ELECTRONICS
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Solution 6 + 6
Installation Manual

ISSUE 1.22

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MA600I

Solution

6 + 6

Installation

Manual

ISSUE 1.22

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Solution 6+6

Installation Manual

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This documentation is provided to suit *Solution 6+6* (CC600/LP600)

Firmware Revision 1.20 – 1.27

Hardware Revision A

Alarm Link Form - Software Version 1.00 = S6_V12

Table Of Contents

Introduction

This section includes the following;

- *Introduction*
- *Features*
- *Quick Start*

Introduction

Congratulations on selecting the *Solution 6+6* control panel for your installation. So that you can obtain the most from your unit, we suggest that you take the time to read through this manual and familiarise yourself with the numerous outstanding operating and installation features of this system.

You will notice that in all aspects of planning, engineering, styling, operation, convenience and adaptability, we have sought to anticipate your every possible requirement. Programming simplicity and speed have been some of the major considerations and we believe that our objectives in this area have been more than satisfied.

This installation manual will explain all aspects of programming the *Solution 6+6* control panel from factory default to final commissioning. All system parameters and options are detailed, however, suitability is left up to the individual. Every control panel can be tailored to meet all requirements quickly and easily. The programming simplicity will make your installation quick, accurate and rewarding each and every time.

The *Solution* range of control panels are very popular amongst thousands of people throughout many countries of the world, all who have various levels of technical aptitude and ability. We have tried to aim this installation manual to all levels of readers.

As the *Solution* control panels continue to be improved over the years, they have become very powerful. Some of its early first-time users have advanced to true "power users" and we need to address their needs too, while maintaining the simplicity of the manual and the product.

Features

The *Solution 6+6* security system uses the very latest in microprocessor technology to provide you with more useful features and superior reliability and performance.

Following is a list of the main features that the control panel will provide.

- Eight Programmable User Codes
- Codepad Duress, Panic, Fire, Medical Alarms
- STAY Mode and AWAY Mode Operation
- Entry and Exit Warning Beeper
- Six Programmable Burglary Zones
- Six 24 Hour Tamper Zones
- Partitionable To 2 Areas
- Zone Lockout
- Sensor Watch
- Day Alarm
- Dynamic Battery Testing
- Remote Arming
- Answering Machine Bypass
- AC Fail and System Fault Indicators
- Event Memory Recall
- Walk Test Mode
- Upload/Download Programmable
- Monitored Siren Output
- Strobe Output
- Relay Output
- EDMSAT – Satellite Siren Compatible
- Separate Fire Alarm Sound
- Securitel Compatible

Quick Start

The following steps will enable you to use the *Solution 6+6* control panel with the factory default values. The default values allow the control panel to communicate in the Contact ID format.

1. Connect the AC plug pack to the control panel.
The MAINS indicator will remain on as will the AWAY indicator. The system is now in the armed state.

2. Enter the default Master Code **2 5 8 0** followed by the [AWAY] button. The AWAY indicator will extinguish. The system is now in the disarmed state. Installer's Programming Mode can now be accessed.

3. The back-up battery should now be connected.

4. Enter the factory default Installer Code **1 2 3 4** followed by the [AWAY] button. The STAY and AWAY indicators will now flash simultaneously to indicate that you have now entered Installer's Programming Mode.

5. Enter the Primary Telephone Number followed by the Secondary Telephone Number and the Subscriber ID Number.

6. Set the time for the test reports if required. Any other programming changes required may also be made, otherwise the factory default settings will be used.

7. Enter Installer's Command **9 6 0** followed by the [AWAY] button to exit Installer's Programming Mode. The system will now return to the disarmed state and is now ready for use. Refer to "Installer's Programming Commands" on page 22 for more information

8. Use the Master Code to set the date and time.

How To Set The New Date and Time

1. Enter your [MASTER CODE] followed by **6** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

2. Enter the day, month, year, hour and minute using the (DD, MM, YY, HH, MM) format.

3. Press the [AWAY] button when finished.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

Zone Defaults

The default zone settings are as listed in the table below.

Zone No	*Zone Type*
1	Delay-1
2, 3, 4 & 5	Handover
6	24 Hour Zone

Table 1: Zone Defaults

Programming

This section includes the following;

- *Programming*
- *Programming With The Remote Codepad*
- *Programming With The Hand Held Programmer*
- *Programming With The Programming Key*
- *Programming Option Bits*
- *Installer's Programming Commands*
- *Disable Factory Default*
- *Defaulting The Control Panel*

Programming

The programming options of this control panel are stored in a non-volatile Eprom. This memory will hold all the relevant configuration and user specific data even during a total power loss.

The data retention time is as long as ten years without power, therefore, no reprogramming will be required after powering the control panel down.

The data can be altered as many times as required without the need for any additional specialised equipment. This memory is laid out in numerous locations, each of which holds the data for a specific function.

15 is the maximum value that can be programmed into any location.

In general, the entire programming sequence will consist of nominating the location number required and then entering or altering the data. You will repeat this procedure until all the data has been programmed to suit your requirements. The factory default settings have been selected for reporting in the Contact ID Format.

There are two programming modes. The Installer's Programming Mode and the Operators Programming Mode. Both programming modes have individual access codes and these two codes must always be programmed differently. The Master Code, as well as being able to arm and disarm the system gives access to the Operators Programming Mode. The Installers Code only gives access to the Installer's Programming Mode and does NOT arm and disarm the system.

Programming of the *Solution 6+6* control panel can be carried out via any of the following four methods.

- System Codepad
- Hand Held Programmer (CC814)
- Programming Key (CC810)
- Alarm Link Upload/Download Software (CC816)

Programming With The Remote Codepad

The system must be in the disarmed state with no flashing zone alarm memories, this can be achieved by entering the [MASTER CODE] followed by the [AWAY] button. The factory default Master Code is **2 5 8 0**.

To access the Installer's Programming Mode, enter the four digit [INSTALLER CODE] followed by the [AWAY] button. The factory default Installer Code is **1 2 3 4**. Two beeps will be heard and both the AWAY and the STAY indicators will flash simultaneously. If a long beep is heard, check the system for alarm memory. The codepad indicators will display the current data stored in the first location (LOCATION 000).

Data Value	*Zone 1 Indicator*	*Zone 2 Indicator*	*Zone 3 Indicator*	*Zone 4 Indicator*	*Zone 5 Indicator*	*Zone 6 Indicator*	*Zone 7 Indicator*	*Zone 8 Indicator*	*MAINS Indicator*
0									
1	✓								
2		✓							
3			✓						
4				✓					
5					✓				
6						✓			
7							✓		
8								✓	
9	✓							✓	
10									✓
11	✓								✓
12		✓							✓
13			✓						✓
14				✓					✓
15					✓				✓

Table 2: Zone Indicators When Programming

Example

To enter Installer's Programming Mode, enter the [INSTALLER CODE] followed by the [AWAY] button. Two beeps will be heard and the codepad will display the current data stored in "LOCATION 000".

To move to a particular programming location, enter the [LOCATION NUMBER] required followed by the [AWAY] button. The data of the new location will now be displayed.

To move to the next location, press the [AWAY] button. This will step you to the next location and the data in that location will be displayed via the codepad indicators.

If you press the [STAY] button without previously entering a location number, the system will step back one location. To change data in the current location, enter the new value (0 – 15) followed by the [STAY] button. This will store the new data into the location and still leave you positioned at the same location.

To proceed to the next location, press the [AWAY] button. The next locations data will now be displayed.

To exit the Installer's Programming Mode, enter command **9 6 0** followed by the [AWAY] button. Two beeps will be heard and the system will return to the disarmed state. Refer to "Installer's Programming Commands" on page 22 for further information on commands that can be performed during access of Installer's Programming Mode.

Programming With The Hand Held Programmer

The Hand Held Programmer (CC814) has five, seven segment displays. The three on the left display the location number, and the two on the right display the data for that particular location.

To connect the hand held programmer, locate the connections marked PROGRAMMING KEY. This point can be found on the left-hand side of the printed circuit board. Observe the triangular markings on the printed circuit board and line them up with the markings on the hand held programmers connecting socket.

When the hand held programmer is correctly connected onto the printed circuit board, one beep will be heard and four centre bars on the hand held programmer will illuminate with either an 'A' or 'U' suffix to indicate the system is armed or unarmed. Only when the Installer's Programming Mode has been accessed will any numerals appear on the display.

When connecting the hand held programmer to the control panel, make sure that the switch on the hand held programmer is in the EXT position and that no external programming key has been connected. Failing to do this may corrupt the control panel's memory. If this occurs, the control panel will need to be returned to Electronics Design and Manufacturing Pty Limited where a service fee will be charged to unlock the control panel's memory.

Example

To enter the Installer's Programming Mode, enter the [INSTALLER CODE] followed by the **#** button. The factory default Installers Code is **1 2 3 4**. Three beeps will be heard and the hand held programmers display will display the current data stored in "LOCATION 000".

To move to a particular programming location, enter the [LOCATION NUMBER] followed by the **#** button. The data for the new location will now be displayed.

To move to the next location press the **#** button. This will step you to the next location and the data in that location will now be displayed via the ZONE indicators.

If you press the ***** button without previously entering a location number, the system will step back one location. To change data in the current location, enter the new value (0-15) followed by the ***** button. This will store the new data into the location and still leave you positioned at the same location.

To proceed to the next location, press the **#** button. The next locations data will now be displayed.

To exit the Installer's Programming Mode, enter command **9 6 0** followed by the **#** button. Two beeps will be heard and the system will return to the disarmed state. Refer to "Installer's Programming Commands" on page 22 for further information on commands that can be performed during access of the Installer's Programming Mode.

When using the hand held programmer, any reference in this manual made to the [STAY] button should be considered as the * button and the [AWAY] button considered as the # button.

Programming With The Programming Key

The Programming Key (CC810) is a unique device that will allow you to easily program your control panel. Inserting the programming key will automatically initiate a data transfer from the programming key to the control panel memory.

If you have a new programming key, you should first enter the Installer's Programming Mode, configure the system as required before inserting the programming key.

To connect the programming key, locate the connections marked PROGRAMMING KEY. This point can be found on the right hand side of the control panel. Observe the triangular markings on the printed circuit board and line them up with the markings on the programming key.

To copy the control panel's data into your new programming key, enter command **9 6 2** followed by the **#** button. Refer to "Command 962 - Copy Control Panel Memory To Programming Key" on page 25 for further information.

Exit the Installer's Programming Mode by entering the command **9 6 0** followed by the **#** button, wait two seconds for the activity LED to return to its normal state and then remove the programming key. This programming key will now become your standard data pattern for future programming of your control panels.

It should be noted that when entering the Installer's Programming Mode, inserting a programming key and then altering any location would cause a simultaneous update of not only the programming keys data, but also the control panels data. Therefore, you are not able to alter data in the programming key without the same location being altered in the control panels memory.

WARNING

Connecting a Programming Key (CC810) to the control panel when the programming keys memory is blank will corrupt the control panel's memory unless the Installer's Programming Mode has been entered first. If this occurs, then the control panel will need to be returned to Electronics Design and Manufacturing Pty Limited where a service fee will be charged to unlock the control panel's memory.

Programming Option Bits

When programming these locations you will notice that there are four alternatives per location. You may select one, two, three or all of these alternatives for each location, however, only one number is required to be programmed. This number is calculated by adding the option bit numbers together.

Example

If at "LOCATION 224" you 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 (ie. 1 + 2 + 4 = 7).

Option	*Description*
1	Enable Dialler Reporting Functions
2	Enable Remote Arming Via The Telephone
4	Enable Upload/Download Via Alarm Link
8	Terminate “Alarm Link” Session On Alarm

Table 3: Example - Programming Option Bits

Installer's Programming Commands

There are several commands that can be invoked to perform various functions once the Installer's Programming Mode has been entered. To invoke the command, enter the corresponding numerical code followed by the # button

Command	Description
958	Enable/Disable Zone Status Mode When Using Hand Held Programmer
959	Test Programming Key
960	Exit Installer's Programming Mode
961	Reset Control Panel Back To Factory Default Settings
962	Copy The Control Panel Memory To The Programming Key
963	Copy The Programming Key Data To The Control Panel
964	Erase Programming Key
965	Set Up Domestic Dialling Format
966	Enable/Disable Automatic Stepping Of Locations During Programming
999	This Command Displays The Control Panel's Software Version Number Only When Using The Hand Held Programmer

Table 4: Installer's Programming Commands

Command 958 - Enable/Disable Zone Status Mode

This function enables and disables the zone status display mode. When using the hand held programmer, the zones will be displayed on the seven-segment display from left to right. If there is a dash illuminated on the display, the corresponding zone is unsealed and if the display is blank, the zone is sealed.

The third (or centre) display shows either the number 4 or the number 6. The number 4 constantly illuminated indicates that zones 1 - 4 are being displayed. The number 6 constantly illuminated indicates that zones 5 & 6 are being displayed. The number 4 flashing indicates tamper zones 1 – 4 are being displayed. The number 6 flashing indicates tamper zones 5 & 6 are being displayed.

Pressing the **#** button will toggle the display between the zones. This feature will prove to be very useful during installation as it allows you to view the status of the zones directly at the control panel, saving you time and money.

How To Enable Zone Status Mode

1. Enter Installers Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

2. Enter command **9 5 8** followed by the **#** button.

How To Disable Zone Status Mode

1. Enter command **9 5 8** followed by the **#** button.

Example

A " - " in the display indicates the zone is triggered.
A blank display indicates the zone is normal.

- - 4 - - indicates that zones 1, 2, 3 and 4 are triggered.
A flashing 4 indicates tamper zones 1, 2, 3 and 4 are being displayed.

- - 6 À À indicates that zones 5 and 6 are triggered.
A flashing 6 indicates tamper zones 5 & 6 are triggered.

Tamper zones report back to base as zones 9, 10, 11, 12, 13 and 14.

Command 959 - Test Programming Key

This command initiates a test to be carried out on the programming key. This test is non-destructive and any data in the programming key will remain intact after the test has been completed. One long beep indicates that the programming key has failed and three beeps indicate a successful test. If the programming key has been removed before the test has completed or the programming key has failed, the data in the programming key has become corrupt. Remember, do not remove the programming key while the activity LED is illuminated constantly or pulsing rapidly.

How To Test The Programming Key

1. Enter Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

2. Plug the programming key onto the pins marked PROGRAMMING KEY on the control panel.

3. Enter command **9 5 9** followed by the **#** button.
Two beeps will be heard after the programming key has successfully been tested.

4. Enter command **9 6 0** followed by the **#** button to exit the Installer's Programming Mode before removing the programming key.

How To Test The Programming Key Using The Hand Held Programmer

1. Before connecting the hand held programmer, make sure that the switch on the hand held programmer is in the EXT position and that no external key has been plugged onto the hand held programmer.

2. Enter the Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

3. Plug the programming key onto the pins marked EXTERNAL KEY on the hand held programmer.

4. Enter command **9 5 9** followed by the **#** button.
Two beeps will be heard after the programming key connected to the hand held programmer has successfully been tested.

5. Enter command **9 6 0** followed by the **#** button to exit the Installer's Programming Mode.

6. Leave the switch on the hand held programmer in the EXT position and remove the external programming key.

Command 960 - Exit Installer's Programming Mode

This command is used to exit the Installer's Programming Mode after you complete your programming alterations. This is achieved by entering command **9 6 0** followed by the **#** button. Two beeps will be heard and the system will return to the disarmed state. This command can be performed at any programming stage and from any location.

Command 961 - Reset Control Panel Back To Factory Default Settings

This command will reset the control panel back to the factory default values. Refer to the default values shown throughout this manual or the "Programming Sheets" on page 175. This is achieved by entering command **9 6 1** followed by the **#** button. Two beeps will be heard.

Command 962 - Copy Control Panel Memory To Programming Key

This command is used to copy the control panel memory to the programming key.

How To Copy The Control Panel Memory To The Programming Key

1. Enter Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

2. Plug the programming key onto the pins marked PROGRAMMING KEY on the control panel.

3. Enter command **9 6 2** followed by the **#** button.
Two beeps will be heard and the control panel's memory has now been copied into the programming key.

4. Enter command **9 6 0** followed by the **#** button to exit Installer's Programming Mode.

5. Remove the programming key from the control panel.

How To Copy The Panel Memory To Programming Key Using The Hand Held Programmer

1. Before connecting the hand held programmer to the control panel, make sure that the switch on the hand held programmer is in the EXT position and that no external programming key has been plugged onto the hand held programmer.

2. Enter Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

3. Plug the programming key onto the pins marked EXTERNAL KEY on the hand held programmer.

4. Enter command **9 6 2** followed by the **#** button.
Two beeps will be heard and the control panel's memory has now been copied into the programming key.

5. Enter command **9 6 0** followed by the **#** button to exit Installer's Programming Mode.

6. Leave the switch on the hand held programmer in the EXT position and remove the programming key.

Command 963 - Copy From Programming Key To Control Panel

This command is used to copy data from the programming key to the control panel.

How To Copy The Programming Key Memory To The Control Panel

1. Enter Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

2. Connect the programming key onto the pins marked PROGRAMMING KEY on the control panel.

3. Enter command **9 6 3** followed by the **#** button.
Two beeps will be heard and the programming key's data has now been copied to the control panel.

4. Enter command **9 6 0** followed by the **#** button to exit Installer's Programming Mode.

5. Remove the programming key from the control panel.

How To Copy Programming Key Memory To Control Panel Using Hand Held Programmer

1. Before connecting the hand held programmer to the control panel, make sure that the switch on the hand held programmer is in the EXT position and that no external programming key has been plugged onto the hand held programmer.

2. Enter Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

3. Plug the programming key onto the pins marked EXTERNAL KEY on the hand held programmer.

4. Enter command **9 6 3** followed by the **#** button.
Two beeps will be heard and the programming keys data will now be copied to the control panel.

5. Enter command **9 6 0** followed by the **#** button to exit Installer's Programming Mode.

6. Leave the switch on the hand held programmer in the EXT position and remove the programming key.

Command 964 - Erase Programming Key

This command erases all data from the programming key.

How To Erase The Programming Key

1. Enter Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

2. Connect the programming key onto the pins marked PROGRAMMING KEY on the control panel.

3. Enter command **9 6 4** followed by the **#** button.
Two beeps will be heard and the programming keys data has now been erased.

4. Enter command **9 6 0** followed by the **#** button to exit Installer's Programming Mode.

5. Remove the programming key from the control panel.

How To Erase The Programming Key Using The Hand Held Programmer

1. Before connecting the hand held programmer to the control panel, make sure that the switch on the hand held programmer is in the EXT position and that no external programming key has been plugged onto the hand held programmer.

2. Enter Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

3. Plug the programming key onto the pins marked EXTERNAL KEY on the hand held programmer.

4. Enter command **9 6 4** followed by the **#** button.
Two beeps will be heard and the programming keys data has now been erase.

5. Enter command **9 6 0** followed by the **#** button to exit Installer's Programming Mode.

6. Remove the programming key from the hand held programmer.

Command 965 - Set Up Domestic Dialling Format

Command 965 has been added to make the set up of the domestic dialling format a one step operation. Refer to page 78 for more information on Domestic Reporting Format.

After Installer's Programming Mode has been accessed, enter command **9 6 5** followed by the **#** button. This will automatically set the following locations in bold below. No other locations will be altered when command 965 has been issued.

Location	*Description*	*Setting*	
LOCATION 49	Handshake Tone	**2**	(1400 Hz)
LOCATION 50	Transmission Format	**11**	(Domestic)
LOCATION 052 – 055	Subscriber ID Number	0, 0, 0, **1**	(1 Beep)
LOCATION 104 – 111	Zone 1	2, 0, 0, 0, **0**, 3, 0, 1	(Delay-1)
LOCATION 112 - 119	Zone 2	1, 0, 0, 0, **0**, 3, 0, 1	(Handover)
LOCATION 120 - 127	Zone 3	1, 0, 0, 0, **0**, 3, 0, 1	(Handover)
LOCATION 128 - 135	Zone 4	1, 0, 0, 0, **0**, 3, 0, 1	(Handover)
LOCATION 136 - 143	Zone 5	1, 0, 0, 0, **0**, 3, 0, 1	(Handover)
LOCATION 144 - 151	Zone 6	12, 0, 0, 0, **0**, 3, 0, 1	(24 Hour)
LOCATION 152 - 153	Bypass Reports	**0, 0**	(Not Used)
LOCATION 154 - 155	Trouble Reports	**0, 0**	(Not Used)
LOCATION 156 - 159	Codepad Duress	**0, 0, 0, 0**	(Not Used)
LOCATION 160 - 163	Codepad Panic	**0, 0, 0, 0**	(Not Used)
LOCATION 164 - 167	Access Denied	**0, 0, 0, 0**	(Not Used)
LOCATION 168 - 171	AC Fail	**0, 0, 0, 0**	(Not Used)
LOCATION 172 - 175	Low Battery	**0, 0, 0, 0**	(Not Used)
LOCATION 176 - 179	Sensor Watch	**0, 0, 0, 0**	(Not Used)
LOCATION 180 - 181	Open/Close Reports	**0, 0**	(Not Used)
LOCATION 182 – 185	Test Report Time	**0, 0, 0, 9**	(Not Used)

Table 5: Command 965 Defaults

As you can see from the table above, all reporting other than zone alarms have been disabled. The handshake tone has been set for 1400 Hz tone acknowledgment and the Subscriber ID Number has been set for one identification beep. The zone reporting has been set so that any zone that triggers an alarm condition will only report when the alarm occurs, the zone restore report will not report as there is no separate indications for zone alarm reports and zone alarm restore reports.

Command 966 - Enable/Disable Automatic Stepping Of Locations

This command enables or disables the automatic stepping of locations while programming. When enabled via the hand held programmer, the decimal point of the left most display will reflect the mode of operation.

If the decimal point is illuminated then auto step mode is active. An automatic increment of the location being programmed will occur as soon as the ***** button is pressed positioning you at the next location ready for programming.

If the decimal point is not illuminated, the auto step mode is disabled. The next programming location will need to be manually selected by pressing the **#** button. As you can see from the examples below, auto step mode is a very useful feature when programming successive locations.

How To Enable Automatic Stepping Of Locations

1. Enter Installer's Programming Mode.
(ie. **1 2 3 4** followed by the **#** button).

2. Enter command **9 6 6** followed by the **#** button.
Two beeps will be heard.

How To Disable Automatic Stepping Of Locations

1. Enter command **9 6 6** followed by the **#** button.
Two beeps will be heard.

Example

(Auto Step Enabled)
To enter the Primary Telephone Number "02 pause 9672 1055" with auto step enabled (ie. Decimal point illuminated).

Press **0** followed by the **#** button.
(This will position you at "LOCATION 000" being the start of the Primary Telephone Number).

[10] + * + 2 + * + [13] + * + 9 + * + 6 + * + 7 + * + 2 + * + 1 + * + [10] + * + 5 + * + 5 + * + 0 + *

Example

(Auto Step Disabled)
To enter the Primary Telephone Number "02 pause 9672 1055" with auto step disabled (ie. Decimal point extinguished).

Press **0** followed by the **#** button.
(This will position you at "LOCATION 000" being the start of the Primary Telephone Number).

[10] + * + # + 2 + * + # + [13] + * + # + 9 + * + # + 6 + * + # + 7 + * + # + 2 + * + # + 1 + * + # + [10] + * + # + 5 + * + # + 5 + * + # + 0 + *

Command 999 - Display Software Version Number

This command will display the control panel's software version number. This command can only be used with the hand held programmer.

Once access to Installer's Programming Mode has been gained, enter command **9 9 9** followed by the **#** button to display the control panel's software version number. Two beeps will be heard. Press the **#** button to exit this command and return to the Installer's Programming Mode.

Disable Factory Default

LOCATION 900 **0**

The system has a feature that prevents the control panel from being manually defaulted via the default button or by using a programming key unless the Installer's Code is known.

Any number between 0-14 programmed into this location will allow defaulting of the control panel. If 15 has been programmed into this location, defaulting of the control panel will not operate and the Installer Code MUST be used for further programming of the control panel.

If the Installer Code is not known, the control panel will need to be returned to your EDM Distributor for exchange. A nominal fee applies for this service.

Electronics Design and Manufacturing Pty Limited does not recommend the use of this feature.

If the option to prevent defaulting of the control panel is required, a special programming procedure has been introduced to eliminate any possibility of accidentally setting this option. The default button on the PCB must be held down while programming this location.

How To Prevent Manual Defaulting Of The Control Panel

1. Disarm the system.

2. Access Installer's Programming Mode.

3. Go to "LOCATION 900".

4. Hold down the default button.

5. Program a 15 into "LOCATION 900".

6. Release the default button.

7. Exit Installer's Programming Mode.

Defaulting The Control Panel

If the *Solution 6+6* control panel does not have "LOCATION 900" programmed as 15, follow the procedure outlined below to successfully default the control panel back to the factory default settings.

How To Default The Control Panel

1. Disconnect the AC mains supply and the backup battery from the control panel.

2. Hold down and continue to hold down the DEFAULT button located at the top of the printed circuit board.

3. Reconnect the AC mains to the control panel.

4. After reconnecting the AC mains, wait for 3-5 seconds before releasing the DEFAULT button.

You will hear the dialler seize relay (RL1) on the control panel click once and two beeps will be heard on the remote codepad. The control panel will now need to be disarmed by using the default Master Code (ie. **2 5 8 0**).

The control panel has now been successfully defaulted back to the factory default settings.

If you hear the dialler seize relay (RL1) click four times while attempting to default the control panel, this would indicate that the feature of defaulting the control panel has been disabled in "LOCATION 900" on page 30. The control panel will need to be returned to Electronics Design and Manufacturing Pty Limited for exchange where a service fee will be charged to unlock the control panel's memory if the Installer Code is not known.

System Indicators and Operations

This section includes the following;

System Indicators and Operations

CP5 Eight Zone LED Codepad (CP508)

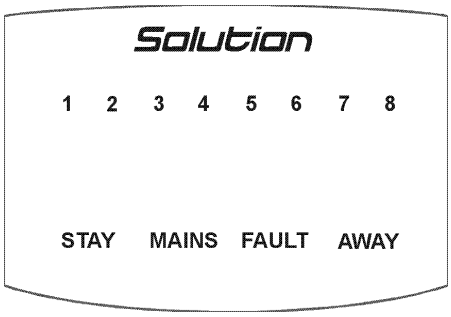


Figure 1: CP5 Eight Zone Codepad (CP508)

The codepad is the communications interface between you and your alarm system. It allows you to issue commands and offers both visual and audible indications that guide you through the general operation.

The codepad incorporates numerous indicators. There are ZONE indicators which are used to show the condition of each zone and four others for general status. The following is a list of situations and the relevant indications that will be seen.

Zone Indicators

The ZONE indicators are used to show the status of the zones. The following table lists the various circumstances that the indicators will display (ie. Zone Sealed, Zone Unsealed).

Indicator	Definition
On	Zone Is Unsealed
Off	Zone Is Sealed
Flashing Fast (0.25 Sec On – 0.25 Sec Off)	Zone Is In Alarm Condition
Flashing Very Fast (0.1 Sec On – 0.1 Sec Off)	Tamper Zone Is In Alarm Condition
Flashing Slow (1 Sec On – 1 Sec Off)	Zone Is Manually Isolated
Flashing Very Slow (2 Sec On – 1 Sec Off)	Tamper Zone In The Unsealed State

Table 6: Zone Indicators

AWAY Indicator

The AWAY indicator is used to inform you that the system is armed in the AWAY Mode.

Indicator	Definition
On	System Is Armed In AWAY Mode
Off	System Is Not Armed In AWAY Mode

Table 7: AWAY Indicator

STAY Indicator

The STAY indicator is used to indicate that the system is armed in the STAY Mode.

Indicator	Definition
On	System Is Armed In STAY Mode
Off	System Is Not Armed In STAY Mode
Flashing	System Is In Isolating Mode

Table 8: STAY Indicator

MAINS Indicator

The MAINS indicator is used to indicate that the systems AC mains supply is normal or has failed.

Indicator	Definition
On	AC Mains Power Normal
Flashing	AC Mains Failure

Table 9: MAINS Indicator

FAULT Indicator

The FAULT indicator is used to indicate that the system has detected a system fault. Refer to "Fault Analysis Mode" on page 45 for more information.

Indicator	Definition
On	There Is A System Fault That Needs To Be Rectified
Off	The System Is Normal, There Are No Faults
Flashing	There Is A System Fault Waiting To Be Acknowledged

Table 10: FAULT Indicator

Audible Indicators

In general, the audible indications given out by the codepad are as follows:

Indicator	Definition
One Short Beep	A Button Has Been Pressed On The Codepad Or End Of Exit Time When Armed In STAY Mode
Two Short Beeps	The System Has Accepted Your Code
Three Short Beeps	The Requested Function Has Been Executed
One Long Beep	Indicates The End Of Exit Time In AWAY Mode Or The Requested Operation Has Been Denied Or Aborted
One Short Beep Every Second	Walk Test Mode Is Currently Active
One Short Beep Every Two Seconds	Telephone Monitor Mode Is Active
One Short Beep Every Minute	There Is A System Fault Waiting To Be Acknowledged

Table 11: Audible Indications

CP5 Eight Zone LCD Codepad (CP508L)

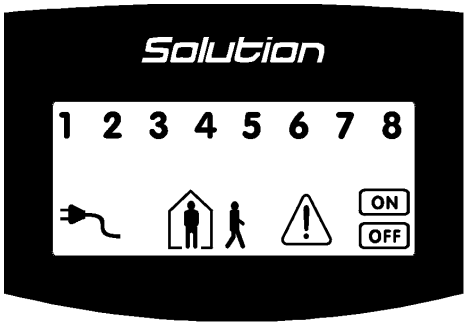


Figure 2: CP5 Eight Zone LCD Codepad (CP508L)

The codepad is the communications interface between you and your alarm system. It allows you to issue commands and offers both visual and audible indications that guide you through the general operation.

The codepad incorporates numerous indicators. There are ZONE indicators which are used to show the condition of each zone and nine others for general status. The following is a list of situations and the relevant indications that will be seen.

Zone Indicators

1 2 3 ....

The ZONE indicators are used to show the status of the zones. The following table lists the various circumstances that the indicators will display (ie. Zone Sealed, Zone Unsealed).

Indicator	Definition
On	Zone Is Unsealed
Off	Zone Is Sealed
Flashing Fast (0.25 Sec On – 0.25 Sec Off)	Zone Is In Alarm Condition
Flashing Very Fast (0.1 Sec On – 0.1 Sec Off)	Tamper Zone Is In Alarm Condition
Flashing Slow (1 Sec On – 1 Sec Off)	Zone Is Manually Isolated
Flashing Very Slow (2 Sec On – 1 Sec Off)	Tamper Zone In The Unsealed State

Table 12: Zone Indicators

AWAY Indicator

The AWAY indicator illuminates when the system is armed in AWAY Mode. The ON indicator will also illuminate when the system is armed in AWAY Mode.

Indicator	Definition
On	System Is Armed In AWAY Mode
Off	System Is Not Armed In AWAY Mode

Table 13: AWAY Indicator

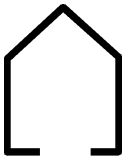
STAY Indicator

The STAY indicator illuminates when the system is armed in STAY Mode. The ON and OFF indicators will also illuminate when the system is armed in STAY Mode.

Indicator	Definition
On	System Is Armed In STAY Mode
Off	System Is Not Armed In STAY Mode
Flashing	System Is In Isolating Mode

Table 14: STAY Indicator

System Disarmed



This indicator will illuminate when the system has been disarmed. The OFF indicator will also illuminate when the system has been disarmed.

MAINS Indicator

The MAINS indicator is used to indicate that the systems AC mains supply is normal or has failed.

Indicator	Definition
On	AC Mains Power Normal
Flashing	AC Mains Failure

Table 15: MAINS Indicator

Zone Isolating Mode

Flashing

This indicator will illuminate when you attempt to isolate zones. The person will flash once every 3 seconds.

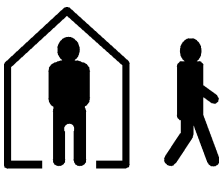
FAULT Indicator

The FAULT indicator is used to indicate that the system has detected a system fault. Refer to "Fault Analysis Mode" on page 45 for more information.

Indicator	Definition
On	There Is A System Fault That Needs To Be Rectified
Off	The System Is Normal, There Are No Faults
Flashing	There Is A System Fault Waiting To Be Acknowledged

Table 16: FAULT Indicator

Programming Mode



Flashing

This indicator will illuminate when the system has entered either Installer's Programming Mode or Operators Programming Mode. Both persons will flash.

Off Indicator/Zone Sealed

OFF

The **OFF** indicator will illuminate when the system is in the disarmed state and will flash when a zone becomes unsealed. It will stop flashing when all zones are sealed.

On Indicator/Zone In Alarm

ON

The **ON** indicator will illuminate when the system is armed in AWAY Mode and will flash when an alarm occurs. The indicator will reset once a valid user code has been entered.

Both the OFF and ON indicators will illuminate when the system has been armed in STAY Mode.

Audible Indicators

In general, the audible indications given out by the codepad are as follows:

Indicator	*Definition*
One Short Beep	A Button Has Been Pressed On The Codepad Or End Of Exit Time When Armed In STAY Mode
Two Short Beeps	The System Has Accepted Your Code
Three Short Beeps	The Requested Function Has Been Executed
One Long Beep	Indicates The End Of Exit Time In AWAY Mode Or The Requested Operation Has Been Denied Or Aborted
One Short Beep Every Second	Walk Test Mode Is Currently Active
One Short Beep Every Two Seconds	Telephone Monitor Mode Is Active
One Short Beep Every Minute	There Is A System Fault Waiting To Be Acknowledged

Table 17: Audible Indications

System Operations

Arming The System In AWAY Mode

There are two methods for arming your system in AWAY Mode. Method one is standard and will always operate. Method two is optional and requires Option 2 in "LOCATION 230" on page 144 to be enabled.

Single button arming in AWAY Mode will report as user code number 32.

Method One

How To Arm The System In AWAY Mode

1. Enter your CODE followed by the AWAY button.
Two beeps will be heard and the AWAY indicator will illuminate. Exit time will now commence.

CODE + AWAY

Method Two

How To Arm The System In AWAY Mode

1. Hold down the AWAY button until two beeps are heard.
The AWAY indicator will illuminate and exit time will now commence. Refer to Option 2 in "LOCATION 230" on page 144 to enable single button arming in AWAY Mode.

If a zone is not sealed at the end of exit time the zone will be automatically isolated. The zone will become an active part of the system again as soon as it has resealed (ie. If a window is left open after exit time has expired, the window will not be an active part of the system until it has closed. Opening the window after exit time has expired will cause an alarm condition).

Forced Arming

The feature of arming the system when a zone is not sealed is known as forced arming. Refer to Option 1 in “LOCATION 226” on page 140 for more information on forced arming.

If the AWAY indicator does not illuminate and a long beep is heard when attempting to arm the system, forced arming is not permitted. If this is the case, you must ensure that all zones are sealed or manually isolated before you can arm the system.

Disarming The System From AWAY Mode

How To Disarm The System From AWAY Mode

1. Enter your CODE followed by the AWAY button.
Two beeps will be heard and the AWAY indicator will extinguish. A flashing ZONE indicator represents a previous alarm on that zone.

CODE + AWAY

Arming The System In STAY Mode

STAY Mode is when the system has been armed with particular zones automatically isolated. Refer to “Zone Types” on page 102 for further information.

When there is a need to arm only the system perimeter, this mode is extremely handy. It automatically disables the interior detection zones allowing movement within the protected area while at the same time arming the perimeter zones.

There are two methods for arming your system in STAY Mode. Method one is standard and will always operate. Method two is optional and needs to be enabled in "LOCATION 230” on page 144.

Single button arming in STAY Mode will report as user code number 32.

Method One

How To Arm The System In STAY Mode

1. Enter your [CODE] followed by the [STAY] button.
Two beeps will be heard and the STAY indicator will illuminate. Exit time will now commence.

Any zones that have been programmed for STAY Mode will be automatically isolated and their respective indicators will begin to flash until exit time expires. At the end of exit time, the ZONE indicators will extinguish and the codepad will give one short beep.

[CODE] + [STAY]

Method Two

How To Arm The System In STAY Mode

1. Hold down the [STAY] button until two beeps are heard.
The STAY indicator will illuminate and exit time will now commence.

Any zones that have been programmed for STAY Mode will be automatically isolated and their respective indicators will begin to flash until exit time expires. At the end of exit time, the ZONE indicators will extinguish and the codepad will give one short beep.

[STAY]

If a zone is not sealed at the end of exit time, the zone will be automatically isolated. The zone will become an active part of the system again as soon as it has resealed (ie. If a window is left open after exit time has expired, the window will not be an active part of the system until it has closed. Opening the window after exit time has expired will cause an alarm condition).

Forced Arming

The feature of arming the system when a zone is not sealed is known as forced arming. Refer to Option 1 in “LOCATION 226” on page 140 for more information on forced arming.

If the STAY indicator does not illuminate and a long beep is heard when attempting to arm the system, forced arming is not permitted. If this is the case, you must ensure that all zones are sealed or manually isolated before you can arm the system.

Disarming The System From STAY Mode

There are two methods for disarming the system from STAY Mode. Method one is standard and will always operate. Method two is optional and requires Option 4 in "LOCATION 230" on page 144 to be enabled.

Method two will not operate unless Option 2 in "LOCATION 230" has been enabled.

Method One

How To Disarm The System From STAY Mode

1. Enter your CODE followed by the STAY button.
Two beeps will be heard and the STAY indicator will extinguish. A flashing ZONE indicator represents a previous alarm on that zone.

CODE + STAY

Method Two

A flashing ZONE indicator represents a previous alarm on that zone. If this is the case, a valid user code will need to be used to disarm the system. To enable method two, Option 4 in "LOCATION 230" on page 144 will need to be enabled.

Single button disarming from STAY Mode will report as user code number 32.

How To Disarm The System From STAY Mode

1. Hold down the STAY button until two beeps are heard.
The STAY indicator will extinguish and the system will disarm.

STAY

Codepad Duress Alarm

A codepad duress alarm can be used as a hold up alarm. This will occur when the number **9** is added to the end of any valid user code that is being used to disarm the system. A duress alarm is always silent and can only be made use of if your system is reporting back to a monitoring station or pocket pager. If you wish to disable the reporting of the codepad duress alarm report, refer to “LOCATION 156 - 159” on page 111 for more information.

CODE + **9** + AWAY

Codepad Panic Alarm - Versions Up To 1.26

A panic alarm will occur when any two outside buttons in the same horizontal row on a codepad are pressed simultaneously. This is an audible alarm. Refer to Option 4 in "LOCATION 227" on page 141 to enable codepad panic to be silent. If you wish to disable the reporting of the codepad panic alarm report, refer to “LOCATION 160 - 163” on page 112 for more information.

1 + **3** or **4** + **6** or **7** + **9** or STAY + AWAY

Codepad Panic Alarm – Version 1.27 Onwards

A codepad panic alarm will be triggered when either the **1** and **3** buttons or the STAY and AWAY buttons are pressed simultaneously. This is an audible alarm. Refer to Option 4 in "LOCATION 227" on page 141 to enable codepad panic to be silent. If you wish to disable the reporting of the codepad panic alarm report, refer to “LOCATION 160 - 163” on page 112 for more information.

1 + **3** or STAY + AWAY

Codepad Fire Alarm – Version 1.27 Onwards

A codepad fire alarm will be triggered when the **4** and **6** buttons on the remote codepad are pressed simultaneously. A distinct fire sound is emitted through the horn speaker to indicate this type of alarm condition. The fire sound is different to the burglary sound. This is an audible alarm.

4 + **6**

Codepad Medical Alarm – Version 1.27 Onwards

A codepad medical alarm will be triggered when the **7** and **9** buttons on the codepad are pressed simultaneously. This is an audible alarm.

7 + **9**

To disable both the reporting and the audible alarms for codepad panic, codepad fire and codepad medical alarms, the dialler channel for “Codepad Panic” in “LOCATION 163” on page 112 should be set as zero and enable Option 4 in “LOCATION 227” on page 141. Codepad fire and codepad medical alarms can not be disabled without disabling codepad panic alarms.

Isolating Zones

When a zone has been isolated, access is allowed into that zone at all times. Isolating zones is performed by one of two methods. One way requires the use of a valid user code while the other way does not. The ability to isolate zones is governed by the priority level allocated to each user code holder. Some user code holders may not be able to isolate zones. Refer to "User Code Priority" on page 93 for further information.

Twenty four hour zone types and zones not used cannot be isolated. If isolation of these zones is attempted, a long beep will be heard.

Standard Isolating

1. Press the STAY button twice.
Three beeps will be heard.

2. * Enter the ZONE NUMBER required to be isolated followed by the STAY button.
The zone you just selected to be isolated will now begin to flash.

Repeat Step 2 if more than one zone is required to be isolated until all zones that are required to be isolated have been selected.

3. Press the AWAY button when finished selecting the zones to be isolated.
Two beeps will be heard.

The isolated zones will now continue to flash until the system has next been disarmed. The system is ready to be armed in AWAY Mode.

STAY + STAY + ZONE NUMBER + STAY
+ ZONE NUMBER + STAY + AWAY

*** As each zone is isolated, the corresponding ZONE indicator will begin to flash. If a mistake is made, press the zone number that was incorrectly entered followed by the STAY button. This zone is now no longer isolated and the ZONE indicator will extinguish.**

Code To Isolate

1. Press the [STAY] button.

2. Enter your [CODE].

3. Press the [STAY] button.
Three beeps will be heard.

4. * Enter the [ZONE NUMBER] required to be isolated followed by the [STAY] button. The zone you have just selected to be isolated will now begin to flash.

Repeat Step 4 if more than one zone is required to be isolated until all zones that are required to be isolated have been selected.

5. Press the [AWAY] button when finished selecting the zones to be isolated.
Two beeps will be heard.

The isolated zones will now continue to flash until the system has next been disarmed. The system is ready to be armed in AWAY Mode.

[STAY] + [CODE] + [STAY] + [ZONE NUMBER] + [STAY]
+ [ZONE NUMBER] + [STAY] + [AWAY]

*** As each zone is isolated, the corresponding ZONE indicator will begin to flash. If a mistake is made, press the zone number that was incorrectly entered followed by the [STAY] button. This zone is now no longer isolated and the ZONE indicator will extinguish.**

Fault Analysis Mode

Whenever a system fault occurs, the FAULT or MAINS indicator will flash and the codepad will beep once every minute.

If the MAINS indicator is flashing, this is because the AC mains has been disconnected. There is no need to determine this type of system fault. Pressing the AWAY button will acknowledge the AC mains fail and will stop the codepad beeping once every minute.

How To Determine The Type Of System Fault

To determine the type of system fault that has occurred, enter fault analysis mode by following the procedures below.

1. Hold down the **5** button until two beeps are heard.
The FAULT indicator will remain steady and the STAY and AWAY indicators will flash in unison with each other.

The ZONE indicators will indicate the type of system fault. Refer to "Table 18: Fault Indicators" below for the list of different system faults that may occur.

Zone Indicator	Fault Description
1	Low Battery
2	Date and Time
3	Sensor Watch
4	Horn Speaker Disconnected
5	Reserved
6	E^2 Fault
7	Reserved
8	Communications Failure

Table 18: Fault Indicators

2. To exit fault analysis mode, press the AWAY button. The STAY and AWAY indicators will extinguish and the FAULT indicator will remain illuminated.

How To Acknowledge The System Fault

1. To acknowledge the system fault, press the AWAY button. The FAULT indicator will remain illuminated and the codepad will cease its once a minute beep.

Fault Descriptions

Low Battery

1 A low battery fault will register when the battery supply voltage falls below 10.5 volts or when a dynamic battery test detects a low capacity battery. This fault will clear after a successful dynamic battery test. A dynamic battery test is performed every four hours once power has been connected to the control panel and also every time the system is armed in AWAY Mode or STAY Mode.

Date and Time

2 The date and time fault will register every time the control panel has been powered down. This fault will not cause the FAULT indicator on the codepad to illuminate. This fault will only be indicated when entering fault analysis mode. This fault will clear once the date and time has been programmed. Refer to "Setting The Date and Time" on page 61 for further information on setting the date and time.

Sensor Watch

3 A sensor watch fault will register because one of the detection devices has stopped working or has failed to detect movement for the programmed time period whilst the system is disarmed. The fault will clear after the registered zone has been unsealed and resealed again.

To find out which zone has registered the sensor watch fault, enter fault analysis mode and hold down the **5** button to display the zone that has registered the sensor watch fault. Refer to "LOCATION 218 - 219" on page 133 for setting sensor watch time and "Zone Options" on page 104 for setting zones to be monitored for sensor watch.

Horn Speaker Monitor

4 A horn speaker fault will register when the horn speaker becomes disconnected from the control panel. This fault will clear when the horn speaker has been reconnected. Refer to Option 4 in "LOCATION 226" on page 140 to enable monitoring of the horn speaker.

Reserved

5

E^2 Fault

6 An E^2 fault will register when the control panel detects an internal checksum error. The control panel will need to be powered down and defaulted to clear this fault.

Reserved

7

Communication Failure

8 A communication failure fault will register if the control panel was unsuccessful in calling the receiving party after the control panel has exhausted its maximum number of attempts.

If the control panel is not connected to the telephone line and no Primary Telephone Number or Secondary Telephone Numbers have been programmed, the control panel will still register this fault if Option 1 in "LOCATION 224" on page 138 is enabled.

AC Mains Failure

An AC mains failure will flash the MAINS indicator, sound the codepad buzzer once every minute and an "AC Fail" report will be transmitted to the monitoring station. This fault will clear after the AC mains has been reconnected. An "AC Restore" report will be transmitted once the AC mains has been restored for more than two minutes.

If you wish only to transmit an "AC Fail" report and ignore the mains failure on the codepad, enable Option 4 in "LOCATION 228" on page 142.

System Functions

This section includes the following;

- *Installer Code Functions*
- *Master Code Functions*
- *Hold Down Functions*

System Functions

This section deals with the more advanced features that are required for testing and regular maintenance of the system. Features such as Installer Code Functions, Master Code Functions and Hold Down Functions are covered in this section.

Installer Code Functions

Installer Code Functions are designed to allow the installer perform various system functions without the need to know a Master Code.

To enter the required Installer Code function, enter the [INSTALLER CODE] followed by the required [FUNCTION] digit and the [AWAY] button.

[INSTALLER CODE] + [FUNCTION] + [AWAY]

These functions can only be carried out when the system is in the disarmed state.

Function	Description
0	Fault Analysis Mode
1	Reserved
2	Set Number Of Days Until The First Test Report
3	Event Memory Recall
4	Walk Test Mode
5	EDMSAT - Satellite Siren Service Mode
6	Initiate Modem Call
7	Turning Telephone Monitor Mode On/Off
8	Reserved
9	Send Test Report

Table 19: Installer Code Functions

Fault Analysis Mode

0

Whenever a system fault occurs, the FAULT or MAINS indicator will flash and the codepad will beep once every minute.

If the MAINS indicator is flashing, this is because the AC mains supply has been disconnected. There is no need to determine this type of system fault. Pressing the AWAY button once will acknowledge the AC mains fail and will stop the codepad from beeping once every minute.

How To Enter Fault Analysis Mode

1. Enter your INSTALLER CODE followed by **0** and the AWAY button.
Two beeps will be heard. The FAULT indicator will remain steady and the STAY and AWAY indicators will flash in unison with each other.

One or more zone indicators (1-8) will illuminate indicating the type of fault that has occurred. Refer to "Fault Descriptions" on page 46 for further information.

2. Press the AWAY button again to exit this function.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

INSTALLER CODE + **0** + AWAY

Zone Indicator	*Fault Description*
1	Low Battery
2	Date and Time
3	Sensor Watch
4	Horn Speaker Disconnected
5	Reserved
6	E^2 Fault
7	Reserved
8	Communications Failure

Table 20: Fault Indicators

Reserved

1

Set The Number Of Days Until The First Test Report

2 If test reports are required, "LOCATION 182 - 185" on page 116 will need to be programmed. After this has been carried out, test reports need to be initiated by setting the first test report. If the first test report is not set, the test report will be transmitted in the number of days as programmed in the repeat interval programmed in "LOCATION 182 - 185".

Each time Installer's Programming Mode has been entered, you will need to reset the number of days until the first test report. Otherwise, the next test report will report as programmed in the repeat interval time.

How To Set The First Test Report

1. Enter your [INSTALLER CODE] followed by **2** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

2. Enter the [No. OF DAYS] to wait (1-99) until the first test report.

3. Press the [AWAY] button when finished.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

[INSTALLER CODE] + **2** + [AWAY]
+ [No. OF DAYS] + [AWAY]

Test reports will not report if the Subscriber ID Number is 0000. The number of day's decrements by one at 2400 hours as set in "LOCATION 901 – 904" on page 136.

Event Memory Recall Mode

3

This feature allows you to playback the last forty events that have occurred to the system. The event memory recall mode reports all alarms and arming/disarming of the system in the AWAY Mode and STAY Mode. This function helps with trouble shooting system faults. The events are displayed via the codepad indicators.

How To Enter The Event Memory Recall Mode

1. Enter your [INSTALLER CODE] followed by **3** and the [AWAY] button.
Three beeps will be heard. The events will be played back via the codepad indicators in reverse chronological order.

[INSTALLER CODE] + **3** + [AWAY]

Example

If the events were as follows:

Event No	*Event Description*
1	System Armed In AWAY Mode
2	Alarm In Zone 3
3	Alarm In Zone 4
4	System Disarmed

Table 21: Event Memory Recall - Example Events

The event memory playback will report as follows:

Event No	*Codepad Indicator*	*Event Description*
4	All Indicators Off Except MAINS	System Disarmed
3	Zone 4 + AWAY Indicator Illuminates	Alarm In Zone 4
2	Zone 3 + AWAY Indicator Illuminates	Alarm In Zone 3
1	AWAY Indicator Illuminates	System Armed In AWAY Mode

Table 22: Event Memory Recall - Example Event Playback

A beep and an illuminated indicator indicate each event. Resetting a 24 hour alarm in the disarmed state is indicated by one beep only. After the last event, two beeps will be heard to indicate the end of playback. The replay can be terminated at any time by pressing the [AWAY] button.

If the control panel has been powered down, the memory of all events will be lost.

Walk Test Mode

4 Walk test mode allows you to test detection devices to ensure that they are functioning correctly. Before activating walk test mode, isolate any zones that are not required for testing. Refer to "Isolating Zones" on page 43 for further information.

How To Enter Walk Test Mode

1. Enter your [INSTALLER CODE] followed by **4** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash. The codepad will beep once every second while the system is in walk test mode.

2. Unseal and seal the zones to be tested.
The codepad will sound one long beep while the horn speaker will sound one short beep every time a zone is sealed or unsealed.

3. Press the [AWAY] button to exit this function.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

[INSTALLER CODE] + **4** + [AWAY]

Satellite Siren Service Mode

5 If an EDMSAT is connected to Output 1, this function will allow you to perform service work on the system without triggering the satellite siren. The unit will return to its normal working state the next time the system is armed.

How To Enter Satellite Siren Service Mode

1. Enter your [INSTALLER CODE] followed by **5** and the [AWAY] button.
Three beeps will be heard.

[INSTALLER CODE] + **5** + [AWAY]

Initiate Modem Call

6 This function will force the control panel to dial the callback telephone number programmed in an attempt to connect to your installer's remote programming computer.

How To Initiate A Modem Call

1. Enter your [INSTALLER CODE] followed by **6** and the [AWAY] button.
Two beeps will be heard.

[INSTALLER CODE] + **6** + [AWAY]

Turning Telephone Monitor Mode On/Off

7 Telephone monitor mode allows the remote codepad to be used for a visual representation of data transmissions between the control panel and the base station receiver. The dialling sequence is also shown in this mode.

The codepad will beep once every two seconds while telephone monitor mode is turned on regardless of whether the system is in Installer's Programming Mode or normal operating mode. The first five indicators are used to display the progressive steps for a transmission to the base station receiver.

Zone Indicator	*Dialling Event*
1	Telephone Line Seized
2	Dialling Phone Number
3	Handshake Received
4	Data Is Being Transmitted
5	Kiss-Off Received
None	Telephone Line Released

Table 23: Telephone Monitor Mode Indications

How To Turn Telephone Monitor Mode On

1. Enter your [INSTALLER CODE] followed by **7** and the [AWAY] button. Three beeps will be heard.

[INSTALLER CODE] + **7** + [AWAY]

How To Turn Telephone Monitor Mode Off

1. Enter your [INSTALLER CODE] followed by **7** and the [AWAY] button. Two beeps will be heard.

[INSTALLER CODE] + **7** + [AWAY]

Reserved

8

Send Test Report

9 This function will force the control panel to send a test report which is used to test the dialling and reporting capabilities of the system without causing the sirens to sound.

How To Initiate A Test Report

1. Enter your [INSTALLER CODE] followed by **9** and the [AWAY] button. Two beeps will be heard.

[INSTALLER CODE] + **9** + [AWAY]

Master Code Functions

Master Code Functions are designed to allow those users that have the appropriate priority level to perform certain functions of a supervisory level.

The default Master Code is 2 5 8 0 and is known as User Code 1. It is possible for the system to have multiple Master Codes. Refer to "User Code Priority" on page 93 for more information.

To enter the required Master Code function, enter the MASTER CODE followed by the required FUNCTION digit and the AWAY button.

MASTER CODE + FUNCTION + AWAY

These functions can only be carried out when the system is in the disarmed state.

Function	*Description*
0	Arm Or Disarm Both Areas At The Same Time
1	Changing and Deleting User Codes
2	Changing Domestic Phone Numbers
3	Event Memory Recall Mode
4	Walk Test Mode
5	Fault Analysis Mode
6	Setting The Date and Time
7	Turn Day Alarm On and Off
8	Reset Latching Outputs
9	Initiate Modem Call

Table 24: Master Code Functions

Arm Or Disarm Both Areas At The Same Time

0

This option allows you to arm or disarm both areas at the same time when the system has been partitioned. Both areas will arm or disarm to follow the state of the area that the code was entered from (ie: If you disarm an area, the other area will disarm, or if you arm an area, the other area will arm as well).

This allows a user to ensure that both areas will be armed by pressing one extra button rather than entering a user code at both area codepads.

This function will only operate if Option 1 in “LOCATION 230” on page 144 has been enabled.

How To Arm Or Disarm Both Areas At The Same Time

1. Enter your MASTER CODE followed by **0** and the AWAY button.
Two beeps will be heard and both areas will arm or disarm.

MASTER CODE + **0** + AWAY

Changing and Deleting User Codes

1 This function allows a Master Code holder to add/change or delete any of the system user codes.

When changing or deleting user codes, it is important that you know the number of the user you wish to change or delete.

How To Add Or Change A User Code

1. Enter your [MASTER CODE] followed by **1** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

2. Enter the [USER NUMBER] (1-8) that you wish to change followed by the [AWAY] button.
Two beeps will be heard and the corresponding ZONE indicator will illuminate. Refer to "Table 25: Zone Indicators Showing Relative User Numbers" on page 56.

3. Enter the digits required for the [NEW CODE] followed by the [AWAY] button.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

If you wish to change any further user codes, repeat this procedure as many times as required.

[MASTER CODE] + **1** + [AWAY]
+ [USER NUMBER] + [AWAY] + [NEW CODE] + [AWAY]

When adding or changing user codes, this function will automatically terminate if a button is not pressed within sixty seconds. Pressing the [AWAY] button will also terminate the session at anytime. One long beep indicates the code entered already exists or an incorrect user number has been selected.

How To Delete A User Code

1. Enter your [MASTER CODE] followed by **1** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

2. Enter the [USER NUMBER] (1-8) that you wish to delete followed by the [AWAY] button.
Two beeps will be heard and the corresponding ZONE indicator will illuminate. Refer to "Table 25: Zone Indicators Showing Relative User Numbers" on page 56.

3. Press the [STAY] button to delete the user code.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

If you wish to delete any further user codes, repeat this procedure as many times as required.

[MASTER CODE] + **1** + [AWAY]
+ [USER NUMBER] + [AWAY] + [STAY]

When deleting user codes, this function will automatically terminate if a button is not pressed within sixty seconds. Pressing the [AWAY] button will also terminate the session at anytime. One long beep indicates an incorrect user number has been selected.

User No	*Zone 1 Indicator*	*Zone 2 Indicator*	*Zone 3 Indicator*	*Zone 4 Indicator*	*Zone 5 Indicator*	*Zone 6 Indicator*	*Zone 7 Indicator*	*Zone 8 Indicator*
1	✓							
2		✓						
3			✓					
4				✓				
5					✓			
6						✓		
7							✓	
8								✓

Table 25: Zone Indicators Showing Relative User Numbers

Changing Domestic Phone Numbers

2 This option allows a Master Code holder to view and program the required telephone numbers that the system will call in the event of an alarm. For a more detailed description, refer to "Domestic Reporting Format" on page 78 for further information.

How To Change Domestic Phone Numbers

1. Enter your [MASTER CODE] followed by **2** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

If there are telephone numbers already programmed, they will be displayed one digit at a time via the zone indicators on the codepad. Refer to "Table 26: Zone Indicators For Changing Phone Numbers" on page 58 for the indicators and their meanings.

If there are no telephone numbers programmed, a further two beeps will be heard after entering this mode. These two beeps are normally heard after the last digit of the last telephone number has been displayed.

2. Enter all the digits for [PHONE No 1], one digit at a time. You will notice as each digit is entered, the corresponding codepad indicators will illuminate.

3. After you have entered all the digits of the first telephone number, press the [STAY] button if there is more than one telephone number to be programmed. This will insert a break between the first telephone number and the second telephone number. If there is only one telephone number, press the [AWAY] button to exit this mode.

4. Enter all the digits for [PHONE No. 2], one digit at a time. You will notice as each digit is entered, the corresponding codepad indicators will illuminate.

5. After the last digit of the second telephone number, press the [AWAY] button to exit this mode unless a third telephone number is required.

[MASTER CODE] + **2** + [AWAY]
+ [PHONE No 1] + [STAY] + [PHONE No. 2] + [AWAY]

How To Disable Domestic Dialling

If at any time you wish to cancel domestic dialling for any reason (eg. You are moving house and do not wish the system to continue calling your work place or mobile phone etc), you may enter the following sequence.

1. Enter your [MASTER CODE] followed by **2** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

2. Press the [STAY] button.

3. Press the [AWAY] button to disable domestic dialling and exit this function.
Two beeps will be heard.

[MASTER CODE] + **2** + [AWAY] + [STAY] + [AWAY]

Digit	Zone 1 Indicator	Zone 2 Indicator	Zone 3 Indicator	Zone 4 Indicator	Zone 5 Indicator	Zone 6 Indicator	Zone 7 Indicator	Zone 8 Indicator	MAINS Indicator
0									✓
1	✓								
2		✓							
3			✓						
4				✓					
5					✓				
6						✓			
7							✓		
8								✓	
9	✓							✓	
Number Separator				✓					✓

Table 26: Zone Indicators For Changing Phone Numbers

Event Memory Recall Mode

3

This feature allows you to playback the last forty events that have occurred to the system. The event memory recall mode reports all alarms and arming/disarming of the system in the AWAY Mode and STAY Mode. This function helps with trouble shooting system faults. The events are displayed via the codepad indicators.

How To Enter The Event Memory Recall Mode

1. Enter your [MASTER CODE] followed by **3** and the [AWAY] button.
Three beeps will be heard. The events will be played back via the codepad indicators in reverse chronological order.

[MASTER CODE] + **3** + [AWAY]

Example

If the events were as follows:

Event No	Event Description
1	System Armed In AWAY Mode
2	Alarm In Zone 3
3	Alarm In Zone 4
4	System Disarmed

Table 27: Event Memory Recall - Example Events

The event memory playback will report as follows:

Event No	Codepad Indicator	Event Description
4	All Indicators Off Except MAINS	System Disarmed
3	Zone 4 + AWAY Indicator Illuminates	Alarm In Zone 4
2	Zone 3 + AWAY Indicator Illuminates	Alarm In Zone 3
1	AWAY Indicator Illuminates	System Armed In AWAY Mode

Table 28: Event Memory Recall - Example Event Playback

A beep and an illuminated indicator indicate each event. Resetting a 24 hour alarm in the disarmed state is indicated by one beep only. After the last event, two beeps will be heard to indicate the end of playback. The replay can be terminated at any time by pressing the [AWAY] button.

If the control panel has been powered down, the memory of all events will be lost.

Walk Test Mode

4 Walk test mode allows you to test detection devices to ensure that they are functioning correctly. This should be performed on a weekly basis.

Before activating walk test mode, isolate any zones that are not required for testing. Refer to "Isolating Zones" on page 43 for more information on isolating zones.

How To Enter Walk Test Mode

1. Enter your [MASTER CODE] followed by **4** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash. The codepad will beep once every second while the system is in the walk test mode.

2. Unseal and seal the zones to be tested. The codepad will sound one long beep and the horn speaker will sound one short beep every time a zone is sealed or unsealed.

3. Press the [AWAY] button to exit this function.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

[MASTER CODE] + **4** + [AWAY]

Fault Analysis Mode

5 Whenever a system fault occurs, the FAULT or MAINS indicator will flash and the codepad will beep once every minute.

If the MAINS indicator is flashing, this is because the AC mains supply has been disconnected. There is no need to determine this type of system fault. Pressing the AWAY button once will acknowledge the AC mains fail and stop the codepad beeping once every minute.

How To Enter Fault Analysis Mode

1. Enter your MASTER CODE followed by **5** and the AWAY button.
Two beeps will be heard and the STAY and AWAY indicators will begin to flash. The FAULT indicator will remain steady illuminated.

One or more zone indicators (1-8) will also illuminate indicating the type of fault that has occurred. Refer to "Fault Descriptions" on page 46 for a more detailed description of each type of system fault.

2. Press the AWAY button to exit this function.
Two beeps will be heard and the STAY and AWAY indicators will extinguish and the FAULT indicator will remain illuminated.

MASTER CODE + **5** + AWAY

Zone Indicator	*Fault Description*
1	Low Battery
2	Date and Time
3	Sensor Watch
4	Horn Speaker Disconnected
5	Reserved
6	E^2 Fault
7	Reserved
8	Communications Failure

Table 29: Fault Indicators

Setting The Date and Time

6 This function needs to be used when the date and time requires to be changed or the system has been powered down.

How To Set The New Date and Time

4. Enter your [MASTER CODE] followed by **6** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

5. Enter the day, month, year, hour and minute using the (DD, MM, YY, HH, MM) format.

6. Press the [AWAY] button when finished.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

[MASTER CODE] + **6** + [AWAY]

Example

If the date and time needs to be set for the 1st January 1997 at 10:30 PM, program the date and time as follows;

[MASTER CODE] + **6** + [AWAY]

0 + 1 + 0 + 1 + 9 + 7 + 2 + 2 + 3 + 0

+ [AWAY]

Turn Day Alarm On and Off

7 This function will allow you to turn day alarm on and off. Day alarm can be used to monitor zones while the system is disarmed. Refer to Day Alarm Operation on page 97 for more information.

How To Turn Day Alarm On

1. Enter your [MASTER CODE] followed by **7** and the [AWAY] button.
Three beeps will be heard and day alarm will be turned on.

How To Turn Day Alarm Off

1. Enter your [MASTER CODE] followed by **7** and the [AWAY] button.
Two beeps will be heard and day alarm will be turned off.

Reset Latching Outputs

8 This function will reset any device that has been programmed to remain on once it has been activated. This could be a door bell that is required to keep ringing until someone has acknowledged it.

How To Reset Latching Outputs

1. Enter your [MASTER CODE] followed by **8** and the [AWAY] button.
Two beeps will be heard and all latching outputs will reset.

[MASTER CODE] + **8** + [AWAY]

Initiate Modem Call

9 This function will force the control panel to dial the callback telephone number programmed in an attempt to connect to the installer's remote computer for remote programming changes.

How To Initiate A Modem Call

1. Enter your [MASTER CODE] followed by **9** and the [AWAY] button.
Two beeps will be heard.

[MASTER CODE] + **9** + [AWAY]

User Code Functions – Partitioned Systems Only

To enter the required user code function, enter your [USER CODE] followed by the required [FUNCTION] digit and the [AWAY] button.

[USER CODE] + [FUNCTION] + [AWAY]

Function	Description
0	Arm Or Disarm Both Areas At The Same Time

Table 30: User Code Functions

Arm Or Disarm Both Areas At The Same Time

0

This option allows you to arm or disarm both areas at the same time when the system has been partitioned. Both areas will arm or disarm to follow the state of the area that the code was entered from (ie: If you disarm an area, the other area will disarm, or if you arm an area, the other area will arm as well).

This allows a user to ensure that both areas will be armed by pressing one extra button rather than entering a user code at both area codepads. Refer to Option 1 in "LOCATION 230" on page 144 to enable this feature.

How To Arm Or Disarm Both Areas

1. Enter your [USER CODE] followed by **0** and the [AWAY] button. Two beeps will be heard and both areas will arm or disarm.

[USER CODE] + **0** + [AWAY]

Hold Down Functions

Hold down function have been incorporated to allow easy activation of specific operations. When a button is held down for two seconds, two beeps will be heard and a particular function will operate. The functions available are listed below.

Arm The System In AWAY Mode

Holding the **#** button down until two beeps are heard will arm the system in AWAY Mode. Refer to Option 2 in "LOCATION 230" on page 144 for setting this feature.

Arm The System In STAY Mode

***** Holding the ***** button down until two beeps are heard will arm the system in STAY Mode. Refer to Option 2 in "LOCATION 230" on page 144 for setting this feature

If there has not been an alarm during the armed cycle, holding the ***** button down a second time will disarm the system from STAY Mode. Option 4 in "LOCATION 230" on page 144 will need to be enabled for this hold down function to operate.

If an alarm has occurred or entry warning has been triggered, a valid user code will need to be used to disarm the system.

Horn Speaker Test

1 Holding the **1** button down until two beeps are heard will sound the horn speaker for a two second burst. No other sounding device will sound in this mode.

If an EDMSAT (SS914) has been connected to the control panel, both the horn speaker and the strobe will operate for a two second burst.

Bell Test

2 Holding the **2** button down until two beeps are heard will sound the speakers for a two second burst. No other sounding device will sound in this mode.

If an EDMSAT (SS914) has been connected to the control panel, both the horn speaker and the strobe will operate for a two second burst.

Strobe Test

3

Holding the **3** button down will operate the strobe. No other device will operate in this mode.

If an EDMSAT (SS914) has been connected to the control panel, this function will also test the strobe on the satellite siren.

How To Turn Strobe Test ON

1. Hold down the **3** button until three beeps are heard.
The strobe will begin to flash.

How To Turn Strobe Test OFF

1. Hold down the **3** button until two beeps are heard.
The strobe will stop flashing.

Turning Day Alarm On and Off

4

Holding the **4** button down will turn day alarm on or off.

How To Turn Day Alarm ON

1. Hold down the **4** button until three beeps are heard.
Day alarm has now been turned on.

How To Turn Day Alarm OFF

1. Hold down the **4** button until two beeps are heard.
Day alarm has now been turned off.

Fault Analysis Mode

5

There are various system faults that can be detected by the control panel. When any of these are present, the FAULT indicator will begin to flash and the codepad will beep once every minute. Refer to "Fault Descriptions" on page 46 for a more detailed description on each fault type.

How To Determine The Type Of Fault

1. Hold the **5** button down until two beeps are heard.
Two beeps will be heard and the STAY and AWAY indicators will begin to flash One or more ZONE indicators (1-8) will illuminate to indicate the type of fault that has occurred.

How To Exit Fault Analysis Mode

1. To exit fault analysis mode, press the AWAY button.
The STAY and AWAY indicators will extinguish and the FAULT indicator will remain illuminated.

Zone Indicator	Fault Description
1	Low Battery
2	Date and Time
3	Sensor Watch
4	Horn Speaker Disconnected
5	Reserved
6	E^2 Fault
7	Reserved
8	Communications Failure

Table 31: Fault Indicators

Initiate A Modem Call

6 Holding the **6** button down until two beeps are heard will force the control panel to dial the callback telephone number programmed in "LOCATION 32 - 47" on page 85 in an attempt to connect to the remote computer.

The remote computer will be required to be running the Alarm Link Software (CC816) and will need to be set to "Waiting For An Incoming Call". If no callback telephone number has been programmed, holding down the **6** button will have no effect.

Reset Latching Outputs

7 Holding the **7** button down until two beeps are heard will reset any programmable output that has been programmed to remain on once it has been activated.

The output will need to be programmed with a latching polarity. Refer to "Output Polarity" on page 127 for further information.

Codepad ID and Beeper Tone Change

8 Holding the **8** button down for two seconds performs one of two functions.

The first function is to indicate the are that the codepad belongs to when the system has been partitioned.

The second function changes the tone of the codepad buzzer. There are fifty different tones to choose from between 1500 Hz and 500 Hz and they are specific to each codepad. In a multiple codepad installation, each codepad can have a different tone.

How To Determine The Area That The Codepad Belongs To

1. Hold the **8** button down until two beeps are heard.
A zone indicator will illuminate to indicate which codepad it has been allocated. If no ZONE indicator illuminates, the codepad cannot be used when the system has been partitioned.

Z1 = Area One Codepad
Z2 = Area Two Codepad
Z7 = Master Partitioned Codepad

2. Press the AWAY button to exit this mode.

How To Change The Tone Of The Buzzer

1. To change the tone of the codepad buzzer, hold the **8** button down continuously.
The tone of the buzzer will start to increase in pitch.

2. Release the **8** button when the desired tone has been reached.

3. Press the AWAY button to exit this function.

Initiate A Test Report

9 Holding the **9** button down until two beeps are heard will transmit a test report which is used to test the dialling and reporting capabilities of the system without causing the sirens to sound.

A test report will not be transmitted if the Subscriber ID Number is 0000.

Remote Operations

This section includes the following;

- *Remote Operations*
- *Remote Arming Via The Telephone*
- *Upload/Download Via Alarm Link Software*

Remote Operations

This section covers all aspects of operating and programming the *Solution 6+6* control panel other than by a remote codepad or the hand held programmer. There are a number of methods that can be used via the telephone line to gain access to the control panel. These methods will prove to be time saving and easy to perform.

Remote Arming Via The Telephone

This feature allows you to arm your system from any remote location via the telephone line. For obvious security reasons, the system cannot be disarmed using this method. To make use of this feature, you will require a touch tone telephone or the Phone Controller (CC911).

How To Remotely Arm Your System Via The Telephone

1. Call the telephone number that your control panel has been connected to.

2. When the control panel answers the incoming call, a short jingle will be heard. Hold the phone controller to the mouthpiece of the telephone and press the button on the side of the unit for 3 seconds. You can alternatively press the * button on the touch tone telephone for 3 seconds to arm the system.

If you hear a number of strange sounding tones when the control panel answers the incoming call, this means that the system has been programmed for remote programming functions. Simply wait for a pause in the tones and follow Step 2 to remotely arm the system.

3. After releasing the button on the phone controller or the * button on the touch tone telephone, two beeps will be heard to indicate that the system has armed in AWAY Mode.

4. Hang up the telephone and the system will remain armed.

If the control panel does not answer the call, this means that the system may already be armed, remote functions have not been enabled or the ring count has been set to zero. Refer to Option 2 in "LOCATION 224" on page 138 to enable remote arming via the telephone and “LOCATION 060” on page 89 to set the ring count.

Where both remote arming and Upload/Download via the Installer’s remote computer have been selected, the control panel will answer the call expecting the remote computer. This is easily noticed, as the modem negotiating tones will be heard rather than the remote arming jingle.

Upload/Download Via Alarm Link Software

The *Solution 6+6* control panel can be remotely programmed or controlled via an IBM or compatible personal computer via the Alarm Link Software (CC816). This facility will allow you to make alterations to your customers control panel without the need to leave your office, thus improving customer service and saving you time and money. For country locations where a control panel may be situated hundreds of kilometres from your office, the Upload/Download feature is invaluable.

When selecting the control panel type during the setup of a new customer database in the Alarm Link Software, refer to the table below to select the software version number that corresponds to the control panel type required.

Control Panels Software Version	*Select Panel Type*
1.2x	S6_V12

Table 32: Alarm Link Panel Forms

After selecting the correct panel type when adding a new customer in the Alarm Link Software, the Subscriber ID Number and the Installer Code will need to match that of the control panel for synchronisation when making connection to the control panel. If these two locations do not match that of the control panel, the computer and the control panel will not synchronise.

Remote Connect

The remote connect feature allows you to establish a connection through the telephone network from your IBM or compatible computer to the *Solution 6+6* control panel anywhere in the country where a telephone line is present. The advantages of this are very obvious and having this facility will allow you to offer faster service to your clients.

Remote Connect With Customer Control

If you wish to configure the control panel so that a remote connection can only be established when the client initiates it through the remote codepad, you will need to program the following information.

"LOCATION 32 - 47" on page 85 will need to have the Callback Telephone Number programmed and Option 4 in "LOCATION 224" on page 138 will need to be disabled. The control panel has now been set so that the client has control of when a remote connection can be established.

To initiate the control panel to dial the remote computer to establish a link, hold the **6** button down until two beeps are heard on the remote codepad.

Remote Connect Without Callback Verification

Remote connect without callback verification can be handy where you have a need to perform Upload/Download functions from multiple locations. It should be noted that by using this feature you are reducing the security of the control panel.

"LOCATION 32 - 47" on page 85 should be cleared and Option 4 in "LOCATION 224" on page 138 will need to be enabled. The control panel will now allow a connection of the first call without calling the remote computer back to make contact.

Remote Connect With Callback Verification

Remote connect with callback verification offers the highest degree of data security by incorporating a two level security check.

The first is the Installer Code combined with the Subscriber ID Number needs to match that of the control panel. Secondly, the control panel will callback the programmed callback phone number to establish the valid connection. The "Callback Telephone Number" is the phone line that the modem and computer has been connected to.

"LOCATION 32 - 47" on page 85 must be programmed with the Callback Telephone Number and Option 4 in "LOCATION 224" on page 138 will need to be enabled.

Dialler Reporting Formats

This section includes the following;

- *Dialler Reporting Formats*
- *Contact ID Format*
- *Point ID Codes*
- *Event Codes*
- *General Reporting Formats*
- *Securitel*
- *Domestic Reporting Format*
- *Domestic Dialling Function*
- *Programming Domestic Reporting*
- *Basic Pager Reporting Format*

Dialler Reporting Formats

When making use of the control panel's dialling and communication features, there are a number of transmission formats available. The Solution 6+6 control panel comes factory default to report in the Contact ID Format.

Contact ID Format

Contact ID Format can identify hundreds of protection zones by their unique code and provides a single digit event qualifier and a three digit event code which quickly identifies the condition being reported.

Subscriber ID Number	*Qualifier*	*Event Code*	*Group Number*	*Point ID Number*
SSSS	**Q**	**XYZ**	**GG**	**CCC**
Four Digit Subscriber ID Number	Event Qualifier, Which Gives Specific Event Information. 1 = New Event Or Opening 3 = New Restore Or Closing	Event Code (Made Up Of 3 Hex Digits)	Group Number (Made Up Of 2 Hex Digits)	Point ID Number (Made Up Of 3 Hex Digits)

Table 33: Contact ID Format Breakdown

In general, Contact ID reporting format is very simple as most of the Event Codes and Point ID Codes have been predefined. The event code is programmable where the Point ID Number is fixed. The base station software usually only has the ability to identify a zone going into alarm by its Point ID Code and usually pays little attention to the Event Code.

Refer to "Table 34: Point ID Codes" on page 73 for further information on the Solution 6+6 Point ID Codes.

Point ID Codes

Point ID Number	Event Description	Event Code	Explanation	Page
Zone Specific 1 - 5	Burglary Zones	130	Burglary	100
Zone Specific 6	24 Hour Burglary Zones	133	24 Hour Burglary	100
Zone Specific 9 - 14	Tamper Zones 1 – 6	137 Fixed	Zone Tamper	100
User Specific 1 - 8	Open/Close Report	401 Fixed	Opening – User # Closing – User #	92
030	AC Mains Fail	301	AC Power	114
031	Low Battery	309	Battery Test Failure	114
040	Codepad Duress	121	Duress Alarm	111
041	Codepad Panic	120	Panic Alarm	112
046	Codepad Fire (New – Version 1.27)	110 Fixed	Fire Alarm	112
045	Codepad Medical (New – Version 1.27)	100 Fixed	Medical Alarm	112
042	Code Retry Limit Exceeded	421	Access Denied	113
044	Test Report	602 Fixed	Test Report	116
Zone Specific 1 – 6	Sensor Watch	307 Fixed	Sensor Self Test Failure	115
Zone Specific 1 - 6	Trouble	380 Fixed	Sensor Trouble	110
Zone Specific 9 – 14	Tamper Trouble	383 Fixed	Sensor Trouble Tamper	110
Zone Specific 1 – 6	Bypass	570 Fixed	Zone Bypass	110

Table 34: Point ID Codes

This table shows the different Point ID Codes and Event Codes that are transmitted to the base station receiver when using Contact ID Reporting Format. Some event codes are fixed, while others are user definable. The event codes that are fixed will always send the same event code as there is no programming locations made available to alter these. The other event codes may be changed when required. For example, if zone four is being used as a 24 hour medical alarm rather than a 24 hour burglary, its event code may be changed to 100 instead of 133.

Before changing any event codes, please contact your base station supervisor to ensure you choose the correct event code.

Event Codes

Event	Description	Event	Description	Event	Description
Medical Alarms		**24 Hour Non Burglary**		**Peripheral Troubles**	
100	Medical	**150**	24 Hour Non Burg	**330**	System Peripheral
101	Pendant Transmitter	**151**	Gas Detected	**331**	Polling Loop Open
102	Fail To Report In	**152**	Refrigeration	**332**	Polling Loop Short
Fire Alarms		**153**	Loss Of Heat	**333**	Exp Module Failure
110	Fire Alarm	**154**	Water Leakage	**334**	Fail To Communicate
111	Smoke	**155**	Foil Break	**335**	Lcl Printer Paper Out
112	Combustion	**156**	Day Trouble	**336**	Local Printer Failure
113	Water Flow	**157**	Bottled Gas Low	**Comms Trouble**	
114	Heat	**158**	High Temperature	**350**	Communication
115	Pull Station	**159**	Low Temperature	**351**	Telecom Line 1 Fail
116	Duct	**161**	Loss Of Air Flow	**352**	Telecom Line 2 Fail
117	Flame	**Fire Supervisory**		**353**	Long Radio TX Fail
118	Near Alarm	**200**	Fire Supervisory	**354**	Fail To Communicate
Panic Alarms		**201**	Low Water Pressure	**355**	Loss Of Radio Super
120	Panic Alarm	**202**	Low CO2	**356**	Loss Of Central Poll'g
121	Duress Alarm	**203**	Gate Valve Sensor	**Protection Loop Trouble**	
122	Silent Alarm	**204**	Low Water Level	**370**	Protection Loop
123	Audible Alarm	**205**	Pump Activated	**371**	Protection Loop Open
Burglary Alarms		**206**	Pump Failure	**372**	Protection Loop Short
130	Burglary	**System Troubles**		**373**	Fire Trouble
131	Perimeter	**300**	System Trouble	**Sensor Troubles**	
132	Interior	**301**	AC Loss	**380**	Sensor Trouble
133	24 Hour	**302**	Low System Battery	**381**	Loss Of Super - RF
134	Entry/Exit	**303**	RAM Checksum Bad	**382**	Loss Of Super - RPM
135	Day/Night	**304**	ROM Checksum Bad	**383**	Sensor Tamper
136	Outdoor	**305**	System Reset	**384**	RF XMTR Low Battery
137	Tamper	**306**	Panel Program Altered	**Open/Close Reports**	
138	Near Alarm	**307**	Self Test Failure	**401**	Open/Close Reports
General Alarms		**308**	System Shutdown	**Access Control**	
140	General Alarm	**309**	Battery Test Failure	**421**	Access Denied
141	Polling Loop Open	**310**	Ground Fault	**Zone Bypass**	
142	Polling Loop Short	**Sounder Relay Troubles**		**570**	Zone Bypass
143	Exp'n Module Fail	**320**	Sounder/Relay		
144	Sensor Tamper	**321**	Bell 1		
145	Exp'n Module Tamper	**322**	Bell 2		
		323	Alarm Relay		
		324	Trouble Relay		
		325	Reversing	**602**	Test

Table 35: Contact ID Event Codes

General Reporting Formats

The following formats may be designated to report in either Standard of Extended Formats. In all cases, the standard format will report to the central monitoring station a Subscriber ID Number followed by an Alarm, Trouble, Restore or Open/Close codes.

The Expanded 3+1 and Expanded 4+1 Formats will report a Subscriber ID Number followed by an Expansion Code, followed by a second line where the Expansion Code is repeated as the Subscriber ID Number followed by the Reporting Channel (Or User ID) relevant to that report.

If 4+2 Format is selected then no second line is transmitted and the reporting channel number is transmitted directly after the expansion code.

Event	*3+1/4+1 Universal*	*3+1/4+1 Expanded*	*4+2*
Alarm	SSS (S) A	SSS (S) A AAA (A) C_H	SSSS AC_H
Trouble	SSS (S) T	SSS (S) T TTT (T) C_H	SSSS TC_H
Bypass	SSS (S) B	SSS (S) B BBB (B) C_H	SSSS BC_H
AC Fail	SSS (S) E	SSS (S) E EEE (E) A_C	SSSS EA_C
Low Battery	SSS (S) L	SSS (S) L LLL (L) L_B	SSSS LL_B
Open	SSS (S) O	SSS (S) O OOO (O) U	SSSS OU
Close	SSS (S) C	SSS (S) C CCC (C) U	SSSS CU
Test	SSS (S) T_E	SSS (S) T_E	SSSS T_EO
Program Altered	SSS (S) P	SSS (S) P	SSSS P0
Duress	SSS (S) D	SSS (S) D	SSSS DD_0
Restore	*3+1/4+1 Universal*	*3+1/4+1 Expanded*	*4+2*
Alarm	SSSS (S) R	SSS (S) R RRR (R) C_H	SSSS R CH
Trouble	SSS (S) T_R	SSS (S) T_R $T_RT_RT_R$ (T_R) C_H	SSSS T_R C_H
Bypass	SSS (S) B_R	SSS (S) B_R $B_RB_RB_R$ (B_R) C_H	SSSS B_R C_H
AC Fail	SSS (S) E_R	SSS (S) E_R $E_RE_RE_R$ (E_R) A_{CR}	SSSS E_R A_{CR}
Low Battery	SSS (S) L_{BR}	SSS (S) L_{BR} $L_{BR}L_{BR}L_{BR}$ (L_{BR}) L_B	SSSS L_{BR} L_B

Table 36: General Reporting Formats

Code	*Description*	*Code*	*Description*
SSSS	Subscriber ID Number	**R**	Alarm Restore Code
A	Alarm	**T_R**	Trouble Restore Code
C_H	Channel Number	**B_R**	Bypass Restore Code
0	Zero	**E_R**	AC Fail Restore Code 1st digit
T	Trouble	**A_{CR}**	AC Fail Restore Code 2nd Digit
B	Bypass	**L_R**	Low Battery Restore Code 1st Digit
E	AC Fail Code 1st Digit	**L_{BR}**	Low Battery Restore Code 2nd Digit
A_C	AC Fail Code 2nd Digit	**D**	Duress Code 1st Digit
L	Low Battery Code 1st Digit	**D_0**	Duress Code 2nd Digit
L_B	Low Battery Code 2nd Digit	**P**	Panic Code 1st Digit
O_P	Open	**P_{CH}**	Panic Code 2nd Digit
C_P	Close	**T_P**	Test Code
U	User Number		

Table 37: 3+1/4+1 Transmission Code Descriptions

Securitel

The *Solution 6+6* control panel can communicate to base stations via the Securitel Network using an EDMSTU (CS800). Not all messages can be transmitted via securitel as they can via the communication dialler transmitting in Contact ID Format. Refer to "Table 38: Securitel Reporting Messages" below for the list of messages that are supported by securitel.

Event	Location	Page No
Alarms and Restores	LOCATION 104 - 151	100
Zone Bypass Reports *	LOCATION 152 – 153	110
Zone Trouble Reports *	LOCATION 154 – 155	110
Open/Close Reports	LOCATION 180 - 181	115
AC Fail	LOCATION 168 - 171	114
Low Battery	LOCATION 172 - 175	114
Codepad Panic	LOCATION 160 - 163	112
Codepad Duress	LOCATION 156 - 159	111
Codepad Tamper	LOCATION 164 - 167	113

Table 38: Securitel Reporting Messages

*** Zone bypass and zone trouble reports are not transmitted separately. They are transmitted as one combined isolate report.**

How To Program and Setup Securitel

To connect and setup the EDMSTU, follow the procedures below:

1. Program the Subscriber ID Number in "LOCATION 052 – 055".

2. Program Output 2 (Strobe) as all zero's in "LOCATION 192 - 197".

3. Disable Option 1 in "LOCATION 224" if the control panel is not going to use the on-board dialler.

4. Connect the EDMSTU to the *Solution 6+6* control panel using the table below.

5. Once the EDMSTU has been connected to the control panel, the EDMSTU will now need to be 'upped' by the monitoring station.

Solution 6+6	EDMSTU
STR	D
GND	-
+ COM	+

Table 39: EDMSTU Connection Terminals

Refer to your EDMSTU Installation Manual (MASTU) for further information.

Domestic Reporting Format

The locations of the primary telephone number and secondary telephone number which are normally used for base station reporting can be added together making provision to store up to 32 digits for domestic dialling format. The 32 locations are now used to store any number of telephone numbers and subject to the length of each telephone number, it is possible to store 3 or more different phone numbers for domestic dialling.

A four second pause may be inserted anywhere in the telephone number by programming the number '13'. The four second pauses can only be programmed by the installer as the Master Code holder has no access to this function.

Domestic Dialling Function

When the control panel has activated into alarm condition, it will commence dialling the first programmed telephone number. If a busy or engaged tone has been detected, the control panel will hang up and commence dialling the second telephone number (if one is programmed). The first call however will be counted as one unsuccessful dialling attempt. If the second telephone number is also busy or an engaged tone is detected, the control panel will hang up and commence dialling the third telephone number (if one is programmed).

If a busy tone is not detected, the control panel will assume that the phone has been answered and will begin sending its transmission. The transmission consists of a siren tone followed by a unit identification beep. The identification beep will allow the customer to verify which control panel made the call if more than one control panel is reporting to the same telephone number. The identification beep is programmed in "LOCATION 055" of the Subscriber ID Number.

After the identification beep, a long pause will follow allowing you to acknowledge the call. If the call is not acknowledged during the pause, the sequence of the siren tone, the identification beep and the pause will continue until you acknowledge the call or until the control panel hangs up after two minutes has expired.

A maximum of 6 calls per alarm event will be made when the control panel has been set up for "Domestic Dialling Format". This count includes any unsuccessful calls. The counter will be reset if the zone retriggers and a further 6 attempts will be made. The control panel will stop dialling after 6 attempts or 3 successful calls. The control panel will also stop dialling if a valid user code has been entered at the remote codepad.

How To Acknowledge Domestic Dialling

Once the call has been received, if it is not acknowledged by pressing the * button on a touch tone telephone or by using the Phone Controller (CC911), the control panel will continue to send its transmission for a period of 2 minutes. It will then hang up and commence dialling the next telephone number. If the call is acknowledged, the control panel will hang up and no further calls will be made for that event.

Programming Domestic Reporting

Programming the control panel for domestic reporting has been made extremely simple by the use of the Installer's Programming Command 965. Refer to "Command 965 - Set Up Domestic Dialling Format" on page 28 for more information.

How To Set Up The Control Panel For Domestic Dialling

1. Enter Installer's Programming Mode (EG: **1 2 3 4** followed by the [AWAY] button). Two beeps will be heard and the STAY and AWAY indicators will begin to flash.

2. Enter Command **9 6 5** followed by the [AWAY] button.
Two beeps will be heard. The control panel has now been set up for Domestic Dialling Format. Refer to “Command 965 - Set Up Domestic Dialling Format” on page 28 for more information.

3. Exit Installer's Programming Mode by entering Command **9 6 0** followed by the [AWAY] button. Two beeps will be heard and the STAY and AWAY indicators will extinguish.

How To Program Domestic Phone Numbers

1. Enter your [MASTER CODE] followed by **2** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

If there are telephone numbers programmed, they will be displayed one digit at a time via the zone indicators on the codepad. Refer to "Table 26: Zone Indicators For Changing Phone Numbers" on page 58 for the indicators and their meanings.

If there are no telephone numbers programmed, a further two beeps will be heard after entering this mode. These two beeps are normally heard after the last digit of the last phone number has been displayed.

2. Enter all the digits for [PHONE No 1], one digit at a time. You will notice as each digit is entered, the corresponding codepad indicators will illuminate.

3. After you have entered all the digits of the first telephone number press the [STAY] button if there is more than one phone number. This will insert a break between the first telephone number and the second telephone number. If there is only one phone number, press the [AWAY] button to exit this mode.

4. Enter all the digits for [PHONE No. 2], one digit at a time. You will notice as each digit is entered, the corresponding codepad indicators will illuminate.

5. After the last digit of the second telephone number, press the [AWAY] button to exit this mode unless a third, fourth or fifth telephone number is required.

Your control panel has now been set up to report in the domestic dialling format. Test the dialling functions by triggering the control panel to report to your programmed telephone numbers.

How To Disable Domestic Dialling Using The Master Code

If at any time you wish to cancel domestic dialling for any reason (eg. You are moving house and you do not wish the system to continue calling your work place or mobile phone etc), you may enter the following sequence.

1. Enter the [MASTER CODE] followed by **2** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

2. Press the [STAY] button.

3. Press the [AWAY] button to disable domestic dialling.
Two beeps will be heard and the system will return to the disarmed state.

[MASTER CODE] + **2** + [AWAY] + [STAY] + [AWAY]

Basic Pager Reporting Format

Basic Pager Format requires some interpretation of the numbers that appear on the display, however, it is possible to differentiate between 1000 different control panels when a number of control panels are reporting to the one pager.

How To Setup Basic Pager Reporting

1. "LOCATION 000 - 015" requires the Basic Pager's access telephone number programmed.

2. “LOCATION 052 – 055” requires a Subscriber ID Number programmed.

3. "LOCATION 049" requires "Option 5 - Pager Handshake" to be selected.

4. "LOCATION 050" requires "Option 12 - Basic Pager Format" to be selected.

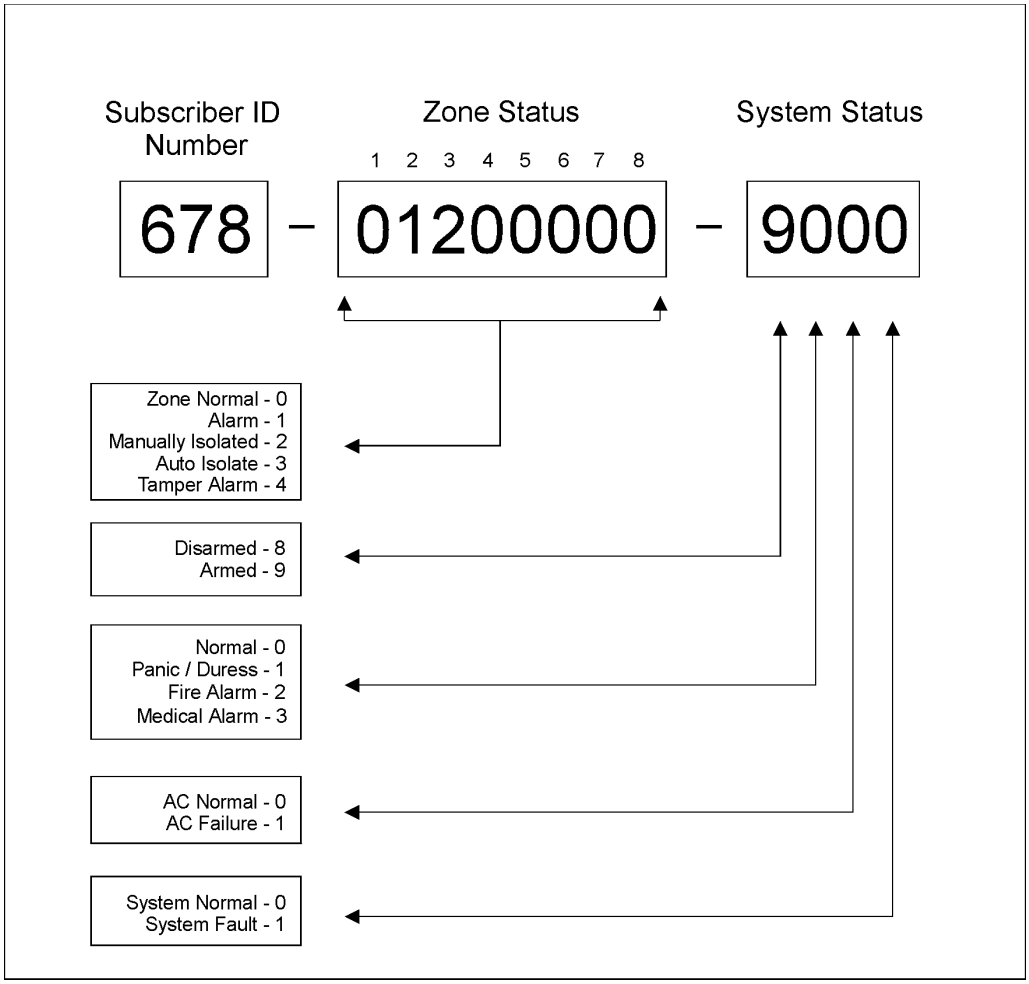


Figure 3: Basic Pager Display

The example in "Figure 3: Basic Pager Display" shows that the transmission has come from Subscriber ID Number 678 and that Zone 2 is in alarm, Zone 3 has been manually isolated, the system is armed, the panic zone is normal, the AC is connected and there is no fault condition.

Base Station Information

This section includes the following;

- *Base Station Information*
- *Primary Telephone Number*
- *Secondary Telephone Number*
- *Callback Telephone Number*
- *Dialling Format*
- *Handshake Tone*
- *Transmission Format*
- *Transmission Speed*
- *Subscriber ID Number*
- *Ring Count*
- *Answering Machine Bypass*

Base Station Information

This section outlines the programming information required for the *Solution 6+6* control panel when communicating with base station receivers. Typically these parameters specify the telephone numbers to call, the transmission formats, handshake tones and transmission speeds.

How To Program A Phone Number

When programming the telephone number, if a '0' is required, it must be programmed as a '10'. Each location in the primary, secondary and callback telephone numbers hold one digit of the telephone number.

To tell the dialler when the end of the telephone number has been reached, a '0' must be inserted at the end of the telephone number. Therefore the dialling sequence will be terminated when a zero appears.

Example

To program the telephone number 9672 1055, you would program the following:

9 6 7 2 1 10 5 5 0 0 0 0 0 0 0 0.

Programming A Four Second Pause In The Phone Number

To enter a four second pause in the dialling sequence, you would need to program the value '13'. This may be necessary when the dialler is communicating through an old (slower) telephone exchange or where a PABX system is in place.

Example

To program the telephone number 02 pause 9672 1055, you would program the following:

10 2 13 9 6 7 2 1 10 5 5 0 0 0 0.

Digit Required	*Number To Program*	*Digit Required*	*Number To Program*
0	10	**8**	8
1	1	**9**	9
2	2	**End Of Number**	0
3	3	*****	11
4	4	**#**	12
5	5	**4 Second Pause**	13
6	6	**Break**	14
7	7		

Table 40: Dialling Digits

Primary Telephone Number

LOCATION 000 - 015 **0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0**

When the control panel requires to transmit a report, the control panel will dial this number in an attempt to contact the monitoring station or pager etc. If the call is successful, the relevant information will be transmitted and the dialler will return back to the stand-by mode.

If unsuccessful, the dialler will attempt two more times using the primary telephone number, after which the secondary telephone number will be called three times. This procedure will be repeated only once again (ie. Maximum of 12 call attempts per alarm) after ten minutes if none of the first 6 attempts were successful

Contact your monitoring station or pager company for the relevant telephone numbers before programming this location.

Secondary Telephone Number

LOCATION 016 - 031 **0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0**

Refer to the Primary Telephone Number for programming information.

Callback Telephone Number

LOCATION 32 - 47 **0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0**

This location contains the telephone number that will be called when Upload/Download is requested or the number **6** button is held down to initiate a modem call from the control panel to establish a communications link with the installer's remote computer. The computer must be running the Alarm Link Software (CC816) and will need to be set to "Waiting For An Incoming Call". The Callback Telephone Number is also required to be programmed if "Remote Connect With Callback Verification" on page 70 is required.

Dialling Format

LOCATION 048 **1**

The method for dialling telephone numbers is entered here. Options 3 and 6 will alternate the dialling sequence between DTMF and Decadic if the call to the base station receiver was unsuccessful. Caution should be exercised when selecting the dialling method.

Only use the Australian method if the control panel is to be connected to the Australian Telecommunications Network. The International DTMF dialling option should only be used in those countries that allow both the caller and the receiver to terminate the phone call. Using the incorrect format will disable EDM's patent Telephone Anti-Jamming feature.

Option	*Dialling Format*	*Option*	*Dialling Format*
1	Australian DTMF (5 Digits/Second)	**4**	International DTMF (Touch Tone)
2	Australian Decadic	**5**	Reversed Decadic (10 Minus 1)
3	Alternating DTMF & Australian Decadic	**6**	Alternate DTMF & Reversed Decadic

Table 41: Dialling Formats

The alternating sequence is as follows; DTMF - Decadic - DTMF - Decadic - DTMF - Decadic

Handshake Tone

LOCATION 049 **1**

This location sets the type of handshake tone required for before data transmissions to the monitoring station will begin.

1. HI LO Handshake Tone is required when the control panel requires to communicate in Contact ID Format or High Speed DTMF.

2. 1400 Hz Handshake Tone is required when the control panel requires to communicate in Ademco Lo Speed Format or Domestic Dialling Format.

3. Reserved.

4. No Handshake Tone is not recommended.

5. Pager Handshake Tone is required when the control panel needs to communicate in Basic Pager Format.

Option	*Handshake Tone*	*Option*	*Handshake Tone*
1	HI LO Handshake (Contact ID Format)	**4**	No Handshake
2	1400 Hz Lo Speed (Ademco Tx At 1900Hz)	**5**	Pager Handshake
3	Reserved		

Table 42: Handshake Tones

Transmission Format

LOCATION 050 **1**

Enter the desired transmission format here. This location selects the data format that will be transmitted to the monitoring station receiver. This location also allows you to configure the control panel for domestic or basic pager formats.

Option	Transmission Format	Option	Transmission Format
1	Contact ID	**9**	Reserved
2	4+2 Express	**10**	Reserved
3	4+2 Pulsed	**11**	Domestic
4	4+2 Pulsed + Checksum	**12**	Basic Pager
5	4+1 Pulsed Universal	**13**	Reserved
6	4+1 Pulsed Expanded	**14**	Reserved
7	3+1 Pulsed Universal	**15**	Reserved
8	3+1 Pulsed Expanded		

Table 43: Transmission Formats

Transmission Speed

LOCATION 051 **2**

This location selects the speed at which data is transmitted to the base station receiver when Lo-Speed Pulsed transmission formats are used. Changing this location will only effect pulsed transmission formats.

Option	Transmission Speed	Option	Transmission Speed
1	1 Pulse Per Second	**4**	20 Pulses Per Second
2	10 Pulses Per Second	**5**	20 Pulses Per Second Fixed Digit Length
3	15 Pulses Per Second	**6**	40 Pulses Per Second

Table 44: Transmission Speeds

Receivers and Their Formats

The following is a list of some compatible control room receivers, their specific handshake tones and transmission formats. Use this table only as a guide when selecting the transmission format.

Receiver Type	*Transmission Format*
Silent Knight Ademco Slow	10 PPS, 1400 Hz HS, 3+1, 3+2, 4+1, 4+2
Sescoa Franklin DCI Vertex	20 PPS, 2300 Hz, 3+1, 3+2, 4+1, 4+2
Silent Knight FAST	20 PPS, 2300 HS, 3+1, 3+2, 4+1, 4+2
Ademco	10 PPS, 1400 Hz HS, 3+1, 3+2, 4+1, 4+2 20 PPS, 2300 Hz HS, 3+1, 3+2, 4+1, 4+2 40 PPS, 1400 Hz HS, 3+1, 3+2, 4+1, 4+2 DTMF, Hi-Low HS, Expanded Format, 4+2 Express
FBI	10 PPS, 1400 Hz HS or 2300 Hz HS, 3+1, 3+2, 4+1, 4+2 20 PPS, 1400 Hz HS or 2300 Hz HS, 3+1, 3+2, 4+1, 4+2 40 PPS, 1400 Hz HS or 2300 Hz HS, 3+1, 3+2, 4+1, 4+2 DTMF, 1400 Hz HS or 2300 Hz or Hi-Low, 4+2 or 4+2+CS DTMF, Hi-Low HS, Expanded Format

Table 45: Receivers and Their Formats

If your base station receiver type is not listed above, do not despair, there are many combinations of formats, speeds and handshake tones. Try a few combinations and you will more than likely find the one that works for your receiver.

It should be noted that some formats offer much more detailed information than others, so take the time to consider the many alternatives being offered.

Subscriber ID Number

LOCATION 052 – 055 **0 0 0 0**

This number is transmitted to identify the calling control panel. Enter the desired Subscriber ID Number in the four locations provided. For Basic Pager Format, “LOCATION 052” will be ignored and the first digit of the Subscriber ID Number required must start in “LOCATION 053”. When using Domestic Dialling Format, the number of identification beeps will be the number that is programmed in “LOCATION 055”. This gives the ability to identify between 15 different control panels calling the same telephone number.

Ring Count

LOCATION 060 **8**

This location sets the number of rings before the control panel will answer an incoming call. This should be set at an acceptable level bearing in mind that one ring = "Ring, Ring - Ring, Ring" and that a ring count of 10 represents approximately 60 seconds. This location only has an effect if remote arming and/or remote Upload/Download via Alarm Link Software has been enabled. If this location is programmed as 'zero', then the answering of incoming calls will be totally disabled irrespective of any programmed options.

Answering Machine Bypass

Answering machine bypass has been incorporated so that it is possible to make a connection with the control panel for remote arming or Upload/Download when there is an answering machine or facsimile machine on the same telephone line. There are two different methods of using answering machine bypass as explained below. The secondary method should only be used when there is a large amount of traffic on the line (eg. A home office). It will reduce the chance of the control panel incorrectly answering incoming calls.

1. Programming the ring count as 15 will enable "Answering Machine Bypass" in the primary mode. When calling the control panel, let the phone ring for no more than 4 rings and then hang up. If you call again within 45 seconds, the control panel will answer the call on the first ring and the connection will be established. This will prevent the answering machine or facsimile from answering the call. Refer to Option 4 in "LOCATION 229" on page 143 if you wish to enable "Answering Machine Bypass Only When System Is Armed".

2. **NEW – Software Version 1.27**
Programming a 14 as the ring count will enable "Answering Machine Bypass" in the secondary mode. In this mode, when calling the control panel, allow the phone to ring for no more than 2 rings and then hang up. Wait a minimum of 8 seconds before calling the control panel again. The control panel will now answer on the first ring. If you do not wait the 8 seconds, the control panel will not answer the call. Refer to Option 4 in "LOCATION 229" on page 143 if you wish to enable "Answering Machine Bypass Only When System Is Armed".

You should set the ring count on the answering machine or facsimile machine to be higher than two rings. Four or six rings would be preferred.

User Codes

This section includes the following;

- *Installer Code*
- *User Codes*
- *User Code Priority*

Access Codes

This section describes the access codes that are used to assign privileges and access functions for user code holders of the system. Two types of user codes exist within the system, the Installer Code and User Codes. Each of these codes allow specific access and operation of the varied functions of the control panel.

Installer Code

LOCATION 056 - 059

1 2 3 4

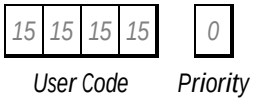
This code is used to access the Installer's Programming Mode and can be between one to four digits long. However, after the control panel has been powered up, the Installer Code can disarm the system if it is the first code used. The next time the Installer Code is used, access into Installer's Programming Mode will be made.

User Codes

LOCATION 061 - 100

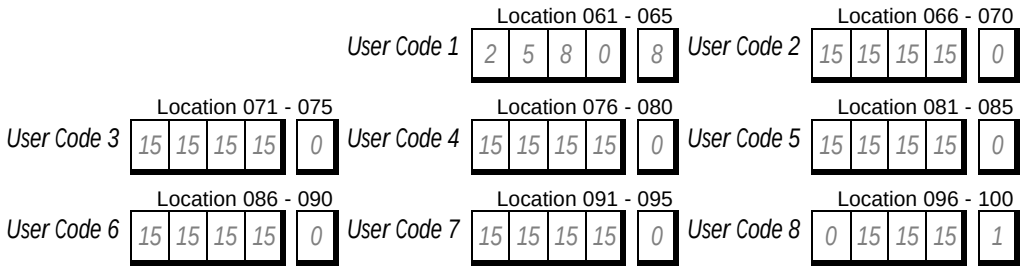
The purpose of user codes is to arm and disarm the system as well as perform other specific functions as described in Master Code Functions on page 54.

User codes can be any length between one to four digits long. Each user code may have a different priority level. The priority level controls the behaviour of the code, allowing it to arm only, arm and disarm or be a Master Code holder etc. The priority level of each user code is programmed in the last location of each user code.



There are a total of 8 user codes available that can be altered or deleted at any time by a Master Code holder. Multiple Master Codes can be programmed. Refer to Master Code Functions on page 54 for more information on adding, deleting or changing user codes.

The priority level for each user code can only be programmed or altered by the installer.



User Code 32 will report when any of the following methods for arming and disarming are used.

1. Arm and disarm via remote radio control equipment connected to the optional Radio Key/Keyswitch Interface (CC813) or keyswitch zone.

2. Arm and disarm the system via Alarm Link Software (CC816).

3. Arm the system remotely over the telephone.

4. Single button arming in AWAY Mode or STAY Mode.

5. Single button disarming from STAY Mode.

User Code Priority

There are seven different priority levels that can be allocated to the user code. Each priority level allows or restricts the functions that different user code holders may perform.

If user code priority levels 4, 6 or 12 have been programmed to any of the available 8 user codes, the method of standard isolating will no longer operate. Only those user codes with the priority level of 4, 6 or 12 will be able to isolate zones using the method code to isolate.

Priority	Description
0	Arm and Disarm
1	Arm Only
2	Patrolman Code
4	Arm and Disarm + Code To Isolate
6	Patrolman Code + Code To Isolate
8	Arm and Disarm + Master Code Functions
12	Arm and Disarm + Master Code Functions + Code To Isolate

Table 46: User Code Priority Levels

Arm and Disarm

0 This priority level allows the user code holder to arm and disarm the system.

Arm Only

1 This priority level allows the user code holder to arm the system but not disarm it.

Patrolman Code

2 This priority level allows the patrolman to disarm the system only after an alarm has occurred. This will prevent unauthorised use of the code. A patrolman code can always arm the system.

Arm and Disarm + Code To Isolate

4 This priority level allows the user code holder to arm and disarm the system. Isolating of zones will only be allowed by using the method “Code To Isolate” once this priority level has been set. Refer to Isolating Zones on page 43 for further information.

Patrolman Code + Code To Isolate

6 This priority level allows the patrolman to disarm the system only after an alarm has occurred. This will prevent unauthorised use of the code. A patroman can always arm the system.

Isolating of zones will only be allowed by using the method “Code To Isolate” once this priority level has been set. Refer to Isolating Zones on page 43 for further information.

Arm and Disarm + Master Code Functions

8 This priority level allows arming and disarming of the system and the ability to carry out any of the Master Code Functions described on page 54. More than one user code can be allocated to this priority level.

Arm and Disarm + Master Code Functions + Code To Isolate

12 This priority level allows arming and disarming of the system and the ability to carry out any of the Master Code Functions described on page 54.

Isolating zones will only be allowed by using the method "Code To Isolate" once this priority level has been set. Refer to Isolating Zones on page 43 for more information. More than one user code can be allocated to this priority level.

LOCATION 102

6

Code retries restricts the amount of times an invalid user code can be used in an attempt to operate the system. This location sets the number of incorrect code attempts that will cause an alarm condition. When the number of incorrect code attempts equals the number programmed in this location, the system will carry out the following;

1. Activate the sirens, internal screamers and strobes connected to the control panel. Refer to Option 8 in "LOCATION 227" on page 141 if you require access denied to be silent.

2. Shutdown all codepads that are connected to the control panel and lock them out for the time period programmed in "LOCATION 220" on page 134.

3. Transmit an "Access Denied" (Contact ID Event Code 421) report to the base station receiver.

Each time the system is armed or disarmed, the counter will be reset. The number of attempts can be anywhere between 1-15. If you program a zero into "LOCATION 102", the code attempts are unlimited and neither of the three points listed above will take place. This function works when the system is in the armed or disarmed state.

Zone Information

This section includes the following;

- *Day Alarm Mask*
- *Day Alarm Operation*
- *EOL Resistor Value*
- *Zone Programming*
- *Zone Defaults*
- *Zone Types*
- *Zone Options*
- *Keyswitch Zone Options*
- *Zone Pulse Count*
- *Zone Pulse Count Time*

Zone Information

Day Alarm Mask

LOCATION 101 **1**

When programming this location, you will notice that there are four options per location. You may select one, two, three or all four of these options, however, only one number needs to be programmed. This number is calculated by adding the option bit numbers together. Program a seven (7) is you require options 1, 2 and 4 simultaneously (ie. 1 + 2 + 4 = 7).

Option	Day Alarm Zone
1	Zone 1
2	Zone 2
4	Zone 3
8	Zone 4

Table 47: Day Alarm Zones 1 - 4

Day alarm enables a combination of zones to be monitored while the system is in the disarmed state. Indications are available via any of the programmable outputs including the codepad buzzer. This function has been expanded to accommodate latching and non latching day alarm output event types.

When the system has been armed in AWAY Mode or STAY Mode, zones that have been programmed as day alarm zones will activate the sirens and dialler just as non day alarm zones do. When day alarm has been activated, it will ignore any zone pulse count settings that have been programmed for that zone (ie. Zone pulse count is only relevant when the system has been armed).

Day Alarm Resetting

An output that has been programmed for day alarm resetting will operate when a zone programmed for day alarm has been triggered. The output will reset once the zone has resealed. This will only occur when the system is disarmed. Refer to Output Event Type "Day Alarm Resetting" on page 121 for more information.

Day Alarm Latching

An output that has been programmed for day alarm latching will operate when a zone programmed for day alarm has been triggered. The ZONE indicator and the latching output will reset when the AWAY button has been pressed. This will only occur when the system is disarmed. Refer to Output Event Type - "Day Alarm Latching" on page 121 for more information.

Day Alarm Operation

How To Turn Day Alarm On

1. Hold down the **4** button until three beeps are heard.

How To Turn Day Alarm Off

1. Hold Down the **4** button until two beeps are heard.

If a zone has been programmed for day alarm, the zone can be isolated in the normal way so that it does not register as a day alarm zone. Only zones 1 – 4 can be used as day alarm zones.

Monitoring of tamper zones 1 – 4 can be achieved by programming an output to mimic a zone. Refer to "Output Event Types" on page 120 for more information.

No Of Beeps	System Status
2	Day Alarm Turned Off
3	Day Alarm Turned On

Table 48: Day Alarm Status Indication Beeps

Day alarm When Partitioned

Day alarm will operate independently for each area when the system has been partitioned. Any area can turn day alarm on or off without effecting the other area.

EOL Resistor Value

LOCATION 103 **4**

Option	Resistor Value	Option	Resistor Value
0	No EOL Resistor	**8**	6K8 (Blue, Grey, Black, Brown) 1%
1	1K (Brown, Black, Red)	**9**	10K (Brown, Black, Orange)
2	1K5 (Brown, Green, Red)	**10**	12K (Brown, Red, Orange)
3	2K2 (Red, Red, Red)	**11**	22K (Red, Red, Orange)
4	3K3 (Orange, Orange, Black, Brown) 1%	**12**	Reserved
5	3K9 (Orange, White, Red)	**13**	Reserved
6	4K7 (Yellow, Violet, Red)	**14**	Reserved
7	5K6 (Green, Blue, Red)	**15**	Split EOL (3K3/6K8) 1% Resistors Required 4 Burglary Zones and 4 x 24 Tamper Zones.

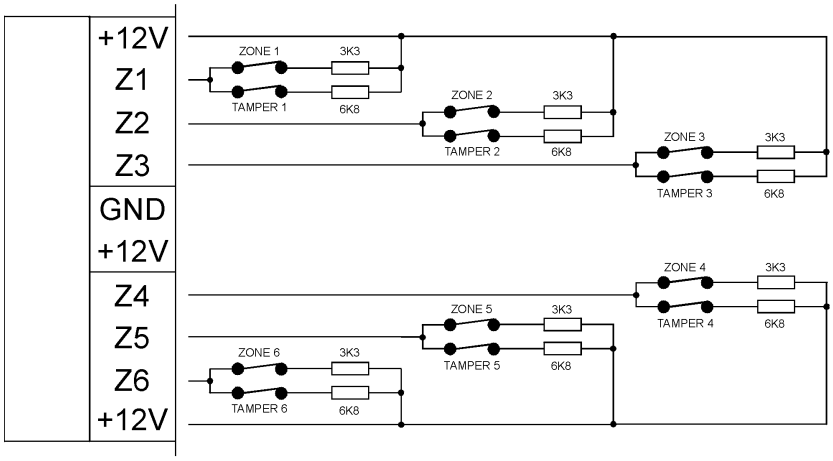
Table 49: EOL Resistor Value

The control panel has the ability to be programmed for different values of EOL resistors. This is a global parameter and will effect all six zones simultaneously. It gives the ability to fit the *Solution 6+6* control panel into an existing installation without having to change the EOL resistors. This feature also increases the security of the system as there are eleven possible EOL resistor values that can be used. This makes it extremely difficult for anyone to tamper with the system.

If split EOL resistors have been selected, the control panel will look for six burglary zones (1-6) consisting of 3K3 EOL resistors and six 24 hour tamper zones (1–6) consisting of 6K8 resistors connected in parallel. The zone 1 termination on the PCB becomes the termination for zone 1 and tamper zone 1.

Caution should be exercised when using split EOL resistors to create six burglary zones and six 24 hour tamper zones. This configuration is only suitable for normally closed contacts. If normally open contacts are used, as is the case with most types of smoke detectors, a short circuit on one zone will trigger both zones connected in parallel.

Enable 6 Burglary and 6 x 24 Hour Tamper Zone Operation Using (3K3/6K8) Configuration and N/C Switches.



If N/O Switches Are Used Both Zones Will Trip If Either Of The N/O Switches Are Closed

Figure 4: Connections Of Split EOL Resistors For 6 Burglary Zones and 6 Tamper Zones

Connections Of Split EOL Resistors Using N/O Contacts

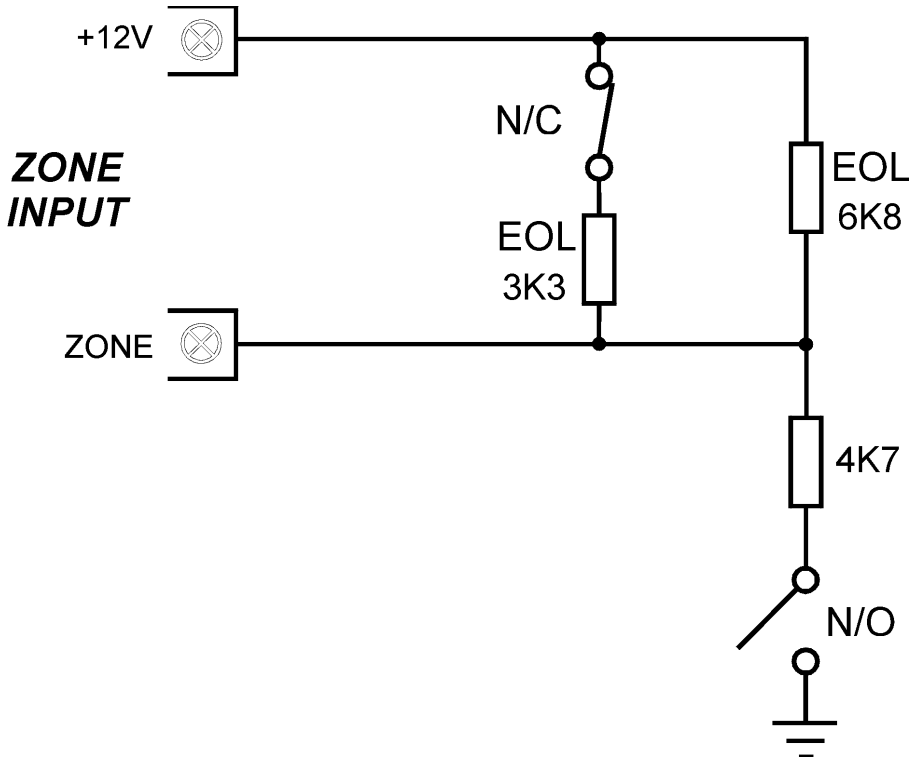


Figure 5: Connections Of Split EOL Resistors Using One N/O Contact

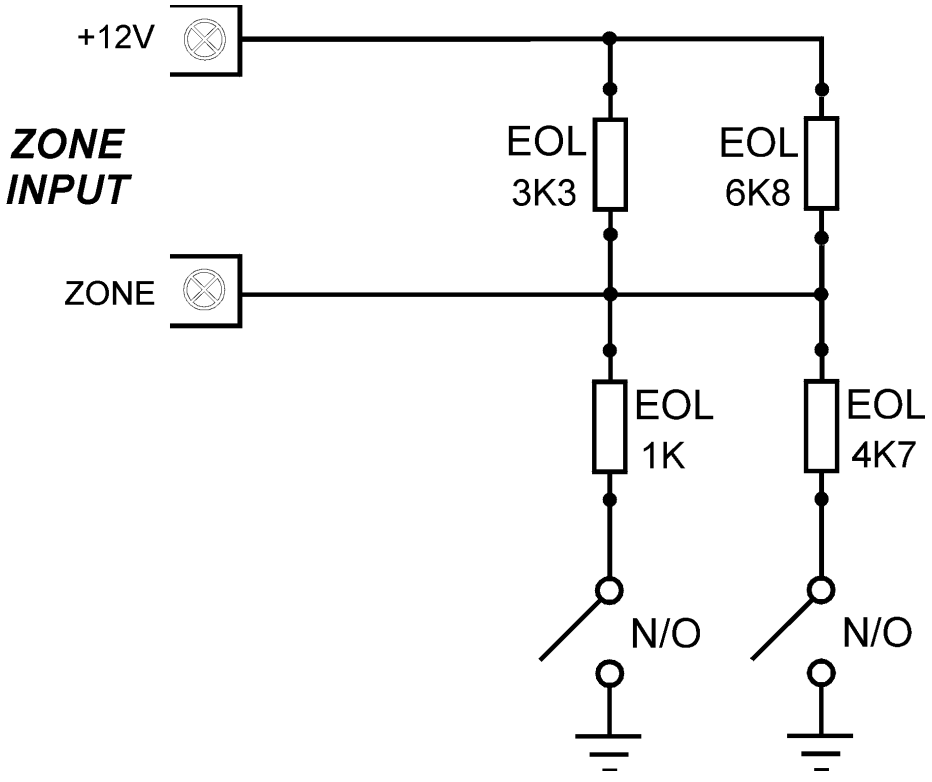


Figure 6: Connections Of Split EOL Using Two N/O Contacts

Zone Programming

Each zone contains eight locations which are divided into two groups of four. The first four locations determine how the zone operates, while the second four locations contain the dialler reporting information.

Zone Operating Information

Zone Type This location programs the "Zone Type" required (eg. Delay-1, Instant, 24 Hour etc).

Zone Option This location controls the zone (eg. Lockout Siren, Silent etc).

Zone Pulse Count This location sets how many times the zone must trigger within the time specified in the "Zone Pulse Count Time.

Zone Pulse Count Time This parameter sets the time period for the number of times the zone must trigger before activating an alarm.

Zone Reporting Information

Hundreds Digit The hundreds digit of the Contact ID Event Code is programmed into this location. This location is also the "Alarm Restore" code in all other reporting formats.

Tens Digit The tens digit of the Contact ID Event Code is programmed into this location. This location is the "Alarm" code in all other reporting formats.

Units Digit The units digit of the Contact ID Event Code is programmed into this location. This location is the "Channel" code that the zone reports on in other reporting formats other than Contact ID Format.

Dialler Channel This location is factory default to report on dialler channel 1. If the system has been partitioned, zones allocated to report on areas other than Area 1 should have their dialler channel correspond to the area number that the zone is allocated to.

Zone Defaults

Zone 1	Location 104 - 111							
	2	0	0	0	1	3	0	1

Zone 2	Location 112 - 119							
	1	0	0	0	1	3	0	1

Zone 3	Location 120 - 127							
	1	0	0	0	1	3	0	1

Zone 4	Location 128 - 135							
	1	0	0	0	1	3	0	1

Zone 5	Location 136 - 143							
	1	0	0	0	1	3	0	1

Zone 6	Location 144 - 151							
	12	0	0	0	1	3	3	1

Zone Type	Zone Option	Zone Pulse Count	Zone Pulse Count Time	Event Code Hundreds Digit	Event Code Tens Digit	Event Code Units Digit	Dialler Channel

Tamper Zones

Tamper zones are 24 hour zones only. Tamper zones are not programmable like the burglary zones.

Tamper zones when unselaed in either the armed or disarmed state will cause an alarm. This alarm condition will be displayed on the codepad by the relevant zone indicator flashing very quickly (0.1 Second On / 0.1 Second Off).

If you arm the system with a tamper zone unsealed, the zone indicator of that zone will flash (2 Seconds On / 1 Second Off) to indicate that the tamper zone has been left unsealed. Burglary zones which are left unsealed when the system has been armed will be indicated by the zone indicator constantly illiminated.

Tamper zones will be displayed on their corrsponding zone indicator on the codepad. (Eg: If the tamper on Zone 1 becomes unsealed, the codepad will then display Zone 1. If an alarm occurs on a burglary zone as well as it's parallel tamper zone during the same arming cycle, only the burglary zone will be indicated on the codepad. Event memory recall mode will however display that two separate alarms had occurred.

Tamper zones when reporting to the base station receiver report as Zones 9 – 14 to allow the monitoring station to tell the difference between burglary and tamper zones. Refer to Point ID Codes on page 73 for more information.

If a burglary zone is programmed to be silent or lockout dialler/lockout siren, the tamper zone which is connected in parallel will also become silent or lockout dialler/lockout siren.

Zone Types

There are thirteen different zone types to choose from. Zones 1 – 6 may be programmed as any one of the zone types listed below. Tamper zones connected in parallel can only be used as a fixed 24 hour zone type and cannot be changed.

Zone Type	Description	Zone Type	Description
0	Instant	**8**	Delay-1 + Isolated In STAY Mode
1	Handover	**9**	Delay-2 + Isolated In STAY Mode
2	Delay-1	**10**	Reserved
3	Delay-2	**11**	Keyswitch
4	Reserved	**12**	24 Hour Burglary
5	Reserved	**13**	24 Hour Fire
6	Instant + Isolated In STAY Mode	**14**	Chime Only
7	Handover + Isolated In STAY Mode	**15**	Zone Not Used

Table 50: Zone Types

Instant Zone

0 An Instant zone will sound the sirens and operate the dialler as soon as it registers as unsealed after the exit timer has expired.

Handover Zone

1 A Handover zone will act as an instant zone if it has been triggered by itself. If a handover zone is triggered after a delay zone, the remaining delay time will handover from the delay zone to the handover zone. Handover may be sequential or non sequential. Refer to Option 2 in "LOCATION 227" on page 141 if you require handover to be sequential or non sequential.

Delay-1 Zone

2 A Delay-1 zone will have a delay time determined by the value in "Entry Timer 1" on page 132.

Delay-2 Zone

3 A Delay-2 zone will have a delay time determined by the value in "Entry Timer 2" on page 132.

Reserved

4

Reserved

5

Instant Zone + Isolated In STAY Mode

6 This zone will act as a Instant zone when the system is armed in the AWAY Mode, but will be automatically isolated when the system is armed in STAY Mode.

Handover Zone + Isolated In STAY Mode

7 This zone will act as a Handover zone when the system is armed in the AWAY Mode, but will be automatically isolated when the system is armed in STAY Mode.

Delay-1 Zone + Isolated In STAY Mode

8 This zone will act as a Delay-1 zone when the system is armed in the AWAY Mode, but will be automatically isolated when the system is armed in STAY Mode. A Delay-1 zone will have a delay time determined by the value in "Entry Timer 1" on page 132.

Delay-2 + Isolated In STAY Mode

9 This zone will act as a Delay-2 zone when the system is armed in the AWAY Mode, but will be automatically isolated when the system is armed in STAY Mode. A Delay-2 zone will have a delay time determined by the value in "Entry Timer 2" on page 132.

Reserved

10

Keyswitch Zone

11 A Keyswitch zone is used when you need to connect a keyswitch to operate the system. Refer to “Keyswitch Zone Options” on page 106 for selecting options such as momentary, toggle etc. User code number 32 will be reported when arming and disarming using this method of operation.

24 Hour Burglary Zone

12 A 24 Hour Burglary zone is always ready to trigger the horn speaker, bell and strobe regardless of whether the system is in the armed or disarmed state.

24 Hour Fire Zone

13 A 24 Hour Fire zone is always ready to trigger the horn speaker, bell and strobe regardless of whether the system is in the armed or disarmed state. A distinct fire sound is emitted through the horn speaker to indicate this type of alarm condition. The fire sound is completely different to the burglary sound.

Chime Zone

14 A Chime zone is not a burglary zone. It can never sound the sirens or trigger the dialler. Its purpose is to map it to a programmable output for an indication of sealed or unsealed. Refer to Output Event Type - Global Chime on page 125.

Chime zones require EOL resistors and they will register at a remote codepad. These zones do not effect the operation of forced arming.

Zone Not Used

15 If a zone is not used, program it as a zone type of 15. This zone will never sound the sirens or trigger the dialler. An EOL resistor is not required if this zone type is used.

Zone Options

When programming this location, you will notice that there are four options per location. You may select one, two, three or all four of these options, however, only one number needs to be programmed. This number is calculated by adding the option bit numbers together. Program a seven (7) is you require options 1, 2 and 4 simultaneously (ie. 1 + 2 + 4 = 7).

Option	Description
1	Lockout Siren
2	Lockout Dialler
4	Silent Alarm
8	Sensor Watch

Table 51: Zone Options

Lockout Siren & Lockout Dialler

1 & 2 Lockout means one activation per arming cycle (ie. A zone programmed for "Lockout" can only cause the sirens or dialler to operate once).

When the system is next armed, the zone can cause the sirens and dialler to operate once more. As can be seen by "Table 51: Zone Options", the sirens can be locked out but still leave the dialler to transmit all reports to the base station receiver by programming Option 1. Programming Option 2 will lockout the dialler but leave the sirens to be reset. Programming a 3 (ie. 1 + 2 = 3), will lockout both the sirens and dialler. Restore signals will be transmitted when the system has been disarmed.

The Solution 6+6 control panel performs lockout different to most other control panels in that only the first zone to trigger an alarm condition will be locked out. All other zones that are triggered during the same siren run time will reset when the sirens reset. This prevents an intruder from triggering all zones then waiting for the sirens to stop before re-entering the premises.

Example

All zones are programmed for both lockout siren and dialler. Zone 1 is triggered followed by all other zones causing the sirens to sound and the dialler to report to the base station receiver. Zone 1 will be the only zone that stops reporting to the base station receiver because of the first zone to trigger is locked out. The remaining zones will continue to report if they are triggered again.

Refer to "LOCATION 223" on page 135 to set the number of times the siren and dialler will be allowed to activate before they will be locked out.

Silent Alarm

4 A zone programmed to be silent will not trigger the HORN SPEAKER, RELAY, STROBE or EDMSAT outputs. The dialler and all other programmable outputs will function as per their particular programming.

Sensor Watch

8 Sensor watch gives the control panel the ability to recognise that detection devices may have stopped working. This is a feature that monitors the operation of a zone over a programmed time period. Refer to "LOCATION 218 - 219" on page 133 for programming sensor watch time.

This value determines how many 24 hour periods a zone may remain continuously sealed before it registers as a sensor watch fault. The number of hours required to fulfil these 24 hour periods is only calculated while the system is in the disarmed state. Every time the system is armed the counter pauses calculating. Sensor watch will continue calculating the next time the system has been disarmed.

Example

If the sensor watch time is programmed for two days in a situation where a premises is armed for twelve hours and disarmed for twelve hours each day, it will take four days before a zone can register as a faulty sensor watch zone.

Keyswitch Zone Options

When you select a zone to be a keyswitch input, then the following table relates to the options available to that keyswitch zone. These keyswitch zone options replace zone options only for the zones that have been programmed to operate as a keyswitch zone.

Option	Description
0	Latching Arm and Disarm In AWAY Mode
1	Latching Arm In AWAY Mode
2	Latching Disarm From AWAY Mode Or STAY Mode
4	Latching Arm and Disarm In STAY Mode
5	Latching Arm In STAY Mode
6	Latching Disarm From STAY Mode
8	Momentary Arm and Disarm In AWAY Mode
9	Momentary Arm In AWAY Mode
10	Momentary Disarm From AWAY Mode Or STAY Mode
12	Momentary Arm and Disarm In STAY Mode
13	Momentary Arm In STAY Mode
14	Momentary Disarm From STAY Mode

Table 52: Keyswitch Zone Options

Latching Arm and Disarm In AWAY Mode

0 If this option has been selected, the system will either arm or disarm from the AWAY Mode when using the latching keyswitch input.

Latching Arm In AWAY Mode

1 If this option has been selected, the system will arm in AWAY Mode when using the latching keyswitch input. Disarming the system will not be permitted via the keyswitch zone if this option has been selected.

Latching Disarm From AWAY Mode Or STAY Mode

2 If this option has been selected, the system will disarm from AWAY Mode or STAY Mode when using the latching keyswitch input. Arming the system will not be permitted via the keyswitch zone if this option has been selected.

Latching Arm and Disarm In STAY Mode

4 If this option has been selected, the system will arm or disarm in STAY Mode when using the latching keyswitch input. Arming the system in AWAY Mode will not be permitted via the keyswitch zone if this option has been selected.

Latching Arm In STAY Mode

5 If this option has been selected, the system will arm in STAY Mode when using the latching keyswitch input. Arming the system in AWAY Mode or disarming the system will not be permitted via the keyswitch zone if this option has been selected.

Latching Disarm From AWAY Mode Or STAY Mode

6 If this option has been selected, the system will disarm from AWAY Mode or STAY Mode when using the latching keyswitch input. Arming the system will not be permitted via the keyswitch zone if this option has been selected.

Momentary Arm and Disarm In AWAY Mode

8 If this option has been selected, the system will either arm or disarm from AWAY Mode when using the momentary keyswitch input.

Momentary Arm In AWAY Mode

9 If this option has been selected, the system will arm in AWAY Mode when using the momentary keyswitch input. Disarming the system will not be permitted via the keyswitch zone if this option has been selected.

Momentary Disarm From AWAY Mode Or STAY Mode

10 If this option has been selected, the system will disarm from either AWAY Mode or STAY Mode when using the momentary keyswitch input. Arming the system will not be permitted via the keyswitch zone if this option has been selected.

Momentary Arm and Disarm In STAY Mode

12 If this option has been selected, the system will arm or disarm in STAY Mode when using the momentary keyswitch input. Arming the system in AWAY Mode will not be permitted via the keyswitch zone if this option has been selected.

Momentary Arm In STAY Mode

13 If this option has been selected, the system will arm in STAY Mode when using the momentary keyswitch input. Arming the system in AWAY Mode or disarming the system will not be permitted via the keyswitch zone if this option has been selected.

Momentary Disarm From AWAY Mode Or STAY Mode

14 If this option has been selected, the system will only disarm the system from AWAY Mode or STAY Mode when using the momentary keyswitch input. Arming the system will not be permitted via the keyswitch zone if this option has been selected.

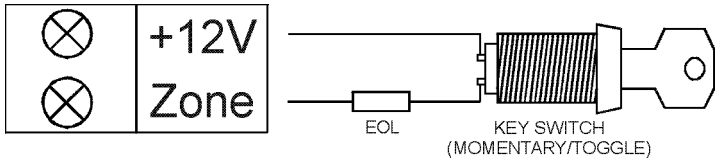


Figure 7: Wiring Diagram For Keyswitch Zone

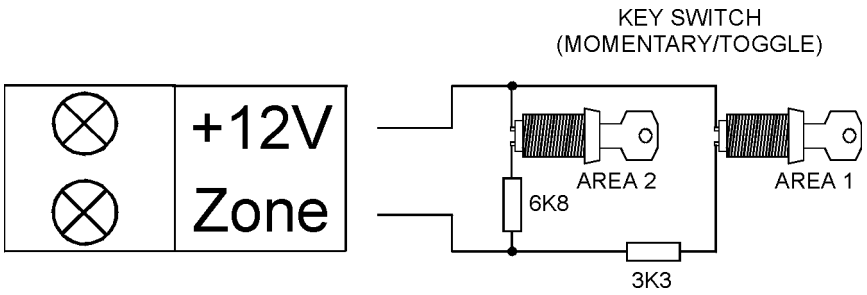


Figure 8: Wiring Diagram For Keyswitch Zone

Zone Pulse Count

Zone pulse count is the number of times a zone must be triggered before the zone registers as an alarm. The number of pulses vary between 0 – 15. The zone pulse count value is relative to the time frame (ie. The number of pulses must be present during a particular time frame). Refer to "Table 54: Zone Pulse Count Times" on page 108 for time frame settings.

Option	Number Of Pulses	Option	Number Of Pulses
0	1	**8**	8
1	1	**9**	9
2	2	**10**	10
3	3	**11**	11
4	4	**12**	12
5	5	**13**	13
6	6	**14**	14
7	7	**15**	15

Table 53: Number Of Pulses

Zone Pulse Count Handover

Zone pulse count handover will only operate with zone pulse count time options 8 – 15. Refer to "Zone Pulse Count Time" on page 108 for more information.

Any zone which registers one trigger pulse will automatically increment any other zone pulse count which has already registered at least one trigger pulse during its respective time. To enable this option, refer to Option 8 in "LOCATION 228" on page 142.

24 Hour zones do not receive any handover pulses from other zones. 24 Hour zones may handover pulses to other zones.

Zone Pulse Count Time

Zone pulse count time is the time frame or period over which the programmed number of pulses must register before an alarm condition is generated.

20 ms Loop Response Time		150 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 54: Zone Pulse Count Times

For zone pulse count time, options 0 – 7 have a zone loop response time of 20 ms. For zone pulse count time, options 8 – 15 have a zone loop response time of 150 ms. Loop response time is the length of time a zone must be triggered before it can register as unsealed or a valid pulse.

Inertia sensors should use options 0-7, while PIR detectors should use options 8 – 15.

Zones which trigger for more than 10 seconds continuously will be considered unsealed and cause an alarm condition irrespective of any zone pulse count or zone time settings.

System Status Information

This section includes the following;

- *Zone Bypass Reports*
- *Zone Trouble Reports*
- *Codepad Duress Report*
- *Codepad Panic Report*
- *Access Denied*
- *AC Fail Report*
- *Low Battery Report*
- *Sensor Watch Time*
- *Open/Close Reports*
- *Test Reporting Time*

System Status Information

This section covers features that are involved with the basic house keeping of the system. This includes monitoring of the zones - whether they are isolated from the system or more importantly that they are actually operating, the status of both the AC mains and DC power to the system and codepad generated alarms activated by the user.

Zone Bypass Reports

LOCATION 152 – 153 **9 9**

Location	Description
152	Alarm Or Expansion Code In 4+2 Format
153	Restore Code In 4+2 Format

Table 55: Zone Status - Bypass Report Locations

A zone is bypassed when it is manually isolated. Refer to “Isolating Zones” on page 43 for information on isolating zones. A "Zone Bypass" report (Contact ID Event Code 570) will be transmitted at the end of exit time for any zone that has been manually isolated. 24 hour zones cannot be manually isolated, therefore they will never transmit bypass reports.

A "Zone Bypass Restore" report will be transmitted when the system has been disarmed. If bypass restore is not programmed, it can be assumed that it will transmit a bypass restore report when an opening report is transmitted. All bypassed zones are automatically cleared when the system has been disarmed.

The bypass code parameter is used as the expansion digit in 4+2 Formats. It has no effect on Contact ID Format as a zone bypass will always be reported on event code 570.

If "Zone Bypass" reports are not required, program "LOCATION 152 – 153" with a zero.

Zone Trouble Reports

LOCATION 154 – 155 **9 9**

Location	Description
154	Alarm Or Expansion Code In 4+2 Format
155	Restore Code In 4+2 Format

Table 56: Zone Status - Trouble Report Locations

A zone is in trouble when it is unsealed at the end of exit time. A "Sensor Trouble" report (Contact ID Event Code 380) will be transmitted to indicate that one or more zones have been automatically isolated by the system. 24 hour zones that are unsealed at the end of exit time will not transmit a "Sensor Trouble" report as the restore for that zone is still outstanding.

A "Sensor Trouble" restore report will be transmitted for burglary zones when the zone reseals or when the system is next disarmed (which ever happens first). A 24 hour zone will only transmit a restore signal when it has resealed.

The trouble code parameter is used as the expansion digit in 4+2 Format. It has no effect on Contact ID Format as a "Sensor Trouble" report will always be reported on event code 380.

If "Sensor Trouble" reports are not required, program "LOCATION 154 – 155" with a zero. If a tamper zone is unsealed at the end of exit time, a Contact ID Event Code 383 will be transmitted.

Codepad Duress Report

LOCATION 156 - 159 **1 2 1 1**

Location	Description
156	Contact ID Event Code – Hundreds Digit
157	Contact ID Event Code – Tens Digit Or Alarm Or Expansion Digit In 4+2 Format
158	Contact ID Event Code – Units Digit Or Channel Location For All Other Formats
159	Dialler Channel

Table 57: Codepad Duress Report Location

A "Duress" report (Contact ID Event Code 121) will be transmitted to the base station receiver when the **9** button is added to the end of any valid user code being used to disarm the system. This alarm will always be silent. A duress alarm can be triggered during exit time (ie. If the system has been armed and then disarmed by adding the **9** button to the end of the user code before exit time has expired, a "Duress" report will be transmitted. Adding **9** to the end of a user code when arming the system will not cause a duress alarm).

Restore reports are not transmitted for this event. If a "Duress" report is not required, program "LOCATION 159" with a zero.

Codepad Panic Report

LOCATION 160 - 163 **1201**

Location	*Description*
160	Contact ID Event Code – Hundreds Digit
161	Contact ID Event Code – Tens Digit Or Alarm Or Expansion Digit In 4+2 Format
162	Contact ID Event Code – Units Digit Or Channel Location For All Other Formats
163	Dialler Channel

Table 58: Codepad Panic Report Locations

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A "Panic Alarm" report (Contact ID Event Code 120) will be transmitted to the base station receiver when any two outside buttons in the same horizontal row on the codepad are pressed simultaneously. This is an audible alarm. Refer to Option 4 in "LOCATION 227" on page 141 if you require codepad panic to be silent.

Software Version 1.27 Onwards

A "Panic Alarm" report (Contact ID Event Code 120) will be transmitted to the base station receiver when either the two outside buttons **1** and **3** or [STAY] and [AWAY] are pressed simultaneously. This is an audible alarm. Refer to Option 4 in "LOCATION 227" on page 141 if you require codepad panic to be silent.

A "Fire Alarm" report (Contact ID Event Code 110) will be transmitted to the base station receiver when the **4** and **6** buttons are pressed simultaneously. This is an audible alarm.

A "Medical" report (Contact ID Event Code 100) will be transmitted to the base station receiver when the **7** and **9** buttons are pressed simultaneously. This is an audible alarm.

To disable both the reporting and the audible alarms for ALL codepad alarm events, the dialler channel for "Codepad Panic" in "LOCATION 163" will need to be programmed as zero and enable Option 4 in "LOCATION 227" on page 141.

Restore reports are not transmitted for this event. If a "Panic" report is not required, program "LOCATION 160 - 163" with a zero.

Access Denied

LOCATION 164 - 167

4 2 1 1

Location	*Description*
164	Contact ID Event Code – Hundreds Digit
165	Contact ID Event Code – Tens Digit Or Alarm Or Expansion Digit In 4+2 Format
166	Contact ID Event Code – Units Digit Or Channel Location For All Other Formats
167	Dialler Channel

Table 59: System Status – Access Denied Locations

An "Access Denied" report (Contact ID Event Code 421) will be transmitted to the base station receiver when the number of incorrect code attempts equals the number programmed in "LOCATION 102" on page 94". This is an audible alarm. Refer to Option 8 in "LOCATION 227" on page 141 if you require this alarm to be silent.

Restore signals for this event are not transmitted. If an "Access Denied" report is not required, program "LOCATION 167" with a zero.

AC Fail Report

LOCATION 168 - 171 **3011**

Location	*Description*
168	Contact ID Event Code – Hundreds Digit
169	Contact ID Event Code – Tens Digit Or Alarm Or Expansion Digit In 4+2 Format
170	Contact ID Event Code – Units Digit Or Channel Location For All Other Formats
171	Dialler Channel

Table 60: System Status – AC Fail Report Locations

An "AC Loss" report (Contact ID Event Code 301) will be transmitted to the base station receiver when the AC mains supply has been disconnected for two minutes. A restore signal will be transmitted when the AC mains has been reconnected for two minutes.

If an "AC Loss" report is not required, program "LOCATION 168 - 171" with a zero.

Low Battery Report

LOCATION 172 - 175 **3091**

Location	*Description*
172	Contact ID Event Code – Hundreds Digit
173	Contact ID Event Code – Tens Digit Or Alarm Or Expansion Digit In 4+2 Format
174	Contact ID Event Code – Units Digit Or Channel Location For All Other Formats
175	Dialler Channel

Table 61: System Status – Low Battery Report Locations

A "Battery Test Failure" report (Contact ID Event Code 309) will be transmitted to the base station receiver when the systems battery voltage falls below 10.5 volts or when a dynamic battery test detects a low capacity battery.

The control panel continually monitors the battery voltage. Refer to "Fault Descriptions" on page 46 for more information. A dynamic battery test is performed every time the system has been armed as well as every four hours from when the power has been applied to the control panel.

A "Low Battery" restore report will be transmitted if the back up battery has been restored the next time the system has been armed, or when the next dynamic battery test reports the battery test is OK

If a "Low Battery" report is not required, program "LOCATION 172 - 175" with a zero.

Sensor Watch Report

LOCATION 176 - 179 **3 0 7 1**

Location	Description
176	Contact ID Event Code – Hundreds Digit
177	Contact ID Event Code – Tens Digit Or Alarm Or Expansion Digit In 4+2 Format
178	Contact ID Event Code – Units Digit Or Channel Location For All Other Formats
179	Dialler Channel

Table 62: System Status – Sensor Watch Report Locations

A Self Test Failure report (Contact ID Event Code 307) will be reported to the base station receiver when a zone has not been triggered during the sensor watch time. This report will continue to be transmitted (according to the frequency of the sensor watch time) until the fault has been rectified. To clear the fault and stop any further reporting, the zone that has registered the fault must be unsealed and resealed again. Refer to “LOCATION 218 - 219” on page 133 for setting the number of days a zone may remain sealed before registering as a fault.

If a "Sensor Watch" report is not required, program "LOCATION 176 - 179" with a zero.

Open/Close Reports

LOCATION 180 - 181 **8 9**

Location	Description
180	Opening Report Code
181	Closing Report Code

Table 63: Open/Close Reporting Locations

An "Opening" report (Contact ID Event Code 401) will be transmitted to the base station receiver when the system has been disarmed from AWAY Mode. A "Closing" report (Contact ID Event Code 401) is transmitted at the end of exit time when the system has been armed in AWAY Mode.

If an expanded format has been selected, this code will be used as the expansion code and the user number that armed or disarmed the system will follow in the same transmission.

Refer to Option 4 in "LOCATION 225" on page 139 for programming "Open/Close" reports in STAY Mode. To program "Open/Close" reports only after a previous alarm, refer to Option 1 in "LOCATION 225" on page 139.

If you do not require "Open/Close" reports, program "LOCATION 180 - 181" with zero.

Test Reporting Time

LOCATION 182 - 185

0 0 (Hour) **0** (Repeat) **9** (Exp)

Location	*Description*
182	Actual Hour Of The Day (Tens Digit)
183	Actual Hour Of The Day (Units Digit)
184	Repeat Interval In Days (0 – 15)
185	Expansion Code For 4+2 Format

Table 64: Test Reporting Time Locations

A "Test" report (Contact ID Event Code 602) is a specific signal that is transmitted to the base station receiver and is normally used to test the dialling and reporting functions of the control panel. Test reports will not report if the Subscriber ID Number is 0000.

When programming test reports, the control panel needs to know the hour of the day the report is required, as well as how often to transmit the report. Test reports are reported on a daily basis ranging from every day to every fifteen days. Refer to "Installer Code Functions" on page 48 to set the first test report.

If you do not require "Test" reports, program the repeat interval in "LOCATION 182 - 185" as zero.

Programmable Outputs

This section includes the following;

- *Programmable Outputs*
- *Output Defaults*
- *Redirecting Outputs To The Codepad Buzzer*
- *Output Event Types*
- *Output Polarity*
- *Timing Of Outputs*
- *Pulsing Polarities*
- *One Shot Polarities*

Programmable Outputs

The *Solution 6+6* control panel has three fully programmable outputs on the main PCB and one other programmable output that operates the codepad buzzer. These three outputs are factory default to operate a horn speaker, strobe and an internal screamer.

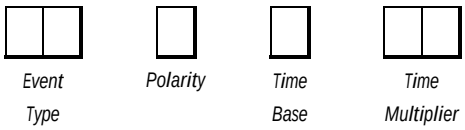
Programmable outputs require four parameters to be programmed in order to operate correctly.

Event Type: When To Operate

Polarity: How To Operate

Time Base: How Long To Operate For

Time Multiplier: How Often To Operate



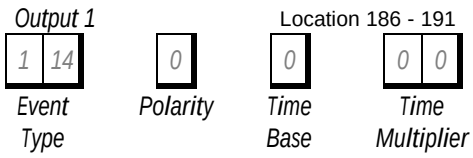
When To Operate Is selected from the output event types listed on page 120. Each digit should be entered into the two corresponding locations for the output event type required.

How To Operate Is selected from "Table 66: Event Type Polarities" on page 127. This determines whether the output remains operating for the duration of the event, pulses for the duration, operates once only (one shot) or latches on.

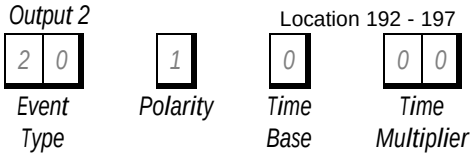
How Long To Operate For Is determined by a time base and a multiplier. Refer to "Timing Of Outputs" on page 129 for further information.

How Often To Operate For Is determined by a time base and a multiplier. Refer to "Timing Of Outputs" on page 129 for further information.

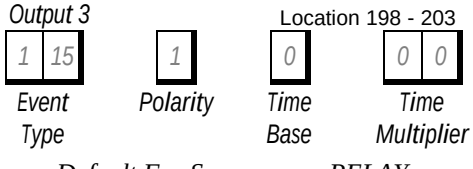
Output Defaults



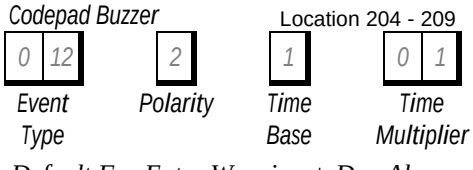
Default For Horn Speaker



Default For Strobe Operation



Default For Screamers – RELAY



Default For Entry Warning + Day Alarm

Redirecting Outputs To The Codepad Buzzer

Multiple output event types can be directed to the codepad buzzer so that it may be used to indicate any number of events.

This is achieved by selecting an output and programming it for the required output event type. When you are satisfied that the output is functioning correctly, change the first digit of the output event type (ie. The tens digit) by adding the value 8.

Example

3 0 **Communications Failure**
This event will operate when the dialler has made all possible attempts to reach the base station receiver. The output will reset when the first "Kiss-Off" is received. This output event type is not applicable for domestic reporting.

To redirect the above output event type to operate the codepad buzzer, program the output event type as below:

11 0 **Communications Failure**
This event will operate when the dialler has made all possible attempts to reach the base station receiver. The output will reset when the first "Kiss-Off" is received. This output event type is not applicable for domestic reporting.

The codepad buzzer will now operate instead of the output that has been programmed. The output is no longer functional and cannot be used for any other output event type.

Output Event Types

There are approximately fifty different output event types to choose from. Two numbers designate each output event type. These two numbers need to be programmed into the appropriate locations of the output being used to indicate when the output should operate.

All reset times are in reference to polarity 1 and 8. Reset times will vary depending on the polarity used.

0 0 **EDMSAT - Satellite Siren (Output 1 Only)**
This output controls all functions of an EDMSAT satellite siren (SS914). The option of speaker indication beeps will not operate via the EDMSAT for remote operations. No polarity is required to be programmed for this output event type.

0 0 **EDMSTU – Securitel PCB (Output 2 Only)**
This output controls all functions of an EDMSTU Securitel unit (CS800). The Data terminal on the securitel unit connects to the STR terminal on the control panel. No polarity is required to be programmed for this output event type.

0 1 **System Armed**
This output will operate when the system is armed in AWAY Mode or STAY Mode. The output will reset when the system has been disarmed. When the system has been partitioned, the output will operate when both areas have been armed in AWAY Mode or STAY Mode.

0 2 **System Disarmed**
This output will operate when the system is in the disarmed state. The output will reset as soon as the system becomes armed. When the system has been partitioned, the output will operate when both areas are disarmed.

0 3 **Armed In STAY Mode**
This output will operate when the system has been armed in STAY Mode. The output will reset when the system is disarmed. When the system has been partitioned, the output will operate when either area has been armed in STAY Mode.

0 4 **Armed In AWAY Mode**
This output will operate when the system has been armed in AWAY Mode. The output will reset when the system is disarmed. When the system has been partitioned, this output will operate when either area has been armed in AWAY Mode.

0 6 **Exit Warning With All Zones Sealed Or Entry Warning**
This output will operate during exit time when the control panel has been armed in AWAY Mode or STAY Mode if all zones are sealed. This output event type will reset once exit time has expired.

The next time this output event type will operate will be during entry time and will reset once entry time has expired or the system has been disarmed. This output event type will also operate if a zone has triggered when the system has been armed in STAY Mode only if the “Entry Guard Timer For STAY Mode” has been programmed in "LOCATION 216 - 217" on page 133.

When the system has been partitioned, this output will only operate the codepad for the specific area concerned.

0 7 **Exit Warning**
This output operates during exit time when the system has been armed in AWAY Mode or STAY Mode. The output will reset once exit time has expired. When the system has been partitioned, this output will only operate the codepad for the specific area concerned.

0 8 **Exit Warning Finished**
This output operates when the exit time has expired when the system has been armed in AWAY Mode or STAY Mode. The output will reset when the system has been disarmed. When the system has been partitioned, this event will only operate the codepad for the specific area concerned.

0 9 **Kiss-Off After End Of Exit Time**
This output will operate after the first successful transmission to the base station receiver when exit time has expired. The output will reset when the system has been disarmed.

0 11 **Entry Warning**
This output will operate when either Entry Timer 1, Entry Timer 2 or Entry Guard Timer For STAY Mode are operating. The output will reset when the entry time expires or the system has been disarmed. When the system has been partitioned, this event will only operate the codepad for the specific area concerned.

0 12 **Entry Warning + Day Alarm Resetting**
This output combines both Entry Warning and Day Alarm Resetting so that either of these two events will activate the output.

If the output has been triggered by either Entry Timer 1, Entry Timer 2, or Entry Guard Timer For STAY Mode, the output will reset once the entry timer has expired or the system has been disarmed.

If a zone programmed for day alarm has triggered the output, the output will reset when the zone has resealed. Refer to “LOCATION 101” on page 96 for programming zones for day alarm.

Day alarm can be turned on and off by holding down the **4** button. Three beeps indicates that day alarm has been turned on, two beeps indicates that day alarm has been turned off. Refer to "Hold Down Functions" on page 64 for further information on day alarm.

0 14 **Day Alarm Resetting**
This output will operate when a zone programmed for day alarm has been triggered. The output will reset when the day alarm zone has resealed. Refer to “LOCATION 101” on page 96 for programming zones for day alarm. When the system has been partitioned, this event will only operate the codepad for the specific area concerned.

Day alarm can be turned on and off by holding down the **4** button. Three beeps indicates that day alarm has been turned on, two beeps indicates that day alarm has been turned off. Refer to "Hold Down Functions" on page 64 for further information on day alarm.

0 15 **Day Alarm Latching**
This output will operate when a zone programmed for day alarm has been triggered. The output will reset when the AWAY button has been pressed. Refer to “LOCATION 101” on page 96 for programming zones for day alarm. When the system has been partitioned, this event will only operate the codepad for the specific area concerned.

Day alarm can be turned on and off by holding down the **4** button. Three beeps indicates that day alarm has been turned on, two beeps indicates that day alarm has been turned off. Refer to "Hold Down Functions" on page 64 for further information on day alarm.

1 0 **Day Alarm Enabled**
This output will operate as soon as day alarm has been enabled. The output will reset when day alarm has been turned off.

Day alarm can be turned on and off by holding down the **4** button. Three beeps indicates that day alarm has been turned on, two beeps indicates that day alarm has been turned off. Refer to "Hold Down Functions" on page 64 for further information on day alarm.

14 **AC Fail**
This output will operate as soon as the AC mains has failed. The output will reset as soon as the AC mains has restored. This output will operate regardless of Option 4 in "LOCATION 228" on page 142 being set.

15 **Low Battery**
This output will operate when a dynamic battery test detects that the battery has failed or the battery voltage has fallen below 10.5 volts. The dynamic battery test is performed every four hours from when the system has been powered up or every time the system has been armed in AWAY Mode or STAY Mode.

This output will reset only after a dynamic battery test reports the backup battery has restored.

16 **Horn Speaker Monitor Fail**
If Option 4 – Enable Monitoring Of Horn Speaker in "LOCATION 226" on page 140 has been selected, this output will operate when the horn speaker has been disconnected. The output will reset when the horn speaker has been reconnected.

17 **Sensor Watch Alarm**
This output will operate when the sensor watch count has been reached. Refer to "Zone Options" on page 104 for more information on programming zones for sensor watch. Refer to "LOCATION 218 - 219" on page 133 for setting how many days before a zone can register as a faulty sensor watch zone.

18 **Codepad Medical Alarm (New – Software Version 1.27)**
This output will operate when a codepad medical alarm has been activated by pressing the **7** and **9** buttons on the remote codepad simultaneously. This output will reset once a valid user code has been entered at the remote codepad.

19 **Codepad Fire Alarm (New – Software Version 1.27)**
This output will operate when a codepad fire alarm has been activated by pressing the **4** and **6** buttons on the remote codepad simultaneously. This output will reset once a valid user code has been entered at the remote codepad.

1 10 **Codepad Panic Alarm**
This output will operate when a codepad panic alarm (audible or silent) has been activated by pressing the **1** and **3** buttons or the STAY and AWAY buttons on the remote codepad simultaneously. This output will reset once a valid user code has been entered at the remote codepad.

1 11 **Codepad Duress Alarm**

This output will operate when a duress alarm has been activated by adding a **9** to the end of the user code being used to disarm the system. This output will reset the next time the system has been armed.

1 12 **Codepad Tamper**
This output will operate when the wrong code has been entered more times than allowed. Refer to "LOCATION 102" on page 94 for setting the number of incorrect attempts that may be allowed. This output will reset once a valid user code has been entered.

1 13 **Speaker Beeps**
This output will function during all remote radio/keyswitch operations allowing you to fit a 12V DC buzzer or light to provide status indication for the system operator. Option 8 – Enable Horn Speaker Beeps For Remote Control Operation in "LOCATION 226" on page 140 is not required to be selected for this event type to operate.

No Of Beeps	System Status
1	System Disarmed
2	System Armed In AWAY Mode
3	System Armed In STAY Mode

Table 65: Horn Speaker Beeps

1 14 **Horn Speaker (Output 1)**
This output only operates on Output 1 and should be programmed whenever an 8 ohm horn speaker is required. Refer to "LOCATION 221" on page 134 for setting the siren run time and "LOCATION 222" on page 134 for setting the siren sound rate.

1 15 **Sirens Running**
This output will operate for the duration of the siren run time programmed in "LOCATION 221" on page 134. When the sirens have been activated, this output will reset once the siren run time has expired.

2 0 **Strobe Operating**
This output will operate when an alarm condition occurs and will reset once a valid user code has been entered.

2 1 **Silent Alarm**
This output will operate whenever a zone programmed as silent alarm has triggered. The output will reset when the siren run time expires, an audible alarm has triggered, or a valid user code has been entered. Refer to "Zone Options" on page 104 for more information on programming zones to be silent.

2 2 **Alarm When In STAY Mode**
This output will operate whenever an audible or silent zone alarm has triggered when the system has been armed in STAY Mode. The output will reset when the system has been disarmed.

2 3 **Alarm When In AWAY Mode**
This output will operate whenever an audible or silent zone alarm has triggered when the system has been armed in AWAY Mode. The output will reset when the system has been disarmed.

2 5 **Fire Alarm Resetting**
This output will operate when a 24 hour fire zone is triggered. The output will reset once a valid user code has been entered or when siren run time expires.

2 6 **Fire Alarm Latching**
This output will operate when a 24 hour fire zone has triggered and will reset when the system has been armed or disarmed.

27 **Fire Alarm Verification**
This feature is used on some commercial fire control panels to reduce false alarms on smoke detectors. It is conceptually very similar to zone pulse count as used in some motion detectors. Basically, a fire zone is allotted a pulse count of 3 pulses over a period of 3 minutes.

If the smoke detector trips, the voltage to the smoke detector is disconnected for 15 seconds and then reapplied. No alarm has registered.

If within 3 minutes of the first trigger the unit triggers again, no alarm will be registered and the voltage to the smoke detector will again be disconnected for 15 seconds and then reapplied.

If a third trigger is detected within 3 minutes of the first trigger, (ie. 3 pulses in 3 minutes) a fire alarm will be registered. Power to the smoke detector will be maintained to facilitate unit identification via the detector memory.

This output should be connected to the negative side of any fire/smoke detector. To configure an output for this feature, use the following settings.

EVENT TYPE = 2,7 POLARITY = 10

TIMEBASE = 2 MULTIPLIER = 15

The zone that the fire/smoke detector is connected to should be programmed as follows:

ZONE TYPE = 13 OPTION = 0 ZONE PULSE COUNT = 3

ZONE TIME = 15

28 **Remote Control 1** **29** **Remote Control 2**

2 10 **Remote Control 3**
These outputs can be remotely activated (Turned "On" or "Off") via the Alarm Link Software - Refer to your Alarm Link Instruction Manual for further information.

2 15 **Communications Failure After 3 Unsuccessful Calls**
This output will operate when the communication dialler has made 3 unsuccessful calls to the base station receiver. The output will reset when all messages have been transmitted (ie. When the buffer is empty or when all possible attempts have been made).

30 **Communications Failure**
This output will operate when the communication dialler has made all possible attempts to reach the base station receiver. The output will reset when the first "Kiss-Off" has been received. This output will not operate for domestic formats.

31 **Dialler Disabled**
This output will operate as long as Option 1 – Enable Dialler Reporting Functions in "LOCATION 224" on page 138 has been disabled. The output will reset once Option 1 – Enable Dialler Reporting Functions in "LOCATION 224" on page 138 has been enabled.

32 **Dialler Active**
This output will operate when the communication dialler is on-line. The output will reset when the communication dialler has released the telephone line.

33 **Ring Detect**
This output will operate when an incoming call has been detected by the control panel. The output will reset when the ringing has stopped or when the call has been answered.

35 **Mimic Zone 1**
36 **Mimic Zone 2**
37 **Mimic Zone 3**
38 **Mimic Zone 4**
39 **Mimic Zone 5**
310 **Mimic Zone 6**
313 **Mimic Tamper Zone 1**
314 **Mimic Tamper Zone 2**
315 **Mimic Tamper Zone 3**
40 **Mimic Tamper Zone 4**
41 **Mimic Tamper Zone 5**
42 **Mimic Tamper Zone 6**

These output types will mimic the zone inputs. The output will operate when the zone is unsealed and will reset when the zone has resealed. They will operate regardless of the zone type chosen (ie. A zone "Not Used" can still operate a mimic output). This feature operates when the system is armed or disarmed.

45 **Global Chime**
This output will operate when any zones programmed as "Chime" have triggered. The output will reset when the zone has resealed.

46 **Zone Not Sealed**
This output will operate whenever a burglary zone is unsealed. Chime zones will not operate this output event type.

47 **Zone Not Sealed After Exit Time**
This output will operate at the end of exit time if a burglary zone is unsealed. The output will reset when all zones are sealed or the system has been disarmed. Chime zones will not operate this output event type.

410 **Area 1 Has Zone Unsealed**
This output will operate when any zone in Area 1 is left unsealed in either the armed or disarmed state.

411 **Area 2 Has Zone Unsealed**
This output will operate when any zone in Area 2 is left unsealed in either the armed or disarmed state.

52 **Area 1 In Alarm** **53** **Area 2 In Alarm**
These outputs will operate when a zone in their corresponding area has triggered an alarm. These outputs will reset once a valid user code has been entered.

Example

Zone 1 has been allocated to Area 1. If zone 1 has triggered into alarm, Output Event Type 5,2 will activate. The output will reset once a valid user code allocated to Area 1 has been entered.

56 **Area 1 Is Armed** **57** **Area 2 Is Armed**
These outputs will operate once their corresponding area has been armed in either AWAY Mode or STAY Mode. The output will reset once the corresponding area has been disarmed.

Example

If Area 1 has been armed in AWAY Mode or STAY Mode, Output Event Type 5,6 will activate. The output will reset once Area 1 has been disarmed.

510 **Area 1 Is Disarmed** **511** **Area 2 Is Disarmed**
These outputs will operate once their corresponding area has been disarmed. The output will reset once the corresponding area has been armed in AWAY Mode or STAY Mode.

Example

If Area 1 has been disarmed, Output Event Type 5,10 will operate. If Area 1 has been armed in AWAY Mode or STAY Mode, the output will reset.

5 14 **Any Areas Armed** **5 15** **Any Areas Disarmed**

Output Event Type 5,14 will operate when any area becomes armed if the control panel has been partitioned. The output will reset when all areas have been disarmed.

Output Event Type 5,15 will operate when any area becomes disarmed if the control panel has been partitioned. The output will reset when all areas have been armed.

6 0 **Area 1 Codepad Data** **6 1** **Area 2 Codepad Data**

If the control panel has been partitioned, "CP5 Area Addressable (CP500A)" codepads are required to be connected to separate outputs and programmed for the required area that the codepad belongs to.

Refer to "Codepad Connections For Partitioning" on page 152 for further information on connecting the "CP5 Area Addressable (CP500A)" codepads to the control panel.

Example

If the Area 1 codepad is to be connected to Output 2, you would then set DIP Switch 1 on the back of the "CP5 Area Addressable (CP500A)" codepad into the "ON" position. For the Area 1 codepad to communicate to and from the control panel, Output 2 will need to be programmed with Output Event Type 6,0.

Output Polarity

There are fifteen different polarities to choose from. Each polarity is designated by a number. This number needs to be programmed into the appropriate location of the output being used to indicate how the output should operate.

Option	Polarity	Option	Polarity
0	Output Not Used		
1	Normally Open, Going Low	**8**	Normally Low, Going Open
2	Normally Open, Pulsing Low	**9**	Normally Low, Pulsing Open
3	Normally Open, One Shot Low	**10**	Normally Low, One Shot Open
4	Normally Open, One Shot Low (Retrigger)	**11**	Normally Low, One Shot Open (Retrigger)
5	Normally Open, One Shot Low (Can Reset)	**12**	Normally Low, One Shot Open (Can Reset)
6	Normally Open, One Show Low (Alarm)	**13**	Normally Low, One Shot Open (Alarm)
7	Normally Open, Latching Low	**14**	Normally Low, Latching Open

Table 66: Event Type Polarities

Output Not Used

0 If an output is not required for use, the polarity should be programmed as zero.

Normally Open, Going Low

1 This polarity 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 are not applicable to this polarity.

Normally Open, Pulsing Low

2 This polarity 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 event has restored. Time parameters vary the "On" time of the pulse.

Normally Open, One Shot Low

3 This one shot polarity is normally open circuit and will switch to zero volts when the event occurs. The output will switch back to open circuit when the time parameter setting has expired. This one shot time setting will always run its full duration and cannot be manually reset.

Normally Open, One Shot Low With Retrigger

4 This one shot polarity 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 polarity is ideally suited for lighting control. A PIR can be used to trigger an output for turning on lights. While ever there is movement, the PIR will keep re-triggering the output and lengthen the time the lights will remain switched on.

Normally Open, One Shot Low With Reset

5 This one shot polarity 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 Open, One Shot Low With Alarm

6 This one shot polarity is normally open circuit and will switch to zero volts when the event occurs. The output will switch back to open circuit once the one shot time has expired, when the event has returned to normal or when the system has been disarmed.

This polarity is ideally suited for the operation of strobe lights as they can be programmed (Up to 99 hours) to reset and prevent them from burning out or becoming annoying to others from prolonged operation.

Normally Open, Latching Low

7 This polarity is normally open circuit and will switch to zero volts when the event occurs. The output will switch back to open circuit once the **7** button on the remote codepad is held down until two beeps are heard. Time parameters are not applicable to this polarity.

Normally Low, Going Open

8 This polarity 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 are not applicable to this polarity.

Normally Low, Pulsing Open

9 This polarity 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 event has restored. Time parameters vary the "Off" time of the pulse.

Normally Low, One Shot Open

10 This one shot polarity is normally zero volts and will switch to open circuit when the event occurs. The output will switch back to zero volts when the time parameter has expired. This one shot time setting will always run its full duration and cannot be manually reset.

Normally Low, One Shot Open With Retrigger

11 This one shot polarity 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 With Reset

12 This one shot polarity 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 one shot timer can be shortened regardless of the time setting.

Normally Low, One Shot Open With Alarm

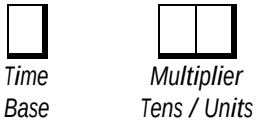
13 This one shot polarity is normally zero volts and will switch to open circuit when the event occurs. The output will switch back to zero volts when the one shot time has expired, when the event has returned to normal or when the system has been disarmed. This means that the one shot timer can be shortened regardless of the time setting.

Normally Low, Latching Open

14 This polarity is normally zero volts and will switch to open circuit when the event occurs. The output will switch back to zero volts once the **7** button on the remote codepad has been held down until two beeps are heard. Time parameters are not applicable to this polarity.

Timing Of Outputs

The timing of outputs is calculated by the time base and a multiplier. These two values play different roles depending on the polarity selected. When programming outputs to pulse, both the "On" and "Off" times can be set. One shot polarities can be programmed to operate between 200 ms up to 99 hours in duration.



The maximum value that can be programmed in the two multiplier locations is 9 9.

Option	Time Base
1	200 ms
2	1 Second
3	1 Minute (60 Seconds)
4	1 Hour (60 Minutes)

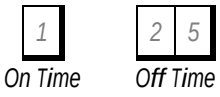
Table 67: Time Base Settings

The time base settings can be set to only one of the values listed in "Table 67: Time Base Settings". The multiplier value is a two digit decimal number from 00-99. For greater accuracy, use 60 seconds for 1 minute intervals and use 60 minutes for one hour intervals.

Pulsing Polarities

When calculating pulsing polarities both the "On" and "Off" times need to be programmed. The duration or "On" time of an output is determined by selecting only one of the time base options from "Table 67: Time Base Settings". This means there are only four "On" times to choose from.

The "Off" time is calculated as a multiple of the "On" time by choosing a decimal number between 00 and 99. If an output is required to operate for 200 ms every five seconds, program the time settings as follows;



ON Time	OFF Time	Increments	Tolerance
200 ms	200 ms - 19.8 ms	200 ms	+/- 200 ms
1 Sec	1 Sec - 99 Sec's	1 Sec	+/- 1 Sec
1 Min	1 Min - 99 Min's	1 Min	+/- 1 Min
1 Hour	1 Hour - 99 Hours	1 Hour	+/- 1 Hour

Table 68: Pulsing Time Settings

One Shot Polarities

The duration or "On" time of an output is determined by the product of the time base and the multiplier.

If an output is required to operate for five seconds, program the time settings as follows;

The "On" time is calculated by multiplying the time base setting (1 second) by the multiplier value (05).

(ie. 1 x 05 = 5 seconds)

On Time	Increments	Tolerance
200 ms - 19.8 Sec's	200 ms	+/- 200 ms
1 Sec - 99 Sec's	1 Sec	+/- 1 Sec
1 Min - 99 Min's	1 Min	+/- 1 Min
1 Hour - 99 Hours	1 Hour	+/- 1 Hour

Table 69: One Shot Time Settings

System Event Timers

This section includes the following;

- *Entry Timer 1*
- *Entry Timer 2*
- *Exit Time*
- *Entry Guard Timer For STAY Mode*
- *Sensor Watch Time*
- *Codepad Lockout Time*
- *Siren Run Time*
- *Siren Sound Rate*
- *Swinger Shutdown Count*
- *System Time*

System Event Timers

This section covers the features that involve timing. Features such as entry and exit times, sensor watch time, siren run time and system date and time along with a host of other timers are discussed extensively in this section.

How To Program Entry/Exit Timers

There are two locations to be programmed for Entry Timer 1, Entry Timer 2, Exit Time For AWAY Mode and Entry Guard Time For STAY Mode.

The first location of the timer is for programming increments of 1 second. The second location of the timer is for programming increments of 16 seconds. By adding these two locations together will give the total time required.

Example

If you require the entry time to expire after 18 seconds, you would need to program "LOCATION 210" as 2 (ie. 2 x 1 second = 2 seconds) and "LOCATION 211" as 1 (ie. 1 x 16 seconds = 16 seconds). This would give you the total time of 18 seconds (ie. 2 + 16 seconds = 18 seconds).

Entry Time

The Solution 6+6 control panel has two separate entry timers. Entry time can be programmed between 0 and 255 seconds in increments of one second. These will prove to be helpful in any installation that requires more than one entry timer.

Entry Timer 1

LOCATION 210 - 211 (Defaulted To 10 Seconds) **[10] 0**

Location	Description
210	Increments Of 1 Second (0 – 15 Sec's)
211	Increments Of 16 Seconds (0 – 240 Sec's)

Table 70: Entry Timer 1 Locations

Entry Timer 1 is the delay time used by the Delay-1 zone type. Refer to "Zone Types" on page 102 for more information.

Entry Timer 2

LOCATION 212 - 213 (Defaulted To 20 Seconds) **4 1**

Location	Description
212	Increments Of 1 Second (0 - 15 Sec's)
213	Increments Of 16 Seconds (0 –240 Sec's)

Table 71: Entry Timer 2 Locations

Entry Timer 2 is the delay time used by the Delay-2 zone type. Refer to "Zone Types" on page 102 for more information.

Exit Time

Exit time can be programmed to be between 0 and 255 seconds in increments of one second. The remote codepad will always give one long beep at the end of exit time when arming in AWAY Mode or one short beep at the end of exit time when arming in STAY Mode.

Exit Time

LOCATION 214 – 215 (Defaulted To 60 Seconds) **12 3**

Location	Description
214	Increments Of 1 Second (0 - 15 Sec's)
215	Increments Of 16 Seconds (0 –240 Sec's)

Table 72: Exit Time Locations

Entry Guard Timer For STAY Mode

LOCATION 216 - 217 (Defaulted To 60 Seconds) **12 3**

Location	Description
216	Increments Of 1 Second (0 - 15 Sec's)
217	Increments Of 16 Seconds (0 –240 Sec's)

Table 73: Entry Guard Timer For STAY Mode Locations

"Entry Guard Timer For STAY Mode" is the delay time used for ALL zones except 24 hour burglary and 24 hour fire zones when the system is armed in STAY Mode. Each zone including delay zones will have the entry delay as programmed in "LOCATION 216 - 217" (ie. The delay time programmed for a delay zone will be overridden by the entry guard timer). If the entry guard timer has been programmed as "0" each zone will act as per its programmed zone type.

Sensor Watch Time

LOCATION 218 - 219 **0 0**

Location	Description
218	Increments Of Days (Tens Digit)
219	Increments Of Days (Units Digit)

Table 74: Sensor Watch Time Locations

The time set in these two locations determines how many days (0-99) a zone may remain sealed before registering as a fault. This feature is only active when the system is in the disarmed state. If a zone programmed for sensor watch has not triggered and reset during this time, the FAULT indicator will illuminate. Refer to "Fault Descriptions" on page 46 for further information on sensor watch faults. Refer to "LOCATION 176 - 179" on page 115 for sensor watch reports and Zone Types on page 102 to program zones for sensor watch.

Codepad Lockout Time

LOCATION 220 **0**

Location	*Description*
220	Increments Of 10 Seconds

Table 75: Codepad Lockout Time Locations

All codepads will be locked out for the specified time programmed if an invalid code has been entered more times than allowed by the code retry attempts programmed in "LOCATION 102" on page 94. If the "Codepad Lockout Time" is programmed as zero, no codepad lockout will occur.

Siren Run Time

LOCATION 221 (Defaulted To 10 Minutes) **10**

Location	*Description*
221	Increments Of 1 Minute (0 – 15)

Table 76: Siren Run Time Locations

The siren run time determines how long the horn speaker will activate during an alarm condition. The siren run time can be programmed between 0-15 minutes (+/- 1 minute).

Siren Sound Rate

LOCATION 222 **7**

Location	*Description*
222	Siren Sound Rate (0 = SLOWEST 15 = FASTEST)

Table 77: Siren Sound Rate Locations

The siren sound rate varies the frequency of the siren tone. Zero rate is the slowest and fifteen is the fastest rate. The siren sound rate does not change the frequency rate for the fire alarm tone.

Swinger Shutdown Count

LOCATION 223 **0**

Location	Description
223	Swinger Shutdown Count (0-15)

Table 78: Swinger Shutdown Count Locations

This location determines the number of times the sirens and dialler can be triggered before any lockout options will take effect. A minimum of one zone must be programmed for lockout siren or lockout dialler for this location to be effective. Refer to "Zone Options" on page 104 to program zones for lockout siren.

Only alarms triggered from zone inputs will increment the swinger shutdown counter. This means alarms such as codepad panic, access denied and any other system alarms will not effect the swinger shutdown count.

While the sirens are operating, the counter for the sirens and dialler is only incremented by the first zone that causes the alarm. Any other zones that are triggered during siren run time will not effect the counter. While the dialler is on line, its counter is only incremented by the first zone that causes the alarm. Any other zones that are triggered while the dialler is on line will not effect the counter.

When the swinger shutdown count (As programmed in "LOCATION 223") has been reached, all zones that have been triggered will be locked out according to their individual lockout settings.

LOCATION 901 – 904 **0 0 0 0**

Location	Description
901	Current Hour In 24 Hour Time (Tens Digit)
902	Current Hour In 24 Hour Time (Units Digit)
903	Current Minute (Tens Digit)
904	Current Minute (Units Digit)

Table 79: System Time Locations

The Solution 6+6 control panel has a real time 24 hour clock that needs to be set during installation. This time must be set in 24 hour format (ie. 10:30 PM would be programmed as 2230). Every time the system has been powered down, the system time will need to be reset.

Setting The Date and Time

The Master Code holder is allowed to set the date and time as follows:

How To Set The New Date and Time

7. Enter your [MASTER CODE] followed by **6** and the [AWAY] button.
Three beeps will be heard and the STAY and AWAY indicators will begin to flash.

8. Enter the day, month, year, hour and minute using the (DD, MM, YY, HH, MM) format.

9. Press the [AWAY] button when finished.
Two beeps will be heard and the STAY and AWAY indicators will extinguish.

[MASTER CODE] + **6** + [AWAY]

Example

If the date and time needs to be set for the 1st January 1997 at 10:30 PM, program the date and time as follows;

[MASTER CODE] + **6** + [AWAY]

0 + 1 + 0 + 1 + 9 + 7 + 2 + 2 + 3 + 0

+ [AWAY]

Options Bits

This section includes the following;

- *Dialler Options 1*
- *Dialler Options 2*
- *System Options 1*
- *System Options 2*
- *System Options 3*
- *Consumer Options 1*
- *Consumer Options 2*

Dialler Options

When programming these locations, you will notice that there are four options per location. You may select one, two, three or all four of these options, however, only one number needs to be programmed. This number is calculated by adding the option bit numbers together. Program a seven (7) if you require options 1, 2 and 4 simultaneously (ie. 1 + 2 + 4 = 7).

Dialler Options 1

LOCATION 224 **5**

Option	Description
1	Enable Dialler Reporting Functions
2	Enable Remote Arming Via The Telephone
4	Enable Upload/Download Via Alarm Link
8	Terminate "Alarm Link" Session On Alarm

Table 80: Dialler Options 1

Enable Dialler Reporting Functions

1 If this option has been selected, the dialler will function for all operations. Upload/Download via Alarm Link Software (CC816) and telephone remote arming will remain operational regardless of this setting.

Disable Dialler Reporting Functions

If this option is not selected, the communication dialler will not operate. Upload/Download via Alarm Link Software (CC816) and telephone remote arming will remain operational regardless of this setting.

Enable Remote Arming Via The Telephone

2 If this option has been selected, you can remotely arm the system via a standard telephone using the Phone Controller (CC911) or by using a touch tone telephone by pressing the * button on the phone. Refer to "Remote Arming Via The Telephone" on page 68 for more information. Forced arming is automatically assumed when this feature is being used.

Whether remote functions have been enabled or disabled, this will have no effect on remote arming via the telephone. Refer to "Ring Count" on page 89 for programming the number of rings before the control panel will answer an incoming call.

Enable Upload/Download Via Alarm Link

4 This option will need to be selected if you require to use the Alarm Link Software (CC816) to remotely program the control panel. The control panel will not respond to the Alarm Link Software if this option is not selected. Refer to "Upload/Download Via Alarm Link Software" on page 69 for more information.

Terminate "Alarm Link" Session On Alarm

8 If the control panel is communicating with a remote computer via Alarm Link Software (CC816) and an alarm has registered, the "Alarm Link" session will automatically terminate and the relevant alarm message will be reported to the base station receiver.

If an alarm occurs that does not need to report to the base station receiver, the session will not terminate. If this option has not been selected and an alarm has registered, the Alarm Link software will prompt the operator with a "Terminate" or "Continue" message.

Dialler Options 2

LOCATION 225 **0**

Option	Description
1	Send Open/Close Reports Only If A Previous Alarm Has Occurred
2	Enable First To Open, Last To Close Reporting (Partitioning Only)
4	Send Open/Close Reports When In STAY Mode
8	Delay Siren Until Transmission Complete

Table 81: Dialler Options 2

Send Open/Close Reports Only If A Previous Alarm Has Occurred

1 This option requires Open/Close reports in "LOCATION 180 - 181" to be enabled on page 115 for it to be effective.

An opening report will be transmitted to the base station receiver when the system has been disarmed after an alarm has occurred. When the system has been armed, a closing report will be transmitted. An opening or closing report will not report again until the system has registered another alarm condition.

If the system is disarmed when an alarm occurs, only a closing report will be transmitted when the system is next armed.

Enable First To Open, Last To Close Reporting When Partitioned

2 This option needs to be enabled if only one Open/Close report is required when the system has been partitioned. Rather than having individual Open/Close reports for each area, a closing report will be transmitted only when BOTH areas have been armed and an opening report will be transmitted as soon as the first of either area has been disarmed.

Send Open/Close Reports When In STAY Mode

4 If open and close reports (Contact ID Event Code 401) are required when the system is armed in STAY Mode, this option will need to be selected.

This option requires Open/Close reports in "LOCATION 180 - 181" to be enabled on page 115 for it to be effective.

Delay Siren Until Transmission Complete

8 If this option has been selected, the horn speaker, bell and strobe outputs will not activate until the base station receiver has sent a kiss-off back to the control panel after the message has been transmitted. If multiple messages are transmitted, the sirens will activate after the last kiss-off has been sent.

LOCATION 226 **1**

Option	Description
1	Enable Forced Arming
2	Enable EDM Smart Lockout
4	Enable Monitoring Of Horn Speaker
8	Allow Horn Speaker Beeps For Remote Control Operation

Table 82: System Options 1

Enable Forced Arming

1 If this option has been selected, the system can be armed with zones unsealed.

If this option is not selected, all zones must be sealed before the system can be armed. An attempt to arm the system with forced arming not enabled will clear any alarm memories present but arming will not be permitted.

This feature will be ignored if the system has been remotely armed via the telephone using a Phone Controller (CC911) or by pressing the * button on a touch tone telephone.

Enable EDM Smart Lockout

2 This feature allows the control panel to remove any zones that are programmed for lockout dialler from the lockout list while the sirens are running. This feature allows a monitoring station to receive codes from previously locked out zones during siren time. Refer to “Zone Options” on page 104 for information on programming zones for lockout dialler and lockout siren.

Enable Monitoring Of Horn Speaker

4 If this option has been selected, the control panel will detect when the horn speaker has been disconnected from the speaker terminals. The FAULT indicator will illuminate when the horn speaker has been disconnected and will extinguish when the horn speaker has been reconnected.

If an output is required to operate when the horn speaker has been disconnected, refer to "Output Event Type – Horn Speaker Monitor Fail" on page 122 for more information.

Allow Horn Speaker Beeps For Remote Control Operations

8 This feature will enable horn speaker beeps to be heard when the system is armed and disarmed via a hand held radio remote control unit. Devices connected to the bell output (RELAY OUTPUT) will not activate.

These speaker beeps are applicable when using the Radio Key/Keyswitch Interface (CC813) or when remotely operating the system via a zone programmed for keyswitch operation. Refer to “Radio Key/Keyswitch Interface” on page 156 for more information. Refer to “Keyswitch Zone” on page 103 for more information.

No Of Beeps	System Status
1	System Disarmed
2	System Armed In AWAY Mode
3	System Armed In STAY Mode

Table 83: Horn Speaker Beeps

When using the Night Arm Station (CP105) to arm in STAY Mode, if this option has been selected, three beeps will be heard from the horn speaker to indicate that the system has been armed in STAY Mode.

System Options 2

LOCATION 227 **2**

Option	Description
1	Enable Radio Key/Keyswitch Interface Or Night Arm Station
2	Enable Handover Delay To Be Sequential
4	Enable Codepad Panic To Be Silent
8	Enable Access Denied To Be Silent

Table 84: System Options 2

Enable Radio Key/Keyswitch Interface or Night Arm Station

1 This option must be selected when using the Radio Key/Keyswitch Interface (CC813) or the Night Arm Station (CP105). This option allows the control panel to be operated using either of these two accessories.

Enable Handover Delay To Be Sequential

2 If this option has been selected, handover delay will be sequential (ie. In numerical order from lowest to highest). If the sequence is broken before the entry time expires, an alarm will occur. If this option has not been selected, handover delay will follow the entry path provided that a delay zone has been triggered first.

Enable Codepad Panic To Be Silent

4 If this option has been selected, a codepad panic alarm will not operate the horn speaker, the bell or the strobe outputs. If this option is not selected, all three outputs will operate after a codepad panic alarm has been activated from the codepad. Selecting this option does not effect the operation of the communication dialler.

If you wish to disable the reporting of the codepad panic alarm, program “LOCATION 160 - 163” on page 112 as zero.

Enable Access Denied To Be Silent

8 If this option has been selected, a codepad tamper alarm will not operate the horn speaker, bell or the strobe outputs. If this option is not selected, all three outputs will operate after a codepad tamper alarm has occurred.

Refer to "LOCATION 102" on page 94 to set the number of invalid code retries before an alarm condition occurs. Selecting this option does not effect the operation of the communication dialler. If you wish to disable the reporting of access denied reports program “LOCATION 164 - 167” on page 113 as zero.

System Options 3

LOCATION 228 **0**

Option	Description
1	Enable Main Codepad To Display Data For Area 1
2	Enable Resetting Of Sirens From All Areas
4	Ignore AC Mains Fail
8	Enable Pulse Count Handover

Table 85: System Options 3

Enable Data Output To Display Data For Area 1 - Partitioned Systems Only

1 If this option has been enabled, the DATA terminal on the panel will be configured to transmit status information that is relevant only to Area 1. A "CP5 Area Addressable (CP500A)" codepad would be used in this instance.

If this option is not enabled, the "CP5 Master Partitioned (CP500P)" codepad will need to be used because information for all areas will be transmitted on the DATA terminal.

An advantage in using this option is that it allows you to configure a system into separate areas while still leaving the maximum number of programmable outputs available for other uses.

Enable Resetting Of Sirens From All Areas (Partitioned Systems Only)

2 This option is only applicable when the control panel has been partitioned. If this option has been enabled, any valid user code from any area will be able to stop the horn speaker, strobe, bell and EDMSAT outputs from operating. This option does not allow a user code allocated from one area to disarm another area.

Ignore AC Mains Fail Indication

4 If this option has been selected, the MAINS indicator will not flash, nor will the codepad beep once every minute when the AC mains has been disconnected from the control panel. If you require a programmable output to operate when the AC mains has failed, refer to “Output Event Type – AC Fail" on page 122.

Enable Zone Pulse Count Handover

8 If this option has been selected, any zone pulse count readings will handover and accumulate to any zone that is triggered during the same arming cycle. Zone pulse count handover will only operate with zone pulse count options 8-15.

Refer to "Zone Pulse Count" on page 108 and "Zone Pulse Count Time" on page 108 for more information.

24 hour zones and 24 hour tamper zones do not receive any handover pulses from other zones. 24 hour zones can handover pulses to other zones.

Consumer Options 1

LOCATION 229 **2**

Option	Description
1	Send Test Reports Only If The System Is Armed
2	Enable Operation Of Siren and Strobe In STAY Mode
4	Enable Answering Machine Bypass Only When Armed
8	Enable Codepad Extinguish Mode

Table 86: Consumer Options 1

Send Test Reports Only If The System Is Armed

1 If this option has been selected, test reports (Contact ID Event Code 602) will only be sent when the system has been armed in AWAY Mode or STAY Mode. It is no longer necessary to send a test report as well as an opening and closing report every day.

During the working week, most commercial premises would be open and therefore a test report is not necessary, as open and close reports would be sent at the time programmed.

Refer to “Test Reporting Time” on page 116 to set the test report time required.

Enable Operation Of Siren & Strobe In STAY Mode

2 This option will need to be selected if audible alarms are required when the system has been armed in STAY Mode.

Enable Answering Machine Bypass Only When Armed

4 This option needs to be selected if the answering machine bypass feature is required to operate only when the system has been armed. When the system is disarmed, the control panel will not answer any incoming calls. This option is beneficial in high telephone traffic installations where the control panel could answer an incoming call. Refer to “LOCATION 060” on page 89 to enable answering machine bypass.

Enable Codepad Extinguish Mode

8 If this option has been selected, all indicators on the remote codepads will extinguish if a button is not pressed for 60 seconds. The indicators will illuminate when there is an alarm (except a silent alarm), when a button is pressed on the codepad, when the AC mains fail beeps, or if the entry timer has been activated.

Consumer Options 2

LOCATION 230 **0**

Option	Description
1	Enable User Code + 0 + AWAY Function To Arm/Disarm Both Areas
2	Enable Single Button Arming In AWAY Mode and STAY Mode
4	Enable Single Button Disarming In STAY Mode
8	Enable Alarm Memory Reset On Disarm

Table 87: Consumer Options 2

Enable "User Code + 0 + AWAY" Function To Arm/Disarm All Areas

1 If this option has been selected, it will allow the user code holder to arm/disarm both areas at the same time without the need to enter the user code at each area codepad. Refer to "Master Code Functions" on page 54 and "User Code Functions" on page 63 for more information.

If the user code holder arms all areas at the same time, if in "LOCATION 225" on page 139 has the option "First To Open/Last To Close Reporting" enabled, only a closing report for the last area will be reported.

If the user code holder disarms both areas at the same time, if in "LOCATION 225" on page 139 has the option "First To Open/Last To Close Reporting" enabled, only an opening report for the first area will be reported.

Enable Single Button Arming In AWAY Mode Or STAY Mode

2 If this option has been selected, the hold down functions for arming in AWAY Mode or STAY Mode will be functional. Refer to "Hold Down Functions" on page 64 for more information.

Enable Single Button Disarming From STAY Mode

4 This option will only operate when Option 2 in this location has also been selected. This option will allow hold down functions for disarming from STAY Mode. Refer to "Hold Down Functions" on page 64 for more information.

Enable Alarm Memory Reset On Disarm

8 This option allows the memory of alarm events to be cleared from the remote codepad when the system has been disarmed. If this option has not been selected, the system will need to be armed and disarmed again to clear alarm memory from the remote codepad.

Partitioning

This section includes the following;

- *Master Partitioned Codepad Indicators*
- *Operating Codepads In Partitioning*
- *Open/Close Reports*
- *Subscriber ID Number*
- *Zone Allocations*
- *Tamper Zone Allocations*
- *User Code Allocations*
- *Codepad Connections For Partitioning*

Partitioning

Partitioning allows a single control panel to act as if it were two separate control panels. There is the "CP-5 Master Partitioned (CP500P)" codepad that has indicators to show the status of both areas. If you wish to give each area a different codepad, the "CP-5 Area Addressable (CP500A)" codepads can be used. This will give the user the impression that they are the only user of the system.

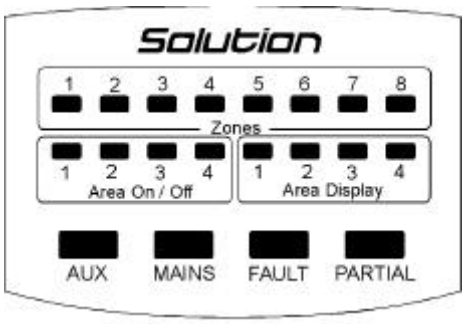


Figure 9: CP-5 Master Partitioned Codepad (CP500P)

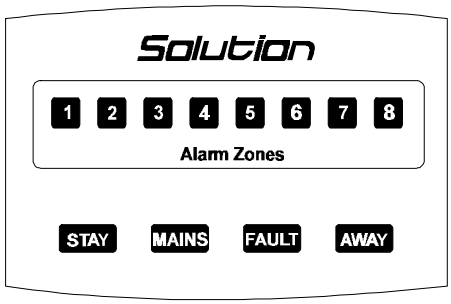


Figure 10: CP-5 Area Addressable Codepad (CP500A)

If the control panel has been partitioned, a maximum of 2 areas are available. Each area can have a maximum of 6 zones. Common zones may be shared between areas to a maximum of 6 zones.

The "CP-5 Master Partitioned (CP500P)" codepad has provision for 4 separate areas however only 2 areas can be used when using the *Solution 6+6* control panel.

Master Partitioned Codepad Indicators

The indicators on a "CP-5 Master Partitioned (CP500P)" codepad are configured in four groups. Following is a description of what the indicators show.

Zone Indicators

1 Indicators (1-8) show the status of each zone. These zones belong to the area that has the AREA DISPLAY indicator illuminated (**ie**. If a zone indicator is illuminated, that zone is unsealed and if the zone indicator is not illuminated, that zone is sealed).

Area ON/OFF Indicators

2 The group of four AREA ON/OFF indicators show the status of each area (**ie.** If an indicator is illuminated, that area is armed and if the indicator is not illuminated, that area is disarmed).

Area Display Indicators

3 A group of four AREA DISPLAY indicators show what area the zones belong to that are currently being displayed.

Status Indicators

4 A group of four indicators show the following:

AUX Indicator

This AUX indicator will flash in conjunction with the PARTIAL indicator to indicate successful entry into any programming mode. For example, this will occur when entering the Installer's Programming Mode.

Version 1.22 Onwards
From software version 1.22 onwards, the AUX indicator displays when the control panel is using the telephone line communicating to the receiving party.

MAINS Indicator

This indicator displays the status of the AC mains power (**ie**. If the indicator is illuminated, the AC mains power is normal and if the indicator is flashing, the AC mains power is disconnected).

FAULT Indicator

This indicator displays the status of the systems fault register (**ie**. If the indicator is flashing the system has detected a fault which has not yet been acknowledged. If the indicator is illuminated, the fault has been acknowledged and if the indicator is not illuminated, the system has no faults).

PARTIAL Indicator

This indicates whether an area has been armed in STAY mode. (**ie**. if the PARTIAL indicator is illuminated an area is armed in STAY mode and if the PARTIAL indicator is not illuminated, no areas are armed in STAY mode).

Whilst isolating zones, the PARTIAL indicator flashes to indicate that you are in isolate mode.

This PARTIAL indicator will flash in conjunction with the AUX indicator to indicate successful entry into any programming mode. For example, this will occur when entering the Installer's Programming Mode.

Operating Codepads In Partitioning

Operating From A "CP-5 Area Addressable (CP500A)" Codepad

If you have a partitioned system with "CP-5 Area Addressable (CP500A)" codepads, the operating procedure is exactly the same as described throughout this manual. Refer to "Hold Down Functions" on page 64 to determine what area a particular codepad belongs to.

Operating From A "CP-5 Master Partitioned (CP500P)" Codepad

If you have a partitioned system with a "CP-5 Master Partitioned (CP500P)" codepad installed, the operating procedure is the same as described throughout this manual with one exception. All operations are relative to the area whose AREA DISPLAY indicator is illuminated at the time.

Example

If AREA DISPLAY indicator number 2 is illuminated, all operations performed will effect only Area 2. To perform any operations in another area, you will have to move the AREA DISPLAY illuminator to the desired area.

How To Move From One Area To The Next

1. Press the AWAY button.
The area display indicator will move to the next area.

2. Press the AWAY button again.
The area display indicator will move to the next area.

SecuritеI and Partitioning

The EDMSTU was not designed to send individual Open/Close reports for each area via the Securitel Network. It will however send a first to open and last to close report if Option 2 in "LOCATION 225" on page 139 is enabled. Please refer to "Table 38: Securitel Reporting Messages" on page 77 for the list of reports that are sent via the Securitel network.

The EDMSTU protocol is currently undergoing software enhancements and individual Open/Close reports will be implemented for future release.

Subscriber ID Number

LOCATION 052 – 055 **0 0 0 0**

This number is transmitted to identify the calling control panel. Enter the desired Subscriber ID Number in the four locations provided. For Basic Pager Format, "LOCATION 052" will be ignored and the first digit of the Subscriber ID Number required must start in "LOCATION 053". When using Domestic Dialling Format, the number of identification beeps will be the number that is programmed in "LOCATION 055". This gives the ability to identify between 15 different control panels calling the same telephone number.

Open/Close Reports

The following options are related to Open/Close reports. You can select one, two or all four options to suit your application.

Dialler Options 2

LOCATION 225 **0**

Option	Description
1	Send Open/Close Reports Only If A Previous Alarm Has Occurred
2	Enable First To Open, Last To Close Reporting (Partitioning Only)
4	Send Open/Close Reports When In STAY Mode
8	Delay Siren Until Transmission Complete

Table 88: Dialler Options 2

Send Open/Close Reports Only If A Previous Alarm Has Occurred

1 This option requires Open/Close reports in "LOCATION 180 - 181" to be enabled on page 115 for it to be effective.

An opening report will be transmitted to the base station receiver when the system has been disarmed after an alarm has occurred. When the system has been armed, a closing report will be transmitted. An opening or closing report will not report again until the system has registered another alarm condition.

If the system is disarmed when an alarm occurs, only a closing report will be transmitted when the system is next armed.

Enable First To Open, Last To Close Reporting When Partitioned

2 This option needs to be enabled if only one Open/Close report is required when the system has been partitioned. Rather than having individual Open/Close reports for each area, a closing report will be transmitted only when BOTH areas have been armed and an opening report will be transmitted as soon as one area has been disarmed.

Send Open/Close Reports When In STAY Mode

4 If open and close reports (Contact ID Event Code 401) are required when the system is armed in STAY Mode, this option will need to be selected.

This option requires Open/Close reports in "LOCATION 180 - 181" to be enabled on page 115 for it to be effective.

Delay Siren Until Transmission Complete

8 If this option has been selected, the horn speaker, bell and strobe outputs will not activate until the base station receiver has sent a kiss-off back to the control panel after the message has been transmitted. If multiple messages are transmitted, the sirens will activate after the last kiss-off has been sent.

Zone Allocations

Each area can have up to six zones allocated to it. The six locations for each area represent zone indicators one to six on the remote codepad. Any of the zone inputs, both burglary (parent) zones 1 to 6 and tamper zones 1 to 6 (tamper zones are represented as zones 9 to 14) can be mapped to any area to appear as any zone on the remote codepad (**ie.** Any zone from 1-6 can be common to both areas as required). Common zones report to the base station on group zero. Zones that are specific to one area will report on the corresponding group number. The group number indicates which area number that the zone reports on.

Zones Allocations For Area 1

LOCATION 231 - 236 **0 0 0 0 0 0**

Location	Description
231	Area 1 Zone 1 Indicator
232	Area 1 Zone 2 Indicator
233	Area 1 Zone 3 Indicator
234	Area 1 Zone 4 Indicator
235	Area 1 Zone 5 Indicator
236	Area 1 Zone 6 Indicator

Table 89: Area 1 Zone Indicators

Zones Allocations For Area 2

LOCATION 237 - 242 **0 0 0 0 0 0**

Location	Description
237	Area 2 Zone 1 Indicator
238	Area 2 Zone 2 Indicator
239	Area 2 Zone 3 Indicator
240	Area 2 Zone 4 Indicator
241	Area 2 Zone 5 Indicator
242	Area 2 Zone 6 Indicator

Table 90: Area 2 Zone Indicators

Example

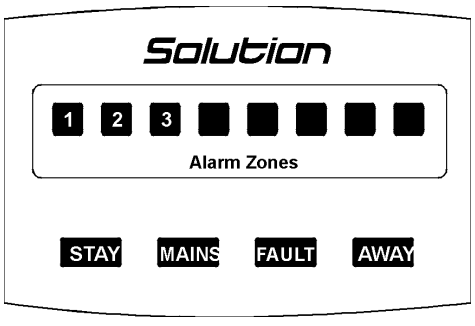


Figure 11: CP-5 Area Addressable Codepad (CP500A)

LOCATION 231 - 236 **Area 1 Zone Allocations**

3 4 5 0 0 0

In this example hardware zones 3, 4 and 5 have been mapped to Area 1 to appear as zones 1, 2 and 3. Programming the same zone number into more than one area indicates that the zone will operate as a common zone.

Example

If zone 2 is allocated to Area 1 and Area 2, it becomes a common zone to Area 1 and Area 2. Zone 2 will not be in the armed state until both Area 1 and Area 2 have been armed. Any number of zones can be mapped to any combination of the two areas to act as common zones.

Tamper Zone Allocations

When programming Area Zone Allocations, Tamper Zones 1 - 6 if enabled, need to be programmed as zones 9 - 14 in either Area 1 and/or Area 2 to appear on any zone on the codepad. ***If the control panel has been partitioned, tamper zones will be indicated when triggered, in the same manner as burglary zones.***

Example

LOCATION 231 - 236
Area 1 Zone Allocations

1 2 3 9 10 11

LOCATION 237 - 242
Area 2 Zone Allocations

12 13 14 **4 5 6**

In this example, tamper zones 1, 2 and 3 (which are represented by zones 9, 10 and 11) have been mapped to Area 1 to display as zones 4, 5 and 6. This means that tamper zones 1, 2 and 3 will be indicated on the Area 1 codepad using zone indicators 4, 5 and 6.

Tamper zones 4, 5 and 6 (which are represented by zones 12, 13 and 14) have been mapped to Area 2 to display as zones 1, 2 and 3. This means that tamper zones 4, 5 and 6 will be indicated on the Area 2 codepad using zone indicators 1, 2 and 3.

User Code Allocations

"LOCATIONS 243 - 250" are provided for assigning each user to particular areas. Any number from 1 to 3 can be entered to indicate what areas are to be operated by the relevant user code holder. Multiple user codes can be allocated to the same areas. Select the areas required and add the option values together (**eg**. A value of three (1 + 2) will allow the user access to both areas).

Option	Area
1	Area 1
2	Area 2

Table 91: Available Areas

Refer to "User Codes" on page 92 for programming of the actual codes.

Location 243	Location 244	Location 245	Location 246
User Code 1 0	*User Code 2* 0	*User Code 3* 0	*User Code 4* 0
Location 247	**Location 248**	**Location 249**	**Location 250**
User Code 5 0	*User Code 6* 0	*User Code 7* 0	*User Code 8* 0

Codepad Connections For Partitioning

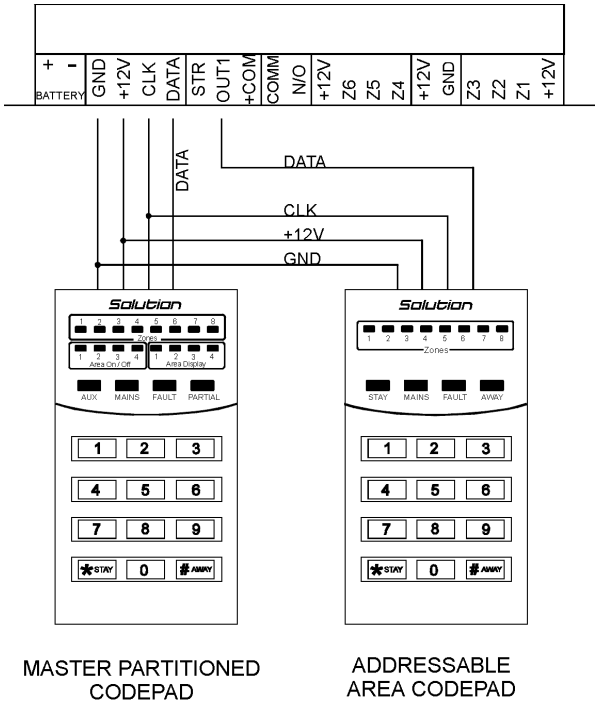
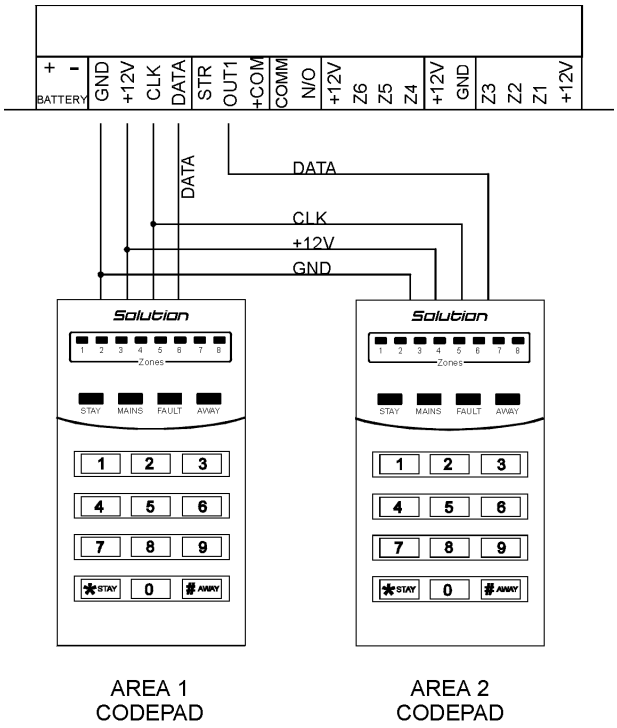


Figure 12: Connections For "CP-5 Master Partitioned (CP500P)" Codepad and "CP-5 Area Addressable (CP500A)" Codepad

If the "CP-5 Area Addressable (CP500A)" codepad is assigned to **Area 1**, DIP Switch 1 on the back of the remote codepad will need to be in the "ON" position. The following locations for Output 1 will need to be programmed.
[LOCATION 186 = 6, 187 = 0]

If the "CP-5 Area Addressable (CP500A)" codepad is assigned to **Area 2**, DIP Switch 2 on the back of the remote codepad will need to be in the "ON" position. The following locations for Output 1 will need to be programmed.
[LOCATION 186 = 6, 187 = 1]



[LOCATION 186 = 6, 187 = 1]

Figure 13: Connections For Two "CP-5 Eight Zone Area Addressable (CP500A)" Codepads

The following DIP Switch settings and locations must be programmed for the two "CP-5 Area Addressable (CP500A)" codepads to function correctly.

AREA 1 CODEPAD
DIP Switch 1 on the back of the remote codepad will need to be in the "ON" position. The following location will also need to be programmed.

[LOCATION 228, Option bit 1 must be enabled]

AREA 2 CODEPAD - (Output 1)
DIP Switch 2 on the back of the remote codepad will need to be in the "ON" position. The following locations for Output 1 will need to be programmed.

Optional Equipment

This section includes the following;

- *EDMSAT - Satellite Siren (SS914)*
- *Programming Key (CC810)*
- *Alarm Link Software (CC816)*
- *CP5 Eight Zone Codepad (CP508)*
- *CP5 Eight Zone LCD Codepad (CP508L)*
- *Night Arm Station (CP105)*
- *Phone Controller (CC911)*
- *Hand Held Dialler Tester (DD901)*
- *Cellular Diallers*
- *PS100 Power Supply Module (PS100)*
- *TF008 Plug Pack (TF008)*
- *Solution Codepad Mimic Board (CC820)*
- *Solution Relay Output Interface (CC892)*
- *2 Wire Smoke Detector Interface (FA101)*
- *Radio Key/Keyswitch Interface (CC813)*

Optional Equipment

EDM manufactures numerous accessories that can be used in conjunction with the Solution 6+6 control panel. These optional pieces of equipment will enhance certain features thus making the system extremely flexible.

EDMSAT - Satellite Siren (SS914)

The EDMSAT Satellite Siren is a totally self contained unit incorporating a high powered siren and a weatherproof strobe. A 1.2 AH sealed lead acid battery needs to be fitted. The EDMSAT requires only two wires for operation on which the charging of the battery and triggering of the siren and strobe are carried out. This is done by pulse code modulating (PCM) the charging voltage. Any attempt to tamper with the wiring or to substitute an alternative power source across the wiring will disrupt the data transmission and the EDMSAT will activate immediately. When the EDMSAT carries out a battery test, the unit will sound for two seconds if the battery test fails. Refer to the “Output Event Type – EDMSAT - Satellite Siren” on page 120 when programming a programmable output for the satellite siren.

Hand Held Programmer (CC814)

The hand held programmer is used to program the locations in the Solution 6+6 control panel. The unit displays the actual location number and the data value currently programmed. It comes complete with a one metre connecting cable and a socket for an external programming key. Refer to “Programming With The Hand Held Programmer” on page 20 for more information.

Programming Key (CC810)

The programming key is a unique device that will store all programming information programmed in your control panel once copied to the programming key. The programming key can hold all your common configuration data such as monitoring station telephone numbers and zone reporting channels etc.

Alarm Link Software (CC816)

This software package is designed to be used for programming the Solution 6+6 control panel by remote connect via the telephone line. All options and features can be accessed via this software as well as maintaining history and service reports. Refer to "LOCATION 224" on page 138 to enable this feature. Refer to “Upload/Download Via Alarm Link Software” on page 69 for more information on the remote connect methods.

CP5 Eight Zone Codepad (CP508)

This codepad is designed to operate with the Solution range of control panels. This codepad provides indications for up to 8 zones.

CP5 Eight Zone LCD Codepad (CP508L)

This codepad is designed to operate with the Solution range of control panels with a fixed icon display. This codepad provides indications for up to 8 zones.

Night Arm Station (CP105)

The night arm station incorporates a panic button and is designed to allow system operation from a bedroom or sitting room to arm and disarm the system in STAY Mode.

Phone Controller (CC911)

The phone controller operates at a frequency of 1400 Hz and allows the user to remotely arm the system in AWAY Mode via the telephone. This phone controller can also be used to acknowledge a phone call from the control panel when the system is set up for domestic dialling.

Hand Held Dialler Tester (DD901)

The hand held dialler tester simulates a base station for testing of the control panel's dialling functions. It communicates in most formats.

Cellular Diallers

The cellular dialler when connected to the control panel will transmit alarm information via the cellular phone network to the base station receiver when a land telephone line is not present or has been tampered with.

PS100 Power Supply Module (PS100)

The PS100 Power Supply Module has been designed for applications requiring 13.8 volts DC at currents of up to 1 Amp and must be used in conjunction with the TF008 - 18 volt AC plug pack.

The unit comes complete with our standard, fully short circuit proof, power out and battery charging terminals as well as a DC LED indicator and AC mains fail output. For situations requiring an uninterrupted power source, a rechargeable sealed lead-acid battery can be connected. In the event of a mains failure, the power supply will switch to battery power without interrupting the load being supplied.

TF008 Plug Pack (TF008)

The TF008 plug packs have been designed to be used with the EDM control panels and the PS100 Power Supply Module. The plug pack includes built in thermal fuses which under overload or fault conditions will blow and eliminate any possible fire threat due to excessive heat build up inside the casing.

The TF008 plug pack incorporates a three wire flying lead that enables a mains earth connection to be made between the equipment and the plug pack. This connection may be required for lightning protection on equipment that is connected to phone lines or for safety reasons such as earthing of metal enclosures.

Solution Codepad Mimic Board (CC820)

The Solution Codepad Mimic Board (CC820) has been designed to allow you to have a separate output indicator for each indicator found on the remote codepad. This will be useful to remotely display system status information.

Solution Relay Output Interface (CC892)

The Solution Relay Output Interface (CC892) has been designed to allow up to an additional 8 relay outputs to be connected to a Solution control panel. This will be useful to remotely display system status information.

The 3 way DIP switch on the board is used to select the data that is to be displayed on the relays. Multiple interfaces may be connected in parallel for different data displays.

2 Wire Smoke Detector Interface (FA101)

The 2 Wire Smoke Detector Interface (FA101) has been designed to allow high quality 2 wire, 24 volt DC smoke detectors to be easily connected to the Solution range of control panels. The interface provides the 24 volts required to power the smoke detector and also provides a relay output that is used to trigger the control panel. Multiple detectors may be connected to the same interface.

Radio Key/Keyswitch Interface (CC813)

This interface was designed to allow simple interfacing of a momentary keyswitch or radio equipment for remote control operations to operate the control panel.

If the R/K terminal is used, a number of momentary keyswitches may be connected in parallel for multiple arm/disarm locations. The ON and OFF terminals can be used to directly interface to any access control system.

The HOME terminal will force the system to arm and disarm in STAY Mode.

There is also a PANIC terminal that allows the customer to issue a panic alarm from a remote keyswitch or hand held radio transmitter.

This is handy if you require your system to be radio controlled and you would like to give your customer total control via a hand held radio remote.

Indication beeps can be provided via the horn speakers when arming and disarming using this interface board. Refer to Option 8 in "LOCATION 226" on page 140 for more information. As you can see, the radio key/keyswitch interface allows you the flexibility to perform quite a number of functions cheaply and easily.

No Of Beeps	*System Status*
1	System Disarmed
2	System Armed In AWAY Mode
3	System Armed In STAY Mode

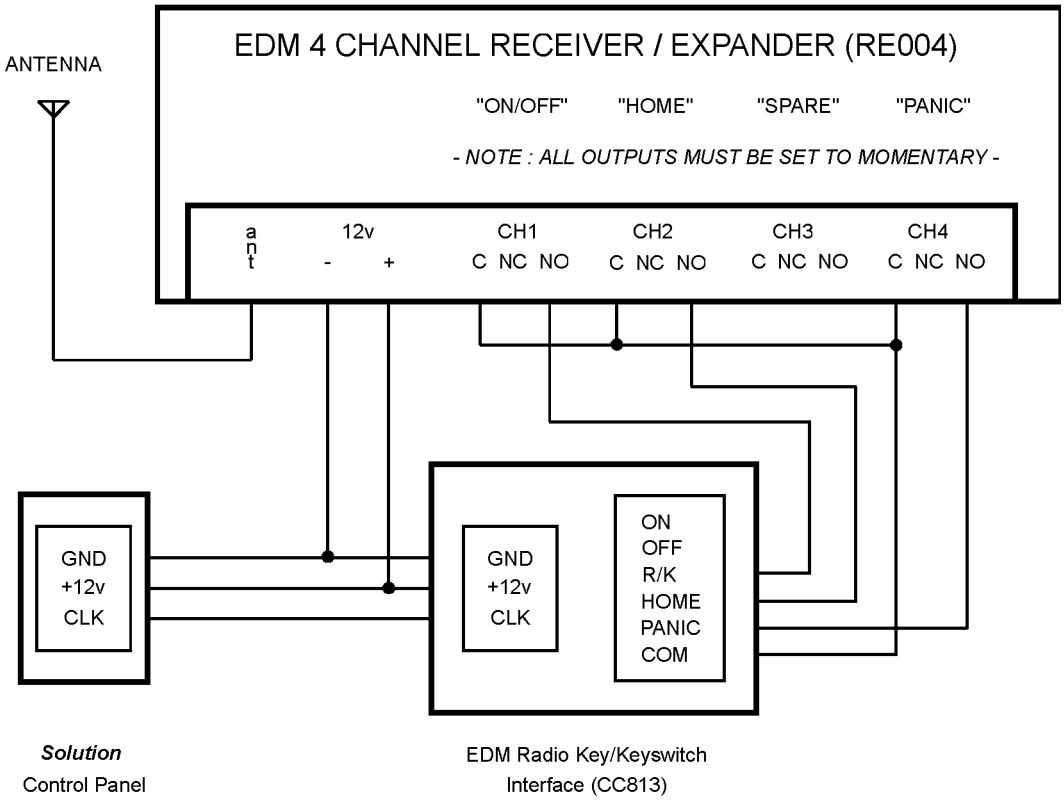
Table 92: Horn Speaker Beeps

Refer to “Figure 14: Radio Key/Keyswitch Interface (CC813) Connection Diagram” on page 157 and “Figure 15: Radio Key/Keyswitch Interface (CC813) Connection Diagram” on page 158 for wiring information.

EDMSTU – Securitel Interface (SC800)

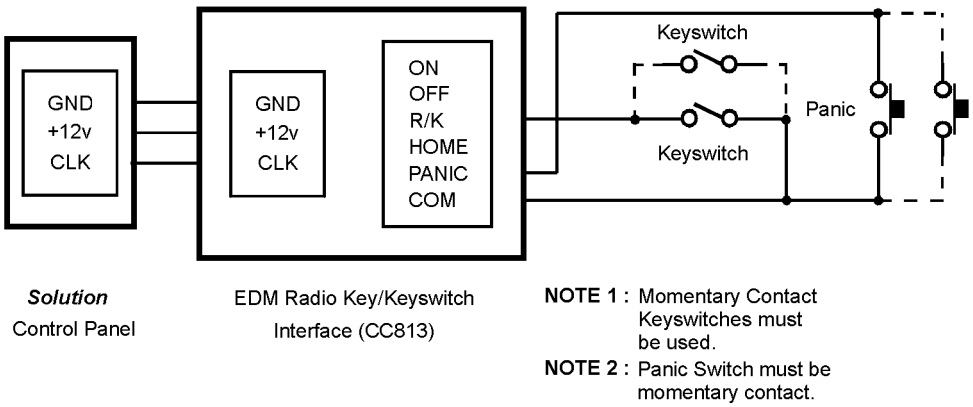
The EDMSTU – Securitel Interface has been designed to operate in conjunction with the control panel using a serial connection. This means that all alarm information can be reported from the control panel to the EDMSTU using only 3 wires. The EDMSTU provides full serial reporting of alarms, opening and closing reports, isolations and user ID information. The monitoring control room also monitors line integrity.

Radio Key: On / Off - Home - Panic



NOTE:
R/K BEEPS MUST BE ENABLED (IF REQUIRED)
LOCATION 226 MUST CONTAIN "8"

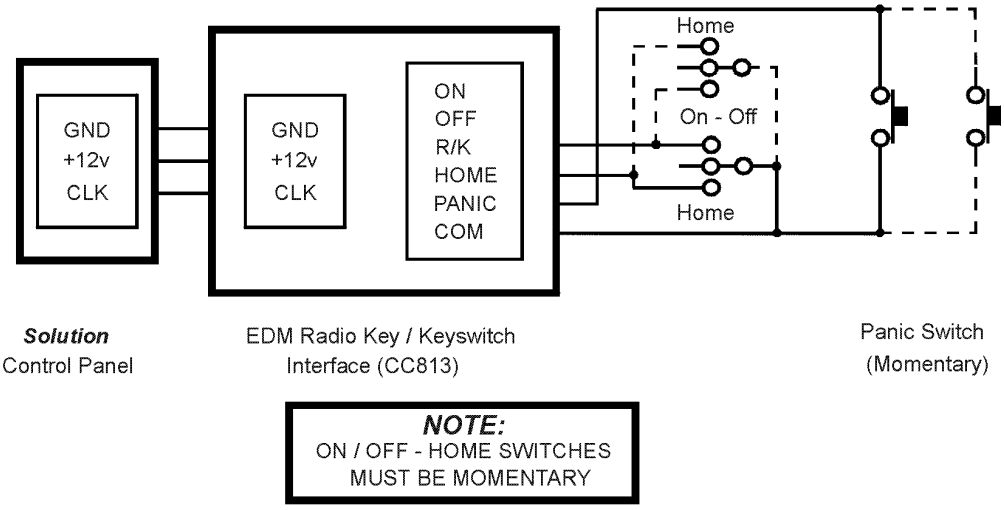
Keyswitch: On / Off



NOTE:
ENABLE KEYSWITCH INTERFACE MODULE
LOCATION 227 MUST CONTAIN "1"

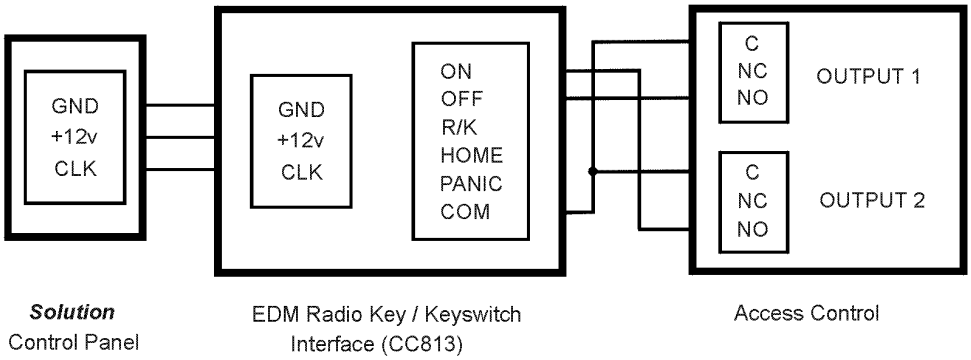
Figure 14: Radio Key/Keyswitch Interface (CC813) Connection Diagram

Keyswitch: On / Off - Panic



NOTE:
ON / OFF - HOME SWITCHES
MUST BE MOMENTARY

Access Control: On / Off



Radio Key: On / Off

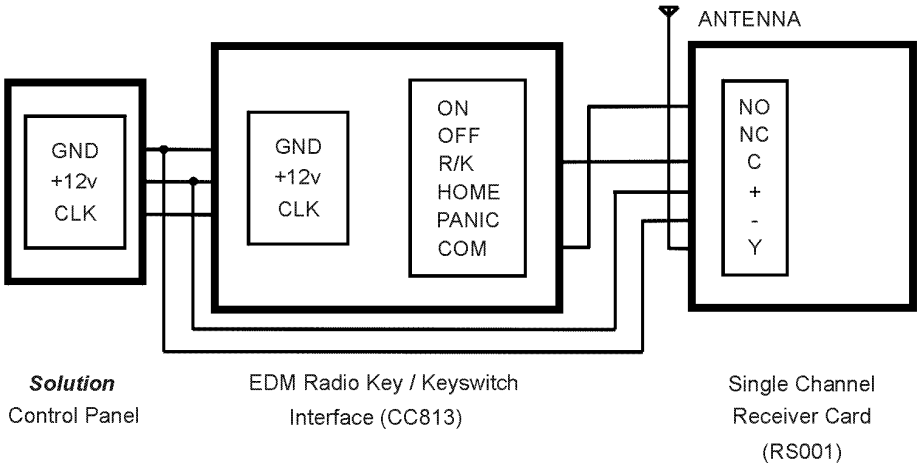


Figure 15: Radio Key/Keyswitch Interface (CC813) Connection Diagram

Terminals and Descriptions

This section includes the following;

- *Terminal Definitions and Descriptions*
- *Glossary Of Terms*
- *Solution 6+6 Wiring Diagram*
- *Solution 6+6 Component Overlay*
- *Telecom Connection Diagrams*

Terminal Definitions and Descriptions

Terminal	*Description*
EARTH	This terminal should be connected to the green wire on the TF008 Plug Pack that is internally connected to the mains earth. Extensive lightning protection has been built into the control panel and this terminal will have to be connected correctly if you are to take the best advantage of the protection provided.
18V AC	These two terminals are plug on type, and are the termination point for the TF008 Plug Pack. The voltage of the plug pack being used must be 18 - 22 volts AC and rated at 1.3 Amps minimum for correct operation.
+BATTERY *-BATTERY*	The + BATTERY connects to the red positive terminal of the battery and the - BATTERY connects to the black negative terminal of the battery. The battery should be a 12 volt sealed lead acid rechargeable type with a capacity of between 1.2 AH - 6.5 AH. The battery is protected by a 3 Amp fuse. The charging globe (LP1) which is situated above the 3 Amp fuse will always be illuminated until the battery is 100% charged.
GND *+12V* *CLK* *DATA*	This group of terminals are the connection points for your system codepads. All system codepads should connect in a parallel configuration back to these terminals. The only factor restricting the number of codepads that can be connected is the available power and its distribution. Each codepad has a maximum power requirement of 60 mA with all indicators illuminated, therefore this should be taken into consideration when calculating your available continuous power. The total continuous external load on the system should not exceed 1 Amp maximum.
STR *OUT1* *+COM*	This group of terminals are the output interface terminals. They can be configured to any combination of the functions available via the system programming options. They can be used for a variety of functions with incredible flexibility. All outputs have a common terminal that is positive 12 volts and each output is capable of sinking a maximum of 400 mA. Output 1 is defaulted to operate a horn speaker. The outputs are protected by EDM's unique Integrated Protection System, [IPS]. This makes them extremely tolerant to abuse or incorrect wiring. It should be noted that each output is open collector and will not source any current but can sink a maximum of 400 mA per output.
COMM *N/O* *(12v 1A Max)*	These relay contacts are fully programmable as with the strobe and output 1. The relay is factory defaulted as an alarm output (Sirens Running - Event Type 1,15). The N/O contact is the connection point for the positive side of a DC siren such as a piezo screamer. The negative side of the DC siren needs to be connected to the GND terminal. A link (JP2) is provided on the PCB for connecting the COM terminal to either GND or 12V. This link should be connected to +12V as shown in "Figure 16: Solution 6+6 Wiring Diagram" on page 163. The relay is rated at 1 Amp/30 VDC.
+12V *Z6* *Z5* *Z4*	These terminals are zones four, five and six. Their common terminal is +12V. All normally closed contacts are to be wired in series with the EOL resistor, where normally open contacts are to be wired in parallel with the EOL resistor. The function of the zones and their response times are programmable via the system programming options. If split EOL has been programmed, this will enable 24 hour tamper zones to be connected in parallel to zones four, five and six to act as zones twelve, thirteen and fourteen.
+12V *GND*	These two terminals are for power to detectors and other equipment. They are fuse protected by a 1 amp fuse.
Z3 *Z2* *Z1* *+12V*	These terminals are zones one two and three. Their common terminal is +12V. All normally closed contacts are to be wired in series with the EOL resistor, where normally open contacts are to be wired in parallel with the EOL resistor. The function of the zones and their response times are programmable via the system programming options. If split EOL has been programmed, this will enable 24 hour tamper zones to be connected in parallel to zones one, two and three to act as zones nine, ten and eleven.

Glossary Of Terms

Term	Description
Alarm Condition	Is when your alarm system is armed and one of the detection devices are violated. A 24 hour zone (eg. Smoke detector) may trigger when your system is armed or disarmed.
Answering Machine Bypass	Answering machine bypass has been incorporated so that it is possible to make a connection with the control panel for remote arming or remote programming operations when there is an answering machine or facsimile machine on the same telephone line.
Armed (System ON)	When the system is in a state ready to accept alarms.
AWAY or #	This is the button on your codepad used to execute any given command.
AWAY Mode	Is the mode used to arm your system when you leave your premises.
Codepad	The codepad allows you to perform all functions such as arming, disarming and programming of your alarm system.
Day Alarm	Day alarm allows a combination of zones to be monitored while the system is in the disarmed state.
Detectors	Are devices connected to your alarm system used to cause an alarm condition. Some common forms of detection devices are; passive infrared, smoke, photo electric beams, reed switches and vibration sensors.
Dialler	Is a device that is used for communicating to a monitoring station, mobile phone or pocket pager etc.
Disarmed	Is when your system is in a state that will not accept alarms except for 24 hour zones.
Dynamic Battery Testing	Is a feature used to monitor and test the condition of your backup battery.
EDMSAT (Satellite Siren)	Is a self contained siren unit complete with flashing blue strobe light and a backup battery. It offers a higher level of security for your alarm system.
Entry Time or Entry Delay	Is the time allowed after entering your premises, to disarm your system before an alarm occurs.
Entry Warning	Is the beeping from your codepad during entry time to remind you to disarm your system.
Exit Time or Exit Delay	Is the amount of time you have to leave your premises after you have armed your system.
External Equipment	Is any device connected to your system such as detectors, codepads and sirens.
Forced Arming	Is a situation where your alarm system is permitted to be armed when one or more zones are unsealed.

Term	Description
Handover Delay	When your system is armed and zone one is violated, the entry delay starts timing. If zone two is then violated the entry delay time is handed over to zone two and so on through zones three and four. This is known as sequential hand over delay.
Hand Held Radio Remote Control	Can be used to arm and disarm your system or cause a panic alarm.
Lockout Dialler	Lockout dialler means that the dialler will only activate once per zone per arming cycle.
Lockout Siren	Lockout siren means that the sirens will only activate once per zone per arming cycle.
Master Code	Is a numerical code used for arming and disarming the system as well as allowing access to all functions that are programmable through the codepad.
Monitoring Station	Is a secure location where a digital receiver monitors numerous alarm systems and deciphers their alarm transmission reports so that the operator can advise the appropriate authorities to take immediate action.
Panic	This is a type of alarm raised by you to indicate to the monitoring station that there is an emergency situation at your premises.
Phone Controller	Is a device used for arming your system via the telephone line. It is also used to acknowledge domestic alarm reports.
Sealed	Refers to a zones status. If a zone is sealed, the detection devices are not violated and the zone indicator will be extinguished (ie. a reed switch is closed or a detector is on stand by waiting for an intrusion).
Sensor Watch	Sensor watch gives the control panel the ability to recognise that detection devices may have stopped working. This is a feature that monitors the operation of a zone over a programmed time period.
Silent Alarm	When programming your system, it is possible to have an individual zone for silent alarm. This means that when the zone is violated your alarm system will communicate with the monitoring station without sounding the sirens. This can only be programmed by your installer.
STAY Mode	Is a condition that automatically isolates certain zones when your system is armed in STAY Mode. These zones can only be programmed by your installer.
Unsealed	Refers to zone status. If a zone is unsealed, the detection devices are violated and the zone indicator will be illuminated (ie. a reed switch is open or a detector has noted an intrusion).
User Code	A numerical code used to arm and disarm the system.
Zones	A monitored input used to trigger an alarm condition.
24 Hour Zone	A monitored input where tamper switches and emergency switches may be connected. If at any time, (whether your system is armed or disarmed) one of these switches is violated, an alarm condition will be generated.

Solution 6+6 Wiring Diagram

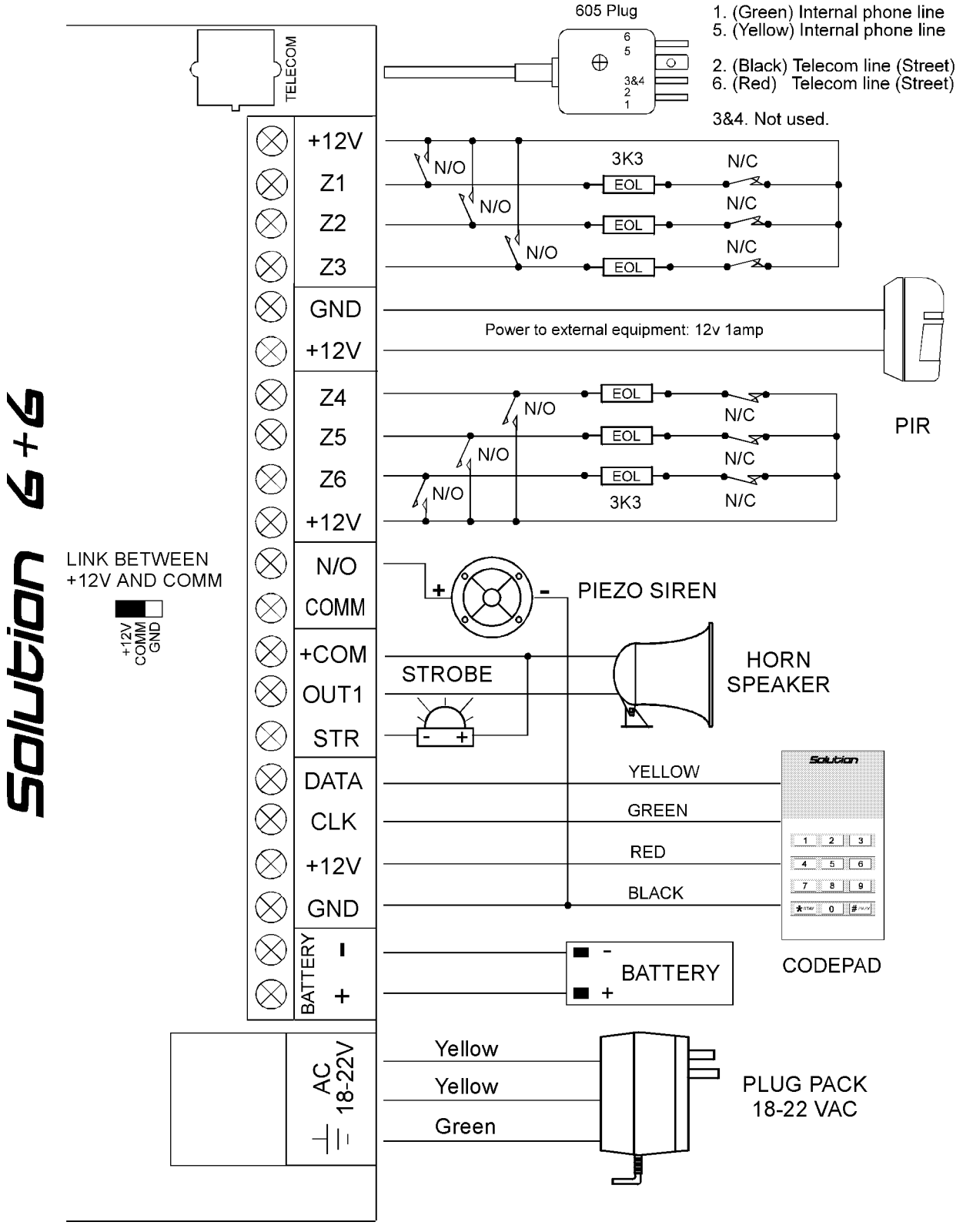


Figure 16: Solution 6+6 Wiring Diagram

Solution 6+6 Component Overlay

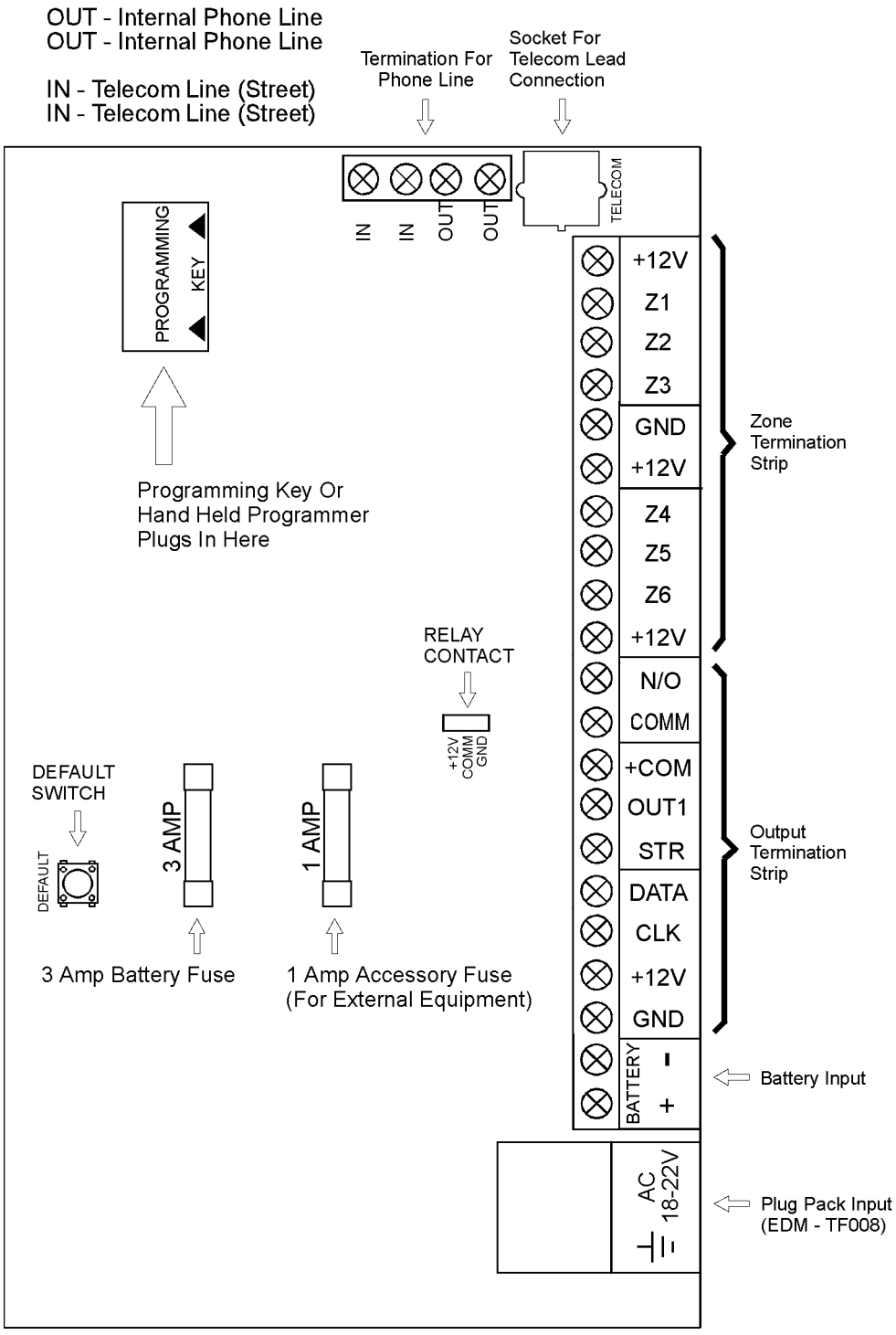


Figure 17: Solution 6+6 Component Overlay

Telecom Connection Diagrams

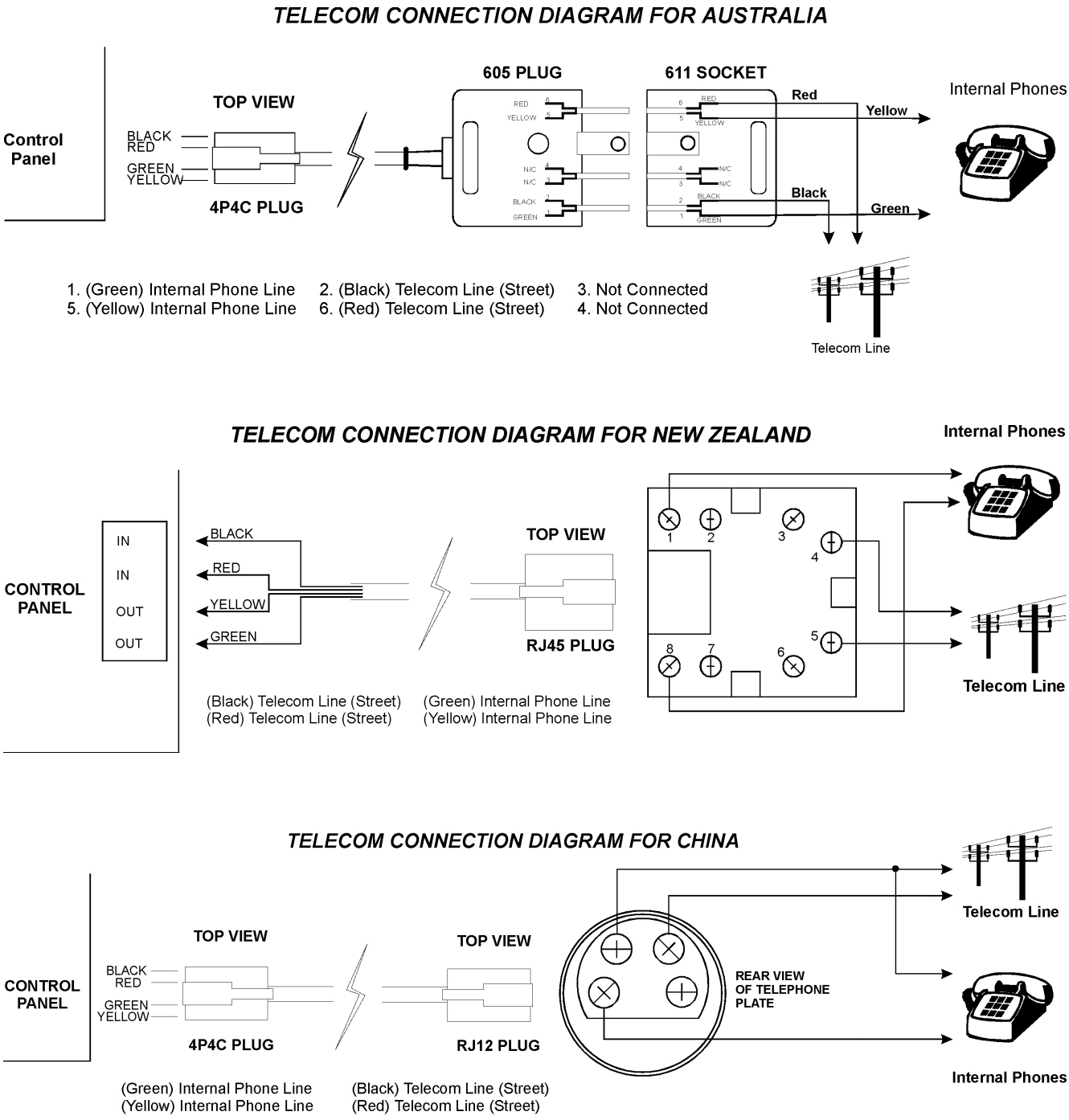


Figure 18: Telecom Connection Diagrams For Solution 6+6

Appendices

This section includes the following;

- *Telephone Anti-Jamming*
- *Test Reports Only When Armed*

Appendix A

Telephone Anti-Jamming

There are many companies today importing American designed products that claim to have Anti-Jamming and believe it or not, they push this feature as if it were a major break through in control panel technology. Well this in fact is not the case at all as most control panels have some sort of Anti-Jamming feature. We can go as far back as the early 1980's where even the 678 diallers incorporated a form of Anti-Jamming as a standard programmable option.

The important thing to note is that as most American designed products are primarily aimed at their local market and telephone networks, when they are imported to Australia their anti-jamming function does not perform as it should.

To clear up just what anti-jamming is and how it works needs some understanding of Telephone Networks. In America either of the two parties (ie. the one who initiated the call or the one receiving the call) can clear the line by placing the hand piece back on the hook. If you pick up the hand piece again, dial tone will be received and you will be able to make a new call immediately. This is not so here in Australia.

In Australia, only the calling party can immediately terminate the call. If you receive a call from someone and hang up on them, picking the hand piece back up again to make a new call only reconnects you to the original caller. It will not be possible to make another call until the original caller hangs up or you hang up the phone for ninety seconds or longer. So you see Australia is very different and needs a special form of anti-jamming to suit our telephone network.

There are control panels on the market that after making a few call attempts which fail simply hang up and wait for ninety seconds or so, in an attempt to clear the jamming incoming call. This may work in some instances where the caller is not a genuine burglar and is not deliberately trying to jam the control panel. With this simple method of hanging up for ninety seconds we have not only delayed the alarm signal for this time but also the time taken for the original failed call attempts which could easily total 4 minutes. This is bad enough in its own right but even more disturbing is the fact that the initial failed call attempts allow for the establishment of an audio connection between the would be burglar and the control panel. Anyone with a little knowledge of alarm systems will be able to actually trick the dialler into thinking it is talking to a base station thus actually clearing the alarm signal. Pretty frightening when you thought the control panel you were using and recommending to your customers is supposed to have anti-jamming.

At Electronics Design and Manufacturing Pty Limited we take anti-jamming very seriously and have in fact devoted a great deal of time and money researching this problem. Our engineers have come up with the best possible anti-jamming procedure known and patented accordingly {Patent Number 571994}.

Our procedure is very simple and effective because we never answer the burglars phone call and the Telecom Network will automatically clear an unanswered call in approximately ninety seconds. This time will be even shorter if the call is originated through the Mobile-Net Network where it will most likely be in the case of a true burglary.

Once the control panel detects that the phone line has stopped ringing it immediately loops the line and makes its call therefore transmitting its alarm message successfully. The line is also automatically disconnected from the telephones within the protected premises immediately on an alarm condition by the control panel to further confuse the burglar and eliminate the possibility of the burglar answering the call. As you can see, our method of anti-jamming will in the worst possible case delay the alarm signal by ninety seconds but even more importantly will never allow for an audio connection between the burglar and the control panel.

All dialling products produced by Electronics Design and Manufacturing Pty Limited have incorporated this true anti-jamming feature as standard since 1985 and we do not consider it as an option but a must in any professional security system.

True anti-jamming can only be found in products produced by Electronics Design and Manufacturing Pty Limited and any other manufacturer can only offer second best due to our patent on this very unique and effective procedure.

Appendix B

Test Reports Only When Armed

The *Solution 6+6* control panel allows for test reports to be transmitted to the base station receiver to verify that the dialler is functional. "So what", you might say, as most alarm diallers allow you to do this.

The one problem with this is that installations that report opening and closing reports will generally also transmit a test report each day. This call is unnecessary, as a successful opening and closing report means that the dialler is functioning correctly.

The *Solution 6+6* control panel allows you to save time and money by providing test reports only while the system is in the armed state.

Program "LOCATION 229" on page 143 with Option 1 (Send test reports only if the system is armed), and then set the test report time to be in the middle of the day. During Monday to Friday when the premises are generally open and the system disarmed a test report will not be transmitted. However, on the weekend, the premises will be closed and the system armed, so a test report will be transmitted at the programmed time thus verifying the operation of the dialler.

At first glance this may not seem to be a big deal but lets do a few sums and you will see just where savings can be made.

Let us assume that the customer wants, needs or has test reports programmed for once a day as well as opening and closing reports. This means that at least three phone calls will be made each week day and one call on Saturday and one call on Sunday.

By using the *Solution 6+6* control panel you will be able to eliminate five calls per week. This means that over one week you will save your customer $1.25 and over one year you will save them $65.00.

Not a bad saving, and remember these figures are for local calls only.

Turning the table slightly, a control room with lets say 1000 customers sending the above mentioned reports, can expect to receive some 884,000 phone calls ($221,000 assuming local calls) just for reporting opening, closing and test reports over a 12 month period.

If you use the *Solution 6+6* control panel, you can effectively cut the calls to 624,000 per year (at a value of $156,000 assuming local calls), a saving of $65,000. If we now assume that for each call one line is printed on the logging printer, and that one page is filled per 60 calls. You will be able to save 4333 sheets of paper per year and at approximately $45 per box this becomes a considerable saving.

As you can see using the *Solution 6+6* control panel will save you money, your customer money and will help conserve our natural resources, in fact, the only people who don't like this feature is Telstra.

Specifications

This section includes the following;

- *Warranty Statement*
- *Specifications*
- *Software Version Number*
- *Advice To Users*
- *New Zealand Telepermit Notes*

Warranty Statement

Electronics Design and Manufacturing Pty Limited warrants this product to be free from defects in material and workmanship for a period of three years from the date of manufacture as indicated by the date stamp and /or the serial number on the product.

Defective units returned by the purchaser at their own expense during this period would be repaired or replaced at the option of the manufacturer. The repair or replacement will be free of charge provided that the defects were not incurred during shipping or handling, or the damage was not due to causes beyond the control of Electronics Design and Manufacturing Pty Limited, such as lightning, excessive voltage, mechanical shock or damage arising out of abuse, alteration or improper application of the equipment.

Specifications

Temperature Range:	0 – 45 Degrees Celsius
Humidity:	10% - 95%
Power Source:	TF008 Plug Pack – 240 Volt / 18 Volt AC @ 1.3 Amp
Stand-By Current:	65 mA
Current Draw In Alarm Condition:	115 mA
Current Draw With No Alarm and Codepad Fitted:	105 mA
Back-Up Battery:	Ah / 12 Volt DC Rechargeable Sealed Lead Acid Battery
Dimensions:	306 mm x 262 mm x 76 mm
Weight:	2.5 Kg
Austel Approval Number:	A96/03/0096 – Only With TF008 Plug Pack
New Zealand Telepermit:	PTC 211/96/007

Software Version Number

LOCATION 999 **1 . 2 7**

When using the Hand Held Programmer (CC814), you have the ability to display the software version number of the control panel. Refer to “Command 999 - Display Software Version Number" on page 30 for more information.

Advice To Users

The Austel permit that has been issued for this product is subject to the following conditions.

- The *Solution 6+6* Control Panel may only be powered by an EDM TF008 Plug Pack (Approval Number Q92128).

New Zealand Telepermit Notes

- The grant of a telepermit for a device in no way indicates Telecom acceptance of responsibility for the correct operation of that device under all operating conditions.
- This equipment shall not be used in any manner that could constitute a nuisance to other Telecom customers.
- Immediately disconnect this equipment should it become physically damaged and arrange for its disposal or repair.
- The transmit level from this device is set at a fixed level and because of this there may be circumstances where the performance is less than optimal. Before reporting such occurrences as faults, please check the line with a standard telepermitted telephone and do not report a fault if the telephone performance is satisfactory.

Programming Sheets

Location 000 – 015 Page 85

Primary Telephone Number

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Location 016 – 031 Page 85

Secondary Telephone Number

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Location 032 – 047 Page 85

Callback Telephone Number

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Location 048 Page 86

Dialling Format

1 = Australian DTMF
2 = Australian Decadic
3 = Alternate DTMF & Decadic (AUST)
4 = International DTMF
5 = Reversed Decadic
6 = Alternate DTMF & Reversed Decadic

1

Location 049 Page 86

Handshake Tone

1 = HI-LO Handshake (Contact ID)
2 = 1400 Hz (Ademco TX @ 1900 Hz)
3 = 2300 Hz (Sescoa TX @ 1800 Hz)
4 = No Handshake Required
5 = Pager

1

Location 050 Page 87

Transmission Format

1 = Contact ID
2 = 4 + 2 Expressed
3 = 4 + 2 Pulsed
4 = 4 + 2 Pulsed + Checksum
5 = 4 + 1 Pulsed + Universal
6 = 4 + 1 Pulsed Expanded
7 = 3 + 1 Pulsed Universal
8 = 3 + 1 Pulsed Expanded
9 = Reserved
10 = Reserved
11 = Domestic
12 = Basic Pager
13 = Reserved
14 = Reserved
15 = Reserved

1

Location 051 Page 87

Transmission Speed

1 = 1 Pulse / Second
2 = 10 Pulses / Second
3 = 15 Pulses / Second
4 = 20 Pulses / Second
5 = 20 Pulses / Second FDL
6 = 40 Pulses / Second

2

Location 052 – 055 Page 88

Subscriber ID Number

0	0	0	0

Location 056 – 059 Page 92

Installer Code

1	2	3	4

Location 060 Page 89

Ring Count

15 = Answering Machine Bypass 1
14 = Answering Machine Bypass 2 **(New - Software Version 1.27 Onwards)**

8

Location 061 - 100 Page 92

User Codes

User Code 1 — Location 61 - 65

2	5	8	0	8

User Code 2 — Location 66 - 70

15	15	15	15	0

User Code 3 — Location 71 - 75

15	15	15	15	0

User Code 4 — Location 76 - 80

15	15	15	15	0

User Code 5 — Location 81 - 85

15	15	15	15	0

User Code 6 — Location 86 - 90

15	15	15	15	0

User Code 7 — Location 91 - 95

15	15	15	15	0

User Code 8 — Location 96 - 100

0	15	15	15	1

Location 101 Page 96

Day Alarm Mask

1 = Zone 1
2 = Zone 2
4 = Zone 3
8 = Zone 4

1

Location 102 Page 94

Code Retries

6

Location 103 Page 98

EOL Resistor Value

1 = 1K
2 = 1K5
3 = 2K2
4 = 3K3
5 = 3K9
6 = 4K7
7 = 5K6
8 = 6K8
9 = 10K
10 = 12K
11 = 22K
12 = Reserved
13 = Reserved
14 = Reserved
15 = Split EOL (3K3/6K8) For 6 Zones + 6 Tamper Zones

4

Location 104 – 151 Page 100

Zones

Zone 1	Location 104 - 111							
2	0	0	0	1	3	0	1

Zone 2	Location 112 - 119							
1	0	0	0	1	3	0	1

Zone 3	Location 120 - 127							
1	0	0	0	1	3	0	1

Zone 4	Location 128 - 135							
1	0	0	0	1	3	0	1

Zone 5	Location 136 - 143							
1	0	0	0	1	3	0	1

Zone 6	Location 144 - 151							
12	0	0	0	1	3	3	1

Zone Type	Zone Option	Zone Pulse Count	Zone Pulse Count Time	Event Code Hundreds Digit	Event Code Tens Digit	Event Code Units Digit	Dialler Channel

Each zone contains eight locations that are divided into two groups of four. The first four locations determine how the zone operates, while the second four locations contain the dialler reporting information.

Zone Types

There are thirteen different zone types to choose from. Each zone can be programmed as any of the zone types listed in the table below.

Zone Type	Description	Zone Type	Description
0	Instant	**8**	Delay-1 + Isolated In STAY Mode 1
1	Handover	**9**	Delay-2 + Isolated In STAY Mode 1
2	Delay-1	**10**	Reserved
3	Delay-2	**11**	Keyswitch
4	Reserved	**12**	24 Hour Burglary
5	Reserved	**13**	24 Hour Fire
6	Instant + Isolated In STAY Mode 1	**14**	Chime Only
7	Handover + Isolated In STAY Mode 1	**15**	Zone Not Used

Zone Options

Zone Option	Description
1	Lockout Siren
2	Lockout Dialler
4	Silent Alarm
8	Sensor Watch

Zone Pulse Count Settings

The pulse count settings for each zone can be programmed between 0 - 15.

Zone Pulse Count Time

Zone pulse count time is the time frame or period over which the number of pulses must register.

20 ms Loop Response Time Zone Pulse Count Time		150 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 Descriptions

Use this table as a reference to indicate what each zone is connected to.

Zone	Description	Tamper Zone	Description
1		**1**	
2		**2**	
3		**3**	
4		**4**	
5		**5**	
6		**6**	

Location 152 – 153 — Page 110
Bypass Codes (Zones 1 To 6)
9 | 9

Location 154 – 155 — Page 110
Trouble Codes (Zones 1 To 6)
9 | 9

Location 156 – 159 — Page 111
Codepad Duress
1 | 2 | 1 | 1

Location 160 – 163 — Page 112
Codepad Panic
1 | 2 | 0 | 1

Location 164 – 167 — Page 113
Access Denied (Code Retries)
4 | 2 | 1 | 1

Location 168 – 171 — Page 114
AC Fail
3 | 0 | 1 | 1

Location 172 – 175 — Page 114
Low Battery
3 | 0 | 9 | 1

Location 176 – 179 — Page 115
Sensor Watch
3 | 0 | 7 | 1

Location 180 – 181 — Page 115
Open/Close
8 | 9

Location 182 – 185 — Page 116
Test Reporting Time

Location 182	Actual Hour Of The Day (Tens Digit)
Location 183	Actual Hour Of The Day (Units Digit)
Location 184	Repeat Interval In Days
Location 185	Expansion Code For 4+2 Format

0 | 0 | 0 | 9

Location 186 – 209 — Page 118
Output Configurations

	Location 186 - 191						Location 192 - 197						Location 198 - 203					
Output 1	1	14	0	0	0	0	*Strobe*	2	0	1	0	0	0	*Relay*	1	15	1	0	0	0

Location 204 - 209

Codepad	0	12	2	1	0	1

Event Type | *Polarity* | *Time Base* | *Time Multiplier*

Location 210 – 211 — Page 132
Entry Timer 1

Location 210	Increments Of 1 Second (0 - 15 Sec's)
Location 211	Increments Of 16 Seconds (0 - 240 Sec's)

10 | 0

Location 212 – 213 — Page 132
Entry Timer 2

Location 212	Increments Of 1 Second (0 - 15 Sec's)
Location 213	Increments Of 16 Seconds (0 - 240 Sec's)

4 | 1

Location 214 – 215 — Page 133
Exit Time

Location 214	Increments Of 1 Second (0 - 15 Sec's)
Location 215	Increments Of 16 Seconds (0 - 240 Sec's)

12 | 3

Location 216 – 217 — Page 133
Entry Guard Time For STAY Mode

Location 216	Increments Of 1 Second (0 - 15 Sec's)
Location 217	Increments Of 16 Seconds (0 - 240 Sec's)

12 | 3

Location 218 – 219 — Page 133
Sensor Watch Time

Location 218	Increments Of Days (Tens Digit)
Location 219	Increments Of Days (Units Digit)

0 | 0

Location 220 — Page 134
Codepad Lockout Time — Location 220 — Increments Of 10 Seconds — 0

Location 221 — Page 134
Siren Run Time — Location 221 — Increments Of Minutes (0-15) — 10

Location 222 — Page 134
Siren Sound Rate (Slow <-Sound-> Fast) — 7

Location 223 — Page 135
Swinger Shutdown Count — 0

Location 224 — Page 138
Dialler Options 1
1 = Enable Dialler Reporting Functions
2 = Enable Remote Arming Via The Telephone
4 = Enable Upload/Download Via Alarm Link
8 = Terminate “Alarm Link” Session On Alarm
5

Location 225 — Page 139
Dialler Options 2
1 = Send Open/Close Reports Only If A Previous Alarm Has Occurred
2 = Enable First To Open, Last To Close Reporting (Partitioning Only)
4 = Send Open/Close Reports When In STAY Mode
8 = Delay Siren Until Transmission Complete
0

Location 226 — Page 140
System Options 1
1 = Enable Forced Arming
2 = Enable EDM Smart Lockout
4 = Enable Monitoring Of Horn Speaker
8 = Enable Horn Speaker Beeps For Remote Control Operation
1

Location 227 — Page 141
System Options 2
1 = Enable Radio Key/Keyswitch Interface or Night Arm Station
2 = Enable Handover Delay To Be Sequential
4 = Enable Codepad Panic To Be Silent
8 = Enable Codepad Tamper To Be Silent
2

Location 228 — Page 142
System Options 3
1 = Enable Main Codepad To Display Data For Area 1 (Partitioning Only)
2 = Enable Resetting Of Sirens From All Areas (Partitioning Only)
4 = Ignore AC Fail
8 = Enable Pulse Count Handover
0

Location 229 — Page 143
Consumer Options 1
1 = Send Test Reports Only If The System Is Armed
2 = Enable Operation Of Siren & Strobe In STAY Mode
4 = Enable Answering Machine Bypass Only When Armed
8 = Enable Codepad Extinguish Mode
2

Location 230 — Page 144
Consumer Options 2
1 = Enable “User Code + 0 + AWAY” Function To Arm/Disarm Both Areas
2 = Enable Single Button Arming In AWAY Mode and STAY Mode
4 = Enable Single Button Disarming From STAY Mode
8 = Enable Alarm Memory Reset On Disarm
0

Location 231 – 236 — Page 150
Area 1 Zone Allocations — 0 0 0 0 0 0

Location 237 – 242 — Page 150
Area 2 Zone Allocations — 0 0 0 0 0 0

Location 243 – 250 — Page 151
Area/User Allocations

Location 243	Location 244	Location 245	Location 246
Areas For User # 1 0	*Areas For User # 2* 0	*Areas For User # 3* 0	*Areas For User # 4* 0
Location 247	**Location 248**	**Location 249**	**Location 250**
Areas For User # 5 0	*Areas For User # 6* 0	*Areas For User # 7* 0	*Areas For User # 8* 0

Location 900 Page 30

Disable Factory Default

0 = Defaulting Enabled
15 = Defaulting Disabled

0

Location 901 – 904 Page 136

System Time

Location 901 Hour Of The Day (Tens Digit)
Location 902 Hour Of The Day (Units Digit)
Location 903 Minute Of The Day (Tens Digit)
Location 904 Minute Of The Day (Units Digit)

0	0	0	0

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