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Solution 6 + 6W
Quick Reference Guide

ISSUE 1.10

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Solution 6+6W

Quick Reference Guide

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This documentation is provided to suit the *Solution 6+6W* Control Panel (CC670/LP670)

Firmware Revision 1.00 - 1.01

Hardware Version A

Alarm Link Form - S6WCV10

Introduction

Thankyou for choosing the *Solution 6+6W* control panel for your installation. We are sure that you will find this system extremely flexible, reliable and easy to use.

Before using the system for the first time, we suggest that you read the section in this Quick Reference Guide called "Programming Using a Codepad" to familiarise yourself with the basic programming methodology.

The Quick Reference Guide is supplied with the *Solution 6+6W* control panel to provide users with enough basic information to wire, configure and operate the system. Due to the systems many programmable features and options, we suggest that you obtain the complete Installation Manual which provides detailed information on all system options and functions as well as detailed information on the numerous programming methods.

Programming

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

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

There are two programming modes. The Installer's Programming Mode and the Operators Programming Mode. Both 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 Installer's Code only gives access to the Installer's Programming Mode and does NOT arm and disarm the system.

Programming of the *Solution 6+6W* 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)

Note: For further information on the different programming options available for the *Solution 6+6W* control panel, refer to the Installation Manual (MA670I).

Programming Using a Codepad

The system must be in a 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 **2580**.

To access the Installer's Programming Mode, enter the four digit INSTALLER CODE followed by the AWAY button. The factory default Installer Code is **1234**. Three 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 combination of the MAINS and ZONE indicators will indicate the data stored in the first location (LOCATION 000).

Data Value	Zone 1 LED	Zone 2 LED	Zone 3 LED	Zone 4 LED	Zone 5 LED	Zone 6 LED	Zone 7 LED	Zone 8 LED	Mains LED
1	✓								
2		✓							
3			✓						
4				✓					
5					✓				
6						✓			
7							✓		
8								✓	
9	✓							✓	
10									✓
11	✓								✓
12		✓							✓
13			✓						✓
14				✓					✓
15					✓				✓

Zone Indicators When Programming

Example

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 zone LED 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 followed by the STAY button. This will store the new data into the location and still leave you still 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 the command **960** followed by the AWAY button. Two beeps will be heard and the system will return to normal.

For a more detailed explanation, refer to the *Solution 6+6W*
Installation Manual (MA670I)

Note: The valid address range for a *Solution 6+6W* control panel is 000 to 213.

Quick Start

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

1.   Connect AC power to the unit.

The MAINS indicator will remain on as will the AWAY indicator. The unit is now in the armed state.

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

3.   Enter the default Master Code **2580** followed by the AWAY button. The AWAY indicator will extinguish. The panel is now in the disarmed state. Installer's Programming Mode can now be accessed.

4.   Enter the factory default Installer Code **1234** followed by the AWAY button. The STAY and AWAY LED's will now flash simultaneously.

5.   Enter the primary and secondary telephone numbers and the Subscriber ID Number.

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

7.   Enter command **960** followed by the AWAY button to exit Installer's Programming Mode. The panel will return to the unarmed state and is now ready for use.

8.   Using a Master Code set the date and time.
   - Enter MASTER CODE + **6** + AWAY .
   - Enter the day of the month, then the month, then the year, then the hour, then the minute using the format (DD, MM, YY, HH, MM).
   - Press the AWAY button when finished.

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

Zone No.	Zone Type
1	Delay
2 & 3	Handover
4 & 5	Instant
6	24 Hour

Note: **The example given in this Quick Reference Guide is a simplified description of how to configure the panel. The system offers many other programmable features which are described in detail in the** *Solution 6+6W* **Installation Manual (MA670I).**

Installer's Programming Commands

There are several commands that can be invoked to perform the functions as listed below. These commands only operate while you are in the Installers Programming Mode. To invoke the command, press in the corresponding numerical code then press the AWAY button.

Command	Function
958	Enable and Disable Zone Status Mode
959	Test Programming Key
960	Exit Installer's Programming Mode
961	Set Defaults For Contact ID Format (Factory Default Settings)
962	Copy The Panel Memory To The Programming Key
963	Copy The Programming Key Data To The Panel Memory
964	Wipe Programming Key
965	Set Defaults For Domestic Reporting
966	Enable and Disable Automatic Stepping of Locations During Programming
999	This Command Displays The *Solution* Panel's "Software Version" Number When Using An EDM Hand Held Programmer

Installers Programming Commands

Installer Code Functions

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

The INSTALLER CODE is entered followed by a FUNCTION digit then the AWAY button to enter you into a particular mode. If a button is not pressed within any sixty second period, the mode will automatically terminate.

INSTALLER CODE + FUNCTION + AWAY

These functions can only be carried out while the system is in a 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	Satellite Siren (EDMSAT) Service Mode
6	Initiate Modem Call
7	Turning Telephone Monitor Mode On and Off
8	*Reserved*
9	Send A Test Report

Installer Code Functions

Master Code Functions

Master Code Functions are designed to allow those users that have the appropriate access level to perform certain functions of a supervisory level. These functions can only be carried out while the system is in a disarmed state.

MASTER CODE + FUNCTION + AWAY

Function	Description
0	Arming and Disarming Both Areas At The Same Time
1	Changing and Deleting User Codes/Radio Remote User Codes
2	Changing Phone Numbers (Domestic Only)
3	Event Memory Recall
4	Walk Test Mode
5	Fault Analysis
6	Setting The Date and Time
7	Toggle Day Alarm On and Off
8	Reset Latched Outputs
9	Initiate Modem Call

Master Code Functions

Fault Analysis

There are various system faults that can be detected by the *Solution 6+6W* control panel. When any of these are present the FAULT indicator will begin to flash and the codepad will beep once every minute. Hold the 5 button down for two seconds until two beeps are heard. The STAY and AWAY indicators will begin to flash in unison with the FAULT indicator. One or more zone indicators (1-8) will illuminate to indicate the current fault. Refer to the following table for a list of fault types.

Zone Indicator	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

Fault Types

User Code Functions

USER CODE + FUNCTION + AWAY

Function	Description
0	Arming and Disarming Both Areas At The Same Time

Hold Down Functions

Hold Down Functions 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. These functions are listed below.

Function	Description
AWAY	Arm The System in AWAY Mode
STAY	Arm The System in STAY Mode
0	*Reserved*
1	Horn Speaker Test
2	Bell Test
3	Strobe Test
4	Toggle Day Alarm On and Off
5	Fault Analysis
6	Initiate a Modem Call
7	Reset Latching Outputs
8	Codepad ID Beeper Tone Change
9	Initiate a Test Report

Hold Down Functions

Each zone contains five locations. The first four locations determine how the zone operates, while the last location contains the dialler reporting information.

O   O   O   O   O
Type   *Option*   *Pulse*   *Time*   *Dialler*

Zone Types

There are fifteen different zone types to choose from. Each has the ability to be programmed as any of the types listed in the table below.

Type	Description	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
5	Reserved	13	24 Hour Fire
6	Instant + Isolated In STAY Mode	14	Chime Only (follow me)
7	Handover + Isolated In STAY Mode	15	Zone Not Used

Zone Options

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

Keyswitch Zone Options

Option	Description
1	Arm Only
2	Disarm Only
4	Enabled = Arm In STAY mode Disabled = Arm In AWAY mode
8	Enabled = Momentary operation Disabled = Toggle operation

Pulse Count Settings

The pulse count settings for each zone can be programmed between 0 - 15.

Pulse Count Time

Zone time is the time frame or period over which the number of pulses must register.

	20ms Loop Response Time		*150ms Loop Response 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

Zone Descriptions

Zone	Description	Tamper Zones Description
1		
2		
3		
4		
5		
6		

Location 00 - 15
Primary Telephone Number

| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Location 16 - 31
Secondary Telephone Number

| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Location 32 - 47
Callback Telephone Number

| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Location 48
Dialling Format

1 = Australian DTMF	4 = International DTMF
2 = Australian Decadic	5 = Reversed Decadic
3 = Alternate DTMF & Decadic (Aus.)	6 = Alternate DTMF & Reverse Decadic

`1`

Location 49
Handshake Tone

1 = Hi-Lo Handshake (Contact ID)	4 = No Handshake Required
2 = 1400 Hz (Ademco TX @ 1900 Hz)	5 = Pager
3 = 2300 Hz (Sescoa TX @ 1800 Hz)	

`1`

Location 50
Transmission Format

1 = Contact ID	6 = Reserved	11 = Domestic
2 = Reserved	7 = Reserved	12 = Basic Pager
3 = Reserved	8 = Reserved	13 = Reserved
4 = Reserved	9 = Reserved	14 = Reserved
5 = Reserved	10 = Reserved	15 = Reserved

`1`

Location 51
Reserved

`0`

Location 52 - 55
Subscriber ID Number

| 0 | 0 | 0 | 0 |

Location 56 - 59
Installer Code

| 1 | 2 | 3 | 4 |

Location 60
Ring Count

15 = Answering Machine Bypass 1

14 = Answering Machine Bypass 2

`8`

Location 61 - 100
User Codes

User Code #1	Location 61 - 65			User Code #2	Location 66 - 70

| 2 | 5 | 8 | 0 | | 8 |

| 15 | 15 | 15 | 15 | | 0 |

User Code #3	Location 71 - 75	User Code #4	Location 76 - 80	User Code #5	Location 81 - 85

| 15 | 15 | 15 | 15 | | 0 |

| 15 | 15 | 15 | 15 | | 0 |

| 15 | 15 | 15 | 15 | | 0 |

User Code #6	Location 86 - 90	User Code #7	Location 91 - 95	User Code #8	Location 96 - 100

| 15 | 15 | 15 | 15 | | 0 |

| 15 | 15 | 15 | 15 | | 0 |

| 0 | 15 | 15 | 15 | | 1 |

Location 101
Day Alarm Mask

1 = Zone 1
2 = Zone 2
4 = Zone 3
8 = Zone 4

`1`

Location 102
Code Retries

`6`

Location 103
EOL Resistor Value

1 = 1KW	5 = 3K9W	9 = 10KW	13 = Reserved
2 = 1K5W	6 = 4K7W	10 = 12KW	14 = Reserved
3 = 2K2W	7 = 5K6W	11 = 22KW	15 = Split EOL For 6 Tampers
4 = 3K3W	8 = 6K8W	12 = Reserved	

`4`

Location 104 - 133
Zones

Zone #1	*Location 104 - 108*	Zone #3	*Location 114 - 118*	Zone #5	*Location 124 - 128*
	2 0 0 0 3		1 0 0 0 3		0 0 0 0 3

Zone #2	*Location 109 - 113*	Zone #4	*Location 119 - 123*	Zone #6	*Location 129 - 133*
	1 0 0 0 3		0 0 0 0 3		12 0 0 0 3

Type	Option	Pulse	Time	Report Option

Report Option

1 = Enable Alarm Report   4 = Reserved
2 = Enable Restore Report   8 = Reserved

Location 134
Report Options 1

1 = Enable Bypass Reports
2 = Enable Bypass Restore Reports
4 = Enable Trouble Reports
8 = Enable Trouble Restore Reports

`15`

Location 135
Report Options 2

1 = Enable Duress Reports
2 = Enable Panic, Medical and Fire Reports
4 = Enable Access Denied Reports
8 = Enable Test Reports

`15`

Location 136
Report Options 3

1 = Enable AC Fail Report
2 = Enable Low Battery Reports
4 = Enable Sensor Watch Reports
8 = Enable Opening/Closing Reports

`15`

Location 137 - 139
Test Reporting Time (Repeat Days, Hours Tens, Hours Units)

`0  0  0`

Location 140 - 163
Output Configurations

Output #1	*Location 140- 145*	Strobe	*Location 146 - 151*
	1 14 0 0 0 0		2 0 1 0 0 0

Relay	*Location 152 - 157*	Console	*Location 158 - 163*
	1 15 1 0 0 0		0 12 2 1 0 1

Event Type (when)	Polarity (how)	Time (base)	Time (multiplier)

Location 164 - 165
Entry Timer 1 (Seconds, 16 Seconds)

`10  0`

Location 166 - 167
Entry Timer 2 (Seconds, 16 Seconds)

`4  1`

Location 168 - 169
Exit Timer (Seconds, 16 Seconds)

`12  3`

Location 170 - 171
Entry Guard Timer (Seconds, 16 Seconds) | 12 | 3 |

Location 172 - 173
Sensor Watch Time (Days) | 0 | 0 |

Location 174
Codepad Lockout Time (10 Second) | 0 |

Location 175
Siren Run Time (Minutes) | 10 |

Location 176
Siren Sound Rate (Slow <-Sound-> Fast) | 7 |

Location 177
Swinger Shutdown Count | 0 |

Location 178
Dialler Options 1

1 = Enable Dialler Reporting Functions
2 = Enable Remote Arming Via The Telephone
4 = Enable Upload/Download Via EDM Alarm Link Software (CC816)
8 = Terminate "Alarm Link" Session On Alarm | 5 |

Location 179
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 Is Complete | 0 |

Location 180
System Options 1

1 = Enable Forced Arming
2 = Enable EDM Smart Lockout
4 = Enable Monitoring Of Horn Speaker
8 = Allow Horn Speaker Beeps For Radio Remote Control Operation | 1 |

Location 181
System Options 2

1 = Enable EDM Radio Key/Keyswitch Interface or EDM Night Arm Station
2 = Enable Handover Delay To Be Sequential
4 = Enable Codepad Panic To Be Silent
8 = Enable Access Denied To Be Silent | 2 |

Location 182
System Options 3

1 = Enable Main Codepad To Display Data For Area #1
2 = Enable Resetting Of Sirens From Both Areas
4 = Ignore AC Fail
8 = Enable Handover Of Zone Pulse Count | 0 |

Location 183
System Options 4

1 = Enable AC Fail In 1 hour
2 = Extend Time To Wait For Handshake From 30 Seconds To 1 Minute
4 = Enable Control Panel To Power Up In The Disarmed State
8 = Reserved | 0 |

Location 184
Consumer Options 1

1 = Send Test Reports Only When The System Is Armed
2 = Enable Operation Of Siren & Strobe In STAY Mode
4 = Enable Answering Machine Bypass To Work Only When The System Is Armed
8 = Enable Codepad Extinguish Mode | 2 |

Location 185
Consumer Options 2

1 = Enable "User Code + 0 + AWAY" Function To Arm/Disarm BOTH Areas At Same Time
2 = Enable Single Button Arming in Away and Stay mode
4 = Enable Single Button Disarming from Stay mode
8 = Enable Alarm Memory Reset on disarm | 0 |

Location 186 - 191
Area 1 Zone Allocations | 0 | 0 | 0 | 0 | 0 | 0 |

Location 192 - 197
Area 2 Zone Allocations | 0 | 0 | 0 | 0 | 0 | 0 |

Location 198 - 205
Area/User Allocations

Location 198	*Location 199*	*Location 200*	*Location 201*
Areas for User # 1	0	*Areas for User # 2*	0	*Areas for User # 3*	0	*Areas for User # 4*	0

Location 202	*Location 203*	*Location 204*	*Location 205*
Areas for User # 5	0	*Areas for User # 6*	0	*Areas for User # 7*	0	*Areas for User # 8*	0

Location 206 - 213
Radio User Allocations

Location 206	*Location 207*	*Location 208*	*Location 209*
Radio User # 9	0	*Radio User # 10*	0	*Radio User # 11*	0	*Radio User # 12*	0

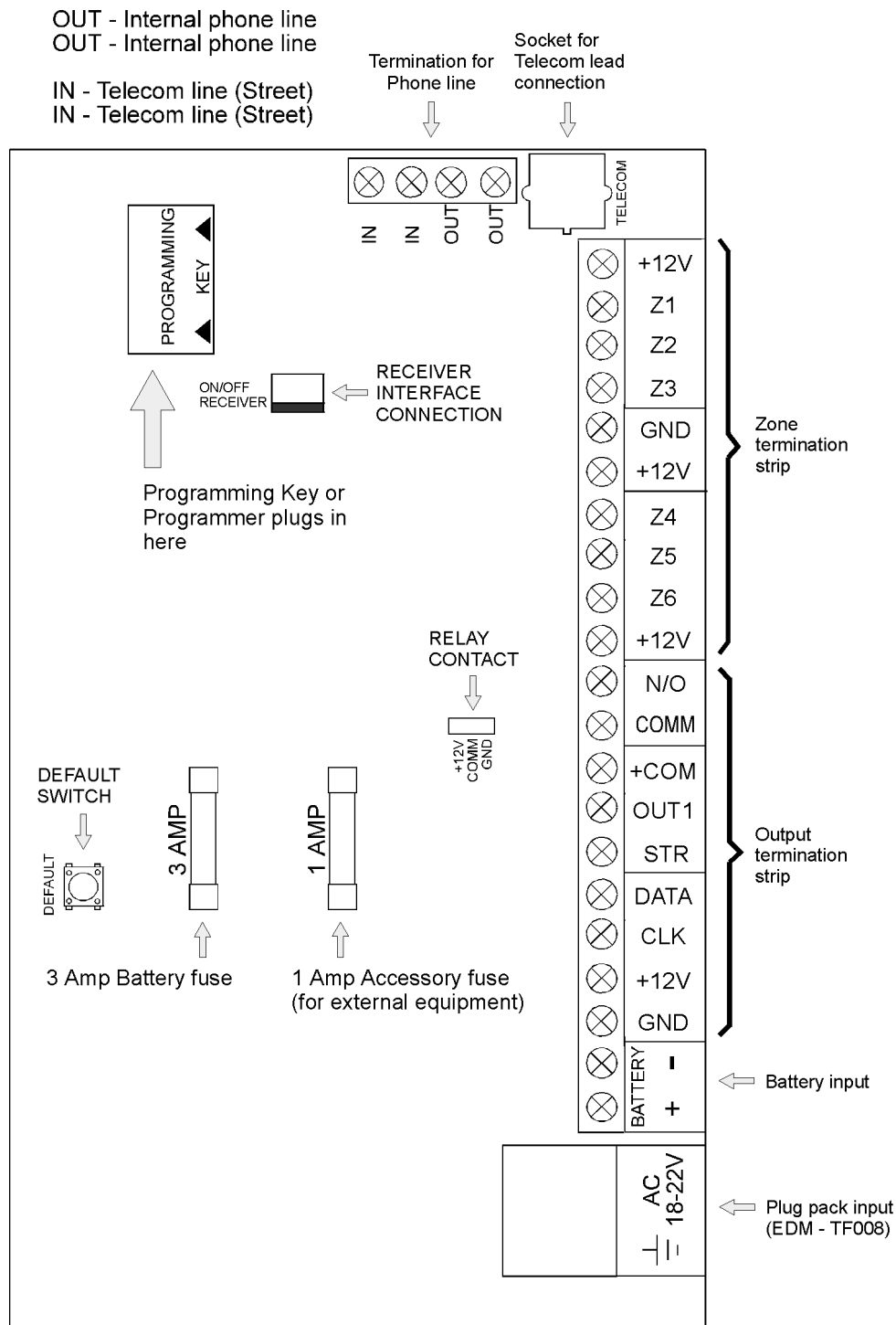| *Location 210*	*Location 211*	*Location 212*	*Location 213*
Radio User # 13	0	*Radio User # 14*	0	*Radio User # 15*	0	*Radio User # 16*	0

Location 900
Disable Factory Default   *0 = Defaulting Enabled* | 0 |
                              15 = Defaulting Disabled

Wiring Diagram

605 Plug

1. (Green) Internal phone line
5. (Yellow) Internal phone line

2. (Black) Telecom line (Street)
6. (Red) Telecom line (Street)

3&4. Not used.

TELECOM

+12V
Z1
Z2
Z3
GND
+12V
Z4
Z5
Z6
+12V
N/O
COMM
+COM
OUT1
STR
DATA
CLK
+12V
GND
BATTERY —
BATTERY +
AC 18-22V

Solution 6+6W

LINK BETWEEN
+12V AND COMM

+12V
COMM
GND

N/O
N/O
N/O
3K3 EOL
N/C
EOL
N/C
EOL
N/C

Power to external equipment: 12v 1amp

N/O EOL N/C
N/O EOL N/C
N/O EOL N/C
3K3 N/C

PIR

PIEZO SIREN

STROBE
— +

HORN
SPEAKER

YELLOW
GREEN
RED
BLACK

CODEPAD

— BATTERY +

Yellow
Yellow
Green

PLUG PACK
18-22 VAC

Component Overlay

OUT - Internal phone line
OUT - Internal phone line

IN - Telecom line (Street)
IN - Telecom line (Street)

Termination for
Phone line

Socket for
Telecom lead
connection

PROGRAMMING KEY

ON/OFF RECEIVER

RECEIVER INTERFACE CONNECTION

Programming Key or
Programmer plugs in
here

DEFAULT SWITCH

DEFAULT

3 AMP

1 AMP

3 Amp Battery fuse

1 Amp Accessory fuse
(for external equipment)

RELAY CONTACT

+12V
COMM
GND

TELECOM

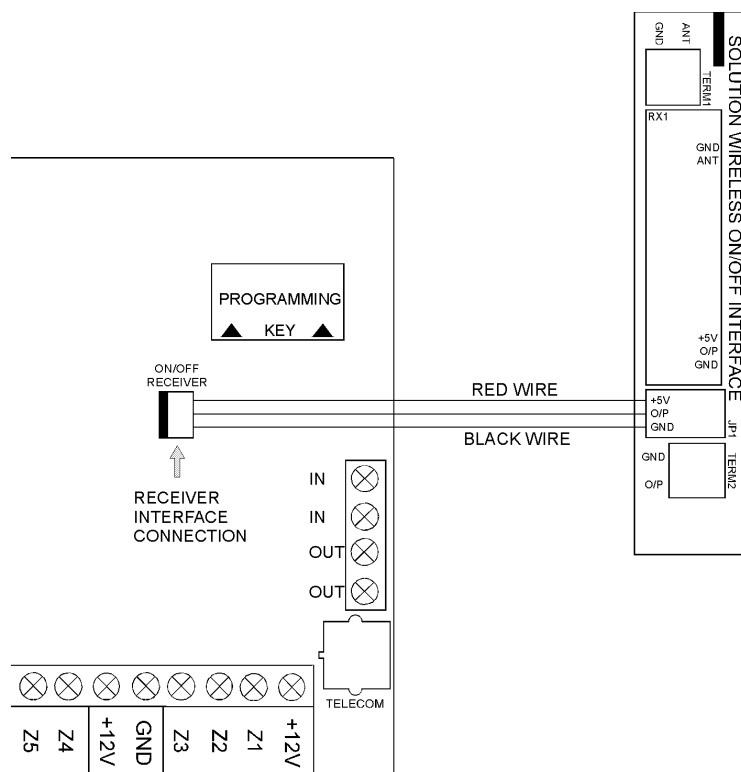|	
+12V	
Z1	
Z2	
Z3	
GND	Zone termination strip
+12V	
Z4	
Z5	
Z6	
+12V	
N/O	
COMM	
+COM	
OUT1	Output termination strip
STR	
DATA	
CLK	
+12V	
GND	
BATTERY −	Battery input
+	

AC 18-22V

Plug pack input
(EDM - TF008)

Wireless ON/OFF Interface

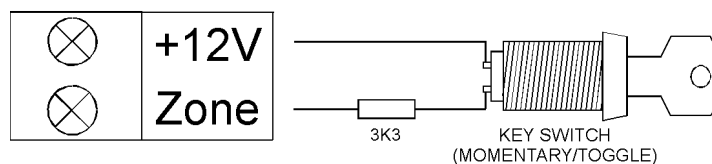## Wiring Diagrams for Keyswitch Zones
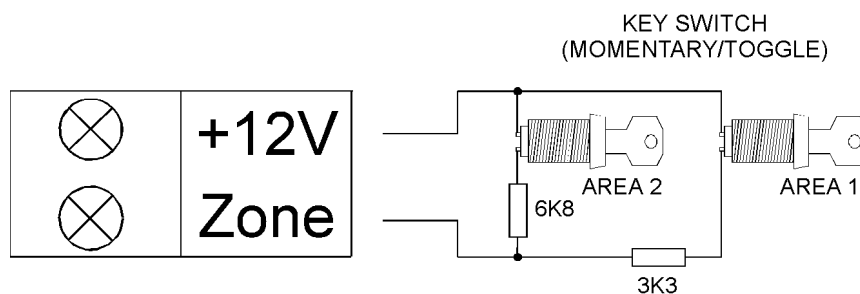

Figure 1: Wiring Diagram for Keyswitch Zone

Figure 2: Wiring Diagram for Keyswitch Zone in Partitioning

Note 1: When choosing an EOL resistor value other than the default 3K3 for a non-partitioned system, the keyswitch zone must still use a 3K3 EOL resistor as shown in "Figure 1". The keyswitch zone will not operate with any other resistor value.

Note 2: When using a keyswitch zone in partitioning, to enable arming/disarming of area 2, there is no need to enable split EOL resistors when not using tamper zones. Simply wire the zone as shown in "Figure 2".
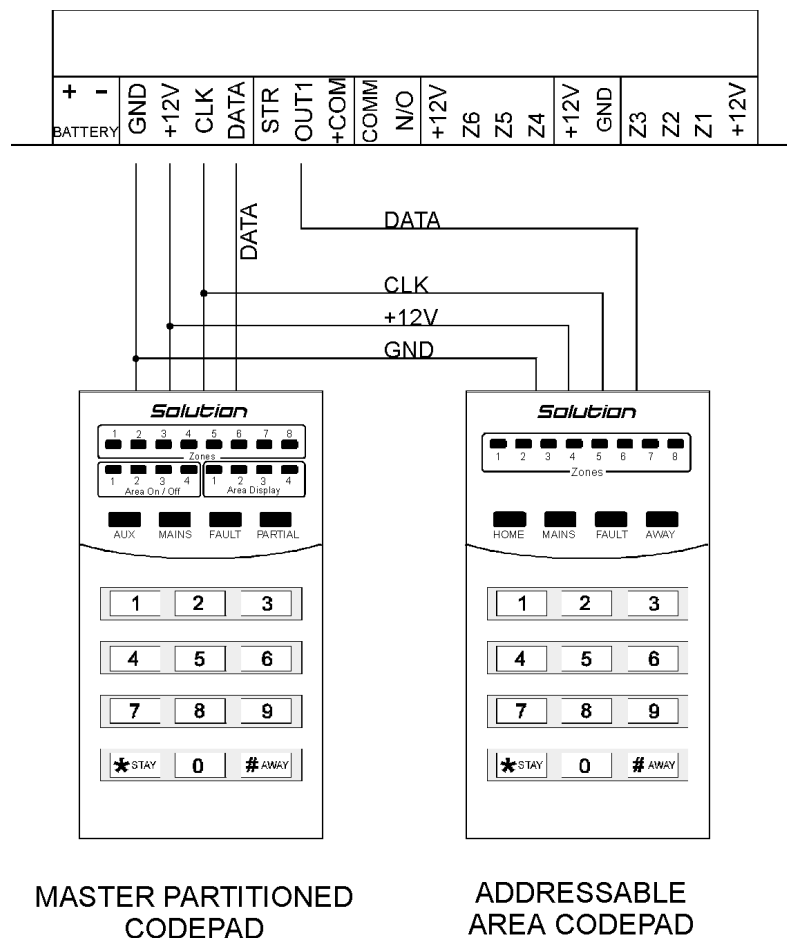

Connections Of Split EOL Resistors For Tamper Operation

Normal/Tamper zone
(3K3/6K8) configuration
using N/C switches.
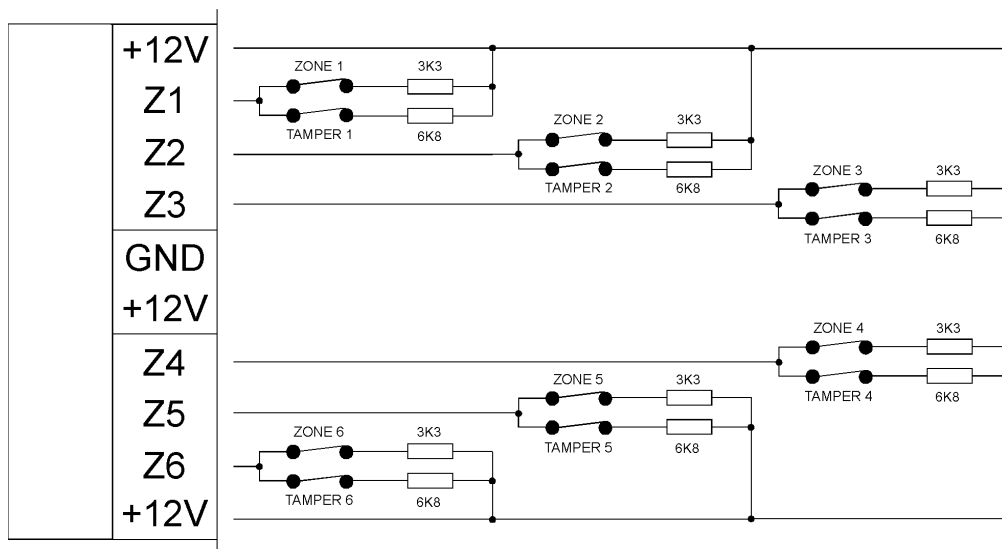
If N/O switches are used both
zones will trip if either of the
N/O switches are closed

Codepad Connections For Partitioned Systems

MASTER PARTITIONED CODEPAD

ADDRESSABLE AREA CODEPAD

If the "Area Addressable" 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 140 = 6, 141 = 0]

If the "Area Addressable" 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 140 = 6, 141 = 1]

AREA 1
CODEPAD

AREA 2
CODEPAD
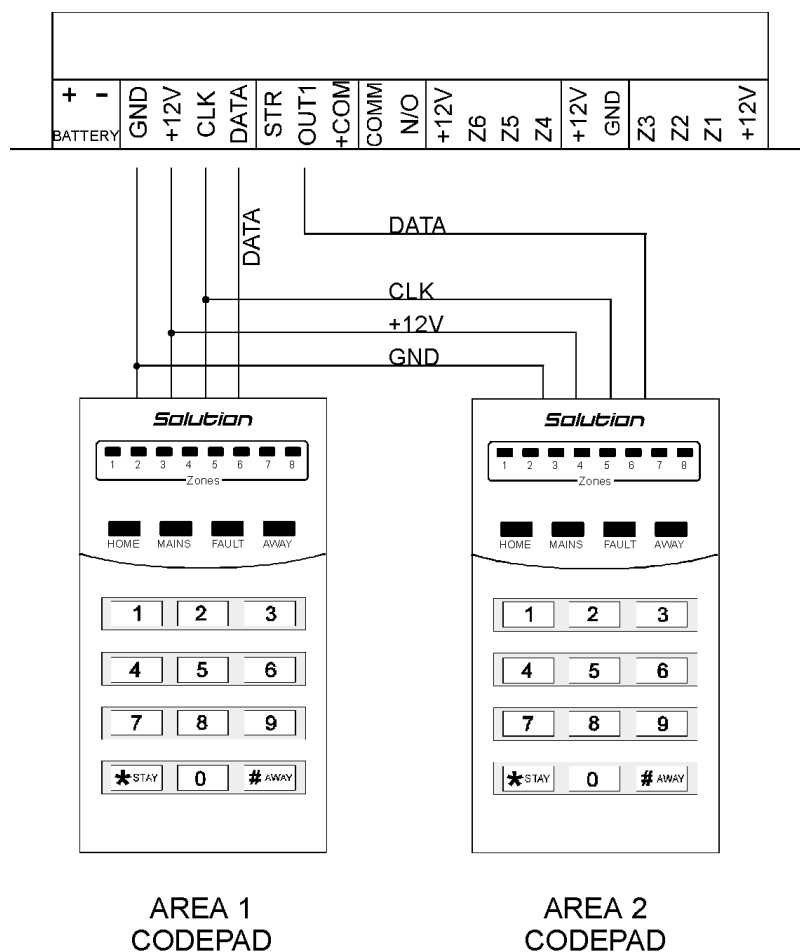
The following DIP Switch settings and locations must be programmed for the two "Area Addressable" codepads to function correctly.

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 182, 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 location will also need to be programmed.
[LOCATION 140 = 6, 141 = 1]

Dear Customer

This Quick Reference Guide is supplied as a very limited document intended only to provide basic installer information. With this information you should be able to make the equipment operational in its simplest form provided you already have a basic understanding of the product. Installers who intend to make repeated installations are urged to purchase the full 200+ page installation manual which contains a wealth of information, diagrams and details the many outstanding features and benefits of the product.

Due to the size of this manual it is no longer practical for it to be included with every panel purchase. The cold hard facts are if the installation manual were to be included then the basic panel purchase price would increase to cover the extra costs.

The savings in panel costs will be multiplied with every new purchase and the benefits of having a detailed reference manual will save you countless dollars during your installation and service activities. Our environment also benefits from this policy as many installers would simply discard the surplus manuals. The cost of their disposal to the community, the trees required to produce the manuals in the first place and even the increased packaging costs all of which you the customer would be paying for.

Our surveys have found that 95% of installers are repeat product users and that there is nothing to be gained by having to pay for a manual with every panel. Instead we have made the installation manual a tool which is tax free to purchase and 100% tax deductable as a cost incurred in earning income.

It is obvious that the advantages of one manual for one installer greatly outweigh the disadvantages of not supplying an installation manual with every panel. I hope that this brief explanation shows that our intent is to save you money while still maintaining a superior standard of technical documentation.

Yours Sincerely

Meinrad Formosa

Managing Director