

Solution 16^{plus}



Security Systems

EN

Quick Start Guide
Security System

BOSCH

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Warnings

- 1) This product must be installed by a qualified and licensed security installer.
- 2) This product may not perform as expected if installed incorrectly.
- 3) Some features of this product require a working telephone line to operate and telephone communication service provider charges are applicable.
- 4) Australian standard AS 2201 requires regular service by qualified and licensed security persons and regular user testing. Please consult your security alarm company for further details.
- 5) Incorrect programming of parameters can result in operation contrary to what may be desired.
- 6) Leave the mains adapter plugged in at all times.
- 7) Leave the telephone line plugged in at all times under normal conditions.

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Features

Listed below are the main features of the Solution 16^{plus} Control Panel.

- ❖ Individual Box Tamper Circuit Monitoring
- ❖ Report Via Email (Internet)
- ❖ Telephone Line Busy Tone Detect
- ❖ RAS Intelli-connect® CLI Caller Line Identification
- ❖ Daylight Savings
- ❖ Senior Watch
- ❖ System Maintenance Interval Reminder
- ❖ System Weekly Test Reminder
- ❖ Area Inactivity Interval
- ❖ Temporary Pin Code
- ❖ Dual Reporting
- ❖ Dual Redundant Reporting
- ❖ Alarm Report Abort/cancel Options
- ❖ 8 Programmable Holiday Calendars
- ❖ 8 Programmable Schedules
- ❖ 16 fully programmable Zones
- ❖ Fire Alarm Verification
- ❖ 48 Pin Codes
- ❖ 3 Supervised High Power Digital Outputs
- ❖ 1 Relay 2 Amp Form (C) Contact (Expandable to 13)
- ❖ Supervised Siren Driver
- ❖ Partitionable To 8 Areas
- ❖ Dialler Reports SIA, Contact ID, SMS and Email Formats
- ❖ Supervised LAN Keypads (Maximum 8 Keypads)
- ❖ Keyswitch Input
- ❖ 256 History Event Memory
- ❖ EMI / Lightning Transient Protection
- ❖ Fully Menu Text Programmable
- ❖ Programmable Via Solution Link Software (Remote/Direct)
- ❖ Telephone Line Fail Monitor
- ❖ Time Executed Functions
- ❖ 60 Output Event Types
- ❖ Exit Restart
- ❖ Expansion Module Supervision
- ❖ DTMF Tone Decoder Built In
- ❖ Remote Arming

Overview

Zones

The Solution 16^{plus} control panel provides up to 16 separate zones of protection. Zone programming determines the panel's response to open/short and tamper conditions on the zone loop.

Areas

The control panel supports up to 4 separate areas. You can assign all zones to a single area, or you can assign each zone to a combination of different areas.

You can arm and disarm the control panel by area, alternatively, you can arm and disarm several areas at the same time.

Dialler

The control panel has a built-in dialler to send reports to the receiving party (ie. Security company monitoring station, mobile phone etc).

Keypads

You can connect a maximum of 8 fully supervised keypads to the control panel. The available current affects the total number of keypads that you can connect without the need to provide additional power supplies.

History Log

The control panel can store up to 256 history events from all 8 areas. All events are stored in the log, even if they are programmed not to report via the on-board dialler.

You can view the control panel's history log via keypad, serial printer (optional), or by connection of a personal computer (direct/remote) using the SolutionLink upload/download software.

Programming

You can program the Solution 16^{plus} either by a keypad or using a personal computer using the Solution Link upload/download software.

About The Panel

Mounting The Cabinet

The cabinet should be mounted via 4 (screws/bolts) through the 4 mounting holes in the base. Ensure that the enclosure is mounted on a solid, flat, vertical surface such that the base will not flex when tightened. Cabinet dimensions are shown below.

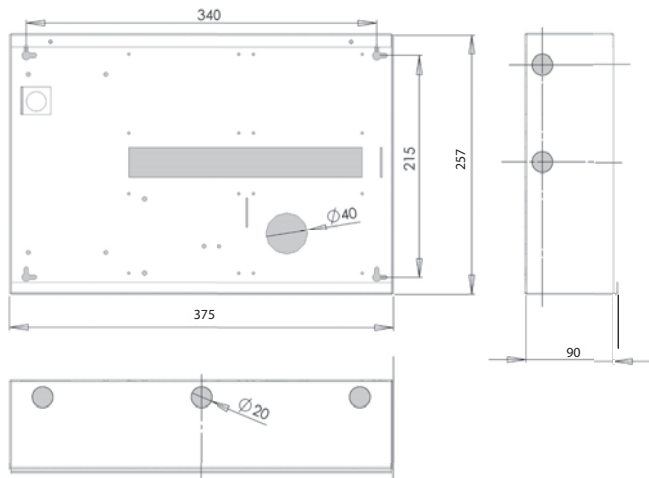


Figure 1 : Cabinet Dimensions

Module Spaces

Each cabinet has 4 identical module spaces and 1 large module space that is allocated for non Solution PCB boards (eg. a securitel STU).

Each space includes 4 x 10mm stand-offs that the optional expander PCB boards will mount using screws (screws will be supplied with each board). The expander board will be earthed via the screws that mount the PCB to the metal box.

All modules will mount on these module spaces. A list of the PCB boards is detailed below

Module	Space Occupied
Solution 16 ^{plus} Control Panel	2 Module Spaces
CM104 Zone Expander	1 Module Space
CM110 Output Expander	1 Module Space
CM120 LAN Power Supply	1 Module Space
CM195 RF Receiver Expander	1 Module Space

Using the above table, the installer can determine how many modules can be mounted in a single cabinet box. On some export models, module 3 will not be available as the transformer mounts in this location.

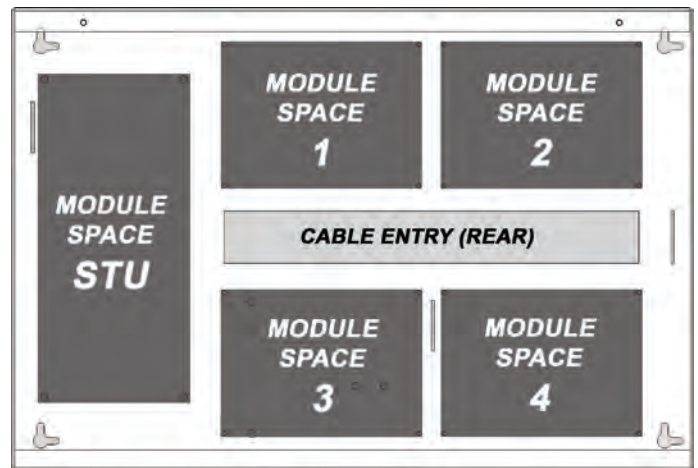


Figure 2: Metal Box – Module Space Allocations

Panel Led Indicators

The Solution 16^{plus} PCB has two LED indicators (Dialler and Status LED's) which display the following information.

Condition	Meaning
Off	Offline
On	On Line (Dialling/Answered)
Flashing	Incoming Call

Table 1: Dialler LED Meanings

Condition	Meaning
Off	Error
On	Error
Flash Once Every 2 Seconds	OK
Flash Fast	AC or Battery Trouble

Table 2: Status LED Meanings



During factory defaulting the Status and Dialler LED indicators will be on steady for approximately 15 seconds.

Panel Address Select

The Solution 16^{plus} pcb has three DIP switches (called Panel Node Select) that must be set. In a multi-panel system, each control panel (Node) must be set to a unique address.

Panel NODE Select DIP Switch Address Settings			
Panel to Address	S1	S2	S3
Panel 1	Off	Off	Off
Panel 2	On	Off	Off
Panel 3	Off	On	Off
Panel 4	On	On	Off
Panel 5	Off	Off	On
Panel 6	On	Off	On
Panel 7	Off	On	On
Panel 8	On	On	On

Table 3: Panel Node Select



The node switch should be left at Panel 1 position for Solution 16^{plus}. OFF-OFF-OFF. On later versions this switch may have been omitted. This is not a fault.

Wiring Diagrams

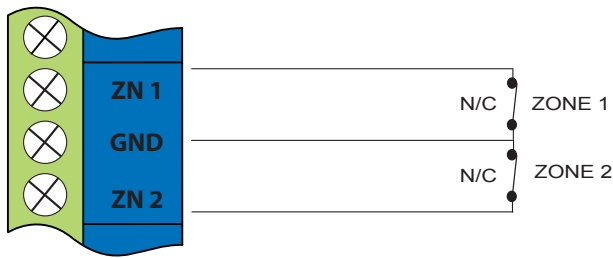


Figure 3: N/C No EOL Zone

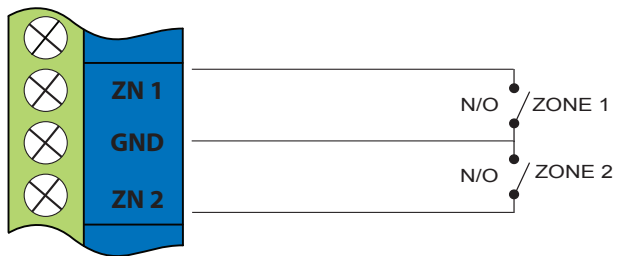


Figure 7: N/O No EOL Zone

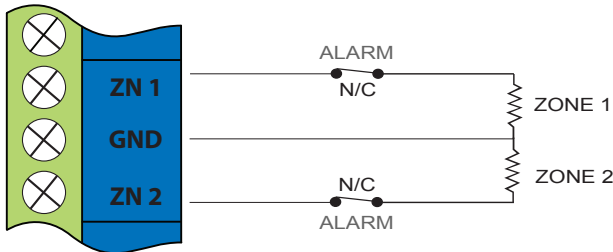


Figure 4: N/C Single EOL Zone

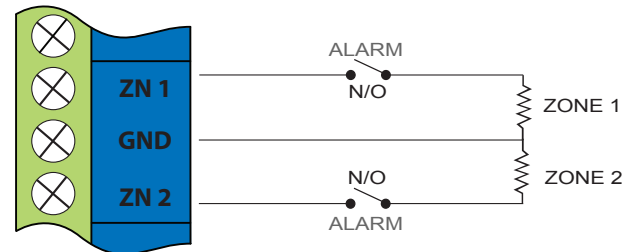


Figure 8: N/O Single EOL Zone

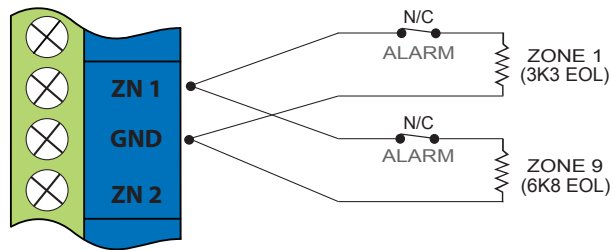


Figure 5: N/C Split EOL Zone

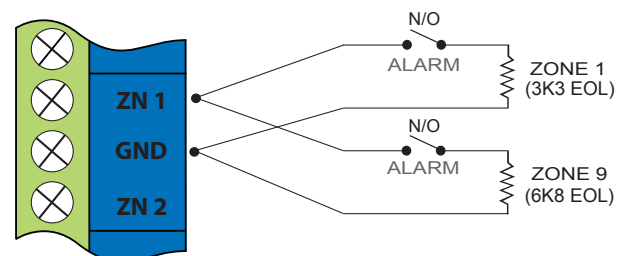


Figure 9: N/O Split EOL Zone

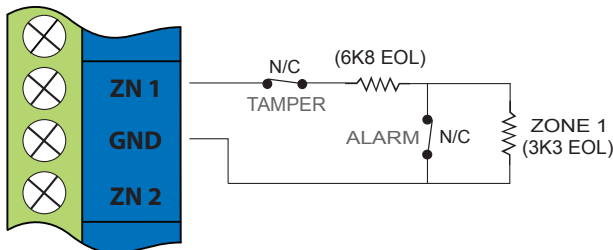


Figure 6: N/C Zone With Tamper

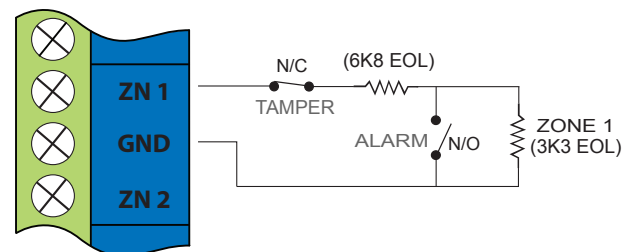


Figure 10: N/O Zone With Tamper



The Above diagrams display zone configurations using Normally-Closed Alarm contacts and Normally-Open Alarm Contacts. When using Normally-Open Alarm Contacts you must select Inverted Seal for each zone in MENU 3-1-8. A shorted loop is a tamper condition for all EOL zone configurations.

EOL Resistor Colour Code (4 Band)

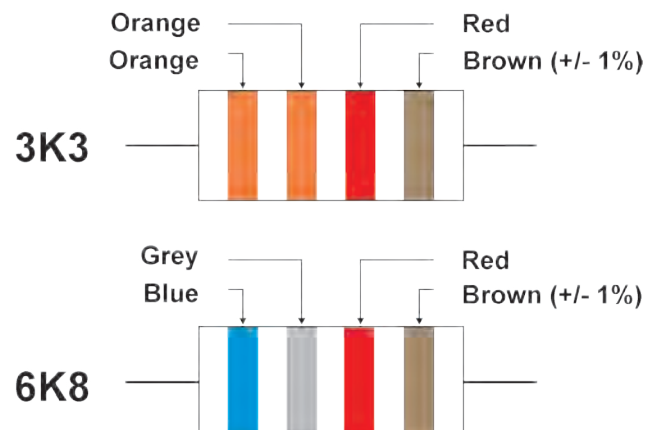
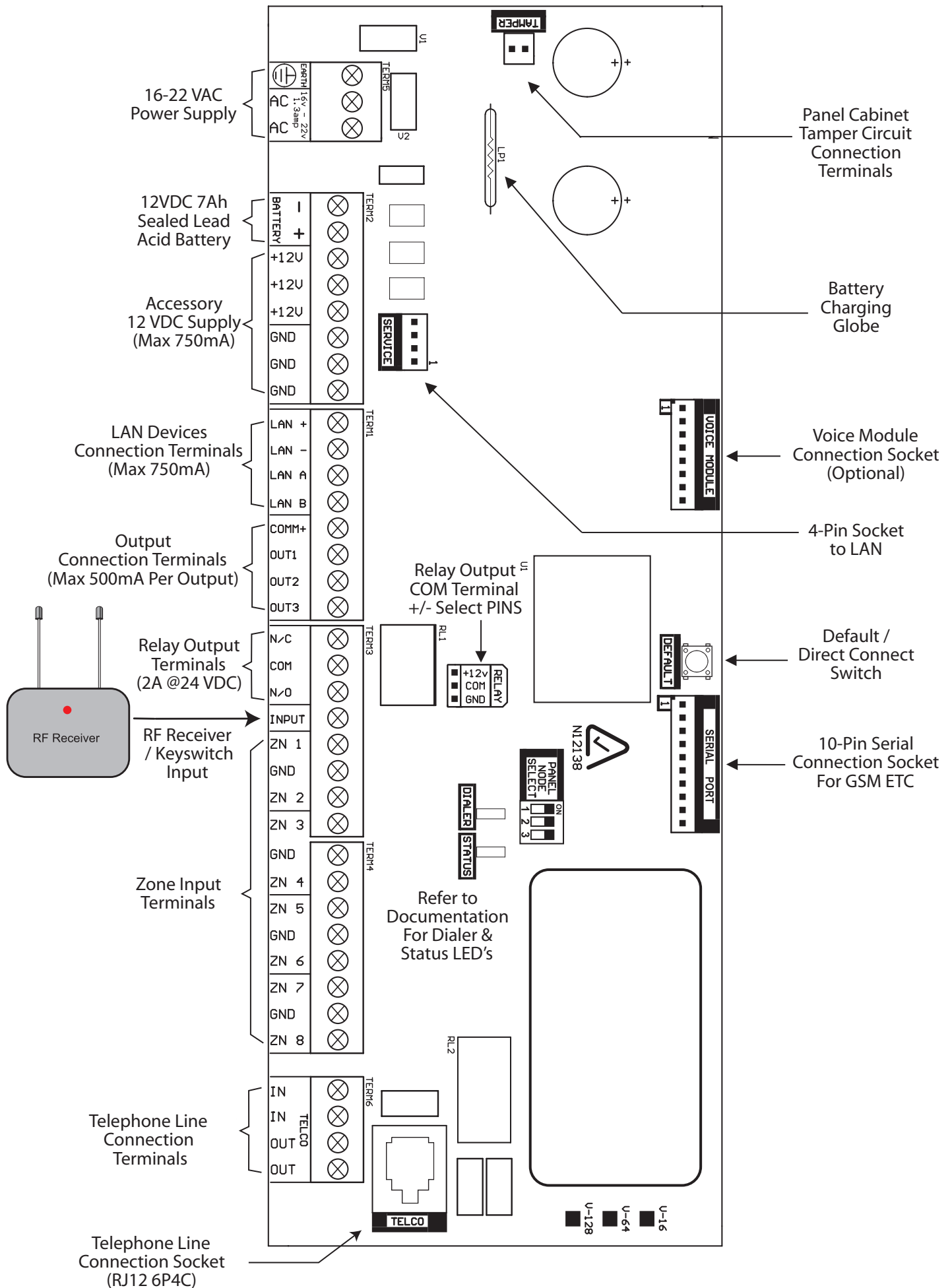


Figure 11: EOL Resistor Colour Chart



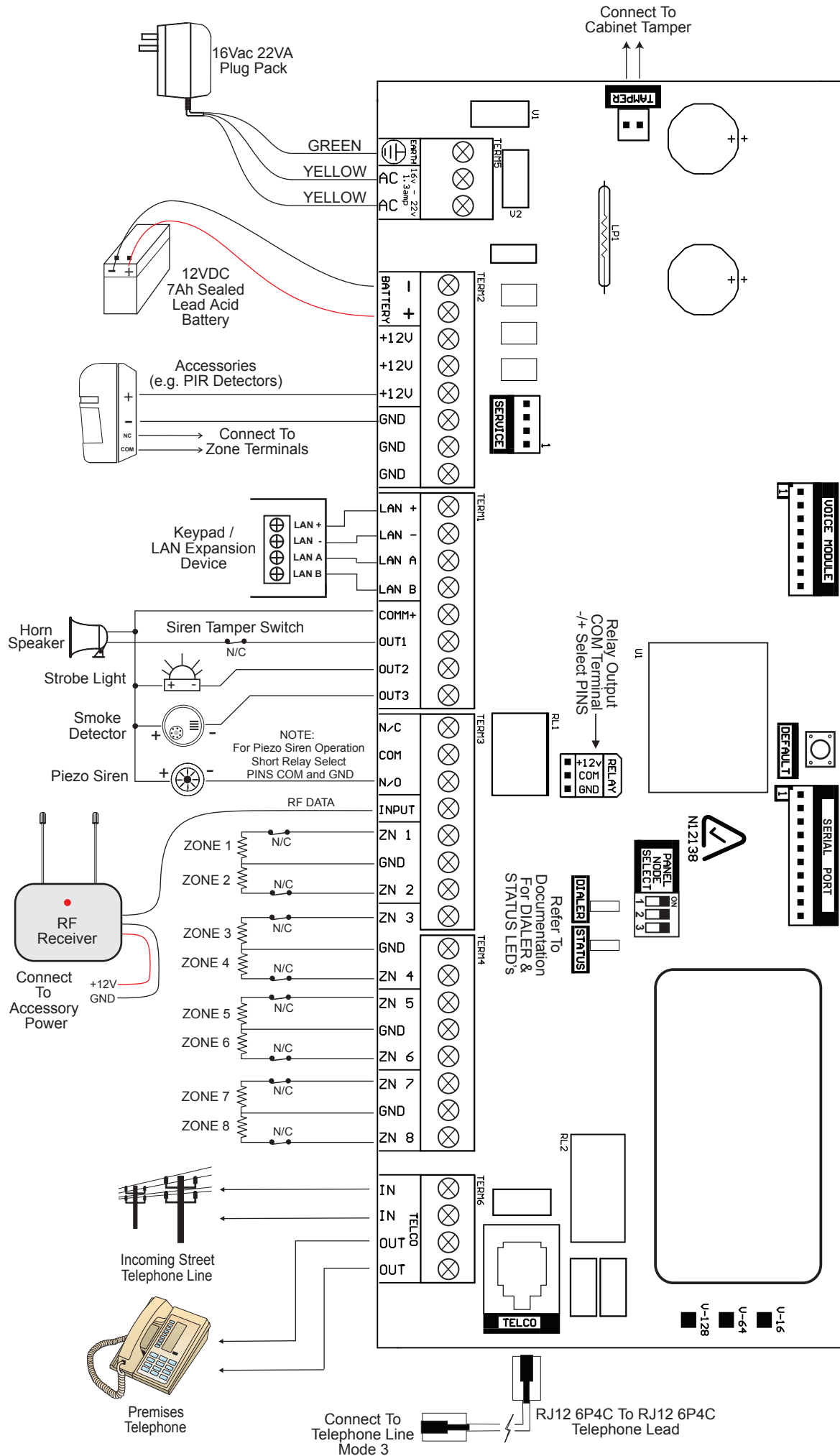


Figure 13: Solution 16^{plus} Connection Diagram

Terminal Descriptions

Nº	Name	Description
1	Earth	Earth wire from this terminal is connected to the Mains earth.
2	~ (AC)	Connection of the A.C. plug pack transformer
3	~ (AC)	
4	BAT (-)	Negative and positive connections to the stand-by battery. 12 VDC / 7AH
5	BAT (+)	
6	+12V	These terminals are used to power detectors and LAN devices up to 750 mA.
7	+12V	
8	+12V	
9	GND	
10	GND	
11	GND	
12	LAN +	These terminals are used to power LAN devices up to 750 mA.
13	LAN -	
14	LAN A	Connect the LAN A data terminal of any LAN device (eg. Keypads, expansion boards) to this terminal. The control panel supports up to 300 m of 24/0.20 (18 AWG) wire on these terminals.
15	LAN B	Connect the LAN B data terminal of any LAN device (eg. Keypads, expansion boards) to this terminal. The control panel supports up to 300 m of 24/0.20 (18 AWG) wire on these terminals.
16	COMM+	Alarm power capable of providing a maximum of 2 Amp (+). This terminal is PTC Fuse protected.
17	OUT 1	Programmable output, capable of providing a maximum of 500 mA (-). This terminal is PTC Fuse protected.
18	OUT 2	
19	OUT 3	
20	N/C	2 A @ 24 VDC Relay Output - Form C contact
21	COM	
22	N/O	
23	INPUT	Programmable Input for RF Receivers, Keyswitch and other devices.
24	ZN 1	Zone 1 and 9 sensor loop input (+).
25	GND	Common (-) for Zone 1 and 2 sensor loop.
26	ZN 2	Zone 2 and 10 sensor loop input (+).
27	ZN 3	Zone 3 and 11 sensor loop input (+).
28	GND	Common (-) for Zone 3 and 4 sensor loop.
29	ZN 4	Zone 4 and 12 sensor loop input (+).
30	ZN 5	Zone 5 and 13 sensor loop input (+).
31	GND	Common (-) for Zone 5 and 6 sensor loop.

Nº	Name	Description
32	ZN 6	Zone 6 and 14 sensor loop input (+).
33	ZN 7	Zone 7 and 15 sensor loop input (+).
34	GND	Common (-) for Zone 7 and 8 sensor loop.
35	ZN 8	Zone 8 and 16 sensor loop input (+).
36	IN	These terminals are used to connect the telephone line from the street.
37	IN	
38	OUT	These terminals are used to connect the premises telephones.
39	OUT	

Table 4: Terminal Block Descriptions

Board Connectors

Connector	Description
Service	This socket allow you to connect a service Keypad to the panel during installation.
Tamper	This socket is used to connect the panel enclosure tamper switch.
Default	This push button is used to reset the control panel back to factory default.
Voice Module	This is used to connect the optional Voice Command Module (CM100).
Serial	This socket is used to connect serial devices to the control system like the direct link programming module.
Telco	This is a RJ12 6P/4C connector that allows you to connect the control panel to the PSTN telephone line.
Relay	The relay select PIN's allow you to easily program the relay common contact to switch either +12v or GND by fitting a plug on link.

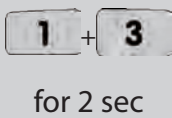
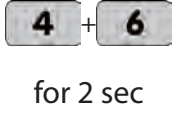
Table 5: Board Connector Descriptions

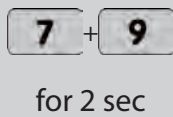
About The Keypad

The Graphic Keypad has 20 keys or buttons. The buttons allow you to input instructions and navigate the menu screens as required. Some buttons have a secondary function which is activated by holding them down for two seconds. Each button's function is described below

Keypad Key Functions

Key	Description
	The numeric keys allow you to enter you numbers when required
	Use the [MENU] and the numeric keys to enter commands. The [MENU] key is also used to go back one level when navigating through menus or to exit a programming location without saving changes.

Key	Description
	The [ON] key allows you to turn an area or output on. To turn all areas on at the same time when the system has been partitioned, press and hold the [ON] key for two seconds.
	The [PART] key allows you to turn an area Part On. This key can also be used to bypass a zone or multiple zones when you press and hold for two seconds.
	The [OFF] key allows you to turn an area or output off. To turn all areas off at the same time when the system had been partitioned, press and hold the [OFF] key for two seconds.
	The [OK] key allows you to save any changes and exit the command.
	The [MAIL] key allows you to read stored mail. This key can also be used to initiate a dialler test when you press and hold for two seconds.
	The [←] key allows you to move the cursor left when programming text or telephone numbers.
	The [→] key allows you to move the cursor right when programming text or telephone numbers.
	The [↑] key allows you to navigate through menus or to toggle characters when programming telephone numbers.
	The [↓] key allows you to navigate through menus or to toggle characters when programming telephone numbers. Pressing The [↓] key will display current trouble conditions when the area that the keypad is displaying is disarmed.
	Pressing the 1 and 3 keys together and holding them down for 2 seconds will cause a Panic alarm to be triggered. If programmed the sirens will sound and the monitoring station will be notified.
	Pressing the 4 and 6 keys together and holding them down for 2 seconds will cause a Fire alarm to be triggered. If programmed the sirens will sound and the monitoring station will be notified.

Key	Description
	Pressing the 7 and 9 keys together and holding them down for 2 seconds will cause a Medical alarm to be triggered. If programmed the sirens will sound and the monitoring station will be notified.

Keypad Setup

The Solution 16^{plus} control panel can have a maximum of 8 keypads connected via the LAN terminals. Each keypad must be set to a unique address before they will operate.

Each keypad needs to be assigned to a home area via MENU 6-1-3. This sets the area the keypad will display and control by default. Keypads can be locked to a home area or allowed to roam or move between areas.

When the system is powered up, any keypads which have not been assigned a home area will be automatically set to home area 1.

Set each keypad address using the table below as a guide.



Only 1 Keypad can be assigned to each address. All Keypads are supplied from the factory set to address 1. (OFF-OFF-OFF).

Keypad Address Select

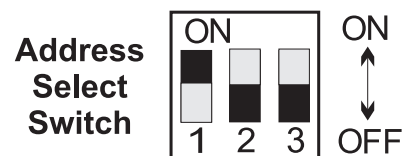


Figure 14: Keypad DIP Switch Address Settings

Keypad DIP Switch Address Settings			
Keypad To Address	S1	S2	S3
Keypad 1	Off	Off	Off
Keypad 2	On	Off	Off
Keypad 3	Off	On	Off
Keypad 4	On	On	Off
Keypad 5	Off	Off	On
Keypad 6	On	Off	On
Keypad 7	Off	On	On
Keypad 8	On	On	On

Table 6: Keypad DIP Switch Address Settings

Status Icons / LED's

The following table lists the function of each of the ICON Symbols and LED Indicators on the Graphic Keypad Display.

Icon	Status	Meaning
	The keypad can display which areas (1 – 8) are turned on or off via the Area Icon Indicators. This programmable option can be disabled in MENU	
	On	The area is turned All On or Part On
	Off	The area is turned Off
	Flashing Fast	The area has an alarm
	On	System power is normal
	Flashing	System power is missing
	Flashing	A fire alarm is active
	Off	No fire alarm
	On	Fire alarm in memory (Turn the area All On and Off to Clear).
	On	The existing service or trouble condition has been acknowledged.
	Off	No service or trouble conditions exist
	Flashing	A service or trouble condition is present that has not been acknowledged.
	On	The area is turned Part On.
	Off	The area is not turned Part On.
	On	The area is turned off.
	Off	The area is turned All On or Part On
	On	The area is turned All On
	Off	The area is turned Off
	On	You have mail waiting to be read
	Off	No Mail
	On	Area is ready to turn on (All On / Part On)
	Off	Not ready, Zone Open

Red LED	On	All On
	Flashing	Alarm
Green LED	On	Area is off.
	Flashing	Area not ready to turn on
Red & Green LED	Flashing	Installer programming mode is active.

Keypad Tones

All keypads emit several distinct tones and display text to alert you to system events. The volume of the keypad tones can be adjusted in MENU 6-1-0.

Type	Meaning
Fire Alarm Tone	When a fire zone sounds an alarm, the keypad will sound 3 seconds on and 2 seconds off (repeat).
Burglary Alarm Tone	When a burglary zone activates while your system is turned on, your keypad emits a continuous siren tone. It sounds for the time set by your security company.
Trouble Tone	When a system component is not functioning properly, your keypad sounds 4 fast short beeps followed by a 5 second pause (repeat).
Key Press Tone	Pressing any key on the keypad sounds one short beep, indicating that the key press is accepted.
Entry Delay Tone	When you enter the premises through a zone programmed for entry delay, the keypad sound a Hi/Low tone to remind you to turn off the area. If the area is not turned off before the entry delay expires, an alarm condition will sound and a report may be sent to your alarm company.
Exit Delay Tone	After you turn an area All On, the keypad will sound 1 short beep every second. During the last 10 seconds fast short beeps will be heard. If you don't exit before the delay time expires and an exit delay door is faulted, an alarm occurs.
Error Tone	If you press an incorrect key, your keypad will sound a 2 second tone.
Menu Mode	The keypad will sound a Hi / Lo tone to indicate you have entered MENU Mode and a Lo/Hi tone to indicate you have exited MENU mode.
Chime Tone	The keypad sounds fast short beeps to alert you when a zone programmed for chime is faulted or unsealed.

Programming Overview

The Solution 16^{plus} Control System incorporates a menu text driven interface. This interface is very similar to that found on many mobile phones. Once programming mode is entered you will see a number of menu options in the display and these may vary depending in the user authority level.

Entering Programming Mode

To enter installer program mode enter, PIN + [MENU].

The default Installer PIN is 1234.

The Red and Green LED indicators on the keypad will flash to confirm Installer programming mode is active.



All areas must be disarmed with no active alarms. To disarm all areas enter the Installer PIN and hold the [OFF] Key for 2 seconds.

Exiting Programming Mode

Press and hold down [MENU] key for 2 seconds.



You can also select Exit and press [OK] from each menu level.

Navigating The Menu

Using the up and down arrow keys to navigate, locate the desired menu item using the highlight bar and then press the [OK] key to select.

A new list of menu items will appear. Repeat the above until the desired menu item is located.

To navigate backwards through the menu items press the [MENU] key at any time. Alternatively if you know the direct menu item number press [MENU] + Item Number.

Key	Description
←	Scrolls Cursor Left
→	Scrolls Cursor Right
↑	Scrolls Cursor Up
↓	Scrolls Cursor Down
OK	Enter Menu Options or Saves Changes
MENU	Go Back One Level, Hold Down to Exit Programming Mode
0 to 9	Enter Data Value
ON	Turn On Bit Option
OFF	Turn Off Bit Option, Clear to End of Line

Table 7: Keys Used During Programming

Command Menu

When you first enter programming mode a special menu called the Command Menu will appear at the top of the menu tree. The Command Menu provides a list of the most common system functions like “Turn Chime Mode On”,

“Move To An Area” or “Turn An Area On”. Use the up and down arrow keys to navigate and press [OK] to select the command.

Programming Option Bit Menus

Use the up and down arrow keys to scroll through the 8 different options. To select an option, press the [ON] key – a tick [✓] will be displayed. To deselect an option, press the [OFF] key.

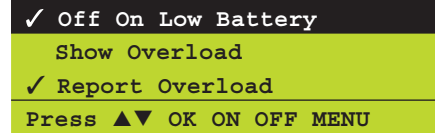


Figure 15: Sample Option Bit Menu Display

To save programming changes, press [OK], else press [MENU] to exit without saving.

Alpha Text

Text descriptions are available for Area Name, Zone Name, User Name, Schedule Name, Holiday Name Prox Reader Name and Output Name. Each name can have a maximum of 16 characters.

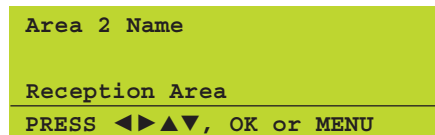


Figure 16: Area Text Programming Display

When programming text, each numeric key represents a different group of characters.

Pressing the same numeric key repeatedly will step you through the available characters assigned to the key. The text key layout is the same as most phones. Refer to the table below for detailed character information.

Key	Characters Assigned To Each Numeric Key									
1	.	,	?	!	-	&	`	1		
2	A	B	C	a	b	c	2			
3	D	E	F	d	e	f	3			
4	G	H	I	g	h	i	4			
5	J	K	L	j	k	l	5			
6	M	N	O	m	n	o	6			
7	P	Q	R	S	p	q	r	s	7	
8	T	U	V	t	u	v	8			
9	W	X	Y	Z	w	x	y	z	9	
0	SPACE	0								
↑	Scroll Up through entire character list									
↓	Scroll Down through entire character list									
←	Move to left one character position									
→	Move to right one character position									
OFF	Clear from cursor position to end of line									

Table 8: Text Keypad Character Set

Once the desired character is displayed press the right arrow key to move to the next character position.

To save programming changes, press [OK], else press

[MENU] to exit without saving.



*The following additional special characters are available by scrolling using the up and down arrow keys. + - @ # \$ " & % * : () / < > =*

Telephone Numbers

To program, select primary telephone number under [MENU] 5-1-1 then enter the digits of the telephone number and press the [OK] key to save. Use the up and down arrow keys to program special characters (*, # and Pause).

```
PRIMARY DEST 1 P001
0297417000
PRESS ▲▼ 0-9 OK to SAVE
```

Figure 17: Telephone Number Programming Display

Key	Characters Assigned To Each Numeric Key
0 to 9	Enter the Digits 0 to 9
↑ ↓	Scroll Up through entire character list 0 - 9 • # , comma = 2 second pause
← →	Move to left or right one character position
OFF	Clear from cursor position to end of line

Table 9: Phone Number Character Set

To save programming changes, press [OK], else press [MENU] to exit without saving.

List Options

Use the [↑] and [↓] keys to step through the available options. Press [OK] to save or [MENU] to exit without saving.



You can also enter the option number directly followed by [OK].

```
ZONE TYPE ZN001
01 - Burglary Delay 1
PRESS ▲▼ 0-9 OK to SAVE
```

Figure 18: List Option Programming Display

Clock Programming

Use the left and right arrow keys to move to the field then use the up and down arrow keys to change. Press [OK] to save or [MENU] to exit without saving.



Scroll through hours to change from am to pm.

```
SET DATE AND TIME
01-Jan-2005 12:00 am
PRESS ◀▶▲▼ OK to SAVE
```

Figure 19: Clock Programming Display

Getting Started Back To Base

The following steps are the minimum requirements to get the system reporting back to base. Examples assume the panel is disarmed with no alarms and starting from factory default settings.

- 1) Enter Program mode.
[1234 + MENU]
- 2) Set Time and Date.
[MENU 7-1-0]
- 3) Change Default Installer PIN.
[MENU 1-5-2]
- 4) Change Default Master Code PIN.
[MENU 1-1-1]
- 5) Enter Account (client) Number, Area 1.
[MENU 2-2-0]
- 6) Enter Base Primary Telephone Number.
[MENU 5-1-1]
- 7) Enter Base Secondary Telephone Number.
[MENU 5-1-2]
- 8) Hold Down MENU To Exit.

Service Mode

Service mode when activated disables dialler reporting, prevents all alarms and prevents all users from arming the system.

To Turn Service Mode ON

- 1) Enter Program Mode.
[1234 + MENU]
- 2) Turn Service Mode On.
[MENU 7-0-8]
- 3) Follow Display Prompts.
- 4) Hold down MENU to exit.



Keypads will display the word Service when service mode is active.

To Turn Service Mode OFF

- 1) Enter Program Mode.
[1234 + MENU]
- 2) Turn Service Mode On.
[MENU 7-0-8]
- 3) Follow Display Prompts.
- 4) Hold down MENU To Exit.



Keypads will display the word Service when service mode is active.

Defaulting The System

Defaulting the system will reset all programming options back to the factory default setting. All programming information will be erased.

To Hardware Default

- 1) Remove All Power To The System. AC and Battery.
- 2) Press and Hold The Default Push Button Down Then Apply Power To The System.
- 3) Release Button, The Panel Will Reset And Revert To Normal Operation When Default Is Complete.

To Software Default

- 1) Enter Program Mode.
[1234 +MENU]
- 2) Select Factory Default Option.
[MENU 7-0-4]
- 3) The Panel Will Reset And Revert To Normal Operation When Default Is Complete.



You can disable factory defaulting using MENU 7-7-4. If factory defaulting has been disabled you must know the installer code to perform a factory default otherwise the system will need to be returned to your supplier for defaulting or you can purchase a CM255 Default Unlock Key which will unlock the panel in the field. Charges apply for defaulting if returned to the distributor.

Domestic Template Defaults

The following table list the changes that will occur when you select domestic default.

Program Option	Domestic Default Value
All Trouble Reports	Disabled
All Bypass Reports	Disabled
All Restore Reports	Disabled
Destination 1 TX Format	Domestic Reporting
Open / Close Reports	Disabled (all areas)
System Events Route	Log Only

Table 10: Domestic Keypad DIP Switch Address Settings

Direct Link Programming

The panel can be programmed via the Solution Link Upload/Download software in either Direct Link or Remote Link modes. For Direct Link you will need a CM900 Direct Link module which connected the panels serial port to the PC.

Once the cable is connected you will need to hold down the default switch on the panel for 5 seconds to initiate the programming session. See Figure 12: for the default switch location. It is also possible to initiate the programming session via [MENU 5-0-5] Start Direct Link.

Zone Array

The feature allows you to view the condition of 16 zones at a time on a single display. From the installer programming mode press [Menu] 3-0-1 to access the zone array.

Use Keys [↑] and [↓] to scroll up and down the zone bank Press [OK] or [MENU] when finished.

N= NORMAL
S = SHORTED
A= ALARM
T= TAMPER
- = DISABLED

```
0000000001111111
1234567890123456
NSA-ANAT-----
PRESS ▲▼, OK or MENU
```

Figure 20: Sample Zone Array Display

In the above example screen,

N = Zone 01 and 06 are Normal (Sealed)
S = Zone 02 is Shorted
A = Zone 03,05,07 are in Alarm (Unsealed)
T = Zone 08 is in Tamper Alarm (Unsealed)
- = Zone 04, 09-16 are Disabled (Unused)

Basic Reporting Reference

A complete reporting template is available on the Solution Link CD or from your nearest Bosch security products outlet. Your base station will need to create a specific reporting template for this and other new model Solution panels.

Point ID Table	Module Description
Ur999	Installer
Ur998	Remote User
Ur001 - 256	Users
Ur000	Quick Arm
Zn301-428	User Keyfob 1 - 128
Zn891-898	Panels 1-8
Zn881-888	Keypads 1-8
Zn871-878	Ethernet 1-8
Zn861-868	GSM 1-8
Zn851-858	Output Expander 1-8
Zn841-848	Serial Expander 1-8
Zn831-838	Lan P/Supply 1-8
Zn821-828	RF Reciever 1-8
Zn811-818	Access 1-8
Zn801-808	X10 1-8
Zn781-788	Input Expander
Zn791-798	Lift 1-8
Zn001-128	Zones

Table 11: Basic Reporting Code Reference Listing

Menu Reference Table

The Solution Controller includes a simple text menu system which makes all levels of programming extremely easy. Once a valid PIN has been entered followed by the MENU key the system will automatically determine which menus and option the user has access to and only those items will be displayed.

There are four basic grouping levels used;

- A = All (No PIN Required)
- U = User PIN Has Access
- M = Master PIN Has Access
- I = Installer PIN Has Access

The following table lists all programming menus and the authority level required to access them.

0	Commands	1	Access	2	Areas
UMI	2-0-1 Turn Area On/Off	1-0 Commands		2-0 Commands	
UMI	2-0-2 Turn All Areas On	MI	1-0-0 Erase User	AUMI	2-0-0 Area Status
UMI	2-0-3 Turn All Areas Off			UMI	2-0-1 Turn Area On/Off
UMI	2-0-4 Move To Area	1-1 PIN Codes		UMI	2-0-2 Turn All Areas On
AUMI	2-0-5 Chime On/Off	UMI	1-1-0 Change Own PIN	UMI	2-0-3 Turn All Areas Off
UMI	1-1-0 Change Own PIN	M	1-1-1 Change Other PIN	UMI	2-0-4 Move To Area
AUMI	3-0-0 Zone Status	MI	1-1-2 Add PIN	AUMI	2-0-5 Chime On/Off
AUMI	4-0-0 Output Status	MI	1-1-3 Delete PIN	UMI	2-0-6 Chime Mode
UMI	4-0-1 Turn Output On/Off	I	1-1-4 View PIN		
MI	7-1-0 Set Date & Time	1-2 Token		2-1 Area Properties	
UMI	3-0-5 Smoke Sensor Reset	MI	1-2-0 Add Token	MI	2-1-0 Area Name
UMI	3-9-0 Walk Test All Zones	MI	1-2-1 Delete Token	I	2-1-1 General Options
MI	4-9-0 External Siren Test	MI	1-2-2 Token Status	I	2-1-2 Input Options
MI	4-9-1 Internal Siren Test			I	2-1-3 Output Options
MI	4-9-2 Strobe Test	1-3 RF Keyfob		I	2-1-4 Reporting Options
MI	5-0-0 Set Domestic Number	MI	1-3-0 Add Keyfob	I	2-1-5 Strobe Trigger
UMI	5-0-1 Call/Answer RAS	MI	1-3-1 Delete Keyfob		
UMI	7-9-1 Battery Test	I	1-3-2 Test Keyfob	2-2 Reporting	
UMI	5-9-0 Test Dialler			I	2-2-0 Account Dest 1
I	7-0-8 Service Mode	1-4 User Properties		I	2-2-1 Account Dest 2
UMI	About	MI	1-4-0 User Name	I	2-2-2 Open Close Route
		MI	1-4-1 Area Assignment		
		I	1-4-2 User Options	2-9 Area Testing	
		MI	1-4-4 Timer Group	I	2-9-0 Area Watch
		MI	1-4-5 Access Assignment	I	2-9-1 User Test Interval
				I	2-9-2 Service Interval
		1-5 Global Properties		I	2-9-3 Test Options
		I	1-5-0 PIN Length		
		I	1-5-1 PIN Retry Count		
		I	1-5-2 Installer PIN		
		I	1-5-3 PIN Expire Time		
		1-6 Prox Reader			
		I	1-6-0 Name		
		I	1-6-1 Area Assignment		
		I	1-6-2 Access Group		
		I	1-6-3 Reader Options		

3 Inputs**3-0 Commands**

AMI	3-0-0	Zone Status
I	3-0-1	Zone Array
UMI	3-0-2	Bypass Zones
MI	3-0-3	Set Chime Zones
MI	3-0-4	Set Part 2 Zones
UMI	3-0-5	Smoke Sensor Reset

3-1 Zone Properties

MI	3-1-0	Zone Name
I	3-1-1	Zone Type
I	3-1-2	Area Assignment
I	3-1-3	Pulse Count
I	3-1-4	Pulse Count Time
I	3-1-5	Access Group
I	3-1-6	Report Route
I	3-1-7	Report Options
I	3-1-8	Zone Options

3-3 RF Zone

I	3-3-0	Add RF Device
I	3-3-1	Delete RF Device
I	3-3-2	Test RF Device

3-4 Global Input Options

I	3-4-0	EOL Value
I	3-4-1	Keyswitch Options
I	3-4-2	Input Options

3-5 PGM Input

I	3-5-0	Input Type
----------	-------	------------

3-6 Tamper Inputs

I	3-6-0	Tamper Options
----------	-------	----------------

3-9 Input Testing

UMI	3-9-0	Walk Test All Zones
UMI	3-9-1	Walk Test A Zone
I	3-9-2	Sensor Watch Time

4 Outputs**4-0 Commands**

AUMI	4-0-0	Output Status
UMI	4-0-1	Turn Output On/Off

4-1 Properties

MI	4-1-0	Output Name
I	4-1-1	Event Type
I	4-1-2	Event Assignment
I	4-1-3	Output Polarity
I	4-1-4	Timer Parameter
I	4-1-5	Output Options
I	4-1-6	Macro Group

4-9 Output Testing

MI	4-9-0	External Siren Test
MI	4-9-1	Internal Siren Test
MI	4-9-2	Strobe Test

5 Comms**5-0 Commands**

MI	5-0-0	Set Domestic Number
UMI	5-0-1	Call /Answer RAS
MI	5-0-2	Call Forward On/Off
MI	5-0-3	Check Web Email
MI	5-0-4	Email System Log
MI	5-0-5	Start Direct Link
	5-0-6	Reserved
	5-0-7	Reserved
	5-0-8	Register Customer
I	5-0-9	Register Installer

5-1 Telephone Numbers

I	5-1-0	Number Prefix
I	5-1-1	Primary Dest 1
I	5-1-2	Secondary Dest 1
I	5-1-3	Primary Dest 2
I	5-1-4	Secondary Dest 2
MI	5-1-5	Domestic Numbers
MI	5-1-6	Call Forward On
MI	5-1-7	Call Forward Off

5-2 Properties

I	5-2-0	Call Attempt Count
I	5-2-1	Dialler Options
I	5-2-2	Phone Line Options
I	5-2-3	Country
I	5-2-7	Set SMS Password

5-3 Remote Access

I	5-3-0	Call Back Number
I	5-3-1	RAS Security PIN
I	5-3-2	Log Threshold
I	5-3-3	Ring Count
I	5-3-4	RAS Options
I	5-3-5	DTMF Options
I	5-3-6	Voice Access Code
I	5-3-7	CLI Numbers

5-4 Dialler Reporting

I	5-4-0	TX Format Dest 1
I	5-4-1	TX Format Dest 2
I	5-4-2	Test Route
I	5-4-3	System Route
I	5-4-4	Emergency Route
I	5-4-5	Swinger Dialler
I	5-4-6	Burg Report Delay
I	5-4-7	Fire Report Delay

5-9 Comms Test

UMI	5-9-0	Send Test Report
I	5-9-1	Test Report Time
I	5-9-2	Test Report Period
I	5-9-3	Test Report Options
I	5-9-4	Test Route
I	5-9-5	Dial Number Test

6 Devices			7 System		
6-0 Commands			7-0 Commands		
UMI	6-0-0	LAN Status	UMI	7-0-0	Panel Status
	6-0-1	LAN Secure	UMI	7-0-1	System Trouble
6-1 Keypads			UMI	7-0-2	History Log
MI	6-1-0	Volume	I	7-0-3	Domestic Default
MI	6-1-1	Contrast	I	7-0-4	Factory Default
MI	6-1-2	Backlight	I	7-0-5	Template Default
I	6-1-3	Home Area	I	7-0-8	Service Mode
I	6-1-4	General Options	7-1 Clock		
I	6-1-5	Beeper Options	MI	7-1-0	Set Date & Time
I	6-1-6	Emergency Keys	I	7-1-1	Summertime On
I	6-1-7	Access Group	I	7-1-2	Summertime Off
I	6-1-8	Lockout Time	7-2 Timers		
6-2 RF Devices			I	7-2-0	Exit Time
I	6-2-0	Receiver Options	I	7-2-1	Entry Time 1
I	6-2-1	Supervision Time	I	7-2-2	Entry Time 2
I	6-2-2	RF Device Options	I	7-2-3	Part Entry Time
I	6-2-3	Add RF Keypad	I	7-2-4	Auto Arm Pre Alert
I	6-2-4	Delete RF Keypad	I	7-2-5	Output Pre Alert
I	6-2-5	View RF Device ID	I	7-2-6	Senior Watch Time
6-3 Serial Device			7-3 Power		
I	6-3-0	Device Type	I	7-3-0	AC Options
I	6-3-1	Baud Rate	I	7-3-1	Battery Options
I	6-3-2	Flow Control	I	7-3-2	Fuse Options
6-5 GSM Modem			7-4 Siren		
6-6 Ethernet			I	7-4-0	Tone
6-7 Access Controller			I	7-4-1	Speed
6-8 X10 Device			I	7-4-2	Volume
			I	7-4-3	Swinger Siren
			7-5 Schedules (TEF)		
			MI	7-5-0	Name
			MI	7-5-1	Time
			MI	7-5-2	Day
			I	7-5-3	Function
			I	7-5-4	Index
			7-6 Holidays		
			MI	7-6-0	Name
			MI	7-6-1	Start Stop Dates
			7-7 System Options		
			I	7-7-0	General Options
			I	7-7-1	Area Options
			I	7-7-2	Keypad Idle Screen
			MI	7-7-3	Keypad Hi/Lo Temp
			I	7-7-4	Installer Options
			I	7-7-5	Language
			7-9 System Testing		
			UMI	7-9-0	Walk Test All Zones
			UMI	7-9-1	Battery Test

Table 12: Menu Structure And Layout

Program Locations

The following section lists all of the programming locations available in the Solution 16^{plus}. The default values for each parameter are shown in grey.

In order to keep the size of this guide down to a minimum we have shown only one example for some parameters and then listed the default values for the other similar parameters. For example the User Default Table below shows the default values for Users 1 to 48. Similar tables are used to show Zone Defaults etc.

Access Programming

User Default Table

Parameter	User 1	User 2 - 48
Add PIN	2580	
Name	User 1	User 2 - 48
Area Assignment	1	1
User Options		
Has Master PIN Privileges	Y	
Expire PIN Code		
Is Arm Only Code		
Can Bypass Zones	Y	Y
Can Auto Bypass Zones	Y	Y
Send 'Open/Close' Reports	Y	Y
Timer Group		
Access Group		

Table 13: User Default Programming Options

Access > Commands >

Erase User MENU 1-0-0

Access > PIN Codes >

Change Own PIN MENU 1-1-0

Change Other PIN MENU 1-1-1

Add PIN MENU 1-1-2

Delete PIN MENU 1-1-3

View PIN MENU 1-1-4

Access > Token >

Add Token MENU 1-2-0

Delete Token

Token Status MENU 1-2-2

Access > RF Keyfob >

Add Keyfob **MENU 1-3-0**

Delete Keyfob MENU 1-3-1

Test Keyfob MENU 1-3-2

Access > User Properties >

User Name **MENU 1-4-0**

U	s	e	r		1		N	a	m	e					
---	---	---	---	--	---	--	---	---	---	---	--	--	--	--	--

Use the left and right arrow keys to scroll cursor left and right. Use Keys [0] – [9] or the up and down arrows to scroll characters then press [OK] To Save

Access > Global Properties >

Area Assignment **MENU 1-4-1**

1	Area 1	Y
2	Area 2	N
3	Area 3	N
4	Area 4	N
5	No Area	N
6	No Area	N
7	No Area	N
8	No Area	N

Access > User Properties >

User Option MENU 1-4-2

1	Has Master Code Privileges	Y
2	Expire PIN Code	N
3	Is Arm Only Code	N
4	Can Bypass Zones	Y
5	Can Auto Bypass Zones	Y
6	Send Open / Close Reports	Y
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Access > User Properties >

Timer Group MENU 1-4-4

0

Enter 1 - 8 + [OK] To Assign The User To A Timer Group – Can Only Be Assigned To One Timer Group (0 = No Timer Group)

Access > User Properties >

Access Assignment MENU 1-4-5

1	Access Group 1	N
2	Access Group 2	N
3	Access Group 3	N
4	Access Group 4	N
5	Access Group 5	N
6	Access Group 6	N
7	Access Group 7	N
8	Access Group 8	N

Multiple Groups Can Be Assigned To Each User. Press 1 – 8 To Toggle Groups On/Off, Then Press [OK] To Save.

Access > Global Properties >

PIN Length MENU 1-5-0

0 = Variable 4

1 = 1 Digit 4 = 4 Digits 7 = 7 Digits

2 = 2 Digits 5 = 5 Digits 8 = 8 Digits

3 = 3 Digits 6 = 6 Digits

Enter 0 - 15 + [OK] To Program The PIN Length Option.
(*** System Wide Parameter ***)

Access > Global Properties >

PIN Retry Count MENU 1-5-1

(*** System Wide Parameter ***) 6

Use Keys [↑] and [↓] keys or enter 0 – 8 + [OK] To Program The PIN Retry Count (0 = Unlimited).

Access > Global Properties >

Installer PIN MENU 1-5-2

1	2	3	4				
---	---	---	---	--	--	--	--

Use Digits 0 – 9 To Program The Installer PIN + [OK] To Save. Installer PIN Can Be Up To 8 Digits Long. (*** System Wide Parameter ***)

Access > Global Properties >

PIN Expire Time MENU 1-5-3

0	3	0
---	---	---

(*** System Wide Parameter ***)

DAYS

Enter Digits 0 – 255 + [OK] To Program How Many Days A Temporary PIN Is Valid.

Access > Prox Reader >

Name MENU 1-6-0

R	e	a	d	e	r	1	N	a	m	e				
---	---	---	---	---	---	---	---	---	---	---	--	--	--	--

Use [←] and [→] Keys To Scroll Cursor Left and Right. Use Keys [0] – [9] + [#] and [*] To Toggle Characters + Enter [OK] To Save

Access > Prox Reader >

Area Assignment MENU 1-6-1
1

Use Keys [↑] and [↓] keys or enter 1 - 4 (0 = Not Assigned) To Assign The Reader To An Area, Then Press [OK] To Save

Access > Prox Reader >

Access Group MENU 1-6-2
0

Use Keys [↑] and [↓] keys or enter 1 - 8 (0 = No Access Group) To Assign The Reader To An Access Group, Then Press [OK] To Save. Can Only Be Assigned To One Access Group

Access > Prox Reader >

Reader Options MENU 1-6-3

1	All On Arming Allowed	Y
2	Disarming Allowed	Y
3	Badging Required	N
4	Zero Exit Time	N
5	Part On Badging Allowed	N
6	Arm If Single Area User	N
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Area Programming

By default the Solution 16^{plus} is configured for one area. Examples given in this document are for Area 1 only. If the system is configured for more than one area then you will be prompted on the keypad to select the area you want to work on.

Areas > Commands >

Area Status MENU 2-0-0**Turn Area On/Off** MENU 2-0-1**Turn All Areas On** MENU 2-0-2**Turn All Areas Off** MENU 2-0-3**Move To Area** MENU 2-0-4**Chime On/Off** MENU 2-0-5**Chime Mode** MENU 2-0-6

Areas > Area Properties >

Area Name MENU 2-1-0

A	r	e	a	1	N	a	m	e				
---	---	---	---	---	---	---	---	---	--	--	--	--

Use [←] and [→] Keys To Scroll Cursor Left and Right. Use Keys [0] – [9] + [#] and [•] To Toggle Characters + Enter [OK] To Save

Areas > Properties >

General Options MENU 2-1-1

1	Exit Time Restart	N
2	Reset Alarm Memory On Disarm	N
3	Duress Allowed	Y
4	Acknowledge All Faults	N
5	Single Button Arming Allowed - All On	Y
6	Single Button Arming Allowed - Part On	Y
7	Link To Common Area	N
8	Single Button Part Off	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Areas > Properties >

Input Options**MENU 2-1-2**

1	Non Sequential Handover (Entry Path)	Y
2	Pulse Count Handover Allowed	Y
3	Senior Watch	N
4	Reset Smoke On Arming	Y
5	Reserved	N
6	Reserved	N
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Areas > Properties >

Output Options**MENU 2-1-3**

1	Arm/Disarm Speaker Beeps Via RF Keyfob	Y
2	Arm/Disarm Speaker Beeps Via Keypad	Y
3	Siren / Strobe When Part On Allowed	Y
4	Alarm On PIN Retry Violations	Y
5	Alarm On Exit Error	N
6	Alarm On Keypad Tamper (Only If System Armed)	Y
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Areas > Properties >

Reporting Options**MENU 2-1-4**

1	Report PIN Retry	Y
2	Report Exit Error	Y
3	Smart Lockout	N
4	Reserved	N
5	Cancel Reports	Y
6	Reserved	N
7	Open / Close Reports For Part On	N
8	Open / Close Reports Only After Alarm	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Areas > Properties >

Strobe Trigger**MENU 2-1-5**

1	Audible Burglary Alarm	Y
2	Silent Burglary Alarm	N
3	Fire Alarm	Y
4	Arm / Disarm Flash Via RF Keyfob	N
5	Arm / Disarm Flash Via Keypad or PGM Input	N
6	Reserved	N
7	24-Hour Alarm	Y
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Areas > Reporting >

Account Dest 1**MENU 2-2-0**

0 0 0 0 0 0 0 0 0 0

Program The Area Account Number For Destination 1 Here (Enter digits 0 – 9 + [OK] To Save

Areas > Reporting >

Account Dest 2**MENU 2-2-1**

0 0 0 0 0 0 0 0 0 0

Program The Area Account Number For Destination 2 Here.

Areas > Reporting >

Open / Close Route**MENU 2-2-2**

0 = Report Events To Log Only

1

1 = Report Events To Destination 1 + Log

2 = Report Events To Destination 2 + Log

3 = Report Events To Destination 1 & Destination 2 + Log

4 = Report Events To Destination 2 If Destination 1 Fails +Log

Use Keys [↑] and [↓] keys or enter 0 - 4 + [OK] To Program Which Destination 'Open' and 'Close' Reports Are Sent To.

Areas > Area Testing >

Area Watch**MENU 2-9-0**

0 1 2

(***) System Wide Parameter (***)

WEEKS

Enter 0 – 255 + [OK] To Program The Number Of Weeks Before Register Inactivity Event.

Areas > Area Testing >

User Test Interval**MENU 2-9-1**

0 0 0

(***) System Wide Parameter (***)

DAYS

Enter 0 – 255 + [OK] To Program The Number Of Days Before A User Test Is Requested.

Areas > Area Testing >

Service Interval**MENU 2-9-2**

0 0 0

(***) System Wide Parameter (***)

WEEKS

Enter 0 – 255 + [OK] To Program The Number Of Weeks Between Installer Service Interval.

Areas > Area Testing >

Test Options**MENU 2-9-3**

1	Monitor User Test Interval	Y
2	Reserved	N
3	Reserved	N
4	Reserved	N
5	Reserved	N
6	Walk Test Reports	Y
7	Walk Test 24-Hour Zones	N
8	Walk Test Fire Zones	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Input Programming

Inputs > Commands >

Zone Status	MENU 3-0-0
Zone Array	MENU 3-0-1
Bypass Zones	MENU 3-0-2
Set Chime Zones	MENU 3-0-3
Set Part 2 Zones	MENU 3-0-4
Smoke Sensor Reset	MENU 3-0-5

Inputs > Zone Properties >

Zone Name	MENU 3-1-0
Z o n e 1 N a m e	

Use [←] and [→] Keys To Scroll Cursor Left and Right. Use Keys [0] – [9] + [#] and [*] To Toggle Characters + Enter [OK] To Save. Refer to Zone Default Table for other default values.

Inputs > Zone Properties >

Zone Type	MENU 3-1-1
1	

Use Keys [↑] and [↓] keys or enter 0 – 15 + [OK] To Program Zone Type

Zone Types
0 = Zone Not Used
1 = Burglary Delay 1 (Entry Timer 1)
2 = Burglary Delay 2 (Entry Timer 2)
3 = Burglary Instant 1 (With Exit Delay)
4 = Burglary Instant 2 (No Exit Delay)
5 = Burglary Handover
6 = Burglary 24-Hour
7 = Tamper 24-Hour
8 = Hold Up 24-Hour (Silent & Invisible)
9 = Medical 24-Hour
10 = Panic 24-Hour
11 = Fire 24-Hour
12 = Reserved
13 = Keyswitch Zone
14 = Display Only
15 = 24-Hour Non Burglary

Table 14: Zone Types

Inputs > Zone Properties >

Area Assignment	MENU 3-1-2
1	

Use Keys [↑] and [↓] keys or enter 1 – 4 + [OK] To Assign The Zone To A Single Area Only

Inputs > Zone Properties >

Pulse Count	MENU 3-1-3
0 0	
PULSES	

Enter 0 – 15 + [OK] To Program The Number Of Pulses The Zone Must Register Within The Zone Pulse Count Time.

Inputs > Zone Properties >

Pulse Count Time	MENU 3-1-4
1 2 0	
SECONDS	

Enter 0 – 255 + [OK] To Program The Period Of Time In Seconds That The Pulse Count Must Register.

Inputs > Zone Properties >

Access Group	MENU 3-1-5
0	

Use Keys [↑] and [↓] keys or enter 1 – 8 + [OK] To Assign The Zone To An Access Group (0 = Disabled).

Inputs > Zone Properties >

Report Route	MENU 3-1-6
0 = Report Events To Log Only	1

1 = Report Events To Destination 1 + Log

2 = Report Events To Destination 2 + Log

3 = Report Events To Destination 1 & Destination 2 + Log

4 = Report Events To Destination 2 If Destination 1 Fails +Log

Use Keys [↑] and [↓] keys or enter 0 – 4 + [OK] To Set the Destination Zone Reports Are Sent To.]

Inputs > Zone Properties >

Report Options	MENU 3-1-7
1 Lockout Dialer	Y
2 Report Alarm	Y
3 Report Trouble	Y
4 Report Bypass	Y
5 Reserved	N
6 Reserved	N
7 Report Restores	Y
8 Delay Reporting	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Inputs > Zone Properties >

Zone Options	MENU 3-1-8
1 Lockout Siren	Y
2 Silent Alarm	N
3 Inverted Seal	N
4 Bypass Allowed	Y
5 Sensor Watch	N
6 Armed When in Part Mode 1	Y
7 Reserved	N
8 Test On Exit	Y

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Inputs > RF Zone >

Add RF Device	MENU 3-3-0
----------------------	-------------------

Delete RF Device	MENU 3-3-1
-------------------------	-------------------

Zone Default Table

The table below list the default values for all zone parameters in the Solution 16^{plus}. By default, zones 5 to 16 are set as Instant zones. Zones marked as Not Used do not require EOL resistors to be fitted.

Programming Option	Zone 1	Zone 2	Zone 3	Zone 4	Zones 5 to 16
Zone Name	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5 - Zone 16
Zone Type	1 = Delay 1	5 = Handover	5 = Handover	5 = Handover	3 = Instant
Area Assignment	1	1	1	1	1
Pulse Count	0	0	0	0	0
Pulse Count Time (Sec's)	120	120	120	120	120
Access Group	0	0	0	0	0
Report Route	2	2	2	2	2
Reporting Options					
Lockout Dialler	Y	Y	Y	Y	Y
Report Alarm	Y	Y	Y	Y	Y
Report Alarm Restore	Y	Y	Y	Y	Y
Report Trouble	Y	Y	Y	Y	Y
Report Trouble Restore	Y	Y	Y	Y	Y
Report Bypass	Y	Y	Y	Y	Y
Report Bypass Restore	Y	Y	Y	Y	Y
Delay Report	N	N	N	N	N
Zone Options					
Lockout Siren	Y	Y	Y	Y	Y
Silent Alarm	N	N	N	N	N
Inverted Seal	N	N	N	N	N
Bypass Allowed	Y	Y	Y	Y	Y
Sensor Watch	N	N	N	N	N
Armed When Part On	Y	Y	Y	Y	Y
Reserved	N	N	N	N	N
Test On Exit	N	Y	Y	Y	Y

Table 15: Zone Defaults

Test RF Device

MENU 3-3-2

Inputs > Global Input Options >

EOL Value

MENU 3-4-0

0 = No EOL

5

1 = 1K0 6 = 4K7 11 = 6K8 Alarm with 2K2 Tamper

2 = 1K5 7 = 5K6 12 = 10K Alarm with 10K Tamper

3 = 2K2 8 = 6K8 13 = 22K

4 = 2K7 9 = 8K1 14 = 3K3 with 6K8 Tamper

5 = 3K3 10 = 10K 15 = Split EOL (Parallel)

(3K3 = Primary 6K8 = Secondary)

Use Keys [↑] and [↓] keys or enter 0 - 15 Then Press [OK] To Program Globally The EOL Resistor For All Zones. (** System Wide Parameter **)

Inputs > Global Input Options >

Keyswitch Options

MENU 3-4-1

0 = Latching - All On/Off

5 = Momentary All On/Off

0

1 = Latching - All On

6 = Momentary - All On

2 = Latching Part On/Off

7 = Momentary - Part On/Off

3 = Latching - Part On

8 = Momentary - Part On

4 = Latching Off

9 = Momentary - Off

Use Keys [↑] and [↓] keys or enter 0 - 9 Then Press [OK] To Program How The Keyswitch Will Operate. (** System Wide Parameter **)

Inputs > Global Input Options >

Input Options

MENU 3-4-2

1	Tamper On Short	N
2	Reserved	N
3	Response Time 500ms	N
4	Reserved	N
5	Keyswitch Open / Close Report	Y
6	Reserved	N
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.
(** System Wide Parameter **)

Inputs > PGM Input >

Input Type

MENU 3-5-0

0 = Disabled

0

1 = Latching - On/Off (RF Relay)

2 = Momentary - On/Off (RF Relay)

3 = Digiflex RF On/Off

6 = Ness Serial RF Receiver

4 = Bosch Serial RF Receiver

7 = Inovonics Serial Receiver

5 = C Type Serial RF Receiver

8 = Secure Wireless Receiver

Enter 0 - 7 + [OK] to select the interface method used for the given RF receiver. The latching and Momentary options will control all areas on the system. For individual area control via RF relay you should use a keyswitch zone(s) in the area you want to control.

Inputs > Tamper Inputs >

Tamper Options**MENU 3-6-0**

1	Display Panel Tamper	Y
2	Report Panel Tamper	Y
3	Audible Panel Tamper	Y
4	Display Expander Tamper	Y
5	Report Expander Tamper	Y
6	Audible Expander Tamper	Y
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Inputs > Input Testing >

Walk Test All Zones**MENU 3-9-0****Walk Test A Zones****MENU 3-9-1**

Inputs > Input Testing >

Sensor Watch Time**MENU 3-9-2**

0 3 0

DAYS

(***) System Wide Parameter (***)

Enter 0 – 255 + [OK] To Program The Sensor Watch Time In Days (0 = Disabled)

Output Default Table

The table below list the default values for all Output parameters in the Solution 16^{plus}. Outputs 1 to 3 are High current digital outputs and Output 4 is the onboard relay output. Outputs 5 to 8 are only available if the optional Output Relay Expander Boards (CM110) are fitted. Options marked N/A = Not Applicable.

Programming Option	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8
Output Name	External Siren	Strobe Light	Smoke Sensor PWR	Internal Siren	Output 5 Name	Output 6 Name	Output 7 Name	Output 8 Name
Event Type	36 (External Siren)	48 (Strobe)	49 (Smoke Sensor GND)	37 (Internal Siren)	0	0	0	0
Event Assignment	1	1	1	1	1	1	1	1
Output Polarity	14	6	11	6	0	0	0	0
Time Parameter								
N° Of Hours	000	008	000	000	000	000	000	000
N° Of Minutes	005	000	000	005	000	000	000	000
N° Of Seconds	000	000	010	000	000	000	000	000
N° Of 1/10 Seconds	000	000	000	000	000	000	000	000
Output Options								
Do not Operate If Low Battery	Y	Y	Y	Y	N	N	N	N
Display Output Overload	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
Report Output Overload	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
Display Missing Output Device	Y	N	N	N/A	N/A	N/A	N/A	N/A
Report Missing Output Device	Y	N	N	N/A	N/A	N/A	N/A	N/A
Alarm On Device Fail	N	N	N	N	N/A	N/A	N/A	N/A
Block Output If Armed All On	N	N	N	N	N	N	N	N
Display Status On Keypad	N	N	N	N	N	N	N	N

Table 16: Output Default Table

Output Programming

Outputs > Commands >

Output Status**MENU 4-0-0****Turn Output On/Off****MENU 4-0-1**

Outputs > Properties >

Output Name**MENU 4-1-0**

O u t p u t 1 N a m e

Use [←] and [↓] Keys To Scroll Cursor Left and Right. Use Keys [0] – [9] + [↑] and [↓] To Toggle Characters + Enter [OK] To Save.

Outputs > Properties >

Event Type**MENU 4-1-1**

0 0 0

Use Keys [↑] and [↓] keys or enter desired Event type 0 – 255 + [OK]. See Output Event Type table for available options.

Outputs > Properties >

Event Assignment**MENU 4-1-2**

0 0 1

Enter 0 to 255 to program the Area, User, Zone, Keypad or Access Group Number You Want The Output To Follow Then Press [OK]. (0 = Unrestricted all Areas, Users, Zones etc)

Output Event Types

0 = Disabled			
1 = Battery Trouble	P	26 = Entry Time	A
2 = AC Trouble	P	27 = Exit Time	A
3 = Telephone Line Trouble	P	28 = End Of Exit Time	A
4 = Comm Fail – Destination 1 / 2	P	29 = Chime On	A
5 = Third Dialler Attempt	P	30 = Chime Zone Triggered	A
6 = Destination 1 Reporting	P	31 = Auto Arm Pre-Alert	A
7 = Destination 2 Reporting	P	32 = Ready To Arm All On	A
8 = Destination 1 or 2 Kiss Off	P	33 = Ready To Arm Part On	A
9 = Destination 1 Kiss Off	P	34 = Ready To Arm Part 2 On	A
10 = Destination 2 Kiss Off	P	35 = Closing Report Sent OK	A
11 = Dialler Disabled	P	36 = External Siren (Spk Beeps)	A
12 = Horn Speaker Missing	P	37 = Internal Siren (Spk Beeps)	A
13 = Output Trouble	O	38 = Alarm Any (Silent or Audible)	A
14 = Panel On Line	P	39 = Fire Alarm	A
15 = Incoming Call	P	40 = Burglary Alarm	A
16 = System Trouble	P	41 = Silent Alarm	A
17 = Box Tamper	P	42 = Duress Alarm	A
18 = Zone Trouble	Z	43 = Keypad Medical	A
19 = Zone Mirror	Z	44 = Keypad Fire	A
20 = Zone Alarm	Z	45 = Keypad Panic	A
21 = Area Disarmed	A	46 = Device Tamper	A
22 = Area Armed (Any)	A	47 = Access Denied	A
23 = Area All On	A	48 = Strobe	A
24 = Area Part On	A	49 = Smoke Sensor GND	A
25 = Area Part 2 On	A	50 = Sensor Watch	A
		51 = Senior Watch	A
		52 = Exit Error	A
		53 = RF Key Fob Function 1	A
		54 = RF Key Fob Function 2	A
		55 = Output Pre-Alert	A
		56 = Follow PIN Code	U
		57 = Part Entry Time	A
		58 = Time Schedule	S
		59 = Temperature Alarm	K
		60 = Access Group	G

Table 18: Output Event Types

Outputs > Properties >

Output Polarity

MENU 4-1-3

0	0
---	---

Enter 0 – 14 + [OK] To Program The Output Polarity. See table below for available polarity types. Each Output Can Only Have One Option Programmed.

Option	Polarity
0	Normally Open Going Low
1	Normally Open Going Low With Pre Delay
2	Normally Open Latching Low
3	Normally Open Pulsing Low
4	Normally Open One Shot Low
5	Normally Open One Shot Low + Retrigger
6	Normally Open One Shot Low + Reset
7	Normally Low Going Open
8	Normally Low Going Open With Pre Delay
9	Normally Low Latching Open
10	Normally Low Pulsing Open
11	Normally Low One Shot Open
12	Normally Low One Shot Open + Retrigger
13	Normally Low One Shot Open + Reset
14	Horn Speaker (Output 1 or 2 Only)
15	Reserved

Table 17: Output Polarity Types

Outputs > Properties >

Time Parameter

MENU 4-1-4

0	0	0	0	0	0	0	0	0	0	0	0
Hour			Minute			Seconds			10 th Sec		

The time base parameter is only applicable for output types that are programmed as one shot or pulsing. Program 0 to 255 for each of the units (Hour, Minute, Seconds and 10th of a Second) for the time parameter. Add the units together to give the total one shot time or pulsing on/off time.

One Shot Mode

The time base is the length of time that the output will operate.

For Example you may want a strobe output to operate for 1 hour, Either of the examples below will achieve the 1 hour time.

Total Time	Hour	Minute	Seconds	10th Sec
60 Minutes	001	000	000	000
60 Minutes	000	060	000	000

Pulsing Mode

The time base is the unit of time that the output will pulse on and off. If the time base is programmed for 60 seconds, the output will pulse on for 60 seconds and then off for 60 seconds (repeat) until the output is reset.

Outputs > Properties >

Output Options**MENU 4-1-5**

1	Do Not Operate On Low Battery	Y
2	Display Overload	Y
3	Report Overload	Y
4	Display Device Fail	Y
5	Report Device Fail	Y
6	Alarm On Device Fail	N
7	Block If Armed All On	N
8	Display Output Status On Keypad	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Outputs > Properties >

Macro Group**MENU 4-1-6**

Reserved

Outputs > Testing >

External Siren Test**MENU 4-9-0****Internal Siren Test****MENU 4-9-1****Strobe Test****MENU 4-9-2****Comms Programming**

Comms > Commands >

Set Domestic Number**MENU 5-0-0****Call / Answer RAS (Solution Link)****MENU 5-0-1****Call Forward On/Off****MENU 5-0-2****Check Web Email****MENU 5-0-3****Email System Log****MENU 5-0-4****Start Direct Link Session****MENU 5-0-5**

Comms > Registration >

Customer**MENU 5-0-5**

Reserved

Comms > Registration >

Installer**MENU 5-0-6**

Reserved

Comms > Telephone Number >

Number Prefix**MENU 5-1-0**

1	Digits	32

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Comms > Telephone Number >

Primary Dest 1**MENU 5-1-1**

1	Digits	32

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Comms > Telephone Number >

Secondary Dest 1**MENU 5-1-2**

1	Digits	32

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Comms > Telephone Number >

Primary Dest 2**MENU 5-1-3**

1	Digits	32

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Comms > Telephone Number >

Secondary Dest 2**MENU 5-1-4**

1	Digits	32

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Comms > Telephone Number >

Domestic Number**MENU 5-1-5**

1	Digits	32
First Number		

1	Digits	32
Second Number		

1	Digits	32
Third Number		

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)



Up to 3 Phone numbers can be entered for Domestic dialing. Press [OK] after each telephone number is entered to save and move to the next number.

Comms > Telephone Number >

Call Forward On**MENU 5-1-6**

1	Digits	32

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Comms > Telephone Number >

Call Forward Off**MENU 5-1-7**

1	Digits										32
#	6	1	#								

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Comms > Properties >

Call Attempt Count**MENU 5-2-0**

0	6
---	---

Enter 0 - 15 Then Press [OK] To Program The Maximum Call Retry Attempts Per Destination

Comms > Properties >

Dialer Options**MENU 5-2-1**

1	Dialler Enabled	Y
2	Pulse Dialling	N
3	Dial Tone Detect	Y
4	Busy Tone Detect	N
5	Mirror Reports To Web	Y
6	Extend Handshake Wait Period To 1 Minute	N
7	Reserved	N
8	Abort Failed Reports	Y

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Comms > Properties >

Phone Line Options**MENU 5-2-2**

1	Display Telephone Line Fail	Y
2	Report Telephone Line Fail	Y
3	Alarm On Line Fail If Armed	Y
4	Alarm On Line Fail If Disarmed	N
5	Reserved	N
6	Reserved	N
7	Reserved	N
8	Display Phone In Use	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Comms > Properties >

Country**MENU 5-2-3**

1 = Australia		0
2 = New Zealand	7 = Portugal	12 = China
3 = Italy	8 = Hungary	13 = Hong Kong
4 = Greece	9 = Czech Republic	14 = Malaysia
5 = Cyprus	10 = Poland	15 = Brazil
6 = Spain	11 = Bulgaria	

Use Keys [↑] and [↓] keys or enter 0 – 15 + [OK] To Set Which Country The Panel Is Being Used In. Only 1 Option Can Be Programmed. (***) System Wide Parameter (***)

Comms > Properties >

Set SMS Pasword**MENU 5-2-7**

p	a	s	s	w	d														
---	---	---	---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Use keys 0 - 9 To Program SMS Password + [OK] To Save. Use [←] and [→] Keys To Scroll Cursor. Default password is for Telstra in Australia.

Comms > Remote Access >

Call Back Number**MENU 5-3-0**

1	Digits										32

Use [←] and [→] Keys To Scroll Cursor. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Comms > Remote Access >

RAS Security PIN**MENU 5-3-1**

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

Use keys 0 - 9 To Program RAS Security PIN + [OK] To Save

Comms > Remote Access >

Log Threshold**MENU 5-3-2**

7	0	%
---	---	---

Enter 0 - 9 To Program Log Threshold + [OK] To Save

Comms > Remote Access >

Ring Count**MENU 5-3-3**

0 = No Answer

10

1 to 15 = Answer Ring Count

Use Keys [↑] and [↓] keys or enter 0 - 15 Then Press [OK] To Program The Ring Count - Single Option Only

Comms > Remote Access >

Solution Link RAS Options**MENU 5-3-4**

1	RAS Allowed	Y
2	Call Back Verification Required	N
3	Terminate RAS on Alarm	Y
4	Answer Machine Bypass	Y
5	Answer Incoming Call Only If Armed	N
6	Tone Bypass	Y
7	Allow User Functions Via Remote Access Software	Y
8	Report / Log RAS Start / End Sessions	Y

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Comms > Dialler Reporting >

Burg Report Delay**MENU 5-4-6**

0	0	0
---	---	---

SECONDS

Enter 0 – 255 seconds + [OK] To Program The Delay Time In Seconds Before Reports Are Sent. 0 = No Delay (** System Wide Parameter **)

Comms > Dialler Reporting >

Fire Report Delay**MENU 5-4-7**

0	0	0
---	---	---

SECONDS

Enter 0 – 255 seconds + [OK] To Program The Delay Time In Seconds Before Reports Are Sent. 0 = No Delay (** System Wide Parameter **)

Comms > Comms Test >

Send Test Report**MENU 5-9-0**

Comms > Comms Test >

Test Report Time**MENU 5-9-1**

Test Time

02	:	00	am
HH		MM	

Use the [←] and [→] keys to move to the field then [↑] and [↓] to change. Press [OK] to save or [MENU] to exit without saving.



Scroll through hours using the [↑] and [↓] to change from am to pm.

Comms > Comms Test >

Test Report Period**MENU 5-9-2**

- 0 = No Test Report
- 1 = Every Day
- 2 = Every Week
- 3 = Every Month

1

MENU 5-9-3 Programs The Interval Between Automatic Test Reports. Use Keys [↑] and [↓] keys or enter [0] to [3] + [OK] To Program. (** System Wide Parameter **)

Comms > Comms Test >

Test Report Options**MENU 5-9-3**

1	Send Test Reports Only If No Other Report	N
2	Send Test Reports On Siren Reset / Time Out	Y
3	Reserved	N
4	Reserved	N
5	Reserved	N
6	Reserved	N
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Comms > Comms Test >

Test Route**MENU 5-9-4**

- 0 = Report Events To Log Only
- 1 = Report Events To Destination 1 + Log
- 2 = Report Events To Destination 2 + Log
- 3 = Report Events To Destination 1 & Destination 2 + Log
- 4 = Report Events To Destination 2 If Destination 1 Fails + Log

1

Use Keys [↑] and [↓] keys or enter 0 - 4 + [OK]. To Enter Single Option Only. (** System Wide Parameter **)

Comms > Comms Test >

Dial Number Test**MENU 5-9-5**

Use the option to test the system dialer to your mobile or other phone. Enter the digits to dial and press OK. The system will call the number entered. This function will stop after 30 seconds or by pressing OK. Enter [0] – [9] For Telephone Digits. Use [↑] and [↓] To Toggle Special Characters * # and , (Pause)

Device Programming

Devices > Commands >

LAN Status**MENU 6-0-0****LAN Secure****MENU 6-0-1**

Devices > Keypads >

Keypad Volume**MENU 6-1-0****Keypad Contrast****MENU 6-1-1****Keypad Backlight****MENU 6-1-2**

Devices > Keypads >

Home Area**MENU 6-1-3**

1

Use Keys [↑] and [↓] keys or enter 1 - 4 Then Press [OK] To Set The Home Area. This is the Area which will be displayed on the keypad by default.



All keypads must have a home area programmed to work correctly.

Devices > Keypads >

General Options**MENU 6-1-4**

1	Keypad Extinguish	N
2	Greeting On Arming	Y
3	Greeting On Disarming	Y
4	Enable Rear Tamper	N
5	PIN To Change Area	N
6	Home Area Only	N
7	Report/Display Keypad Temperature	Y
8	Display Area ICON Indicators	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Devices > Keypads >

Beeper Options MENU 6-1-5

1	Trouble Alert Beeps	Y
2	Entry Warning	Y
3	Exit Warning	Y
4	Chime Tone	Y
5	Display Temperature	N
6	PIN Arming Not Allowed	N
7	Installer PIN Not Allowed	N
8	Show Alarm When Armed	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Devices > Keypads >

Emergency Keys MENU 6-1-6

1	Audible Keypad Fire	Y
2	Report Keypad Fire	Y
3	Audible Keypad Medical	Y
4	Report Keypad Medical	Y
5	Audible Keypad Panic (Invisible If Not Set)	Y
6	Report Keypad Panic	Y
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Devices > Keypads >

Access Group MENU 6-1-7

0

Use Keys [↑] and [↓] keys or enter 1 - 8 + [OK] To Assign The Keypad To An Access Group.

Devices > Keypads >

Lockout Time MENU 6-1-8

0 6 0

SECONDS

Enter 0 – 255 + [OK] To Program The Keypad Lockout Time In Seconds. 0 = No Lockout (** System Wide Parameter **)

Devices > RF Devices >

Receiver Options MENU 6-2-0

1	Display RF Receiver Trouble	Y
2	Alarm On RF Receiver Tamper	Y
3	Report RF Receiver Tamper	Y
4	Alarm On RF Receiver Jam Detect	N
5	Report RF Receiver Jam Detect	N
6	Alarm On RF Receiver Comms Fail	Y
7	Report RF Receiver Comms Fail	Y
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Device > RF Devices >

Supervision Time MENU 6-2-1

0 2 4

HOURS

Enter the RF Supervision Time for Devices in Hours (001 - 255 Hours)
000 = No Supervision

Device > RF Devices >

RF Device Options MENU 6-2-2

1	Display RF Tamper	Y
2	Report RF Tamper	Y
3	Report RF Low Battery	Y
4	Report Lost RF Device	Y
5	Open Zone On Lost RF	N
6	Audible Keyfob Panic	Y
7	Report Keyfob Panic	Y
8	Keyfob Function 1 Key = Part On	Y

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

Devices > RF Devices >

Add RF Keypad MENU 6-2-3**Delete RF Keypad** MENU 6-2-4**View RF Device ID** MENU 6-2-5

Devices > Serial Device >

Device Type MENU 6-3-0

0 = Disabled

1 = Serial Printer

2 = Computer

0

Use Keys [↑] and [↓] keys or enter 0 – 2 + [OK] To Program The Type Of Serial Device Connected To The Serial Port.

Devices > Serial Device >

Baud Rate MENU 6-3-1

0 = No Device Connected

1 = 300 Baud

2 = 600 Baud

3 = 1200 Baud

4 = 2400 Baud

5 = 9600 Baud

6 = 19200 Baud

0

Use Keys [↑] and [↓] keys or enter Digits 0 – 6 To Program The Serial Device Baud Rate, Then Press [OK] To Save.

Devices > Serial Device >

Flow Control MENU 6-3-2

0 = No Handshaking

1 = Hardware

2 = Xon-Xoff

0

Use Keys [↑] and [↓] keys or enter Digits 0 – 2 To Program The Serial Device Flow Control, Then Press [OK] To Save.

System Programming

System > Commands >

Panel Status MENU 7-0-0

System Trouble MENU 7-0-1

History Log MENU 7-0-2

Domestic Default MENU 7-0-3

Factory Default MENU 7-0-4

Template Default MENU 7-0-5

Service Mode MENU 7-0-8

System > Clock >

Set Date & Time MENU 7-1-0

System > Clock >

Summertime On MENU 7-1-1

At 2:00am

Month Week Day

Program The Month Of The Year (Jan – Dec), Week Of The Month (Wk1 to Last) and Day Of The Week (Sun To Sat). Use [←] and [→] Keys To Scroll Cursor Left and Right and Use [↑] and [↓] To Toggle Options.
(*** System Wide Parameter ***)

System > Clock >

Summertime Off MENU 7-1-2

At 2:00am

Month Week Day

Program The Month Of The Year (Jan – Dec), Week Of The Month (Wk1 to Last) and Day Of The Week (Sun To Sat). Use [←] and [→] Keys To Scroll Cursor Left and Right and Use [↑] and [↓] To Toggle Options.
(*** System Wide Parameter ***)

System > Timers >

Exit Time MENU 7-2-0

(*** System Wide Parameter ***)

SECONDS

Enter 0 – 255 + [OK] To Program The Exit Time In Seconds.

System > Timers >

Entry Time 1 MENU 7-2-1

(*** System Wide Parameter ***)

SECONDS

Enter 0 – 255 + [OK] To Program The Entry Time In Seconds.

System > Timers >

Entry Time 2 MENU 7-2-2

(*** System Wide Parameter ***)

SECONDS

Enter 0 – 255 + [OK] To Program The Entry Time In Seconds.

System > Timers >

Part Entry Time MENU 7-2-3

(*** System Wide Parameter ***)

SECONDS

Enter 0 – 255 + [OK] To Program The Part Mode Entry Time In Seconds.

System > Timers >

Auto Arm Pre-Alert MENU 7-2-4

(*** System Wide Parameter ***)

Minutes

Enter Digits 0 – 255 + [OK] To Program The Pre-Alert Time In Minutes
(0 = No Pre-Alert)

System > Timers >

Output Pre-Alert MENU 7-2-5

(*** System Wide Parameter ***)

Minutes

Enter Digits 0 – 255 + [OK] To Program The Pre-Alert Time In Minutes
(0 = No Pre-Alert)

System > Timers >

Senior Watch Time MENU 7-2-6

(*** System Wide Parameter ***)

Hours

Enter 0 – 255 + [OK] To Program The Senior Watch Interval In Hours.

System > Power >

AC Options MENU 7-3-0

1	Display AC Fail	Y
2	Report AC Fail	Y
3	Use AC To Synchronise The System Clock	Y
4	Random AC Report 2 hour	N
5	Extend AC Supervision From 1 Minute To 60 Minutes	N
6	Reserved	N
7	Reserved	N
8	Display Clock Trouble	Y

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

System > Power >

Battery Options**MENU 7-3-1**

1	Display Battery Fail	Y
2	Report Battery Fail	Y
3	Execute Battery Testing On Arming	Y
4	Arming Allowed On Low Battery	Y
5	Reserved	N
6	Reserved	N
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

System > Power >

Fuse Options**MENU 7-3-2**

1	Display COMM+ Current Overload Condition	Y
2	Report COMM+ Current Overload Condition	Y
3	Display +12V (Accessories) Current Overload Condition	Y
4	Report +12V (Accessories) Current Overload Condition	Y
5	Display LAN+ Overload Condition	Y
6	Report LAN+ Overload Condition	Y
7	Reserved	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

System > Siren >

Tone**MENU 7-4-0****Speed****MENU 7-4-1****Volume****MENU 7-4-2**

(***) System Wide Parameter (***)

1 5

Enter 0 – 15 + [OK] To Program Volume Of The Siren Volume
(0 = Disabled / 1 = Low – 15 = High)

System > Siren >

Swinger Siren**MENU 7-4-3**

3

Enter 0 – 15 + [OK] To Program Number Of Times Siren Can Sound Before Lockout. (0 = Unlimited) (***) System Wide Parameter (***)

System > Schedules >

Name**MENU 7-5-0**

S	c	h	e	d	u	l	e	1	N	a	m	e
---	---	---	---	---	---	---	---	---	---	---	---	---

Use [←] and [→] Keys To Scroll Cursor Left and Right. Use Keys [0] – [9] + [#] and [*] To Toggle Characters + Enter [OK] To Save

System > Schedules >

Time**MENU 7-5-1****Start Time**12 : 00 am
HH MM**Stop Time**12 : 00 am
HH MM

Use the [←] and [→] keys to move to the field then [↑] and [↓] to change. Press [OK] to save or [MENU] to exit without saving.



Scroll through hours to change from am to pm.

System > Schedules >

Day**MENU 7-5-2**

Sun	Mon	Tue	Wed	Thu	Fri	Sat	Hol
Y	Y	Y	Y	Y	Y	Y	N

Enter 1 – 8 To Toggle Days ON/OFF, Then Press [OK] To Save

System > Schedules >

Function**MENU 7-5-3**

0 = Disabled

0

1 = Area On/Off

3 = Operate Output

2 = Area Part On/Off

4 = Timer Group

Use Keys [↑] and [↓] keys or enter 0 - 4 + [OK] To Program The Function the Schedule Will Follow

System > Schedules >

Index**MENU 7-5-4**

0

(Enter Digits 0 – 15 To Program Area, Output or Access Group Number, Then Press [OK] To Save

System > Holidays >

Name**MENU 7-6-0**

H	o	i	d	a	y	N	a	m	e
---	---	---	---	---	---	---	---	---	---

Use [←] and [→] Keys To Scroll Cursor Left and Right. Use Keys [0] – [9] + [#] and [*] To Toggle Characters + Enter [OK] To Save

System > Holidays >

Start Stop Dates**MENU 7-6-1****Start 12am**01 Jan
DD MM**Stop 12am**01 Jan
DD MM

Use the [←] and [→] keys to move to the field then [↑] and [↓] to change. Press [OK] to save or [MENU] to exit without saving.



If the start day and month and the stop day and month are equal then no holiday exists.

System > System Options >

General Options**MENU 7-7-0**

1	Display LAN Fail	Y
2	Report LAN Fail	Y
3	Alarm On LAN Fail	N
4	Reserved	N
5	Can Change Own PIN Code	N
6	Monitor Default PIN Codes	Y
7	PIN Always Required	N
8	Display Menu Numbers	Y

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

(*** System Wide Parameter ***)

System > System Options >

Area Options**MENU 7-7-1**

1	Area 1 = Common Area	N
2	First To Open Last To Close	N
3	Reset Siren All Users (All Areas)	Y
4	Power Up In Same State As Powered Down	Y
5	Fault Acknowledge All Areas	Y
6	Delay Trouble Beeps	Y
7	Power Up Disarmed	N
8	Reserved	N

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

(*** System Wide Parameter ***)

System > Options >

Keypad Idle Screen**MENU 7-7-2**

0 = No Idle Screen

0

1 = Date and Time

2 = Time

3 = Custom Screen

(***) System Wide Parameter (***)

Use Keys [↑] and [↓] keys or enter 0 - 3 Then Press [OK] To Program The Keypad Idle Screen - Single Option Only.

System > Options >

Keypad Hi/Lo Temp**MENU 7-7-3**

00 °C

Hi TEMP

00 °C

Lo TEMP

(*** System Wide Parameter ***)

Use Keys [↑] and [↓] keys To Program The High / Low Keypad Monitor Temperature. Max = 50 Min = 0

System > Installer Options >

Installer Options**MENU 7-7-4**

1	Report/Log Entry/Exit Intstaller Menu	N
2	Report/Log Program Data Change	Y
3	Arm Only Installer Pin	N
4	Reserved	N
5	Auto Exit Installer Menu In 2 Hours	Y
6	Auto Exit Service mode In 2 Hours	Y
7	Reserved	N
8	Factory Defaulting Allowed	Y

Use Keys [↑] and [↓] to scroll up and down the option list. With option selected press ON / OFF key to enable or disable option. [✓] will display to indicate option set. Press [OK] To Save when finished.

(*** System Wide Parameter ***)

System > Options >

Language**MENU 7-7-5**

0 = English

0

1 = Alternate Language

(Enter Digits 0 – 15 To Program Area, Output or Access Group Number, Then Press [OK] To Save

System > System Testing >

Walk Test All Zones**MENU 7-9-0****Battery Test****MENU 7-9-1****Testing The System**

You will need to be in programming mode before accessing the test functions listed below.

Walk Test

Use the walk test command MENU 3-9-0 to test and verify that all zones work correctly.

External Audible Test

Use MENU 4-9-0 to test and verify that all horn speakers operate. This test will sound the horn speaker for two seconds.

Internal Audible Test

Use MENU 4-9-1 to test and verify that all 12 VDC sirens operate. This test will sound the siren for two seconds.

Strobe Test

Use MENU 4-9-2 To test and verify that the strobe operates. This test will turn on the strobe until you manually stop the test.

Battery Test

Use MENU 7-9-1 to test the back-up battery that is connected to the control panel.

Communication Test

Use MENU 5-9-0 to test the telephone reporting capability of the control panel. You can also activate a communication test by holding down the Test / Mail key on the keypad.

Specifications

Panel	Solution 16 ^{plus} (Part Number CC100)	
Voltage Input	16-22 VAC	
Current Requirements	22 VA min plug pack adapter or transformer	
<u>Power Outputs</u>		
Continuous Power	1 Amp (Primary supply source only)	
Secondary Source	4 Amp (Total with both primary and secondary source combined)	
Stand-by Battery	12 VDC, 7AH sealed rechargeable battery	
Min Operating Voltage	10.2 VDC	
<u>Discharge Cycle</u>		
AC Off	Keypads indicate trouble condition, AC Fail report sent (if programmed)	
13.8 VDC	Charging level	
11.5 VDC	Low battery trouble at keypads, low battery report sent (if programmed)	
10.0 VDC	Panel shuts down as voltage fails below 10.2 VDC	
<u>Recharge Cycle</u>		
AC On	Panel restarts, battery charging begins.	
	AC trouble clears from keypads,	
	AC restore report sent (if programmed).	
13.0 VDC	Battery trouble clears from keypads,	
	Battery restore report sent (if programmed).	
13.8 VDC	Battery pulse charged.	
LAN BUS	12 VDC, 305M of 14/0.20 0.8mm ² (22 AWG) cable.	
Telephone Connections	RJ-12 Socket or 4-way terminal	
Temperature	0° to 55° C	
Relative Humidity	5 to 85% at 30°C non-condensing.	
Compatible Keypads	CPI00 Graphic CPI01 Graphic + Prox	CPI10 Graphic - Black CPI11 Graphic + Prox - Black
Compatible Accessories	CM104 8/16 Zone Expander CM110 4-Way Relay Output Module CM120 1-Amp LAN Power Supply	CM195 Multi RF Receiver Interface SW500B Solution Link (RAS) Software CM900 Direct Link Interface
Enclosure Dimensions:	375mm (W), 257mm (H), 90mm (D)Part Number: MW100	
PWA Dimensions:	235mm (W), 40mm (H), 85mm (D)	
Warranty:	3 years from date of manufacture (return to base)	

The following parts are supplied with the panel

(Australian models only - content may differ in export models)

Panel Assembly Includes	1 x Metal Enclosure with tamper 1 x Panel PWA 1 x User Manual	1 x Installer Reference Guide 1 x Resistor Pack
Resistor Pack Includes	1 x Red Battery Lead 1 x Black Battery Lead 1 x 2-Way Shunt With Handle 2 x Phillips Pan Head Zinc Plate Screw 1 x Telephone Cable RJ12 6P/4C 10 x 3K3 – 0.25W +/- 1% Metal Film Resistors 10 x 6K8 – 0.25W +/- 1% Metal Film Resistors 1 x 3-Way AC Terminal Block 1 x Panel Tamper Switch 1 x Tamper Switch Bracket	
Available Separately	Solution 16 ^{plus} Installation Manual Part Number: BLCC100I Solution Link (RAS) Software Part Number: SW500B	

NOTES:

This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across the entire width of the page, providing a guide for writing. The background is a solid off-white color. There are no margins, text, or other markings present.

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