The Icon Series

Installation and Programming Information



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Warning:	This equipment must only be installed a by suitably qualified personnel	nd serviced	



Installation and programming manual

INPUTS:		
Inputs 1 to 8	Are 10K monitored inputs, with a response time of around 300 ms. Alarm triggers siren,strobe and dialler (depending on setup). Are armed in the on or partial mode (depending on partial setup). May be programmed to have exit / entry , exit / handover delays or may be programmed for 24 hou r operation.	
16 VAC	For the connection of a 16 vac 1.5 amp plug pack.	
	OUTPUTS:	
Aux 12V	This 12v dc is for detectors, etc. The output is via the INTERNAL fuse. Between 200 and 500mA can be delivered to load depending on other loads, eg. siren, strobe. The onboard regulator is rated at 1.0 amp and of this, the battery can take up to 200mA depending on the state of charge.	
Batt	The panel itself, in alarm with one arming station connected, draws 150mA approx. This output is connected to the on-board regulator via a resistor which limits the charge current. Charging voltage is 13.7v.	
Int sir **	Timed output to drive 2 x 8 ohm speaker rated at 10 watts, fused via the INTERNAL fuse.This may be replaced by the Bell 2 output on later models.	
Int bell or bell1 Ext stb Ext sir	Output (timed) to DC screamers, fused via INTERNAL fuse. May also be programmed (via opt 91) as armed, 24 hr alarm, bell or to power to smoke detectors which latch and can be reset by test 6. 12v dc output to drive 12v dc strobe, fused via EXTERNAL fuse. Timed Output to drive 1 x 8 ohm speaker rated at 10 watts, fused via EXTERNAL fuse.	
Int bell2 ***	Output (timed) to drive DC screamers, fused via INTERNAL fuse. This bell2 output is not programmable, it is fixed as a bell output. *** Note this output will be only available on future models.	
Telecom Line socket	This is connected to the Exchange line, via the Telecom lead which is supplied with the unit. 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. AUSTEL Permit No. A89-12-0083.	
High Integrity Comms 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, it must be hard wired otherwise Austel Permit will be rendered Void.	
Remote Command	These 4 terminals connect to the REMOTE KEYPADS. The terminal marked + connects to the + terminal on the keypad The terminal marked C connects to the C on the keypads The terminal marked D connects to the D on the keypads The terminal marked - connects to the - on the keypads	

	Indicators on the PCB	
Scan	This LED indicates that the micro-processor is operating and must always be flickering.	
Dial	This LED, located adjacent to the dial relays, will light when the dialler is in its reporting sequence and will extinguish when reporting is completed.	
	Initialization	
To initialize Function 90 seconds.	the panel to factory defaults enter program mode and use) or power the panel up with any button pressed on the keyboard for 3	
	On power up	
On power of this program factory defor If the EEPR Function 98 If Function the sirens r If Function interrupted,	up the unit performs an internal self test of its EEPROM and then boots with n. If the EEPROM is found to have been corrupted in some way then the aults will be reloaded indicated by 5 beeps from the keypad. OM is correct then the panel will power up in the mode determined by 8 (Status on power up). 98 is 0 (Do not retain the On /Off status) the unit starts off in OFF mode and nay operate for half a second. 98 is 1 (Retain On/Off status) and the unit was armed when power was then when power is restored, the unit will allow a settling time of 60 secs	
and attempt to re-arm. Sectors unsealed after the settling time will be automatically isolated and will be reported as such. After the 60 seconds settling time the unit will dial through a mains fail restore, a low battery restore and the current status of the panel with user code 31.		
	Dialling sequence	
The dialling The first 3 attempts to If after the 5 minutes. The dialler number has If after thes another cor	sequence from start to finish consists of 6 dialling attempts. dialling attempts to the first phone number (with a 20 second pause between wait for handshake). 3 attempts no handshake is received then the dialler will release the line for will then make 3 attempts to the second phone number (if no second s been programmed then the first number will be tried again). e 3 attempts handshake is still not received the dialler will hang up until adition causes it to dial, at which time the previous condition will also be	

PROGRAM READBACK

With the full range of panels there are basically two methods of reading back information that has previously been programmed. The first method allows information that is serial in format to be read sequentially ie. phone numbers, while the second method allows all selections to be seen at once ie. sectors assigned as E/E. These are explained below.

SEQUENTIAL READBACK

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 "	" INDICATES DIGIT "
1 2	1 2
3	3
4	4
5	5
6 7	6 7
8	8
Partial	9
On Auxiliary	0 Pause

Example

For this example Function 60 is already programmed as 0199

If you wish to check Function 60

Enter the function number 6 0 followed by the TEST key. (whilst in program mode)

ON LED will light accompanied by a beep(digit 0)Then number 1 LED accompanied by a beep(digit 1)Then PARTIAL LED accompanied by a beep(digit 9)Then another beep with PARTIAL LED still lit(digit 9)Then beep beep and the PROGRAM LED flashing again(test completed ready for next function).

PARALLEL READBACK

For Functions 31 - 36, 49, 50, 51, 52, 55, 56, 61, 76. When the function number is entered the previously selected sections will flash. If at this point the On button is depressed no changes will be made and the program LED will be flashing again. To de-select a section re-enter that section number and the section LED will

I o de-select a section re-enter that section number and the section LED will extinguish.

ENTERING PROGRAM MODE

There are two codes that will allow access to the product range of panels for programming. The *technician code* that will allow access to all programmable functions and the *master user* code which allows access only to user code programming. Either code can **only** be used in the OFF mode and since the operation of both codes is similar, only the technician code will be discussed.

DEFAULTING THE PANEL

If the technician and master codes are not known the only way to enter program mode is to default the panel so the factory preset codes may be used. This is accomplished by removing power from the panel and then reapplying power with ANY key on the keypad pressed for three seconds. This will restore the factory technician and master codes which are 2 1 8 0 6 7 and 2 1 8 5 7 2 respectively and will be indicated by five beeps from the Keypad.

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NOTE : Defaulting the panel will reset ALL functions to the factory presets.

ENTERING PROGRAM MODE

To enter the program mode the following sequence is entered :

2 1 8 0 6 7 - On (Enter technician code and press the On key)

At this point the program LED will begin flashing to indicate that you are in program mode and the required function number may be entered. If an error was made in entering the code or an incorrect code used, the keypad will give a long error beep after which you may try again. Assuming we are in program mode the following examples will show how functions are programmed or changed.

Example 1

To program or change the primary phone number (Function 64) to 02 - pause - 1234567. With the program LED flashing enter the following :

6 4 (Select Function 64. Program LED will light steady.)
0 2 (First two digits of phone number.)
partial (Pressing partial key = 1 second pause.)
1 2 3 4 5 6 7 (Remainder of phone number.)
On (Stores phone number. Program LED will flash.)

At this point the installer can either program further options or leave the program mode by pressing the 'off' key.

Example 2

Program sectors 1 and 8 to be entry/exit sectors (Function 49). With the programming LED again flashing enter the following :

49	(Select Function 49. Program LED will light steady.)
0108	(Enter sectors 1 (01) and 8 (08) LEDS will flash.)
On	(store information and exit function 49.)
Off	(Exit program mode. Program LED will extinguish.)

Control Panel Functions			
Function	Function	Defaults	Page No.
00	Master Code	218572	20
01	User code 1	1111	20
02-30	User code 2 to User code 30	Nil	20
40	Exit time	60 5055	20
41	Entry time	30 2002	0
12	Siren time	SU secs	0
12 12	Partial Mode isolatos		8
43	Kounad Pania audible		9
47	Evit and Entry continue	Audible	9
49	Exit and Entry sections	Sections $1 + 2$	9
50	Exit and Handover sections	Nil	10
51	Partial Exit / Handover sections	Nil	10
52	24 hour inputs	Nil	10
54	Disable sirens on first keypress	Enabled	10
55	Silent sections	Nil	11
С	ommunications Functio	ns	I
60	Account number	Nil	11
62	Down - Load phone number	Nil	11
63	Open / Close reports	Enabled	12
64	Phone number one	Nil	12
65	Phone number two		12
66	Dial mathed		12
67	Paparting format	DIMF (fone)	12
07		Contact I.D.	13
08 (0	Report restorals	Enabled	13
69	No. days between test reports	Nil	13
70	Checksum reporting	Enabled	14
71	Report isolates	Enabled	14
73	Delay till first test report	12 Hours	14
74	Keypad Duress On / Off	Disabled	15
75	Auto - Isolation	Disabled	15
76	Multi - break sectors	Nil	15
89	Single digit arming	Disabled	16
Sp	ecial Functions		
90	Default to factory		40
01	Ball autout tura	N/A	16
71		Bell	16
92	Slave dialler	Control dialler	17
93	Keyswitch option	Disabled	17
94	Siren speed	Medium	17
95	Arming lockout	Disabled	18
96	Download configuration	Master/Tech Code	18
98	Rearm enable	Disabled	19
99	Technician code	218067	10
		210007	

Function 40 - Exit Time	Default - 60 seconds		
Description : This function sets the time that sectors allocated as entry/exit (Function 49), exit handover (Function 50) or partial exit/entry (Function 51) will allow for exit.	Options- (Single digit entryrequired)0-0 seconds5-50 seconds1-10 seconds6-60 seconds2-20 seconds7-70 seconds3-30 seconds8-80 seconds4-40 seconds9-90 seconds		
Example : While in program mode (Program LED flashing)Key SequenceOperation40-5-0n-Store EntryInstaller may now exit program mode by pressing the OFF button or continueprogramming by entering a new function number			
Function 41 - Entry Tim	C Default - 30 seconds		
Description : This function sets the time that sectors allocated as entry/exit (Function 49), exit handover (Function 50) or partial exit/entry (Function 51) will allow for entry. Notes : Handover sectors will only have entry time if an exit/entry sector has been triagered first	Options- (Single digit entry required)0- 0 seconds5- 50 seconds1- 10 seconds6- 60 seconds2- 20 seconds7- 70 seconds3- 30 seconds8- 80 seconds4- 40 seconds9- 90 seconds		
Example : While in program mode (Program Li Key Sequence 41 - 3 - on - Installer may now exit program mode by pressi	ED flashing) Operation Enter Function No. Enter Option (3 = 30 seconds) Store Entry ng the OFF button or continue programming.		
Function 42 - Siren Tim	C Default - 10 minutes		
Description : This function sets the maximum time for which the internal, external and satellite sirens and bell output will operate.	Options - (Single digit entry required) 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: Australian Standards AS 2201 limit the siren manually re-armed. Noise pollution regulatio	s to be triggered only once per section unless ns in most states limit siren time to 10 minutes.		
Example : While in program mode (Program Key Sequence 42 - 6 - on - Installer may now exit program mode by p	n LED flashing) Operation Enter Function No. Enter Option (6 = 5 minutes) Store Entry ressing the OFF button or continue programming		

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Function 43 - Partial Mod	Default - No sections programmed.			
Description : Partial mode sets up a prepro- grammed list of sections which are automatically isolated when the unit is turned on using the partial key.	Options : (Two digit entry required per sector) Any sector or combination of sectors from 1 to 8			
Example : While in program mode (Program LED flashing) Key Sequence Operation 51 - 51 - 050708 - On - Store Entry Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number				
Function 47 - Keypad Panic	Function 47 - Keypad Panic Audible Default - audible			
Description : This function determines whether the keypad panic activation (holding the ON and the OFF keys depressed at the same time for 3 seconds) will cause the sirens to sound in addition to reporting to the monitoring company or only report.	Options : (Single digit entry required) 0 = Silent Keypad Panic (report only) 1 = Sirens and report.			
Example : While in program mode (Program Key Sequence 47 - 0 - On - Installer may now exit program mode by p by entering a new function number	n LED flashing) Operation Enter Function No. Enter Option (Keypad Panic now silent) Store Entry rressing the OFF button or continue programming			
Function 49 - Exit/Entry Se	ctions in ON Mode Default - Sectors 1 & 2			
Description : This function allows the display and or changing of those sections which will have the exit/entry delays defined in Functions 40 and 41.	Options : (Two digit entry required per sector) Any sector or combination of sectors from 1 to 8			
Example : While in program mode (Program LED flashing) Key Sequence Operation 49 - Description - 0208 - Description - On - Store Entry Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.				

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Function	on 50 - Exit and Handover Sections in ON MOde Default - none
Description Display ar will have Notes : Se	n : Options : (Two digit entry required per sector) nd / or change which sections Any sector or combination of sectors from 1 to exit / handover delay. Sectors selected will only have entry time if an exit/entry sector is triggered first.
Example : Ke Installer m programm	While in program mode (Program LED flashing) cy Sequence Operation 50 - Enter Function No. 02 - Enter Option (Sector 2 becomes handover) On - Store Entry hay now exit program mode by pressing the OFF button or continue ing by entering a new function number.
Function	on 51 - Exit / Entry Sections in Partial mode Default none
Description Display ar have exit	n : Options : (Two digit entry required per sector) and change which sections will / entry delay in Partial mode.
Notes : ON mode panel is tu	Sectors programmed in this function are independent of sectors programmed as exit / entry sectors and only have exit / entry times assigned to them when the urned ON using the Partial key.
Example : Ke Installer m by enterin	While in program mode (Program LED flashing) sy Sequence Operation 51 - Enter Function No. 03 - Enter Option (Sector 3 is now Partial Exit/Entry sector) On - Store Entry nay now exit program mode by pressing the OFF button or continue programming g a new function number.
Function	on 52 - Sections to operate in 24 Hour mode Default - none
Description Display ar operate as	n : Option : (Two digit entry required per sector) and change which sections will Any sector or combination of sectors from 1 to s 24 hour inputs.
Example : Ke Installer m programm	While in program mode (Program LED flashing) cy Sequence Operation 52 - 07 - 07 - On - aay now exit program mode by pressing the OFF button or continue ing by entering a new function number.
Functi	on 54 - Disable Sirens On First Keypress Default - Disabled (1)
Description This funct sirens will the first ke ble feedba heard wi (Does not	 n: ion determines whether the be silenced for 10 seconds on ey press. This allows the audiack from the keypad to be thout the sirens interfering. work on keypad panic) Options : (Single digit entry required) 0 = Sirens are not disabled on first keypress. 1 = Sirens are silenced for 10 secs on the first keypress.
Example : Ke	While in program mode (Program LED flashing) cy Sequence Operation 42 - 0 - Enter Function No. 0 - On - ay now exit program mode by pressing the OFF button or continue

Function 55 - Silent Sections	Default - None
Description : Display and change which sections will operate as Silent Sections ie. they will report to the monitoring company but will not activate the sirens.	y required per sector) of sectors from 1 to 8
Example : While in program mode (Program LED flashing) Key Sequence Operation 55 - Enter Function No. 05 - Enter Option (Sector 5 is now sile 06 - Enter Option (Sector 6 is now sile 07 - Enter Option (Sector 7 is now sile 07 - Enter Option (Sector 7 is now sile 07 - Store Entry Installer may now exit program mode by pressing the OFF button or programming by entering a new function number.	nt) nt) nt) continue
Function 60 - Account number	Default - None
Description : This function is used to enter the account number for transmission to the Central Station. Options : (Four digit entral station)	y required) 2999
Notes: The dialler will not dial if the account number (Function 60) or (Function 64) is not programmed or the account number is set to 000 function number and then pressing the isol + code key will clear entries 62, 64 and 65.	r phone number 1 0. Entering the es for Functions 60,
Example : While in program mode (Program LED flashing) Key Sequence Operation 60 - 1234 - On - Store Entry	234) ramming by entering
a new function number.	
Function 62 - Download Phone Number	Default - None
Description : This phone number is used by the panel when downloading is initiated by the MCM Connect downloading software. Options : (Max of 15 digi The phone number may be including pauses. Pauses entered anywhere by pre	i ts) be up to 15 digits long (1 second) may be essing the Partial key.
Example : While in program mode (Program LED flashing)Key SequenceOperation62-62-02-part-218067-	676)
On - Store Entry Installer may now exit program mode by pressing the OFF button or ming by entering a new function number.	continue program-

Function 63 - Open/Close reports	- Yes / No. Default -Send open /close	
Description :Selects whether open / close reports are sent or not.Example : While in programmode (Program Key Sequence63-63-0-0-0-0-1nstaller may now exit program mode by pre- continue programming by entering a new	Options : (Single digit entry required) 1 Open / Close sent 0 No Open / Close sent. LED flashing) ation Function No. Option (0 = no report) Entry essing the OFF button or function number.	
Function 64 - Phone number	Default - None	
Description : This phone number is the first number used by the panel when reporting to the monitoring company.	Options : (Maximum of 15 digits) The phone number may be up to 15 digits long including pauses. Pauses (1 second) may be entered anywhere by pressing the Partial key.	
Example : While in program mode (Program Key Sequence Operation 64 - 218572 - On - Installer may now exit program mode by pressing the new function number.	n LED flashing) ation ction No. tion (Phone number 1 is 218572) y e OFF button or continue programming by entering a	
Function 65 - Phone number 2	Default - None	
Description : This phone number is the alternative number used by the panel when report- ing to the monitoring company and is only used if the panel fails to report to Phone #1 Description : Options : (Maximum of 15 digits) The phone number may be up to 15 digits long including pauses. Pauses (1 second) may be entered anywhere by pressing the Partial key.		
Example : While in program mode (Program LED flashing) Key Sequence Operation 65 - 218067 - On - Store Entry Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.		
Function 66 - Dialling method	Default - DTMF (tone)	
Description : Selects to dial in DTMF or Decadic	Options : (Single digit entry required)0Dial in Decadic, (pulse)1Dial in DTMF, (tone)2Dial in New Zealand Decadic	
Example : While in program mode (Program Key Sequence Operation 66 - 1 - On - Installer may now exit program mode by pr	LED flashing) ation Function No. Dption (1 = Dial in DTMF) Entry essing the OFF button or continue programming	

Function 67 - Reporting forma	Default - Contact I.D. (4)
<i>Description :</i> This function determines the format the dialler will report in.	Option : (Single digit entry required)0Normal Reporting (ADEMCO high speed)1Tape Dial (No handshake to start Tx.)4Contact I.D. single account number.
Notes: When selected Tape Dial mode causes the starts sending alarm message continuously u this mode a kissoff tone can be a whistle.) It continue to dial. In this mode no open/close low battery or 24 hour test messages are set	e dialler not to listen for acknowledge tone and ntil 30 second timeout or until a kissoff tone. (In f the whistle is received on the first call it will not sing report, restores, isolate/de-isolates, mains fail, ent.
Example : While in program mode (Program Key Sequence Open 67 - Enter 0 - Enter On - Store Installer may now exit program mode by pr ming by entering a new function number.	n LED flashing) ation Function No. Option (0 = ADEMCO high speed) Entry ressing the OFF button or continue program-
Function 68 - Report restorals	Default - Report restorals
<i>Description :</i> The dialler will normally report when an input is restored to a non alarm condition.	Options : (Single digit entry required) 1 Report restorals 0 Do not report restorals
Example : While in program mode (Program Key Sequence Oper 68 - Enter 1 - Enter On - Store Installer may now exit program mode by pr gramming by entering a new function num	n LED flashing) ation Function No. Option (1 = Report Restorals) Entry ressing the OFF button or continue pro- nber.
Function 69 - Test reports	Default - No test reports
Description : This function programs the number of 24hr periods between test reports, programming a 0 gives no test reports.	Options : (Single digit entry required) 0 to 9 = period in days
Example : While in program mode (Program Key Sequence Oper 69 - Enter Fur 7 - Enter Op On - Store Ent Installer may now exit program mode by pressing th programming by entering a new function	n LED flashing) ation nction No. otion (7 = 7 days) ry ne OFF button or continue number

Installation and programming manual Function 70 - Report Using Checksum Default - Using checksum **Description** : Options : (Single digit entry required) The dialler defaults to use the single 1 Report using checksum round with checksum. 0 Do not use checksum in reporting If a 0 is programmed the dialler will report in dual round without checksum. Note: Not all base stations can handle reporting with checksum. This function is applicable to ADEMCO high speed reporting only and not CONTACT ID. Example : While in program mode (Program LED flashing) Operation Key Sequence 70 Enter Function No. Enter Option (0 = no checksum) 0 On Store Entry Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number. Function 71 - Report Isolated Sections Default - Report isolates **Description** : Options : (Single digit entry required) If enabled the control panel will 1 Report isolated sections report isolated sections at the end of 0 Do not report isolated sections exit time. Example : While in program mode (Program LED flashing) Operation Key Sequence 71 Enter Function No. 1 Enter Option (1 = report isolated sectors)On Store Entry Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number. Function 73 - Delay till First test report Default - 12 hours Description : Options : (Single digit entry required) This sets the delay from when pro-0 to 9 = number of 4 hr periods before the first test gram is exited till the dialler sends its report. first test report, in multiples of 4 hours. **Example** : While in program mode (Program LED flashing) Key Sequence Operation 73 Enter Function No. 3 Enter Option (3 = 12hrs)On Store Entry Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 74 - Keyboard Duress Or	Default - Duress disabled
Description :OptKeyboard duress may be disabled to1prevent accidental duress alarms0from private residences.	ions : (Single digit entry required) Duress reports enabled Duress reports disabled
Note: Duress is achieved by adding 1 to the last digit c becomes 6780.	f the user code eg. 1234 becomes 1235, 6789
Example : While in program mode (Program LED Key Sequence Op 74 - 1 - On - Installer may now exit program mode by pressing programming by entering a new function number	D flashing) peration er Function No. er Option (1 = reports enabled) re Entry g the OFF button or continue per.
Function 75 - Auto-Isolate On/Of	Default - Auto-Isolate disabled
Description :OptNormally if an attempt to arm the1panel with a faulted section (other0than an exit/entry section) is madethe panel will give an error beep. Ifthis option is enabled then faultedsections will be automatically isolatedand will be reported as such.	ions : (Single digit entry required) Auto - isolation enabled Auto - isolation disabled
Example : While in program mode (Program LED Key Sequence Op 75 - Ent 1 - Ent On - Sto Installer may now exit program mode by pressin by entering a new function number.	D flashing) peration er Function No. er Option (1 = auto-isolation enabled) re Entry g the OFF button or continue programming
Function 76 - Multi-Report (Mult	i-Break) <i>Default - None</i>
Description : Optility Display and change which sections Any will report input condition changes when armed. Note: This option will not give multi triggering of sirens section LED will latch on the first alarm for that	ions : (Two digit entry required per sector) sector or combination of sectors from 1 to 8 to a section but will give multi reporting. The section.
Example : While in program mode (Program LEE Key Sequence 76 - Ent 01 - Ent 02 - Ent On - Sto Installer may now exit program mode by pressin) flashing) peration er Function No. er Option (01 = sector 1) er Option (02 = sector 2) re Entries g the OFF button or continue

Function 89 - Single Digit Armi	ng Default - disabled	
Description : This function, when enabled, will allow the panel to be turned on by pressing the 0 key and either the 'ON' key for full arming or 'PARTIAL' key for partial arming.	Options : (Single digit entry required) 0 = Single digit arming is disabled 1 = Single digit arming is enabled	
NOTE: If opening / closing reporting is enab closing with user 31 in CONTACT ID format	led, the unit will report an opening or or user 15 with ADEMCO high speed format.	
Example : While in program mode (Program Key Sequence 89 - 1 - On - Installer may now exit program mode by pr by entering a new function number.	n LED flashing) Operation Enter Function No. Enter Option (1 = single digit arming enabled) Store Entry ressing the OFF button or continue programming	
Function 90 - Default System	Parameters	
Description : This option is used to default all system setup values and user numbers etc, back to known values.	Options : None	
Example : While in program mode (Program LED flashing) Key Sequence Operation 90 - Dn - Installer will automatically be exited from program mode when this function is invoked and will have to re-enter program mode using the default Technician code (218067)		
Function 91 - Bell Output Typ	e Default - Normal Bell Output	
<i>Description :</i> This function determines what events will trigger the bell 1 output <i>Notes :</i>	 Options : (Single digit entry required) 0 - Normal Bell Output 1 - Normal Bell Output Plus Pulse Output For Keyswitch Option 2 - Panel Secure 3 - 24 Hour input in Alarm 4 - Smoke Detector Power 	
 When used for Smoke Detector Power (option 4), the Bell Output is used as the negative supply to the Detectors. The Smoke Detector power may be turned off for 5 seconds when the panel is not armed by entering a user code and then TEST 6. When option 1 is selected and the keyswitch function (Function 93) has been enabled, the bell output will give :- 1 beep on disarm, 2 beeps on arming and 5 beeps if arming was unsuccessful 		
Example : While in program mode (Program Key Sequence 91 - 2 - On - Installer may now exit program mode by pr by entering a new function number.	n LED flashing) Operation Enter Function No. Enter Option (2 = panel secure o/p) Store Entry ressing the OFF button or continue programming	

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Function 92 - Slave Dialler (Option Default - Control Dialler
<i>Description :</i> If this option is enabled, the panel will, to all intents and purposes act as a slave dialler.	Options : (Single digit entry required) 0 - Control Dialler 1 - Slave Dialler
Note: When the Slave Dialler option is	s selected, inputs are 10k end of line
Example : While in program mode (Prog Key Sequence 92 - 0 - On - Installer may now exit program mode by programming by entering a new functio	gram LED flashing) Operation Enter Function No. Enter Option (0 = Control Dialler) Store Entry r pressing the OFF button or continue on number.
Function 93 - Keyswitch Op	btion Default - No Keyswitch
Description : This function, if enabled, will allow sectors 7 and 8 to be used as keyswitch inputs. The Keyswitch is fitted to inputs 7 and 8. These inputs are disabled as alarm inputs. To arm panel into Partial mode seal input 7 (with 10K resistor). To arm panel into Secure mode seal input 8 (with 10K resistor). To disarm panel unseal inputs 7 or 8. Example : While in program mode (Program panel unseal inputs 7 or 8. Installer may now exit program mode by pressicontinue programming by entering a magnetic programmed by pressicontinue programming by entering a magnetic programming by entering a magnetic programmed by pressicontinue programming by entering a magnetic programmed by pressicontinue programming by entering a magnetic programmed by pressicontinue programmed by pressicontinue programming by entering a magnetic programmed by pressicontinue progr	 Options : (Single digit entry required) 0 - No Keyswitch fitted 1 - Latched Keyswitch (input 7 = partial, input 8 = full arm) 2 - Momentary Keyswitch, intended for radio control. Includes a Panic Feature if input faulted for longer then 2 secs. As per option 1, input 7 is partial arm and input 8 is full arm. 3 - Momentary Keyswitch as per option 2 but with only input 8 used (Full arm only) 4 - Momentary Keyswitch as per option 2 but with only input 7 used (Partial arm only) gram LED flashing) Operation Enter Option (Sector 8 becomes a keyswitch input) Store Entry ing the OFF button or ew function number.
Function 94 - Siren Speed	Default - medium(6)
<i>Description :</i> This function may be used to vary the speed of the siren outputs.	Options : (Single digit entry required) 9 (slow) to 1 (fast)
Example : While in program mode (Prog Key Sequence 94 - 3 - On - Installer may now exit program mode by gramming by entering a new function r	gram LED flashing) Operation Enter Function No. Enter Option (3 = Faster than default) Store Entry pressing the OFF button or continue pro- number.

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Functio	n 95 - Arming Locko	Dut Default - Arming enabled
Description This function the user fr panel	on may be used to prevent om being able to arm the	Options : 0 = Arming can be performed. 1 = Arming is disabled.
Example : Ke Installer m ming by e	While in program mode (Progr y Sequence Op 95 - 1 - On - ay now exit program mode by ntering a new function number	am LED flashing) eration Enter Function No. Enter Option (1 = Panel cannot be armed by user code) Store Entry pressing the OFF button or continue program- r.
Functio	n 96 - Download C	onfiguration Default - 5
Description This function download	; on determines how a / upload session is initiated.	Options : (Single digit entry required)0 = Download disabled1 = Ring detect only2 = Ring detect or Tech code only3 = Ring detect, Master code or Tech code4 = Tech code only5 = Master or Tech code only
Notes : Downloadir 1.	g can be initiated by one of the three Ring Detect - The panel will dial bc (Function 62) if it receives three ca	e methods listed below : ack using the download phone number Ils, of six rings duration (4-8), within a 90 second period.
2.	Master code initiated - Entering th panel to dial as if it had detected th	ne User Master Code + test 8 will cause the ne correct ring sequence.
3.	Tech code initiated - Tech code + the correct ring sequence.	test 80 will cause the panel to dial as if it had detected
Example : Ke Installer m by entering	While in program mode (Progr y Sequence 96 - 1 - On - ay now exit program mode by g a new function number.	am LED flashing) Operation Enter Function No. Enter Option (1 = ring detect only) Store Entry pressing the OFF button or continue programming

Function 98 - Status on powe	er up Default - Do not retain status
Description : If this option is enabled, the panel will attempt to power up in its previous state when power is restorede.(e.g.Armed). If it was previously armed it will ignore the sector inputs for a settling period of 90 seconds and then re-arm. Any sectors unsealed after this settling period will be automatically isolated.	Options : 0 = Do not retain status. 1 = Retain status.
If this option is disabled then the panel will power up in the OFF mode regardless of its previous state.	
NOTE: Pressing the OFF key during the 90 will stay in the OFF mode.	sec settling period will abort the rearm and panel
Example : While in program mode (Program Key Sequence 98 - 1 - On - Installer may now exit program mode by pr programming by entering a new function	m LED flashing) Operation Enter Function No. Enter Option (1 = Retain status) Store Entry ressing the OFF button or continue number.
Function 99 - Technician Co	de Default - 218067 (six digits)
Description : The Technician code is used to set up all functions of the system. Tech code can only be used when the system is in the OFF mode.	Options : (6 digit entry required) Any 6 Digits
Example : While in program mode (Program Key Sequence 99 - 218067 - On - Installer may now exit program mode by programming by entering a new function	n LED flashing) Operation Enter Function No. Enter Option (Tech code = 218067) Store Entry ressing the OFF button or continue number.

Installation and programming manual

Installation and programming manual Function 00 - Master Code Default - 218572 (six digits) **Description** : Options : (6 digit entry required) The Master code is used to enter and Any 6 Digits change the user codes only (no system setups may be changed). The Master code may be changed by either the Technician or by the holder of the existing Master code. Notes: Ensure the Master code is different to the Technicians code. If the Master code is the same as the Technician code then the technician will not be able to gain access to program the system functions **Example** : While in program mode (Program LED flashing) Key Sequence Operation 00 Enter Function No. 218572 Enter Option (Master code = 218572) On Store Entry Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number. Function 01 - User Code 1 Default - 1111 (four digits only) **Description** : Options : (Four digit entry required) Function 01 allows the programming of Any 4 Digits (see notes) user code 1. This User code is the only one with a default value but in all other respects is the same as User codes 02 to 30 Notes: 30 User codes may be programmed into the panel, These user codes are programmed using function numbers 01 to 30, all are programmed in exactly the same manner. No two User Codes may be the same and if Keyboard Duress has been enabled by Function 74 then 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 The User codes are used to Arm, Disarm, Isolate Sections and Test the system only. The User codes may be changed by either the Technician or by the holder of the existing Master code. The User codes may be deleted by using the Isolate key in place of the 4 digits in the user code (the Isolate key needs to be used only once to delete all four digits of the user code). Example : While in program mode (Program LED flashing) Operation Key Sequence Select User No. 01 01 2222 Enter Option (User code 1 = 2222) On Store Entry Select Function No. 02 02 Delete User Code 2 Isolate On Store Entry Installer or Master code holder may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

REPO	RTING C	ODES	Ademo	o I	High Speed	Function
67=0						
EXPAN D The high allocated reporting Valid cor	ED HIGH SPI speed ADEMC to be the clien channels with les for the 8 ex	EED REPO CO reports nt's account the last dig vent reporti	ORT CODES are 13 digits lo t number, the n git being the cho	ng ext anne	with the first four di 8 digits allocated to el status code. with their megnings	gits being be event
Code	Meanina	vom roporm	ng channel cou	00 1	inn meannige	
1	New event					
2	New openin	g				
3	New restore	-				
4	New closing	l				
5	Normal					
6	Previously re	eported eve	nt still in effect			
Valid coo	les for the cha	nnel status	code with their	me	aning are as follows	5:-
Code	Mean	ing			.	
I	Duress repo	rt in previou	us 8 channels (c	larr	n in channel 1)	
	e.g. c	accnt #. c	channels, code	·. 1		
0		1234	10000000	 /	ar id in channel 1)	
Z	Opening rep	pon in previ accet #	shappels code	(US	er la in channel 1)	
	e.y. c	1031	7000 0000	י. ר	usor 7 disarmod th	no system
3	Zone bypass	s status rena	ort in previous 8	∠- ⊰ch	annels	ie sysiem
0	Zone bypuss	$a_{cont} \# c$	hannels code			
]	1234 5	5515 5555	3	- zone 3 newly isc	plated
	1	1234 1	565 5555	3	- zone 1 newly iso	plated.
					zone 3 previousl	y isolated
	1	1234 3	3535 5555	3	- zones 1 and 3	, isolate restoral
4	Closing repo	ort in previc	ous 8 channels			
	e.g. c	accnt #	channels. code	•		
	1	1234 8	3444 4444	4	- user 8 armed th	e system
_	1	1234 F	444 4444	4	- user 15 armed t	he system
5	Zone trouble	e report in p	previous 8 chan	nels	(not used)	
6	System troub	ole report in	the previous 8	chc	annels (not used)	
/	∠one alarm	status repo	ert L L L			
	e.g. c	accnt #. c	nannels. code	7	2 L	
	1	1204 5 1934 1	565 5555	/7		armed
	I	1234	1000 0000	/	- zone i newly di	v alarm
	1	1234	3535 5555	7	- zones 1 and 3 r	estoral
8	New low ha	itterv alarm		,		
J	e.a. o	accnt # c	channels, code			
]	1234 5	5555 5555	8	- low batterv alar	m
9	Test report.	- Alarm statu	s is reported in	the	previous 8 channe	ls
	e.g. c	accnt #. c	channels. code		,	
	Ĩ	1234 5	5555 5655	9	- test report, prev.	zone 6 alarm.
					· ·	

REPORTING CODES Contact ID Function 67=4 Contact ID Format SSSS 18 E TTT PP NNN Where SSSS = Four Digit Account Number 18 = Unique Format Identifier (Not Displayed or Printed) Е Event =1 =New Event or Opening 3 = New Restore or Closing **Event Code** TTT = 120 = Panic Alarm 121 = Duress Alarm 130 = Burglar Alarm301 = AC Power Loss 302 = Low Battery401 = Open/Close by User 570 = Zone Bypass602 = Periodic Test Report PP Area or Partition Number = NNN = Section Number or User Number Examples of Reporting Note: Checksum is omitted for clarity 1234 18 1 120 00 000 Panic Alarm Duress Alarm by user 5 1234 18 1 121 00 005 1234 18 1 130 01 001 Section 1 alarm in area 1 Section 2 alarm in area 1 1234 18 1 130 01 002 1234 18 3 301 00 000 AC Fail restore 1234 18 1 302 00 000 Low battery alarm 1234 18 1 401 00 001 Open message with user code 1 1234 18 1 602 00 000 Test Report

Other Features		
- KEYBOARD Panic	Keyboard Panic is achieved by pressing and holding both the OFF and ON keys together and holding for 2 secs. This is a local as well as a back to base alarm.Keyboard Panic may be triggered and reported more than once, but only one restoral will be sent when a valid user code is next entered.	
- KEYBOARD Duress	Keyboard 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 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".	
- 24 HOUR	Inputs which are configured for 24 hour operation, when alarmed, will send a restoral when that input is resealed and a valid user code entered.	
- MAINS FAIL	Mains fail is automatically detected and reported by the control dialler. When mains fail is detected the power LED on the Command Centre will start giving a single flash and will be beeping. The beeper will stop when any button is depressed. After mains has been off for more than 60 minutes the dialler will send a mains fail alarm. When mains is restored the LED will go steady again and after 30 seconds the dialler will trip and send a mains restoral.	
- LOW BATT	Low battery is automatically detected and reported by the control dialler. When low battery is detected the power LED on the Command Centre will start giving a double flash. After the battery voltage has been low for 30 seconds thedialler will send a low battery report. When the battery voltage is restored to normal the LED will go steady again and after 30 seconds the dialler will send a low battery restoral. If low battery occurs during the 60 minute mains fail time, then it takes precedence over the mains fail and both events will be reported.	
- TEST DIAL	To test the reporting ability of the dialler a test dial may be initiated by entering a User code and then TEST 9. When the dialler receives the handshake tones from the monitoring station the dialler will give 3 beeps. When Tape Dial (option 67) is enabled the dialler will give 3 beeps after dialling is completed for the test call. NOTE: This test dial will reset the time to the next test dial if test reports are enabled .	
- TECH TEST FUNCTIONS	In addition to the normal test functions, the technicians code also allows the initiation of automatic upload or download sessions when using the MCM Connect 2000 software package. The sequence is :	
	Tech Code + TEST 80	
N In frc Pc	OTE: all instances when mentioned in this manual, Download refers to information being sent om the PC to the remote Panel and Upload refers to information being sent from the remote anel to the PC.	