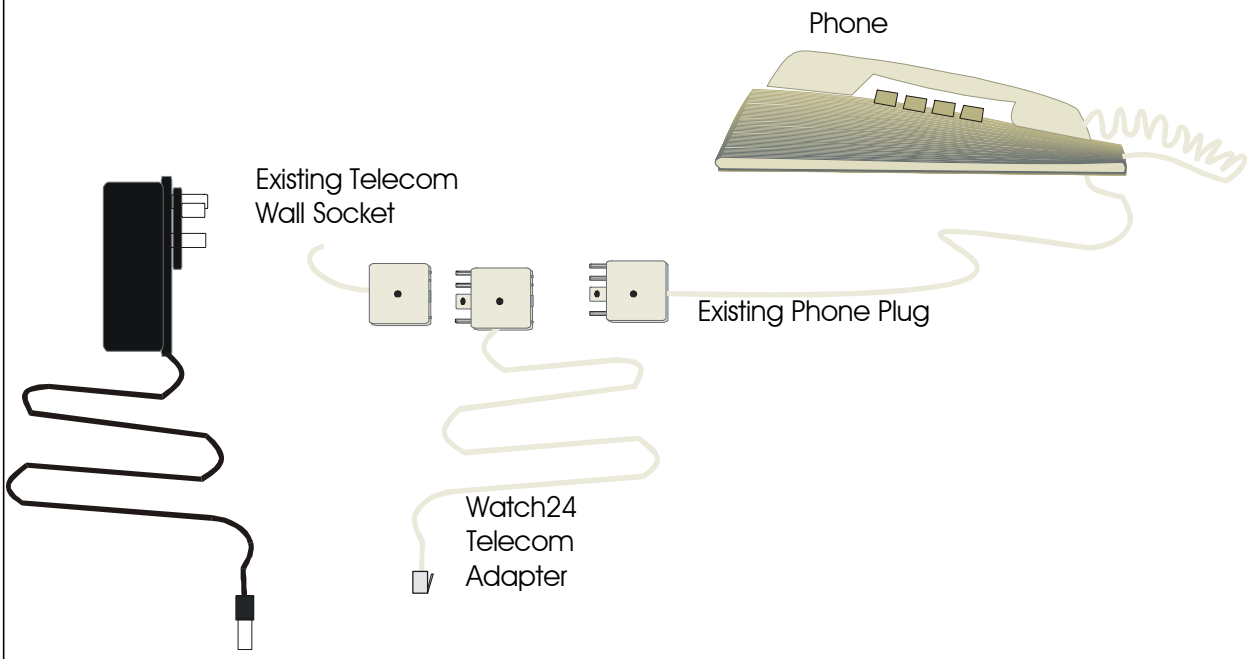
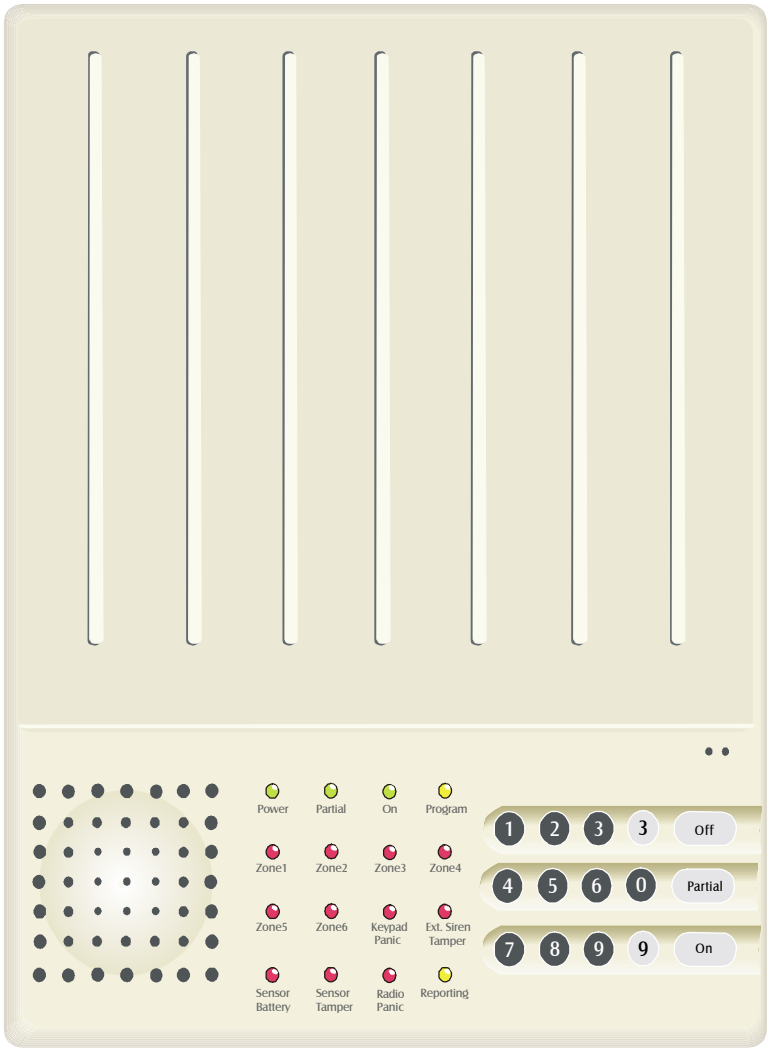
TABLE OF CONTENTS

Warning: *This equipment must only be installed and serviced by suitably qualified personnel*


Phone
Existing Telecom
Wall Socket
Existing Phone Plug
Watch24
Telecom
Adapter


Power
Partial
On
Program
Zone1
Zone2
Zone3
Zone4
Zone5
Zone6
Keypad Panic
Ext. Siren Tamper
Sensor Battery
Sensor Tamper
Radio Panic
Reporting
1 2 3 3 Off
4 5 6 0 Partial
7 8 9 9 On

INPUTS:

Ext siren tamper 10K monitored input, 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:

Batt When function 57 is enabled this output is connected to the on-board regulator via a resistor which limits the charge current. Charging voltage is 13.7v.

Int bell Output (timed) to DC screamers, fused via INTERNAL fuse. This outpt is tested by User PIN Test 2.

Ext. Siren /Strobe This output (timed) for connection of the external 12 volt DC siren and strobe, fused via External fuse. This outpt is tested by User PIN Test 2.

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.

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 the panel to factory defaults enter program mode and use **Function 90** or power the panel up with **Partial** button pressed on the keyboard for 3 seconds.

On power up

On power up the unit performs an internal self test of its **EEPROM** and then boots with this program. If the **EEPROM** is found to have been corrupted in some way then the factory defaults will be reloaded indicated by 5 beeps from the keypad.
If the **EEPROM** is correct then the panel will power up in the mode determined by **Function 98 (Status on power up).**

If **Function 98** is **0** (Do not retain the **On /Off** status) the unit starts off in **OFF** mode and the sirens may operate for half a second.

If **Function 98** is **1** (Retain **On/Off** status) and the unit was armed when power was interrupted, 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 sequence from start to finish consists of 6 dialling attempts.
The first 3 dialling attempts to the first phone number (with a 20 second pause between attempts to wait for handshake).
If after the 3 attempts no handshake is received then the dialler will release the line for 5 minutes.

The dialler will then make 3 attempts to the second phone number (if no second number has been programmed then the first number will be tried again).
If after these 3 attempts handshake is still not received the dialler will hang up until another condition causes it to dial, at which time the previous condition will also be reported.

PROGRAM READBACK

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 "
Zone1	**1**
Zone2	**2**
Zone3	**3**
Zone4	**4**
Zone5	**5**
Zone6	**6**
Keypad panic	**7**
Ext Siren Tamper	**8**
Partial	**9**
Sensor battery or On	**0**

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 43, 49, 50, 51, 52, 55 and 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 extinguish.

ENTERING PROGRAM MODE

There are two codes that will allow access to the Watch 24 panel 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 the **Partial** key on the keypad pressed for three seconds. This will restore the factory technician and master codes which are **2 1 8 1 8 8** and **2 1 8 5 7 2** respectively and will be indicated by **five** beeps from the Keypad.

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 1 8 8 - 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 :

4 9	**(Select Function 49. Program LED will light steady.)**
0 1 0 8	**(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 Number	Function	Defaults	Page No.
00	Master Code	218572	20
01	User code 1	1111	20
02-29	User code 2 to User code 29	Nil	20
40	Exit time	30 secs	8
41	Entry time	30 secs	8
42	Siren time	5 min	8
43	Partial Mode isolates	Nil	9
47	Panic audible	Audible	9
49	Exit and Entry zones	1 & 2	9
50	Exit and Handover zones	Nil	10
51	Partial Exit / Handover zones	Nil	10
52	24 hour inputs	Nil	10
54	Disable sirens on first keypress	Enabled	10
55	Silent zones	Nil	11
56	Cime zones	Nil	11
57	Battery Enable	Disabled	11

Communications Functions

60	Account number	0000	12
62	Down - Load phone number	1 300 732 404	12
63	Open / Close reports	Disabled	13
64	Phone number one	1 345 02 36	13
65	Phone number two	1 300 30 99 10	13
66	Dial method	DTMF (tone)	13
67	Reporting format	Contact I.D.	14
68	Report restorals	Enabled	14
69	No. days between test reports	7	14
70	Checksum reporting	Enabled	15
71	Report isolates	Disabled	15
73	Delay till first test report	12 Hours	15
74	Keypad Duress On / Off	Disabled	16
75	Auto - Isolation	Disabled	16
76	Multi - break sectors	Nil	16
88	Enable section 8 (Ext Siren Tamper)	Disabled	17
89	Single digit arming	Disabled	18

Special Functions

90	Default to factory	N/A	18
91	Bell output type	Bell + chirp	18
92	Slave dialler	Control dialler	19
93	Keyswitch option	Keyswitch (3)	19
94	Siren speed	Medium	19
95	Arming lockout	Disabled	20
96	Download configuration	Master/Tech/ Ring	20
98	Mode on power up	Disabled	21
99	Technician code	218188	21

Function 40 - Exit Time

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 exit.

Options - (Single digit entry required)

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

Example : *While in program mode (Program LED flashing)*

Key Sequence		Operation
40	-	Enter Function No.
5	-	Enter Option (5 = 50 seconds)
on	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number

Function 41 - Entry Time

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 triggered first

Options - (Single digit entry required)

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

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
41	-	Enter Function No.
3	-	Enter Option (3 = 30 seconds)
on	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming.

Function 42 - Siren Time

Default - 5 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 sirens to be triggered only once per section unless manually re-armed. Noise pollution regulations in most states limit siren time to 10 minutes.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
42	-	Enter Function No.
6	-	Enter Option (6 = 5 minutes)
on	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming

Function 43 - Partial Mode

Default - No sections programmed.

Description :
Partial mode sets up a preprogrammed 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	**-**	Enter Function No.
050708	**-**	Enter Options (Sectors 5, 7 & 8 will be isolated)
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 - Panic Audible

Default - audible

Description :
This function determines whether the keypad panic activation (holding the ON and the OFF Keys or Radio Key depressed 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 Panic (report only)
1 = Sirens and report.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
47	**-**	Enter Function No.
0	**-**	Enter Option (Keypad Panic now silent)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number

Function 49 - Exit/Entry Sections in **ON** Mode

Default - Zones 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	**-**	Enter Function No.
0208	**-**	Enter Option (Sector 2 is removed and section 8 is added)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 50 - Exit and Handover Sections in **ON** Mode *Default - nil*

Description :
Display and / or change which sections will have exit / handover delay.

Options : (Two digit entry required per sector)
Any sector or combination of sectors from 1 to 8

Notes : Sectors selected will only have entry time if an exit/entry sector is triggered first.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
50	-	Enter Function No.
02	-	Enter Option (Sector 2 becomes handover)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 51 - Exit / Entry Sections in **Partial** mode *Default nil*

Description :
Display and change which sections will have exit / entry delay in Partial mode.

Options : (Two digit entry required per sector)
Any sector or combination of sectors from 1 to 8

Notes : Sectors programmed in this function are independent of sectors programmed as ON mode exit / entry sectors and only have exit / entry times assigned to them when the panel is turned ON using the Partial key.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
51	-	Enter Function No.
03	-	Enter Option (Sector 3 is now Partial Exit/Entry sector)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 52 - Sections to operate in 24 Hour mode *Default - nil*

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

Option : (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
52	-	Enter Function No.
07	-	Enter Options (Sector 7 is now active 24hrs)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 54 - Disable Sirens On First Keypress *Default - Enabled (1)*

Description :
This function determines whether the sirens will be silenced for 10 seconds on the first key press. This allows the audible feedback from the keypad to be heard without the sirens interfering. (Does not 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 : While in program mode (Program LED flashing)

Key Sequence		Operation
42	-	Enter Function No.
0	-	Enter Option (0 = Sirens are not silenced)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 55 - Silent Sections *Default - nil*

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.

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
55	**-**	Enter Function No.
05	**-**	Enter Option (Sector 5 is now silent)
06	-	Enter Option (Sector 6 is now silent)
07	-	Enter Option (Sector 7 is now silent)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 56 - Cime Mode Zones *Default - Nil*

Description :
Display and change which zones when triggered will operate as Chime Zones ie. they will chirp the beeper and may chirp the screamers and ext. siren depending on whether "Test 6 - Chirp beeper" or "Test 7 - Chirp siren" is selected. Reporting to the monitoring company but will not occur unless the zone is armed.

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
56	**-**	Enter Function No.
05	**-**	Enter Option (Zone 5 is now a Chime zone)
06	-	Enter Option (Sector 6 is now a Chime zone)
07	-	Enter Option (Sector 7 is now a Chime zone)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 57 - Enable Battery *Default - disabled*

Description :
This function, when enabled, will operate a relay to connect the battery into circuit. The battery will however be trickle charged even if not enabled.

Options : (Single digit entry required)
0 = Battery Disabled
1 = Battery Enabled

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
57	**-**	Enter Function No.
1	**-**	Enter Option (1 = Enable Battery)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 60 - Account number *Default - 0000*

Description :
This function is used to enter the account number for transmission to the Central Station.

Options : (Four digit entry required)
Any 4 Digits Limits 0000 - 9999

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
60	**-**	Enter Function No.
1234	**-**	Enter Option (Account Number is now 1234)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Notes: The dialler will not dial if the account number (Function 60) or phone number 1 (Function 64) is not programmed or the account number is set to 0000. Entering the function number and then pressing the Isolate then On keys will clear entries for Functions 60, 62, 64 and 65.

Function 62 - Download Phone Number *Default -* **1300 73 24 04**

None

Description :
This phone number is used by the panel when downloading is initiated by the MCM Connect downloading software.

Options : (Max 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
62	**-**	Enter Function No.
02	-	Enter Area Code
part	-	Enter a 1 second Pause
218067	**-**	Enter Phone number (047p2180676)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 63 - Open/Close reports - Yes / No. *Default -no open /close*

Description :
Selects whether open / close reports are sent or not.

Options : (Single digit entry required)
1 Open / Close sent
0 No Open / Close sent.

Example : While in programmode (Program LED flashing)

Key Sequence		Operation
63	-	Enter Function No.
0	-	Enter Option (0 = no report)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 64 - Phone number 1 *Default -* **1345 02 36**

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 LED flashing)

Key Sequence		Operation
64	-	Enter Function No.
218572-		Enter Option (Phone number 1 is 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 65 - Phone number 2 *Default -* **1300 30 99 10**

Description :
This phone number is the alternative number used by the panel when reporting to the monitoring company and is only used if the panel fails to report to Phone #1

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	-	Enter Function No.
218067-		Enter Option (Phone number 2 is 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)
0 Dial in Decadic, (pulse)
1 Dial in DTMF, (tone)
2 Dial in New Zealand Decadic

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
66	-	Enter Function No.
1	-	Enter Option (1 = Dial in DTMF)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 67 - Reporting format

Default - Contact I.D. (4)

Description :
This function determines the format the dialler will report in.

Option : (Single digit entry required)
0 Normal Reporting (ADEMCO high speed)
1 Tape Dial (No handshake to start Tx.)
4 Contact I.D. single account number.

Notes:
When selected Tape Dial mode causes the dialler not to listen for acknowledge tone and starts sending alarm message continuously until 30 second timeout or until a kissoff tone. (In this mode a kissoff tone can be a whistle.) If the whistle is received on the first call it will not continue to dial. In this mode no open/closing report, restores, isolate/de-isolates, mains fail, low battery or 24 hour test messages are sent.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
67	-	Enter Function No.
0	-	Enter Option (0 = ADEMCO high speed)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 68 - Report restorals

Default - Report restorals

Description :
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 LED flashing)

Key Sequence		Operation
68	-	Enter Function No.
1	-	Enter Option (1 = Report Restorals)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 69 - Test reports

Default - 7 Day 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 LED flashing)

Key Sequence		Operation
69	-	Enter Function No.
7	-	Enter Option (7 = 7 days)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 70 - Report Using Checksum ***Default - 0***

Description :
The dialler defaults to use the single round with checksum.
If a 0 is programmed the dialler will report in dual round without checksum.

Options : (Single digit entry required)
1 Report using checksum
0 Do not use checksum in reporting

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)

Key Sequence		Operation
70	-	Enter Function No.
0	-	Enter Option (0 = no checksum)
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 - no isolate reporting***

Description :
If enabled the control panel will report isolated sections at the end of exit time.

Options : (Single digit entry required)
1 Report isolated sections
0 Do not report isolated sections

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
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 :
This sets the delay from when program is exited till the dialler sends its first test report, in multiples of **4 hours.**

Options : (Single digit entry required)
0 to 9 = number of 4 hr periods before the first test report.

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 On / Off

Default - Duress disabled

Description :
Keyboard duress may be disabled to prevent accidental duress alarms from private residences.

Options : (Single digit entry required)
1 Duress reports enabled
0 Duress reports disabled

Note:
Duress is achieved by adding 1 to the last digit of the user code eg. 1234 becomes 1235, 6789 becomes 6780.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
74	-	Enter Function No.
1	-	Enter Option (1 = reports enabled)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 75 - Auto-Isolate On/Off

Default - Auto-Isolate disabled

Description :
Normally if an attempt to arm the panel with a faulted section (other than an exit/entry section) is made the panel will give an error beep. If this option is enabled then faulted sections will be automatically isolated and will be reported as such.

Options : (Single digit entry required)
1 Auto - isolation enabled
0 Auto - isolation disabled

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
75	-	Enter Function No.
1	-	Enter Option (1 = auto-isolation enabled)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 76 - Multi-Report (Multi-Break)

Default - Nil

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

Options : (Two digit entry required per sector)
Any sector or combination of sectors from 1 to 8

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

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
76	-	Enter Function No.
01	-	Enter Option (01 = sector 1)
02	-	Enter Option (02 = sector 2)
On	-	Store Entries

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 88 - Enable Siren Tamper Section 8 ***Default - disabled***

Description :
This function, when enabled, will allow the panel to monitor the 10k end of line resistor in the External Siren unit

Options : (Single digit entry required)
0 = Siren Tamper disabled
1 = Siren Tamper enabled

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
88	**-**	Enter Function No.
1	**-**	Enter Option (1 = Siren Tamper enabled)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 89 - Single Digit Arming *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 enabled, the unit will report an opening or closing with user **31** in CONTACT ID format or user **15** with ADEMCO high speed format.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
89	-	Enter Function No.
1	-	Enter Option (1 = single digit arming enabled)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

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	-	Enter Function No.
On	-	Panel will default to Factory defaults

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 Type *Default - Bell o/p +pulse (1)*

Description :
This function determines what events will trigger the bell 1 output

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

Notes :
1. 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**.
2. 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 LED flashing)

Key Sequence		Operation
91	-	Enter Function No.
2	-	Enter Option (2 = panel secure o/p)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 92 - Slave Dialler Option

Default - Control Dialler

Description :
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 selected, inputs are 10k end of line

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
92	-	Enter Function No.
0	-	Enter Option (0 = Control Dialler)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 93 - Keyswitch Option

Default - Keyswitch (3)

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.

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)

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
93	-	Enter Function No.
3	-	Enter Option (Sector 8 becomes keyswitch input)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 94 - Siren Speed

Default - medium(6)

Description :
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 (Program LED flashing)

Key Sequence		Operation
94	-	Enter Function No.
3	-	Enter Option (3 = Faster than default)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 95 - Arming Lockout

Default - Arming enabled

Description :
This function may be used to prevent the user from being able to arm the panel

Options :
0 = Arming can be performed.
1 = Arming is disabled.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
95	**-**	Enter Function No.
1	**-**	Enter Option (1 = Panel cannot be armed by user code)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 96 - Download Configuration

Default - 3

Description :
This function determines how a download / upload session is initiated.

Options : (Single digit entry required)
0 = Download disabled
1 = Ring detect only
2 = Ring detect or Tech code only
3 = Ring detect, Master code or Tech code
4 = Tech code only
5 = Master or Tech code only

Notes :
Downloading can be initiated by one of the three methods listed below :

1. Ring Detect - The panel will dial back using the download phone number (Function 62) if it receives three calls, of six rings duration, within a 90 second period.
2. Master code initiated - Entering the **User Master Code + test 8** will cause the panel to dial as if it had detected the correct ring sequence.
3. Tech code initiated - In which the Technician has three options being :
   a) **Tech code + test 80** will cause the panel to dial as if it had detected the correct ring sequence.
   b) **Tech code + test 81 + 6 digit service code** will cause the panel to dial as if it had detected the correct ring sequence and automatically begin the download session.
   c) **Tech code + test 82 + 6 digit service code** will cause the panel to dial as if it had detected the correct ring sequence and automatically begin an upload session.

The last two options allow the technician to use the **Unattended Dial-in** feature of the **MCM Connect** 2 software package.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
96	**-**	Enter Function No.
1	**-**	Enter Option (1 = ring detect only)
On	**-**	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 98 - Mode on power up

Default - Do not retain mode

Description :
If this option is enabled, the panel will attempt to power up in its previous state or mode when power is restored. 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. If this option is disabled then the panel will power up in the **OFF** mode regardless of its previous state.

Options :
0 = Do not retain status.
1 = Retain mode / status.

NOTE: Pressing the **OFF** key during the **90** sec settling period will abort the rearm and panel will stay in the **OFF** mode.

Example : While in program mode (Program LED flashing)

Key Sequence		Operation
98	-	Enter Function No.
1	-	Enter Option (1 = Retain status)
On	-	Store Entry

Installer may now exit program mode by pressing the OFF button or continue programming by entering a new function number.

Function 99 - Technician Code

Default - 218188 (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 LED flashing)

Key Sequence		Operation
99	-	Enter Function No.
218188	-	Enter Option (Tech code = 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 00 - Master Code

Default - 218572 (six digits)

Description :
The Master code is used to enter and 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.

Options : (6 digit entry required)
Any 6 Digits

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 :
Function 01 allows the programming of 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 29

Options : (Four digit entry required)
Any 4 Digits (see notes)

Notes:

- 29 User codes may be programmed into the panel, These user codes are programmed using function numbers **01** to **29**, 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)

Key Sequence		Operation
01	-	Select User No. 01
2222	-	Enter Option (User code 1 = 2222)
On	-	Store Entry
02	-	Select Function No. 02
Isolate	-	Delete User Code 2
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.

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)

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

TTT = Event Code
101 = Personal Emmergency Alarm
Radio Panic Alarm
120 = Keyboard Panic Alarm
121 = Duress Alarm
130 = Burglar Alarm
301 = AC Power Loss
302 = Low Battery
401 = Open/Close by User
570 = Zone Bypass
383 = Radio Tamper Alarm
384 = Radio sensor Low battery
602 = 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
1234 18 1 121 00 005	Duress Alarm by user 5
1234 18 1 130 01 001	Section 1 alarm in area 1
1234 18 1 130 01 002	Section 2 alarm in area 1
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** — An 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 2** software package. The sequence is :

  Tech Code + TEST 81 + Service Code - Auto Download

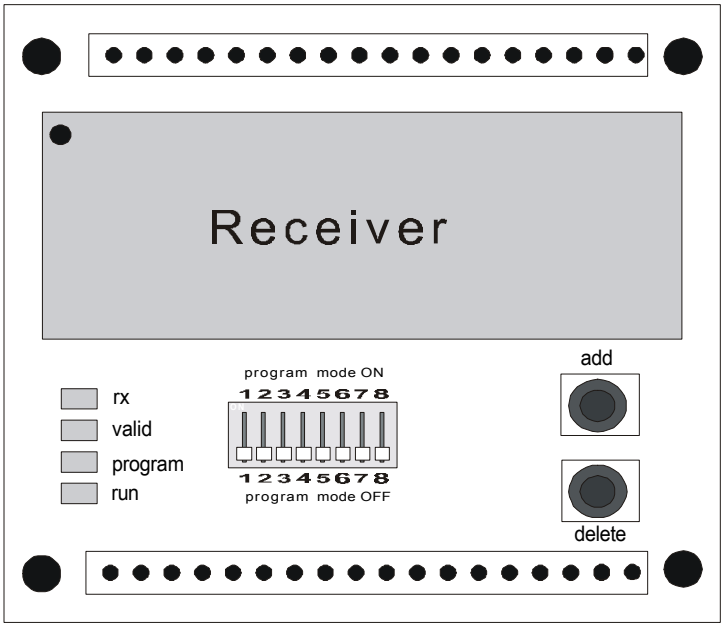
  Tech Code + TEST 82 + Service Code - Auto Upload

  where the actual **Service code** is determined by an entry in the **MCM Connect 2** software package.

  NOTE:
  In all instances when mentioned in this manual, **Download** refers to information being sent from the PC to the remote Panel and **Upload** refers to information being sent from the remote Panel to the PC.

Watch24 Receiver programming information

(to identify a DUAL receiver board the word DUAL is written on a label on the receiver)



RX LED	On when any data packets are received - even if not programmed addresses
VALID LED	On while valid data is decoded e.g. while Tx is pressed or PIR transmitting. Flashes 6 times when in program mode and valid data is received for storage
PROGRAM LED	on when any switch is in the “on” position, flashes when more than one switch is in the on postion
RUN LED	normally flashing at 0.5 hz indicates microprocessor running.
SWITCH 1 - 6	for programming zones 1-6
SWITCH 7	on when adding or deleting 2nd sensor on zones 1-6
SWITCH 8	for Radio Transmitters 1-8

examples of programming are on the next page >>

Watch24 Receiver programming information(cont'd)

(includes dual sensor receiver setup instructions)

Normal condition of LED and switches All switches normally in off position
Program light OFF
Running light flashing
Valid light OFF

Example of operation to ADD a PIR sensor to zone 4
(PIR must have been powered up for at least 5 minutes)

- Put switch 4 in the ON position — Program LED illuminates

- press ADD button — Valid lED flashes until a Tx is received.
(with the PIR 5 meters away)

- operate tamper switch and trigger sensor — RX LED will illuminates
(make sure no other sensors operate when the ADD button is pressed otherwise they will be ADDED in place of the sensor you are trying to add. First in is programmed.)

- switch 4 to the off position — programming complete.

Example of operation to ADD a second PIR sensor to zone 4
(a DUAL receiver has the word DUAL is on the receiver PCB)
(PIR must have been powered up for at least 5 minutes)

- Put switch **4 and 7** in the ON position — Program LED illuminates

- press ADD button — Valid lED flashes until a Tx is received.
(with the PIR 5 meters away)

- operate tamper switch and trigger sensor — RX LED will illuminates
(make sure no other sensors operate when the ADD button is pressed otherwise they will be ADDED in place of the sensor you are trying to add. First in is programmed.)

- switch 4 and 7 to the off position — programming complete.

Example of operation to DELETE a sensor from zone 4
(the first sensor if a zone doubled receiver)

- Put switch 4 in the ON position — Program LED illuminates

- press DELETE button

- switch 4 to the off position — programming complete.

Example of operation to add a second PIR sensor to zone 4
(the second sensor with a zone doubled receiver)

- Put switch **4 and 7** in the ON position — Program LED illuminates

- press DELETE button

- switch 4 and 7 to the off position — programming complete.

Watch 24

Security System

Installation and Programming Manual