

ICON 16

installation manual

Important Note

Default using DEFAULT
pins LK3 on initial power up



Icon 16, 32 and 48
version 6.02 2006

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New features and functions

Chime Mode	Any selected section can cause output 4 to give a pulse output to drive a sionalert or screamer when that section is unsealed. Setup by function 84.
Keyswitch operation	Select up to six sections (from sections 11-16) to arm or disarm (and panic) by a momentary or latching trigger of the section. Separate combinations of areas can be selected to be controlled by each keyswitch input and the opening and closings report via users 81-86.
Securitel Line Fail Backup to Dialler or GSM	Function 59 (backup account number) and Function 70 (Delay to backup) added to enable line fault detection on STU line to cause the reporting to use an alternate format. CID via dialler / GSM.
Tape or Domestic	Tape dial allows the panel to report to a standard phone or mobile.
Upload / Download	Allows remote programming via modem and retrieval of history (up to 2000 events)

Short Cuts

Here are some related functions which may help in programming the Panel

Keypad Codes	Functions	54, 58, 74
	Functions	00- 30 and 99 with Tech Code 00- 80 with Master Code
Time Functions	Functions	40, 41, 42, 73, 97, 98
Section Setup	Functions	49, 50, 52, 53, 55, 56, 57, 61, 75
Area Setup	Functions	31, 32, 33, 34, 35, 36, 58
Dialler	Functions	60, 61, 63, 66, 67, 69, 71, 72, 73, 74, 76
Down load	Functions	60, 62, 66
Securitel	Functions	60, 61, 63, 67, 71, 72, 74, 76
Dead Man Timer	Functions	44, 45, 46, 57
Printer	Functions	94, 96
Special Functions	Functions	54, 58, 74, 81-88
Keyswitch Functions	Functions	37, 81-86 (delete sections used from 31-36)
Chime sections	Functions	84 - output on OP4

Notes

1. Day Local Sections - only generate local sirens, bells and strobes when in Day Mode (i.e. the area is disarmed).
2. Open / Close Reports can be enabled / disabled for each area 1-6.
Individual area reporting may not be required if Full system Close and Open is required.
Area 7 can be separately selected to report first to open, last to close messages.
3. When programming user code areas or privileges:
Area 9 is used to allow the user access to the test functions.
Area 10 is used to allow the user to isolate sections.
4. User Codes 81-86 are reserved as keyswitch users for inputs 11-16 see function 37
5. To enter program or test modes, all areas must be in the off mode.

Readback

Notes

1. For functions 31-36,49,50,52,55,56 and any others relating to sections, when the function number is entered, previously selected sections will flash. If at this point the Code or On button is pressed no changes will be made and the power LED will be flashing again and you can select the next Function.
To de-select a section when the sections are displayed, re-enter that sections number, The section LED will be off.
2. For all other function numbers, whilst in PROGRAM mode, if an option is entered followed by the TEST key then that options setting will be read back using the LEDs on the programmer as follows.

LED	Indicated Digit
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	0

If you wish to check Function 60 (Account number), enter the 6 0 followed by the TEST key.

(In this case option 60 is 0199)

(digit 0) Section 10 LED will light accompanied by a beep

(digit 1) Section 1 LED will light accompanied by a beep

(digit 9) Section 9 LED will light accompanied by a beep

(digit 9) Section 9 LED still lit and accompanied by a beep

Then beep-beep and the POWER led flashing again (Test completed ready for next function)

Inputs

All Inputs Are 10K end of line monitored, with a response time of approximately 300-500ms. Alarm triggers Siren, Strobe, Outputs and Reporting. (depending on setup)

Inputs 1-48 These inputs may be partitioned into any of the six areas. For more on partitioning see description of Partitioning below. May be programmed to have EXIT / ENTRY or EXIT / HANDOVER delays, and may be programmed for 24 HOUR, SILENT or DAY SILENT operation. These inputs when in alarm can be programmed to operate outputs 1-3 (see function 81-83)

Fridge Section 24 may be programmed as a Fridge alarm (Timed 24 hour). The Fridge input is ignored unless unsealed for a period of time set by Function 48.

16VAC These terminals are for connection to a 16 -18vac 1.5 amp plug pack.

Partitioning The 1-48 inputs may be grouped into six areas. Each Area may be armed and disarmed independently. Each Area uses an independent entry/exit timer. Due to noise restriction laws, the siren timer is controlled by all areas, such that the siren will sound for the preprogrammed time when a non silent section is alarmed. While the siren timer is running any new section alarms are ignored and do not cause the siren time to increase. Any user code may be used to turn the sirens off. If a section is in more than one Area or Partition then the section is armed when all its Partitions are armed

Chime Any section can be programmed for a chime using function 84 (chime output is OP4)

Keyswitch Sections 11-16 can be programmed as a Keyswitch input using function 37.

Outputs

- OP1:** This Open Collector output is activated when any of the preprogrammed sections (Function 81) are in the alarm condition. Output via 100 Ohm resistor.
- OP2:** This Open Collector output is activated when any of the preprogrammed sections (Function 82) are in alarm. Output via 100 Ohm resistor.
- OP3:** This Open Collector output is activated when any of the preprogrammed sections (Function 83) are in alarm. Output via 100 Ohm resistor.
- OP4:** This Open Collector output is activated when any of the preprogrammed sections are unsealed (see Function 84). Double pulse output for CHIME. Output via 100 Ohm resistor, connect a sonalert between OP4 and +12 volts for CHIME.
- OP5:** This Open Collector output is activated when the panel is in TEST mode or Dead Mans Timer (DMT) is running. See Function 46 to enable DMT.
- OP6:** This Open Collector output is activated when any of the preprogrammed sections are Isolated. Programmed with (Function 86) or Dead Mans Warning/Alarm.
- OP7:** This Open Collector output is activated when ANY of the preprogrammed areas are in the On mode. Programmed with (Function 87).
- OP8:** This Open Collector output is activated when ALL of the preprogrammed areas are in the On mode. Programmed with (Function 88).
- RS232 PRINT T** RS-232 printer output. Baud rate programmed with option 94 (Default 9600,8,1,0).
- RS232 PRINT -** Printer signal ground.
- Aux 12:** 12VDC outputs for detectors, etc. The outputs are via the INTERNAL fuse. Between 200 - 500mA can be delivered to load depending on siren, strobe. The onboard regulation is rated at 1.5amps and of this, the battery can take up to 200mA depending on the state of charge. One strobe requires 250mA and each speaker 200mA. The panel itself in alarm with one keypad draws 150mA approx.
- Batt:** This output is connected to the onboard regulator via a resistor which limits the charge current. Charging voltage is 13.7V.
- +Int:** This terminal is +12VDC fused via the INTERNAL fuse, connects to Internal Bell/Screamer, Internal Siren, Keypad and Detectors.
- +Ext:** This terminal is +12VDC fused via the EXTERNAL fuse, connects to External Siren and Strobe.
- Int Sir:** Timed output to drive 1 x 8 ohm speaker rated at 10 watts, fused via INTERNAL fuse.
- Int Bel:** Timed output to drive DC screamers, fused via INTERNAL fuse.
- Ext Stb:** 12vdc untimed output to drive 12vdc strobe, fused via EXTERNAL fuse.
- Ext Sir:** Timed output to drive 1 x 8ohm speaker rated at 10 watts, fused via EXTERNAL fuse.
- Telecom Connector :** This is where the Telecom lead, which is supplied with the unit is connected. The Telecom lead uses pins 2 & 6 of the Telecom socket for the incoming line and pins 1 & 5 connect to the telephone in a MODE 3 arrangement.

Outputs cont'd

- High Integrity Earth:** This terminal connects to a dual GAS ARRESTOR. This device is the same as used by Telecom in exchanges and main frames to protect against lightning induced voltages. If this terminal is connected to an earth rod or cold water pipe, the tolerance to high voltage or lightning induced transients is greatly increased. The Telecom input normally has a high tolerance to transients but with this terminal connected the tolerance is even greater. Use a heavy conductor for this purpose 40/020 or similar.
- R0 T0** These 2 terminals together with the + and - terminals are used to connect to an RS232 STU (R0 connects to Tx on the STU and T0 connects to Rx on the STU).
- + - C D1:** These 4 terminals connect to the keypads that display sections 1 up to 24.
- D2:** This terminal connects to the keypad when required to display sections **25 - 48**.
- The terminal marked + connects to the terminal marked + on the keypad
The terminal marked CLK connects to the one marked C on the keypad
The terminal marked D1 and D2 connect to D1 and D2 on the keypad
The terminal marked - connects to the terminal marked - on the keypad

Leds on the PCB

- Scan:** This green led near the keypad screw terminals indicates that the micro-processor is operating and must always be flickering.
- Sir:** This red LED is near the fuses and indicates when the siren is running.
- Stb:** This red LED is near the fuses and indicates when the strobe output is on.
- Dial:** This red LED is near the Line Sieze relay and indicates when the Dialler is on line.
- Rx:** This yellow LED is near the Rx2 screw terminal and will flicker when RS232 data is being received on the Rx2 screw terminal.
- Tx:** This red LED is near the Tx2 screw terminal and will flicker when the panel is transmitting RS232 data on the Tx2 screw terminal.
- MCD:** This green LED is near the telecom transformer and illuminates when the onboard modem is detecting a carrier.
- MRX:** This yellow LED is near the telecom transformer and flickers when the modem is receiving serial data or Rx0 is receiving data from a reporting device.
- MTX:** This red LED is near the telecom transformer and flickers when the panel is transmitting data to the onboard modem or Tx0 to a reporting device.
- OP1:** This LED is on when the output OP1 setup by function 81 is on or active low.
OP2: This LED is on when the output OP2 setup by function 82 is on or active low.
OP3: This LED is on when the output OP3 setup by function 83 is on or active low.
OP4: This LED is on when the output OP4 setup by function 84 is on or active low.
OP5: This LED is on when the output OP5 setup by function 85 is on or active low.
OP6: This LED is on when the output OP6 setup by function 86 is on or active low.
OP7: This LED is on when the output OP7 setup by function 87 is on or active low.
OP8: This LED is on when the output OP8 setup by function 88 is on or active low.

Defaulting the Panel

To initialize the panel to factory defaults, momentarily link/short the Default pins on power up for 3 seconds. While the panel is defaulting, the area leds will scan from left to right.

These pins are located near the large square chip in the centre of the PCB. This will default all system setup values and user numbers etc, back to known default values.

On Power Up

On power up the unit performs an internal self test of Non Volatile Memory. If the Non Volatile memory is found to have been corrupted in some way then the factory defaults will be reloaded. On power up the unit starts off in the OFF mode and the sirens may operate for half a second.

Dialling Sequence

The dialling sequence from start to finish consists of 6 dialling attempts as follows:

3 dialling attempts to the phone number 1 (setup in Function 64),
The dialler will release the line for 5 minutes,
Then dial 3 more attempts using number 2 (setup in Function 64)
(if no second number has been programmed then the first number will be tried again).

If after these attempts handshake is still not received, dialling will cease until another condition causes it to dial, at which time the previous condition will also be reported.

Other Features

Keyboard Duress: Duress is sent by entering your normal 4 digit code but with the last digit incremented by 1.
If your code is " 1234 " then enter "1235 " a duress alarm is sent with no local alarm.
A duress restore is sent when the next valid code is entered. If the last digit of your code is " 0 " then enter a " 1 ". Or if a 9 enter a 0.

Mains Fail: Mains fail is detected automatically by the panel.
When mains fail is detected the power LED on the keypad will give a single flash and keypad will be beeping. The beeper will stop when any button is pressed. After mains failure has occurred for more than 60 minutes the panel will report a mains fail alarm. When mains is restored the power LED will go steady again and after 10 seconds the panel will report a mains restoral.

Low Battery: Low battery is detected automatically by the panel. When low voltage is detected the power LED on the keypad will give a double flash. After the system voltage has been low for 60 seconds the panel will report the Low Battery. When the system voltage is restored to normal, the power LED will go steady and after 10 seconds the panel will report a low voltage restoral.

Control Panel Function List

Function	Num of Digits	Defaults
00 Master Code holder	6	218572
01 User code 1 (Areas: All)	4	1111
02 and up to 86 User code (Areas: All)	4	Nil
*** User codes 01-30 programmed with Tech code, 01-80 with Master Code *** User codes 81- 86 are used to set up Areas assigned to keyswitch sections 11-16		
31 Area 1 Sections	2	1 to 48
32 Area 2 Sections	2	Nil
33 Area 3 Sections	2	Nil
34 Area 4 Sections	2	Nil
35 Area 5 Sections	2	Nil
36 Area 6 Sections	2	Nil
37 Keyswitch Sections	2	Nil
40 Exit time	1	60 secs
41 Entry time	1	30 secs
42 Siren time	1	5 min
43 Manual De - Isolate of 24 hour sections	1	Enabled
44 Dead Mans Timer ..Start Time	4	0000
45 Dead Mans Timer ..Stop Time	4	0000
46 Dead Mans Timer ..Timeout Period	1	Disabled
47 Panic silent or audible (Not Used)	1	Audible
48 Fridge Alarm Delay (Section 24) ++	1	Disabled
49 Exit and Entry sections	2	1+2
50 Exit and Handover sections	2	Nil
52 24 hour inputs	2	Nil
53 Number of 16 input Expanders connected	1	Nil
54 Disable sirens on first keypress	1	No
55 Silent Sections	2	Nil
56 Day Silent Sections +++	2	Nil
57 Dead mans Timer Sections	2	Nil
58 Number of Areas	1	6

Note:

When programming user code areas:

LEDs 1-6 are areas 1-6. LEDs 7 and 8 are spare.

LED 9 is not a physical area but is used to allow access to the test functions.

LED10 is not a physical area but is used to allow users to isolate sections.

++ When the Fridge Delay is enabled Section 24 becomes a Fridge Input.

+++When an area is not armed the area is in Day Mode, a section programmed for that area is in Day Mode.

Communications Functions

	Function	# of Digits	Defaults
60	Account number	4	0000
61	Day Locals +	2	Nil
62	DownLoading (Ring Back) Phone No	15 max	Nil
63	Area Open / Close reports ++	2	Areas 1-7
64	Phone Number one	15 max	Nil
65	Phone Number two	15 max	Nil
66	Dial method	1	Tone
67	Transmission Format	1	Contact ID
68	Report Restorals	1	Yes
69	No of days between test reports	1	0
70	Securitel Backup Timeout	1	30secs
71	Report Isolates	1	Yes
72	Report User IDs	1	Yes
73	Time of test report	4	Disabled,0000
74	Keyboard Duress	1	Disabled
76	Multi-Break	2	Nil

Special Functions

	Function	# of Digits	Defaults
81	Output OP 1 Sections	2	Nil
82	Output OP 2 Sections	2	Nil
83	Output OP 3 Sections	2	Nil
84	Output OP 4 Sections	2	Nil
85	Output OP 5	2	Nil
86	Output OP 6	2	Nil
87	Output OP 7 Areas	2	Nil
88	Output OP 8 Areas	2	Nil
90	Default to factory (see also Initialization)	0	N/A
94	Printer Baud Rate	1	9600,8,1,N
96	Print Event Log - (as it happens)	1	No, on request
97	Time Set	4	0900
98	Date Set	6	010999
99	Technician Code	6	218067

+ Day Local Sections only generate local sirens, bells and strobes when in Day Mode (i.e. the area is disarmed).

++ Open / Close Reports can be enabled / disabled for each area 1-6. Individual area reporting may not be required if Full system Close and Open is required (Area 7). Area 7 can be separately selected to report first to open, last to close messages.

Function 31 Area 1 sections - Default Sections 1-48

Display and change which sections will operate as Area 1 inputs.

Key Sequence

2 1 8 0 6 7 On

3 1

0 1

0 2

0 3

On

Off

Operation

Enter Tech code(default 218067)

Select Function 31

(previously selected sections will flash)

Section 1 is in area 1

Section 2 is in area 1

Section 3 is in area 1

Store this selection

Exit program mode

Function 32 Area 2 sections - Default Sections Nil

Display and change which sections will operate as Area 2 inputs.

Key Sequence

2 1 8 0 6 7 On

3 2

0 9

1 0

1 1

On

Off

Operation

Enter Tech code(default 218067)

Select Function 32

(previously selected sections will flash)

Section 9 is in area 2

Section 10 is in area 2

Section 11 is in area 2

Store this selection

Exit program mode

Function 33 Area 3 sections - Default Sections Nil

Display and change which sections will operate as Area 3 inputs.

Key Sequence

2 1 8 0 6 7 On

3 3

1 7

1 8

1 9

On

Off

Operation

Enter Tech code(default 218067)

Select Function 33

(previously selected sections will flash)

Section 17 is in area 3

Section 18 is in area 3

Section 19 is in area 3

Store this selection

Exit program mode

Function 34 Area 4 sections -

Default Sections Nil

Display and change which sections will operate as Area 4 inputs.

Key Sequence

2 1 8 0 6 7 On
3 4

2 7
On

Select another function number or Exit program mode using the OFF key

Operation

Enter Tech code(default 218067)
Select Function 34
(previously selected sections will flash)
Section 27 is in area 4
Store this selection

Function 35 Area 5 sections -

Default Sections Nil

Display and change which sections will operate as Area 5 inputs.

Key Sequence

2 1 8 0 6 7 On
3 5

0 1
0 2
0 3
On

Select another function number or Exit program mode using the OFF key

Operation

Enter Tech code(default 218067)
Select Function 35
(previously selected sections will flash)
Section 1 is in area 5
Section 2 is in area 5
Section 3 is in area 5
Store this selection

Function 36 Area 6 sections -

Default Sections Nil

Display and change which sections will operate as Area 6 inputs.

Key Sequence

2 1 8 0 6 7 On
3 6

0 9
1 0
On

Select another function number or Exit program mode using the OFF key

Operation

Enter Tech code(default 218067)
Select Function 36
(previously selected sections will flash)
Section 9 is in area 6
Section 10 is in area 6
Store this selection

This function provides the keyswitch functionality to the ICON 16 allowing a remote arming facility, based on the change in state of one or more (up to 6) keyswitch sections (sections 11-16). The keyswitch can be used to arm or disarm an area or a group of areas, depending on the "Areas" setup of the current keyswitch User (Users 81 to 86).

It can also create a panic alarm if activated for more than 3 seconds

Programming Options needed to be setup:

User 81-86 = User 81 keyswitch areas and chirp outputs.
Note this must be setup with a **Master code** not the Tech code.
Function 37 = Keyswitch Sections 11 to 16
Function 31 = Remove sections in areas when used as keyswitch sections

Keyswitch Sections - Function 37

Display and change which sections will operate as keyswitch inputs.

Only sections 11-16 can be keyswitch sections, and the Areas that are controlled by each keyswitch input are assigned by programming User Codes 81-86 with the **Master Code**

(input/section 11 setup by user 81, input 12 setup by user 82 etc.)

Note: Make sure you remove keyswitch sections out of Function 31-36.

Key Sequence

2 1 8 0 6 7 On
3 7

1 1

1 2

On

Select another function number or Exit program mode using the OFF key

Operation

Enter Tech code(default 218067)

Select Function 37

(previously selected sections will flash)

Section 11 when flashing is a keyswitch input

Section 12 when flashing is a keyswitch input

Store this selection

Whilst it is not necessary to setup every keyswitch user, or any in fact, the unused users cannot be setup as general users.

Continued on next page.....

Function 37 Keyswitch sections *Cont'd*

User Setup (Areas):

- 1 - 6** Area Control - Arming/Disarming of areas, as a normal user setup.
Default areas 1- 6
- 7** - Acknowledge Alarms only (Mute) - Default enabled
- 8** - Reset and Mute - Default enabled
- 9** - Enable Panic - Default disabled
- 10** - Chirp the Bell Output - Default enabled
- 11** - Chirp the Siren Output - Default enabled
- 12** - Flash the Strobe Output - Default enabled
- 13** - Momentary or Latching - Default Momentary
If latching is used, then the panic option is not available.

Beep / Chirp / Flash:

Arming	300m/S On	300m/S Off	300m/S On
Disarming	600m/S On		
Error	300m/S On	300m/S Off	five times (Unsealed sections inhibiting arming)

Note:

A change has been made to the normal operation via keypad. If any of the selected areas have unsealed sections, then NO AREA will arm.

A keyswitch section cannot be part of an area. If it is included in an area, it may be ignored within that area while it is setup as a keyswitch section.

Where there are multiple keyswitch areas, and an arm request is received, if any of the keyswitch areas have an unsealed section, NO AREA will arm.

The priority will be to turn off areas, this means that when a keyswitch input is activated, if any keyswitch areas are armed at that time, then these areas will be disarmed. The following activation of the keyswitch input will then arm all the keyswitch areas.

User 81-86 will be used for reporting and logging keyswitch operations

The Keyswitch Users, 81-86 are dedicated, and cannot be setup as panel users if they or any of them are not used as Keyswitch.

Only sections 11-16 can be setup as Keyswitch Sections, however, in this case, if any, or all of these sections is not to be used as a Keyswitch Section, then that section can be programmed in general use.

Function 40 Exit Time

Default 60 seconds

Options

0 - 0 seconds	5 - 50 seconds
1 - 10 seconds	6 - 60 seconds
2 - 20 seconds	7 - 70 seconds
3 - 30 seconds	8 - 80 seconds
4 - 40 seconds	9 - 90 seconds

Key Sequence

2 1 8 0 6 7 On
4 0
5 On

Off

Operation

Enter valid Technician code (default 218067)
Select function number 40
Select & store option number (example shows option 5, i.e. 50 secs being selected).
Exit Program mode

Function 41 Entry Time

Default 30 seconds

Options

0 - 0 seconds	5 - 50 seconds
1 - 10 seconds	6 - 60 seconds
2 - 20 seconds	7 - 70 seconds
3 - 30 seconds	8 - 80 seconds
4 - 40 seconds	9 - 90 seconds

Key Sequence

2 1 8 0 6 7 On
4 1
3 On

Off

Operation

Enter valid Technician code (default 218067)
Select function number 41
Select & store option number (example shows option 3, i.e. 30 secs being selected).
Exit Program mode

Function 42 Siren Time

Default 5 minutes

Options

0 - 0 seconds	5 - 2 min 40 sec
1 - 10 seconds	6 - 5 min
2 - 20 seconds	7 - 10 min
3 - 40 seconds	8 - 21 min
4 - 80 seconds	9 - 42 min

Notes:

Siren time applies to internal, external and satellite sirens. Australian Standards AS 2201 limit siren to be triggered only once per section unless manually re-set. Noise pollution regulations in most states limit siren time to 5 minutes.

Key Sequence

2 1 8 0 6 7 On
4 2
5 On
Off

Operation

Enter valid Technician code (Default 218067)
Select function number 42
Select & store number e.g. 5 = 160 seconds is selected
Exit Program mode

Function 43 Manual De-Isolate

Default Enabled

Options

- 1 - Enabled. 24 hour sections will remain isolated when disarming.
- 0 - Disabled. 24 hour sections will automatically de-Isolate when disarming.

Key Sequence

2 1 8 0 6 7 On
4 3
1 On
Off

Operation

Enter valid Technician code (Default 218067)
Select function number 43
Select & store option number e.g. 1 = Enable
Exit Program mode

Function 44 Deadman Timer - Start

Default Nil

This Function is used to set the Start time of the Dead Mans timer See also function 45 and 46
Format is HHMM where: - HH is hours in range 00 - 23,
MM is minutes in range 00 -59

Key Sequence

2 1 8 0 6 7 On
4 4
0 9 3 0 On
Off

Operation

Enter existing Tech code (default is 218067)
Select function 44
Set the Start Time to 9.30 am.
Exit Program mode

Function 45 Deadman Timer - Stop

Default Nil

This Function is used to set the Stop time of the Dead Mans timer See also function 44 and 46
Format is HHMM where: - HH is hours in range 00 - 23,
MM is minutes in range 00 - 59

Key Sequence

2 1 8 0 6 7 On
4 5
2 3 3 0 On
Off

Operation

Enter existing Tech code (default is 218067)
Select function 45
Set the Stop Time to 11:30 pm
Exit Program mode

Function 46 Deadman Timer - Timeout

Default 0

Note:

The Deadmans Timer Function is setup by functions 44, 45, 46 and 57. During the Start / Stop period Function 46 is used to set the maximum time during which the "Deadmans Timer Sections " as set by Deadmans Timer "Alarm" is reported as Section 255 Alarm

Options

0 - Disabled	5 - 75 Minutes
1 - 15 Minutes	6 - 90 Minutes
2 - 30 Minutes	7 - 105 Minutes
3 - 45 Minutes	8 - 120 Minutes
4 - 60 Minutes	9 - 135 Minutes

Key Sequence

2 1 8 0 6 7 On
4 6
4 On
Off

Operation

Enter valid Technician code
Select Function 46
Set timeout to 60 minutes.
Exit program mode

Function 47 Silent / Audible Panic

Default Audible

Option

- 1 Audible Panic
- 0 Silent Panic (no strobe or siren)

Note:

This option is for the Key board Panic only

Key Sequence

2 1 8 0 6 7 On
4 7
0 On

Operation

Enter Tech code (default 218067)
Select Function 47
Select option 0 or 1
Example shows option 0 selected
which is silent panic
Exit program mode

Off

Function 48 Fridge Alarm Delay

Default Disabled

Options

0 - Fridge input disabled	5 - 1 hour 15 minutes
1 - 15 minutes	6 - 1 hour 30 minutes
2 - 30 minutes	7 - 1 hour 45 minutes
3 - 45 minutes	8 - 2 hours
4 - 1 hour	9 - Fridge input disabled

Note:

When an option other than 0 or 9 is selected, input 24 becomes a Fridge input.

Key Sequence

2 1 8 0 6 7 On
4 8
2 On
Off

Operation

Enter Tech code (default 218067)
Select Function 48
A delay of 30 minutes selected
Exit program mode

Function 49 Exit Entry Sections

Default 1,2

Display and change which sections will have exit / entry delay.

Key Sequence

2 1 8 0 6 7 On
4 9

0 2
0 8
On
Off

Operation

Enter Tech code (default 218067)
Select Function 49
(any previously selected sections will flash)
Section 2 has exit / entry delay
Section 8 has exit / entry delay
Store this selection
Exit program mode

Function 50 Exit Handover Sections

Default Nil

Display and change which sections will have exit / handover delay. Handover is enabled when any section that has been programmed for Exit / Entry delay has been activated first.

Key Sequence

2 1 8 0 6 7 On
5 0

0 2
0 8
On
Off

Operation

Enter Tech code (default 218067)
Select Function 50
(any previously selected sections will flash)
Section 2 has exit / handover
Section 8 has exit / handover
Store this selection
Exit program mode

Function 52 24Hr Sections

Default Nil

Display and change which sections will operate as 24 hour inputs.

Key Sequence

2 1 8 0 6 7 On
5 2

0 6
0 7
2 3
2 4
On
Off

Operation

Enter Tech code (default 218067)
Select Function 52
(any previously selected sections will flash)
Section 6 is a 24 hour input
Section 7 is a 24 hour input
Section 23 is a 24 hour input
Section 24 is a 24 hour input
Store this selection
Exit program mode

Function 53 Number of Expanders

Default Nil

Option

- 0 No expander fitted
- 1 1 expander fitted
- 2 2 expanders fitted

When expanders are fitted, a jumper on the expander board configures the input numbering.

Group 1 i.e. Sections 17 - 32 or

Group 2 i.e. Sections 33 - 48

Key Sequence

2 1 8 0 6 7 On

5 3

2 On

Off

Operation

Enter Tech code (default 218067)

Select Function 53

Select 2 expanders (Sections 17-32 and 33-48)

Example shows 2 selected

Exit program mode

Function 54 Disable Sirens on first Keypress

Default - Do not disable

Option

- 1 Disable sirens on first keypress
- 0 Do not disable sirens

Note:

If the function enabled and if the sirens are operating when the first number in a code is entered, the sirens will be shut off for 10 seconds after which they will turn on again unless a valid user code is used to acknowledge the alarm. This can only happen once during an Armed or Disarmed period.

Key Sequence

2 1 8 0 6 7 On

5 4

1 On

Off

Operation

Enter Tech code (default 218067)

Select Function 54

Select 1 Disable Siren on first keypress

Exit program mode

Function 55 Silent Sections

Default Nil

Display and change which sections will operate as silent sections. i.e. No Siren and Strobe.

Key Sequence

2 1 8 0 6 7 On

5 5

0 6

2 4

On

Off

Operation

Enter Tech code (default 218067)

Select Function 55

(previously selected sections will flash)

Section 6 is a silent input

Section 24 is a silent input

Store this selection

Exit program mode

Function 56 Silent Sections in Day Mode *Default Nil*

Display and change which sections will operate as silent sections in Day mode.

Day Mode is when the area is disarmed in which the sections are programmed.

Silent means both Siren and Strobe will not be activated

Outputs OP1 - 3 can be used to give local alarm outputs.

Day Local sections (alarms on these sections will not report to Central Station in Day Mode) can be programmed by option 61.

Key Sequence

2 1 8 0 6 7 On
5 6

0 6

0 7

On

Off

Operation

Enter Tech code (default 218067)

Select Function 56.

(previously selected sections will flash)

Section 6 is a day silent input.

Section 7 is a day silent input.

Store this selection.

Exit program mode.

Function 57 Deadman's Sections

Default Nil

Display and change the Sections that will reset the Dead Man Timer (DMT) during the DMT time period as set up by functions 44, 45, 46.

Key Sequence

2 1 8 0 6 7 On
5 7

0 4

On

Off

Operation

Enter Tech code (default 218067)

Select Function 57.

Section 4 selected to reset DMT.

Store this selection.

Exit program mode.

Function 58 Number of Areas

Default 6

Display and change the number of Areas that exist in the panel (1-6)

Options

1 - 1 Area

2 - 2 Areas (1 and 2)

3 - 3 Areas (1, 2 and 3)

4 - 4 Areas (1, 2, 3 and 4)

5 - 5 Areas (1, 2, 3, 4 and 5)

6 - 6 Areas (1-6)

Key Sequence

2 1 8 0 6 7 On
5 8

4

On

Off

Operation

Enter Tech code (default 218067)

Select Function 58.

Panel selected to have 4 Areas.

Store this selection.

Exit program mode.

Function 59 Backup Account Number

Default Nil

Notes:

1. See function 70 for details of Securitel line fail backup to GSM or dialler
2. 4 Digits Limits 0000- 9999
3. This backup account number is used only when programmed for Securitel (Function 67=9) and line fail detection is enabled with a Line Fault Monitor and connected into section 16 and programmed as per function 70

Key Sequence

2 1 8 0 6 7 On
5 9
6 6 6 6 On
Off

Operation

Enter valid Technician code.
Select function 59
Enter Backup Account number - example 6666
Exit Program mode

Function 60 Account Number / HID

Default Nil

Notes:

1. 4 Digits Limits 0000- 9999
2. This function is used to enter the account number for transmission to the Central Station.
3. The dialler will not dial if account number or phone number not programmed.
4. When Option 67 is set to 3 then area 1 uses this Account Number , area 2 uses Account Number +1, area 3 uses Account Number +2, area 4 uses Account Number +3 etc.
5. This Account number is the Hard I.D. when programmed for Securitel (Function 67=9)

Key Sequence

2 1 8 0 6 7 On
6 0
6 6 6 6 On
Off

Operation

Enter valid Technician code.
Select function 60
Enter Account number - example 6666
Exit Program mode

Function 61 Day Local Sections

Default Nil

Display and change which sections will operate as local sections. In Day mode these sections will not report an alarm back to the Central Station. Sirens, Strobe and outputs 1-3, depending on options 55,56,81,82,83. Day Mode is when the area is disarmed.

Key Sequence

2 1 8 0 6 7 On
6 1

0 6
On
Off

Operation

Enter Tech code (default 218067)
Select Function 61
(previously selected sections will flash)
Section 6 is selected for day local
Store this selection
Exit program mode

Function 62 Download Phone number

Default Nil

Note:

The phone number may be up to 15 digits long Including pauses
1 sec pause = Partial key.

Key Sequence

2 1 8 0 6 7 On
6 2
047 Partial 218067
On
Off

Operation

Enter valid Technician code (default 218067).
Select function 62
e.g. shows 047 pause 218067
Store Entry
Exit Program mode

Function 63 Open / Close Reports

Default Areas 1-7

This function is used to select which areas will send open and close reports.

Note:

1. Option 7 or Area 7 is not an area but is used to select first to open / last to close reporting.
2. Open / Close Reports can be enabled / disabled for each area 1-6.
3. Individual area reporting may not be required if Full system Close and Open is required (Area 7).

Key Sequence

2 1 8 0 6 7 On
6 3
0 5
On
Off

Operation

Enter valid Technician code (default 218067)
Select function 63 (previous selections will flash)
Area 5, if flashing, will report open and close messages
Store entry
Exit Program mode

Function 64 Phone number 1

Default none

Note:

The phone number may be up to 15 digits long including pauses.
1 sec pause = Partial key.

Key Sequence

2 1 8 0 6 7 On
6 4
047 Partial 218067
On
Off

Operation

Enter valid Technician code (default 218067)
Select function 64
e.g. shows 047 pause 218067
Store Entry
Exit Program mode

Function 65 Phone number 2

Default none

Note:

The phone number may be up to 15 digits long including pauses.
1 sec pause = Partial key.

Key sequence

2 1 8 0 6 7 On
6 5
047218572
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 65
e.g. shows 047218572
Store entry
Exit Program mode

Function 66 Dialling method

Default DTMF(tone)

Selects to dial in DTMF (Tone) or Decadic Dialling

Option

- 1 Dial in DTMF, (tone)
- 0 Dial in Decadic, (pulse)
- 2 Dial in New Zealand Decadic (Pulse)

Key Sequence

- 2 1 8 0 6 7 On
- 6 6
- 1
- On
- Off

Operation

- Enter valid Technician code (default 218067)
- Select function 66
- Dial in DTMF
- Store entry
- Exit Program mode

Function 67 Transmission Format

Default Contact ID

Option

- 0, 2, 3 Dialling Disabled
- 1 Tape Dial (only with Version 4.5 software and above)
- 4 Contact ID Single Account Number multiple Areas or Partitions
- 5 EDL Direct Line, set account number, Function 60 - Special PCB marked "Direct Line"
- 9 Securitel via RS232 STU Connected to T0, R0, + and - terminals. Set HID with option 60.

Key Sequence

- 2 1 8 0 6 7 On
- 6 7
- 4
- On
- Off

Operation

- Enter valid Technician code (default 218067)
- Select function
- Contact ID Format Selected
- Store entry
- Exit Program mode

Function 68 Report Restorals

Default Report Restorals

The dialler will normally report when an input is restored to a non alarm condition. This is usually when the panel is disarmed.

Option

- 1 Report restorals
- 0 Do not report restorals

Key sequence

- 2 1 8 0 6 7 On
- 6 8
- 0
- On
- Off

Operation

- Enter valid Technician code(default 218067)
- Select function
- Don't report restorals
- Store entry
- Exit Program mode

Function 69 Test Reports

Default 0, no test reports

This function programs the number of days between test reports (0 - 9), programming a 0 gives no test reports. Also setup Function 73 Time of Test report.

Options

0 -	Test Reports disabled	5 -	send test report every 5 days
1 -	send test report every day	6 -	send test report every 6 days
2 -	send test report every 2 days	7 -	send test report every 7 days
3 -	send test report every 3 days	8 -	send test report every 8 days
4 -	send test report every 4 days	9 -	send test report every 9 days

Key sequence

2 1 8 0 6 7 On
6 9
7
On
Off

Operation

Enter valid Technician code(default 218067)
Select function
Select period in days (1 - 9) e.g. shows once a week
Store entry.
Exit Program mode

Function 70 Securitel /GSM Backup

Default 0

Overview

This new function has been added to allow the panel to report via Securitel (using an RS232 STU) and in the event of a Securitel line failure (cut line sensed by a line fail module). The panel will automatically report the line failure via dialler on GSM or standard PSTN line and keep transmitting any further events via this backup reporting method until the line fail module has determined the line has restored to normal.

A line fail module is connected on the Securitel line and the output is connected to **section 16**. When section 16 is faulted and after a delay set by function 70, the panel will go into "Backup mode". The panel then uses the "Backup client number" stored in function 59 (or 60 if function 59 is not set). The panel sends a "section 16 alarm" message (panel operating on backup) to the Central station via the GSM /dialler. The delay before line fail is reported can be set between 0 and 10 minutes from the detected line fail. The Line fault detector module has also an inbuilt 30 -second delay.

When the voltage on the Securitel line restores to normal, the line fail module will restore section 16 after a delay set by function 70. A "section 16 restored" message will be sent to the Central station via dialler/GSM prior to reverting to Securitel.

The normal setup for this mode of backup operation is as follows:

Reporting format is setup for Securitel (function 67=9)

Account number (Function 60) An alternate backup account number (Function 59) if different from Function 60.

Section 16 connected to the line fail module (section sealed when line ok)

Delete Section 16 from being in an area

Primary phone number (function 64) setup

Secondary phone number (function 65) setup

Backup Account number (function 59).

Function 70 is used to program the Timeout Period as follows:

Value	Timeout Period	
0	No Timeout Period	
1	10 Second Timeout Period	(20 Seconds to Restore)
2	20 Second Timeout Period	(40 Seconds to Restore)
3	40 Second Timeout Period	(80 Seconds to Restore)
4	80 Second Timeout Period	(1 60 Seconds to Restore)
5	5 Minute (300 Second) Timeout Period	(10 Minutes to Restore)
6	10 Minute (600 Second) Timeout Period	(20 Minutes to Restore)

Function 71 Report Isolated Sections

Default report

The control panel will normally report isolated sections.

Option

- 1 Report Isolated sections
- 0 Do not report Isolated sections

Key sequence

- 2 1 8 0 6 7 On
- 7 1
- 1
- On
- Off

Operation

- Enter valid Technician code(default 218067)
- Select function
- Report isolated sections
- Store entry
- Exit Program mode

Function 72 Report User Ids

Default report

Note:

If enabled the control panel will report user Ids.

Option

- 1 Report user IDs
- 0 Do not report user IDs (Send as User 30 Only)

Key sequence

- 2 1 8 0 6 7 On
- 7 2
- 1
- On
- Off

Operation

- Enter valid Technician code (default 218067)
- Select function 72
- Report user IDs
- Store entry
- Exit Program mode

Function 73 Time of Test report

Default nil

Note:

This sets the time of day that a test report will be generated.

Format is HHMM

where: - HH is hours in range 00 - 23, MM is minutes in range 00 -59

Key sequences

- 2 1 8 0 6 7 On
- 7 3
- 2 3 3 0
- On
- Off

Operation

- Enter valid Technician code(default 218067 .
- Select Function
- Test report started at 11.30pm.
- Store entry
- Exit Program mode

Function 74 Keyboard Duress

Default Disabled

Note:

Keyboard duress may be disabled to prevent accidental duress alarms from private residences. Duress is achieved by adding 1 to the last digit eg. 1234 becomes 1235, 6789 becomes 6780.

Option

1 Duress reports enabled
0 Duress reports disabled

Key sequence

2 1 8 0 6 7 Code
7 4
1
On
Off

Operation

Enter valid Technician code(default 218067)
Select Function
Duress enabled
Store entry
Exit Program mode

Function 76 Multibreak Sections

Default None

Display and change which sections will report input condition changes when armed.

Note:

This option will not give multi triggering of sirens to a section but will give multi reporting. The section LED will latch on first alarm for that section

Key sequence

2 1 8 0 6 7 On
7 6
0 9
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 76
Select section 9 for multibreak.
Store entry
Exit Program mode

Function 81 Output OP1 Sections

Default None

Display and change which sections when in alarm will activate Output OP1.

If any of the selected sections goes into alarm then Output OP1 is held active until the alarm condition has been cleared.

Key sequence

2 1 8 0 6 7 On
8 1
0 9
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 81
Select section 9 to operate OP1 when in Alarm.
Store entry
Exit Program mode

Function 82 Output OP2 Sections

Default None

Display and change which sections when in alarm will activate OP2 output.

If any of the selected sections goes into alarm then Output OP2 is held active until the alarm condition has been cleared.

Key sequence

2 1 8 0 6 7 On
8 2
1 0
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 82
Select section 10 to operate OP2 when in Alarm.
Store entry
Exit Program mode

Function 83 Output OP3 Sections

Default None

Display and change which sections when in alarm will activate OP3 output.
If any of the selected sections goes into alarm then Output OP3 is held active until the alarm condition has been cleared.

Key sequence

2 1 8 0 6 7 On
8 3
1 0
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 83
Select section 10 to operate OP3 when in Alarm.
Store entry
Exit Program mode

Function 84 Chime Sections - OP4

Default None

Display and change which sections when **unsealed** will give 2 pulses on OP4 output (Chime output).
If any of the selected Chime sections are unsealed then Output OP4 will pulse low twice on the opening of the door or triggering of the sensor (not the sealing of the section). If one Chime section is left unsealed further activations of the Chime output can still occur from other Chime sections.
Output 4 (OP4) can be connected to a beeper or the internal Bell - terminal. Connecting the OP4 to the Bell - allows the internal screamer to operate as normal and also give a double chirp on the screamer when a Chime section is triggered. A switch can also be added in series with the beeper to mute as required.

Key sequence

2 1 8 0 6 7 On
8 4
1 0
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 84
Select section 10 to operate OP4 when in Alarm.
Store entry
Exit Program mode

Function 85 Output OP5 Test or Deadman

No need to program sections into this function

If Function 46 is set to 0 then the Dead Mans Timer is not Active and OP5 is active Low (i.e. Zero volts) while the panel is in Test mode.

If Function 46 is set to between 1 and 9 then the Dead Mans Timer is Active
Output OP5 is active (Low) while the Dead Man Timer is running.(Between Start and Stop times)

Function 44 sets the Start time.

Function 45 sets the Stop time.

Function 57 sets the sections that are used to reset the timeout while the Dead Mans Timer is running.

Note:

Dead-man's Timer alarm is reported as a Section 255 Alarm

Function 86 Output OP6 sections

Default Nil

Section Isolated

If Function 46 is set to 0 then the Dead Mans Timer is not active and OP6 is active low (i.e. Zero volts) while a section is isolated and that section is selected in Function 86 .

If any of the selected sections are isolated, then Output OP6 is held active (low) until the isolate condition has been cleared.

Key Sequence

2 1 8 0 6 7 On
8 6
1 0
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 86
Select section 10 to operate OP6 when isolated.
Store entry
Exit Program mode

Dead Man Timer warning Alarm

If "Dead Man Timer" is enabled, then Output OP6 is pulsed Low for 3 seconds every minute during the last 5 minutes as a warning of a pending "Dead ManTimer" Timeout. If the DMT has timed out the output is constantly Low .

Function 87 Output OP7 Areas ON

Default Nil

Display and change which areas 1 - 6 that when ANY are Armed activate OP7 output.

If ANY of the selected areas are turned On or Armed then Output OP7 is held active low until all the areas selected are turned Off.

Key Sequence

2 1 8 0 6 7 On
8 7
0 1
0 2
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 87
Select area 1 operate OP7 when in On mode.
Select area 2 operate OP7 when in On mode.
Store entry
Exit Program mode

Function 88 Output OP8 Areas ON

Default Nil

Display and change which areas 1 - 6 that when ALL Armed activate OP8 output.

If ALL of the selected areas are turned On or Armed then Output OP8 is held active until any of the areas selected are turned Off.

Key Sequence

2 1 8 0 6 7 On
8 8
0 1
0 2
On
Off

Operation

Enter valid Technician code(default 218067)
Select function 88
Select area 1 operate OP8 when in On mode.
Select area 2 operate OP8 when in On mode.
Store entry
Exit Program mode

Function 90 Default system parameters

Notes:

On first application of power, short the "Default" pins which are located near the large square chip in the centre of the PCB. This will default all system setup values and user numbers etc, back to known factory default values.

Key Sequence

2 1 8 0 6 7 On
9 0 On

Operation

Enter valid Technician code (default 218067).
Select Function 90 to reset all options to default values

Function 94 Printer Baud Rate *Default 9600,8,No parity*

Options

0 - 9600 Baud 8 data,1 stop,no parity
1 - 19.2 KBaud 8 data,1 stop, no parity
2 - 9600 Baud 7 data, 1 stop, even parity

Key Sequence

2 1 8 0 6 7 On
9 4
1
On
Off

Operation

Enter valid Technician code (default 218067)
Select function 94
Set the Baud Rate to 19.2 KBaud.
Store the Entry
Exit from Program mode

Function 96 Print Event Log *Default On request*

This Function is used to control the printing of the events.

Options

1 Print events as they occur.
0 Print the events on request.

Key Sequence

2 1 8 0 6 7 On
9 6
0
On
Off

Operation

Enter valid Technician code (default 218067)
Select function 96
Select print on request only.
Store the Entry
Exit from Program mode

Function 97 Set Time *Default 0900*

This Function is used to set the Real Time Clock.

Format is HHMM

where: - HH is hours in range 00 - 23,
MM is minutes in range 00 -59

Key Sequence

2 1 8 0 6 7 On
9 7
0 9 3 0
On
Off

Operation

Enter valid Technician code (default 218067)
Select function 97
Set the Real Time Clock to 9.30 am.
Store the Entry
Exit from Program mode

Function 98 Set Date

Default 010102

This Function is used to set the date
Format is DDMMYY

where:- DD is day in range 01 - 31
MM is month in range 1 -12
YY is year (e.g 02 =2002.)

Key Sequence

2 1 8 0 6 7 On
9 8
0 1 0 1 0 2
On
Off

Operation

Enter valid Technician code (default 218067)
Select function 98
Enter Date (shows 1st January 2002)
Store the Entry
Exit from Program mode

Function 99 Technician Code

Default 218067

Notes:

The Technician code is used to set up all functions of the system.
Those setups are stored in non - volatile memory - (the setups are not lost during loss of power).
Enter Tech code only when system is in OFF mode.
NOTE: To Default Panel without Technician Code see "Function 90"

Key Sequence

2 1 8 0 6 7 On
9 9
6 5 6 5 6 5

On
Off

Operation

Enter valid Technician code (default 218067)
Select function 99
Enter new 6 - digit Technician code
(example shows code being entered is 6 5 6 5 6 5)
Store the Entry
Exit from Program mode

Function 00 Master Code

Default 218572

Notes:

The Master code is used to enter and change the user codes 01-90 and also time and date functions, but does not have access to other panel functions or system setups.
The Master code may be changed by either the Technician or by the holder of the existing Master code. The Master Code can only be used when the system is in Off mode.

Key Sequence

2 1 8 0 6 7 On
0 0
1 2 3 4 5 6
On
Off

Operation

Enter valid Technician code (default 218067)
Select function 00
Enter new 6 - digit Master code(e.g.123456)
Store the Entry
Exit from Program mode

Notes:

1. 80 User codes may be programmed into the panel. These user codes are programmed by the Master Code holder using Function numbers 01 to 80, all are programmed in exactly the same manner.
2. The Technician code can only program users 01-30 as functions 31-89 are panel functions. Master code can program all 80 user codes 01-80.
3. No two User Codes may be the same and no two codes can be within 2 digits of each other. eg. if one code is 1234 then the closest a code can be to it is 1236 or 1232, or else an error beep will be heard. This includes the Tech and Master Codes
4. The User codes can be used to Arm, Disarm, Isolate Sections of its allocated area /s.
5. The User codes may be changed by either the Technician or Master codes, but the technician code only allows access to users 01-30.
6. Each User code can be programmed to allow control of any combination of areas.
7. **Area 9** is not a physical area but is used to allow access to the test functions.
8. **Area 10** is not a physical area but is used to allow users to isolate sections.

Adding a user

Key Sequence

2 1 8 0 6 7 On
 0 1
 1 2 3 4 On

0 1
 Partial
 0 1
 0 2

On
 Off

Operation

Enter existing Tech code (default 218067)
 Select function 01 (Areas assigned to that User will flash)
 Enter new 4 - digit User code
 (in this example code being entered is 1234)

Select function 01 (Areas assigned to that User will flash)
 Enter area Selection mode
 Select area 1 (Section led 1 will start to flash)
 Select area 2 (Section led 2 will start to flash)
 User code 1 can now control areas 1 and 2.

Store the Entry
 Exit from Program mode or select another User number

Deleting a user

To delete a User Code from the system, select the Function for that User Code, press the Isolate button and then the On button - that code has now been deleted.

Key Sequence

2 1 8 0 6 7 On
 0 4
 Isolate On
 Off

Operation

Enter existing Tech code (default 218067)
 Select User Code 4
 Select delete
 Exit from Program mode

Test Functions

Notes:

1. Not all the test functions listed below are available to normal or master code holders.
2. Maximum testing time is 10 minutes.
3. All Areas must be in the OFF mode before entering test mode.
4. Test Functions are available to Users who have AREA 9 enabled:-

Test 1 - Walk test - Beeper operates and section light operates. This test enables the user to walk around and activate sensors and check correct operation of sensors.

Test 2 - Siren test - Siren sounds for 3 seconds.

Test 3 - Strobe test - Strobe operates until next key press.

Test 4 - All lights and beeper operate until next key press - used to check operation of lights and beeper.

Test 5 - Recall Last Alarm - last alarm flashes until next key press.

Test 7X - This test requires an additional digit to specify where in the event log to start a printed report of 3 pages of events. (1 is most recent and 9 is oldest).
e.g. Test 71 generates a print (upto 3 pages long) of the most recent events.

Test 8 - Start downloading. **This function is available to the Master Code Only.**

Test 81 - Print all the current program settings to the printer port at the current printer port specifications. **This function is available to the Tech Code Only.**

Test 83 - Start downloading. **This function is available to the Tech Code Only..**

Test 9 - Start a Test Report on Dialler (if fitted) - sends a test report to the Central station (Account number, and phone number must be programmed for this test to start.)
Test mode is exited.

Key Sequence

2 1 8 0 6 7 Test
1
2
Off

Operation

Enter valid Technician code.
Test 1 started - walk test
Test 2 started - siren test
Exit test mode.

Contact ID Reporting

Single Account Number Reporting - Function 67 = 4

SSSS E TTT PP NNN

Where SSSS = Four Digit Account Number

E = Event
1 = New Event or Opening
3 = New Restore or Closing

TTT = Event Code
120 = Panic Alarm
121 = Duress Alarm
130 = Burglar Alarm
152 = Fridge Alarm
301 = AC Power Loss
302 = Low Battery Alarm
353 = Radio Comms Alarm
401 = Open / Close Full system by User
402 = Open / Close Area by User
570 = Zone Bypass
602 = Periodic Test Report

PP = Area or Partition Number

NNN = Section Number or User Number

Examples of Reporting

1234 1 120 00 049	Panic Alarm
1234 1 121 00 005	Duress Alarm by user 5
1234 1 130 01 001	Section 1 alarm in area 1
1234 3 130 02 001	Section 1 restore in area 2
1234 1 152 00 008	Fridge alarm. (if section is set to 8)
1234 3 301 00 000	AC restore
1234 1 302 00 000	Low battery alarm
1234 3 402 03 002	Area 3 arming with user code 2
1234 1 401 00 001	First to open with user code 1
1234 1 570 04 003	Section 3 new isolate in area 4
1234 1 130 00 255	Deadmans Timer Timeout Alarm
1234 1 602 00 000	Test Report

Keyboard panic reports as **section 49**

Radio Network Fail / Restore reports as **section 63**

Deadmans Timeout reports as **section 255**

Securitel Reporting

Securitel Serial Data Reporting (Function 67 = 9)

All inputs as well as panel functions are individually reported, using the "SECURITEL SERIAL DATA PROTOCOL."

The CONTROL STU will report-

alarm	For each of the 48 inputs
restore	For each of the 48 inputs
isolate	For each of the 48 inputs
de-isolate	For each of the 48 inputs

LONG STATUS report-

The AC fail, low battery and Self Test fail are reported using the standard LONG STATUS report.

pin 1	not used.
pin 2	not used.
pin 3	not used.
pin 4	not used.
pin 5	not used.
pin 6	not used.
pin 7	not used.
pin 8	not used.
pin 9	not used.
pin 10	not used.
pin 11	not used.
pin 12	not used.
pin 13	AC Fail.
pin 14	low battery.
pin 15	Self Test fail (panel is not communicating with STU).

When an area is armed with one or more inputs isolated (partial seal), those inputs will be individually reported. The de-isolated inputs will be reported individually.

86 User codes can be programmed and reported by the STU.
These IDs are also reported using the " SECURITEL SERIAL DATA PROTOCOL."

Keyboard panic reports as section 49 alarm / restore
Deadmans Timeout reports as Section 255

Downloading

Down Loading offers the alarm installer or service technician a method of programming this dialler via a computer. Several security measures ensure that only privileged access is permitted to this feature of the dialler.

Computer Setup

To be able to Down Load to the dialler a computer with terminal software and a 300 Baud (v21) modem is necessary. The communications parameters are 300 Baud, 8 data bits 1 stop bit and no parity. The protocol between the dialler and computer is ascii based so no terminal emulation is necessary other than plain ascii. The modem should be setup to auto answer the phone line.

Dialler Setup

To enable down loading to the dialler the down loading phone number needs to be programmed into function 62.

Starting Down Load

Two methods are possible to start the down loading procedure. If the technician is on site then down loading may be started by using function 83 in test mode. If the technician is not on site then the dialler can be made to start the down loading procedure by calling the phone that the dialler is attached to three times within 1 minute. For each call the phone should be let ring 3 times and then hung up. After the third call, the dialler will start the down loading procedure.

Download Call Progress

When the panel starts down loading mode it will call the programmed down loading number and if a modem answers the call, and carrier is detected, then the panel will start the logon procedure. If unsuccessful the dialler will make up to three attempts before aborting downloading.

Logging on to the Dialler

When prompted, the technician code must be sent from the computer to the dialler, and if the code is valid, access is permitted to the dialler. If no Technician code is entered within 1 minute then the dialler will hang up and try again.

Entering Commands

When the technician has logged onto the dialler, a "Command:" prompt will be sent to the computer indicating that the technician is in program mode. This command prompt will be given each time the dialler is expecting the first digit of a function. While down loading, operation is very similar to keypad programming in that each function is started with a 2 digit number. When the dialler has received these two digits it will echo the function number entered, and the information that currently exists for the function. Entry of the option required is then the same as normal program mode and if necessary, the dialler will send the currently selected information to the computer as a check of correct entry. This is used when programming section information where a selected section is toggled by entering a two digit number while in a function. Special keys can be selected as follows:-

Key pad key	Computer character
Off	F
On	N
Code	C
Test	T
Isolate	I
Partial	P

Downloading cont'd

In addition to these keypad equivalents, there are special characters that perform extra functions, these are:

Character	Function
E	Send a print out of event history to computer. The technician will also be prompted for the starting page and number of pages to send.
L	Send a print out of all the current program settings.

To Abort Event History Printing

To end the event report prematurely press any key on the computer.

To End the Down Loading Session

To exit down loading enter the Off key equivalent 'F' at the 'command:' prompt. The technician will then be prompted to confirm the end of the down load session.

Sample Session

(Comments are in brackets and Non Bold)

```
**** V25 Panel Revision 1.0 ****
Please Enter Technician Code: + + + + +      (Entry of Technician code to logon)
Technician Logged On                       (Dialler confirms entry of Tech code)
Command:01                                 (Technician entered 01 - user code -1)
Function:01                                (Dialler Confirms Function Number)
User Code 9999   Selected Areas: - - - - -  (Current setting readback)
1234Code                                              (Entry of new user code + 'Code'
is sent from the dialler when 'C' received)
Function:01                                (user code 01 function selected)
User Code 1234   Selected Areas: - - - - -  (Current settings readback)
Partial                                              (Partial is sent by dialler when 'P' sent)
Function:01   Area Mode: Selected Areas: - - - - -  (Select area 1 for user code 01 priveledge)
01
Function:01   Area Mode: Selected Areas: 01 - - - - -  (End the partial mode for user code 01)
Code
Command:31                                 (Select function 31- Area 1 sections)
Function:31                                 (Dialler confirms function 31)
Selected Sections:                         (Current settings readback)
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
22                                           (Deselect section 22)
Function:31                                 (Still in function 31- Area 1 Sections)
Selected Sections:                         (Confirm selections)
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 -- 23 24
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
23                                           (Deselect section 23)
Function:31                                 (Still in function 31- Area 1 Sections)
Selected Sections:                         (Confirm selections)
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 -- -- 24
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
Code                                          (End function 31)
```

Downloading cont'd

(Request for an event history print is started with an 'E')

Command:Event History (Request a print out of the event history)
Enter Starting Page (01 - 27): 01 (Select the most recent page of events)
Enter Number of Pages (01 - 27): 01 (Select one page of events)
(There is a total of 52 events per page)

Hit Any Key To Abort Print ... (Any key will abort the print)

01/06/93 09:30 Event Log Report Acc 0000 Page 1 (start of event history)
=====

01/06/93 09:00 Panel was Reset
01/06/93 09:01 Panel Programming Local User 99
01/06/93 09:02 Panel Programming Remote User 99
01/06/93 09:05 Panel Test Mode 7 (Print Request) User 99
**** End Of Report **** (End of event history)

(Request for a listing of current program settings with a 'L')

Command:List Program (Confirmation of command)

Hit Any Key To Abort Print ... (Any key will abort the print)

Function 00 :218572
Function:01
User Code :9999 Selected Areas: - - - - -
Function:02
User Code :1111 Selected Areas: 01 02 03 04 05 06 07 08
Function:03
User Code :- --- Selected Areas: 01 02 03 04 05 06 07 08 (user code 3 is blank)

Function:95 :0000
Function:96 :0
Function:97 :0931 (current time)
Function:98 :010693 (current date)
Function:99 :218067
**** End of Program Setups **** (end of list)
Command:Off (Off is sent by dialler when 'F' sent)
Confirm Logoff by User (y/n) y (Confirm exit from down load with 'Y')
Down Load Aborted

Version Control

Version 5.52

Keypad timing adjusted for IC16V keypad to eliminate keypad LEDs flashing.
Added Chime mode as OP4, setup by Technician Function 84.
Changed OP8 to operate when ALL areas selected are ON.
(instead of when ANY area ON)
Defaulting time improved.

Version 5.2

Keyswitch functions added. Function 37
Upload / Download via Hyperterminal added
Securitel backup mode added.
Ring detect count technique changed.

Version 4.51

Changed thresholds on mains fail and low battery detect.

Icon16 Programming Record



Site Name:
Address:
Installer:
Date:

Function	Description	Default Value	Programmed Value
31	Area 1 Sections	Sections 1 - 48	
32	Area 2 Sections	NIL	
33	Area 3 Sections	NIL	
34	Area 4 Sections	NIL	
35	Area 5 Sections	NIL	
36	Area 6 Sections	NIL	
37	Keyswitch Sections	NIL	
40	Exit Time	6 = 60 Seconds	
41	Entry Time	3 = 30 Seconds	
42	Siren Time	6 = 5 Minutes	
43	Manual De-Isolate 24hr Sectors	1 = Enabled	
44	Deadmans Timer – Start Time	NIL	
45	Deadmans Timer – Stop Time	NIL	
46	Deadmans Timer-Timeout Period	0 = Disabled	
47	Panic – Silent or Audible	1 = Audible	
48	Fridge Alarm Delay	0 = Disabled	
49	Exit / Entry Sections	Sections 1 & 2	
50	Exit and Handover Sections	NIL	
52	24hr Sections	NIL	
53	Number of Expanders	0 = No Expander Fitted	
54	Disable Siren on first key press	0 = Do Not Disable	
55	Silent Sections	NIL	
56	Day Silent Sections	NIL	
57	Deadmans Timer Sections	NIL	
58	Number of Areas	6 = 6 Areas	
59	Backup Account Number	NIL	
60	Account Number	NIL	
61	Day Local Sections	NIL	
62	Download Phone Number	NIL	
63	Open / Close Reports	Areas 1 – 7	
64	Phone Number 1	NIL	
65	Phone Number 2	NIL	
66	Dialling Method	1 = DTMF (tone)	
67	Transmission Format	4 = Contact ID	
68	Report Restorals	1 = Report Restorals	
69	Test Reports	0 = No Test Reports	
70	Securitel Backup time	0 = Disabled	
71	Report Isolated Sections	1 = Report Isolates	
72	Report User ID's	1 = Report User ID's	
73	Time of Test Report	NIL	
74	Keyboard Duress	0 = Disabled	
76	Multi Break Sections	NIL	
81	Output OP1 Sections	NIL	
82	Output OP2 Sections	NIL	
83	Output OP3 Sections	NIL	
84	Output OP4 Chime Sections	NIL	
85	Output OP5 Deadman Timer/Test	NIL	
86	Output OP6 Section Isolated	NIL	
87	Output OP7 Areas ANY On	NIL	
88	Output OP8 Areas ALL On	NIL	
90	Default System	N/A	
94	Printer Baud Rate	0 = 9600,8,No Parity	
96	Print Event Log Now	0 = On Request	
97	Time Set	0900	
98	Date Set	01 01 02	
99	Technician Code	218067	
00	Master Code	218572	



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