 = No Options Programmed
- 1 = Output 2 Is Supervised Horn Speaker
- 2 = Send Output Set/Reset Reports Allowed
- 4 = Strobe Output To Indicate RF and Keyswitch Arm/Disarm
- 8 = Alarm Output(s) To Indicate RF and Keyswitch Arm/Disarm

1

Address 1040

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Siren Time

Increments Of 1 Minute (0 - 15 Minutes)

6

Address 1041

Page 202

Horn Speaker Frequency

(0 = Lowest Frequency / 15 = Highest Frequency)

2

Address 1042

Page 202

Horn Speaker Beep Volume

(0 = No Beep / 15 = Highest Volume)

7

Address 1043

Page 203

Strobe Function Options

- 0 = Siren Time Starts Strobe Function
- 1 = Alarm Output Type 1,8 Starts Strobe Function
- 2 = Alarm Output Type 1,9 Starts Strobe Function
- 4 = Alarm Output Type 1,10 Starts Strobe Function
- 8 = Alarm Output Type 1,11 Starts Strobe Function

15

Address 1044 – 1183

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Outputs

Area Assignment

Option	Area
0	Output Disabled
1	Assigned To Area 1
2	Assigned To Area 2
4	Assigned To Area 3
8	Assigned To Area 4

Event Types

0	0	Disabled
0	1	Armed - Away, Stay or Stay 2
0	2	Armed - Stay or Stay 2
0	3	Armed - Away
0	4	Auto Arm Pre-Alert Timer
0	5	Exit Delay or Entry Delay
0	6	Exit Delay
0	7	Exit Delay Finished
0	8	Ack After Exit Delay (Siren Test On Close)
0	9	Entry Delay
0	10	Entry Delay + Chime
0	11	Entry Delay, Exit Delay + Chime
0	12	Phone Line Fail
0	13	Ack Received
0	14	AC Fail
0	15	Low Battery / Missing Battery
1	0	PO2 Siren Supervision Fail
1	1	Sensor Trouble Monitor
1	2	Duress, Command 47 Resets
1	3	User Tamper, Command 47 Resets
1	4	Disarm/Away/Part 1 Beeps (Keyswitch & RF Arming)
1	5	Siren Time - Starts On Alarm Event (Code Stops)
1	6	Strobe - Follows Siren Time. (Code Stops)
1	7	Silent Alarm - Follow Siren Time (Code Stops)
1	8	Alarm - Away, Part 1 and Stay 2, Non-Fire 24 Hour Alarms (Reset On Disarm or Code)
1	9	Alarm - Part 1 and Stay 2, Non-Fire 24 Hour Alarms (Reset On Disarm or Code)

1	10	Alarm All Modes (Including Fire and 24 Hour Non-Fire (Reset On Disarm or Code)
1	11	Fire Alarm - Follows Siren Time (Reset On Code)
1	12	Fire Alarm, Latching (Reset On Command 47)
1	13	Fire Alarm Verification (must follow UL model)
1	14	System Trouble
1	15	RF Trapezoid Key
2	0	RF Rising Sun Key
2	1	RF Panic
2	2	RF Panic While Sirens Running
2	3	A-Key Activated (Command 47 Resets)
2	4	B-Key Activated (Command 47 Resets)
2	5	C-Key Activated (Command 47 Resets)
2	6	Communication Fail After 3 Attempts
2	7	Communication Fail
2	8	Panel Off Hook
2	9	Ring Detect
2	10	Voice Request
2	11	Follow Keypad Buzzer
2	12	Chime
2	13	Ready To Arm
2	14	Exit Error
2	15	AC 50 Hz Or 60 Hz
3	0	Ground Start
3	1	Follow Zone Index 1
3	2	Follow Zone Index 2
3	3	Follow Zone Index 3

3	4	Follow Zone Index 4
3	5	Follow Zone Index 5
3	6	Follow Zone Index 6
3	7	Follow Zone Index 7
3	8	Follow Zone Index 8
3	9	Follow Zone Index 9
3	10	Follow Zone Index 10
3	11	Follow Zone Index 11
3	12	Follow Zone Index 12
3	13	Follow Zone Index 13
3	14	Follow Zone Index 14
3	15	Follow Zone Index 15
4	0	
4	1	Alarm Zone Index 1
4	2	Alarm Zone Index 2
4	3	Alarm Zone Index 3
4	4	Alarm Zone Index 4
4	5	Alarm Zone Index 5
4	6	Alarm Zone Index 6
4	7	Alarm Zone Index 7
4	8	Alarm Zone Index 8
4	9	Alarm Zone Index 9
4	10	Alarm Zone Index 10
4	11	Alarm Zone Index 11
4	12	Alarm Zone Index 12
4	13	Alarm Zone Index 13
4	14	Alarm Zone Index 14
4	15	Alarm Zone Index 15
5	0	
5	1	Trouble Zone Index 1
5	2	Trouble Zone Index 2
5	3	Trouble Zone Index 3
5	4	Trouble Zone Index 4
5	5	Trouble Zone Index 5
5	6	Trouble Zone Index 6
5	7	Trouble Zone Index 7
5	8	Trouble Zone Index 8
5	9	Trouble Zone Index 9
5	10	Trouble Zone Index 10
5	11	Trouble Zone Index 11
5	12	Trouble Zone Index 12
5	13	Trouble Zone Index 13
5	14	Trouble Zone Index 14
5	15	Trouble Zone Index 15
6	0	
6	1	Follow PIN Code 1

6	2	Follow PIN Code 2
6	3	Follow PIN Code 3
6	4	Follow PIN Code 4
6	5	Follow PIN Code 5
6	6	Follow PIN Code 6
6	7	Follow PIN Code 7
6	8	Follow PIN Code 8
6	9	Follow PIN Code 9
6	10	Follow PIN Code 10
6	11	Follow PIN Code 11
6	12	Follow PIN Code 12
6	13	Follow PIN Code 13
6	14	Follow PIN Code 14
6	15	Follow PIN Code 15
7	0	Follow PIN Code 16
7	1	Follow PIN Code 17
7	2	Follow PIN Code 18
7	3	Follow PIN Code 19
7	4	Follow PIN Code 20
7	5	Follow PIN Code 21
7	6	Follow PIN Code 22
7	7	Follow PIN Code 23
7	8	Follow PIN Code 24
7	9	Follow PIN Code 25
7	10	Follow PIN Code 26
7	11	Follow PIN Code 27
7	12	Follow PIN Code 28
7	13	Follow PIN Code 29
7	14	Follow PIN Code 30
7	15	Follow PIN Code 31
8	0	Follow PIN Code 32
8	1	Sked (Only Outputs 1 - 15)
8	2	Command 54
8	3	
8	4	Confirmed / Verified Alarm
8	5	Unconfirmed / Verified Alarm
8	6	Tamper
8	7	Bypass
8	8	Enhanced Siren
8	9	Alarm Cancelled
8	10	Rf Transmitter Missing
8	11	RF Transmitter Low Battery
8	12	RF Receiver Jamming
8	13	Fire Alarm Only
8	14	Personal Alarm

Polarity

Option	Polarity	Option	Polarity
0	Output Disabled		
1	Normally Open, Going Low (No Time Parameters)	8	Normally Low, Going Open (No Time Parameters)
2	Normally Open, Latching Low (Resets Command 54)	9	Normally Low, Latching Open (Resets Command 54)
3	Toggle Relay State		
4	Normally Open, Pulsing Low	10	Normally Low Pulsing Open
5	Normally Open, One Shot Low (Full Duration)	11	Normally Low, One Shot Open (Full Duration)
6	Normally Open, One Shot Low (Retrigger)	12	Normally Low, One Shot Open (Retrigger)
7	Normally Open, One Shot Low (Can Reset)	13	Normally Low, One Shot Open (Can Reset)

Pulse Mode Table

Time Base	On Time	Time Multiplier	Off Time	Increments	Tolerance
0	0	N/A	N/A	N/A	N/A
1	200 ms	01 - 99	200 ms - 19.8 Sec	200 ms	+/- 200 ms
2	1 Sec	01 - 99	1 - 99 Sec	1 Sec	+/- 1 Sec
3	1 Min	01 - 99	1 - 99 Min	1 Min	+/- 1 Min
4	1 Hr	01 - 99	1 - 99 Hr	1 Hr	+/- 1 Hr

One Shot Mode Table

Time Base	ON Time	OFF Time	Increments	Tolerance
0	N/A	N/A	N/A	N/A
1	200 ms	200 - 19.8 ms	200 ms	+/- 200 ms
2	1 Second	1 - 99 Seconds	1 Second	+/- 1 Second
3	1 Minute	1 - 99 Minutes	1 Minute	+/- 1 Minute
4	1 Hour	1 - 99 Hours	1 Hour	+/- 1 Hour

<p>Output 1</p> <p>Address 1044 1045/1046 1047 1048 1049/1050</p> <p>Default: Disabled</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 0 0</p> <p>Polarity: 1</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 2</p> <p>Address 1051 1052/1053 1054 1055 1056/1057</p> <p>Default: (Speaker) Alarm All Modes</p> <p>Area Assignment: 1 1 10</p> <p>Event Type: 7</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 3</p> <p>Address 1058 1059/1060 1061 1062 1063/1064</p> <p>Default: (Piezo) Alarm All Modes</p> <p>Area Assignment: 1 1 10</p> <p>Event Type: 7</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 4</p> <p>Address 1065 1066/1067 1068 1069 1070/1071</p> <p>Default: Strobe</p> <p>Area Assignment: 1 1 6</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 5</p> <p>Address 1072 1073/1074 1075 1076 1077/1078</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 6</p> <p>Address 1079 1080/1081 1082 1083 1084/1085</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 7</p> <p>Address 1086 1087/1088 1089 1090 1091/1092</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 8</p> <p>Address 1093 1094/1095 1096 1097 1098/1099</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 9</p> <p>Address 1100 1101/1102 1103 1104 1105/1106</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 10</p> <p>Address 1107 1108/1109 1110 1111 1112/1113</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 11</p> <p>Address 1114 1115/1116 1117 1118 1119/1120</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 12</p> <p>Address 1121 1122/1123 1124 1125 1126/1127</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 13</p> <p>Address 1128 1129/1130 1131 1132 1133/1134</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 14</p> <p>Address 1135 1136/1137 1138 1139 1140/1141</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 15</p> <p>Address 1142 1143/1144 1145 1146 1147/1148</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 16</p> <p>Address 1149 1150/1151 1152 1153 1154/1155</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 17</p> <p>Address 1156 1157/1158 1159 1160 1161/1162</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 18</p> <p>Address 1163 1164/1165 1166 1167 1168/1169</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>
<p>Output 19</p> <p>Address 1170 1171/1172 1173 1174 1175/1176</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>	<p>Output 20</p> <p>Address 1177 1178/1179 1180 1181 1182/1183</p> <p>Area Assignment: 1 0 0</p> <p>Event Type: 1</p> <p>Polarity: 0</p> <p>Time Base: 0</p> <p>Multiplier: 0 0</p>

Skeds

Type
0 = Sked Disabled
1 = Auto Arm - Away
2 = Auto Arm - Stay
3 = Auto Arm - Stay 2
4 = Auto Off
5 = Auto Output On
6 = Auto Output Off

Assign		
1 = Area 1 or Output 1	6 = Output 6	11 = Output 11
2 = Area 2 or Output 2	7 = Output 7	12 = Output 12
3 = Area 3 or Output 3	8 = Output 8	13 = Output 13
4 = Area 4 or Output 4	9 = Output 9	14 = Output 14
5 = Output 5	10 = Output 10	15 = Output 15

Time
Hour Of The Day (Tens Digit)
Hour Of The Day (Units Digit)
Minute Of The Day (Tens Digit)
Minute Of The Day (Units Digit)

Option 1
1 = Every Day
2 = Monday
4 = Tuesday
8 = Wednesday

Option 2
1 = Thursday
2 = Friday
4 = Saturday
8 = Sunday

Sked #1

Address	1184	1185	1186 - 1189	1190	1191
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
	Type	Assign	Time	Option 1	Option 2

Sked #2

Address	1192	1193	1194 - 1197	1198	1199
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
	Type	Assign	Time	Option 1	Option 2

Sked #3

Address	1200	1201	1202 - 1205	1206	1207
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
	Type	Assign	Time	Option 1	Option 2

Sked #4

Address	1208	1209	1210 - 1213	1214	1215
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
	Type	Assign	Time	Option 1	Option 2

Sked #5

Address	1216	1217	1218 - 1221	1222	1223
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
	Type	Assign	Time	Option 1	Option 2

Sked #6

Address	1224	1225	1226 - 1229	1230	1231
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
	Type	Assign	Time	Option 1	Option 2

Sked #7

Address	1232	1233	1234 - 1237	1238	1239
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
	Type	Assign	Time	Option 1	Option 2

Sked #8

Address	1240	1241	1242 - 1245	1246	1247
	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
	Type	Assign	Time	Option 1	Option 2

Address 1265

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**AC Fail & Ground Fault
Trouble Tone**

- 0 = No Options Programmed
- 1 = AC Fail Trouble Tone Allowed
- 2 = Ground Fault Display and Trouble Tone Allowed
- 4 = Reserved
- 8 = Reserved

0

Keypad Text

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Address 1266 - 1297

Call For Service Text

Default = Press 0 To View

P r e s s 0 T o V i e w

Address 1298 - 1329

A-Key Text

Default = A Key Text

A K e y T e x t

Address 1330 - 1361

B-Key Text

Default = B Key Text

B K e y T e x t

Address 1362 - 1393

B-Key Text

Default = C Key Text

C K e y T e x t

Address 1394 - 1425

Area 1 Name Text

Default = SOLUTION 40

S o l u t i o n 4 0

Address 1426 - 1457

Area 1 Idle Text

Default = Not Ready

N o t R e a d y

Address 1458 - 1489

Area 2 Name Text

Default = SOLUTION 40

S o l u t i o n 4 0

Address 1490 - 1521

Area 2 Idle Text

Default = Not Ready

N o t R e a d y

Address 1522 - 1553

Area 3 Name Text

Default = SOLUTION 40

S o l u t i o n 4 0

Address 1554 - 1585

Area 3 Idle Text

Default = Not Ready

N o t R e a d y

Address 1586 - 1617

Area 4 Name Text

Default = SOLUTION 40

S o l u t i o n 4 0

Address 1618 - 1649

Area 4 Idle Text

Default = Not Ready

N o t R e a d y

Address 1650 - 1681

Location 1 Text

Default = Zone 1

				Z	o	n	e		1						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1682 - 1713

Location 2 Text

Default = Zone 2

				Z	o	n	e		2						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1714 - 1745

Location 3 Text

Default = Zone 3

				Z	o	n	e		3						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1746 - 1777

Location 4 Text

Default = Zone 4

				Z	o	n	e		4						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1778 - 1809

Location 5 Text

Default = Zone 5

				Z	o	n	e		5						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1810 - 1841

Location 6 Text

Default = Zone 6

				Z	o	n	e		6						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1842 - 1873

Location 7 Text

Default = Zone 7

				Z	o	n	e		7						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1874 - 1905

Location 8 Text

Default = Zone 8

				Z	o	n	e		8						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1906 - 1937

Location 9 Text

Default = Zone 9

				Z	o	n	e		9						
--	--	--	--	---	---	---	---	--	---	--	--	--	--	--	--

Address 1938 - 1969

Location 10 Text

Default = Zone 10

				Z	o	n	e		1	0					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 1970 - 2001

Location 11 Text

Default = Zone 11

				Z	o	n	e		1	1					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2002 - 2033

Location 12 Text

Default = Zone 12

				Z	o	n	e		1	2					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2034 - 2065

Location 13 Text

Default = Zone 13

				Z	o	n	e		1	3					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2066 - 2097

Location 14 Text

Default = Zone 14

				Z	o	n	e		1	4					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2098 - 2129

Location 15 Text

Default = Zone 15

				Z	o	n	e		1	5					
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--	--

Address 2130 - 2161
Location 16 Text

Default = Zone 16

				Z	o	n	e		1	6				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2162 - 2193
Location 17 Text

Default = Zone 17

				Z	o	n	e		1	7				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2194 - 2225
Location 18 Text

Default = Zone 18

				Z	o	n	e		1	8				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2226 - 2257
Location 19 Text

Default = Zone 19

				Z	o	n	e		1	9				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2258 - 228
Location 20 Text

Default = Zone 20

				Z	o	n	e		2	0				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2290 - 2321
Location 21 Text

Default = Zone 21

				Z	o	n	e		2	1				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2322 - 2353
Location 22 Text

Default = Zone 22

				Z	o	n	e		2	2				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2354 - 2385
Location 23 Text

Default = Zone 23

				Z	o	n	e		2	3				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2386 - 2417
Location 24 Text

Default = Zone 24

				Z	o	n	e		2	4				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2418 - 2449
Location 25 Text

Default = Zone 25

				Z	o	n	e		2	5				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2450 - 2481
Location 26 Text

Default = Zone 26

				Z	o	n	e		2	6				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2482 - 2513
Location 27 Text

Default = Zone 27

				Z	o	n	e		2	7				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2514 - 2545
Location 28 Text

Default = Zone 28

				Z	o	n	e		2	8				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2546 - 2577
Location 29 Text

Default = Zone 29

				Z	o	n	e		2	9				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2578 - 2609
Location 30 Text

Default = Zone 30

				Z	o	n	e		3	0				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2610 - 2641

Location 31 Text

Default = Zone 31

				Z	o	n	e		3	1				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2642 - 2673

Location 32 Text

Default = Zone 32

				Z	o	n	e		3	2				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2674 - 2705

Location 33 Text

Default = Zone 33

				Z	o	n	e		3	3				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2706 - 2737

Location 34 Text

Default = Zone 34

				Z	o	n	e		3	4				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2738 - 2769

Location 35 Text

Default = Zone 35

				Z	o	n	e		3	5				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2770 - 2801

Location 36 Text

Default = Zone 36

				Z	o	n	e		3	6				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2802 - 2833

Location 37 Text

Default = Zone 37

				Z	o	n	e		3	7				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2834 - 2865

Location 38 Text

Default = Zone 38

				Z	o	n	e		3	8				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2866 - 2897

Location 39 Text

Default = Zone 39

				Z	o	n	e		3	9				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

Address 2898 - 2929

Location 40 Text

Default = Zone 40

				Z	o	n	e		4	0				
--	--	--	--	---	---	---	---	--	---	---	--	--	--	--

RF Keypad Options / Assignment (Future Release)

Keypad Options
0 = Disabled
1 = Reserved
2 = Assigned To RF Receiver 2
4 = Supervised
8 = Reserved

RF Keypad Area Assignment
0 = Disabled
1 = Assigned To Area 1
2 = Assigned To Area 2
3 = Assigned To Area 3
4 = Assigned To Area 4

<p>RF Keypad 1</p> <p style="text-align: center;">2930  Options</p> <p style="text-align: center;">2931  Area Assignment</p>	<p>RF Keypad 2</p> <p style="text-align: center;">2932  Options</p> <p style="text-align: center;">2933  Area Assignment</p>
<p>RF Keypad 3</p> <p style="text-align: center;">2934  Options</p> <p style="text-align: center;">2935  Area Assignment</p>	<p>RF Keypad 4</p> <p style="text-align: center;">2936  Options</p> <p style="text-align: center;">2937  Area Assignment</p>

Address 2938

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Keyfob Receiver Assignment Options

- 0 = Assigned To RF Receiver 1
- 1 = Assign Keyfobs 01 - 08 To Receiver 2
- 2 = Assign Keyfobs 09 - 16 To Receiver 2
- 4 = Assign Keyfobs 17 - 24 To Receiver 2
- 8 = Assign Keyfobs 25 - 32 To Receiver 2

8

Address 2939

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Keyfob Options

- 0 = Disabled
- 1 = 'Panic' Alarm Allowed
- 2 = Audible Alarm Allowed For 'Panic'
- 4 = Assign 'O' (Trapezoid) Key To Stay
- 8 = Assign 'P' (Sun) Key To Stay 2

7

Address 2944

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Return To Factory Default

Program A 1 Into This address To Reset Back To Factory Default Settings

0

Address 3406

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Tamper Alarm / Trouble Configuration

- 0 = No trouble or restoral reports
- 1 = Tamper Alarms when Armed
- 2 = Tamper alarms when Disarmed
- 4 = Send Tamper Trouble Reports
- 8 = Send Tamper Trouble Restoral Reports

15

Address 3407

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System Alarm Reports Configuration

- 0 = No System Tamper Alarm Reports, Alarm Output
- 1 = Send System Tamper Alarm Reports
- 2 = Send System Tamper Alarm Restoral Reports
- 4 = Enable System Tamper Alarm Output
- 8 = Reserved

7

Address 3408

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Tamper Reset / Arming Options

- 0 = No Tamper Reset / Arming Options
- 1 = Allow User Reset of Tamper / Troubles
- 2 = Allow Force Arming of Tamper / Troubles
- 4 = Reserved
- 8 = Reserved

3

Address 3409

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Contact Set / Exit Delay Cancel Zone Options

- 0 = No Contact Set Arming
- 1 = Enable Contact Set in Area 1
- 2 = Enable Contact Set in Area 2
- 4 = Enable Contact Set in Area 3
- 8 = Enable Contact Set in Area 4

1

Address 3410

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Exit Terminator Areas

- 0 = No Exit Terminator Arming
- 1 = Enable Exit Terminator Arming in Area 1
- 2 = Enable Exit Terminator Arming in Area 2
- 4 = Enable Exit Terminator Arming in Area 3
- 8 = Enable Exit Terminator Arming in Area 4

0

Address 3411

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Panel Arming Options

- 0 = No Panel Arming Options
- 1 = Enable Bad Set Operation
- 2 = Panel is Unset during Exit Delay
- 4 = Start Exit Delay with Faulted Zones
- 8 = Reserved

6

Address 3412 - 3413

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Verified Alarm Timer

- Address 3412 = Increments Of 16 Minutes
- Address 3413 = Increments Of 1 Minute

0 0

Address 3414 - 3429

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Personal Dialing Format Configuration

Options	Area Assignment
0 = No Report Sent	9 = 3 beeps, pause, 1 beep
1 = 1 beep	10 = 4beeps
2 = 1 beep, pause, 1 beep	11 = 1 beep, pause, 4 beeps
3 = 2 beeps	12 = 2 beeps, pause, 3 beeps
4 = 1 beep ,pause, 2 beeps	13 = 3 beeps, pause, 2 beeps
5 = 2 beeps, pause, 1 beep	14 = 4 beeps, pause, 1 beep
6 = 3 beeps	15 = 5 beeps
7 = 1 beep, pause, 3beeps	
8 = 2 beeps, pause, 2 beeps	

Duress

Address 3414
3

Non-Fire Trouble

Address 3419
0

Open / Close

Address 3423
0

Bypass

Address 3428
0

Fire Alarm

Address 3415
1

Fire Restoral

Address 3420
0

Installer Mode

Address 3424
0

Output Reports

Address 3429
0

Non-Fire Alarm

Address 3416
2

Non-Fire Restoral

Address 3421
0

System Fault

Address 3425
0

Fire Trouble

Address 3418
0

RF Trouble

Address 3422
0

Test Report

Address 3426
0

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