

Supa 8

Control Panel & Dialler

Installer Manual

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GSM wireless alarm transmission refer GSM module user's manual.	

Features

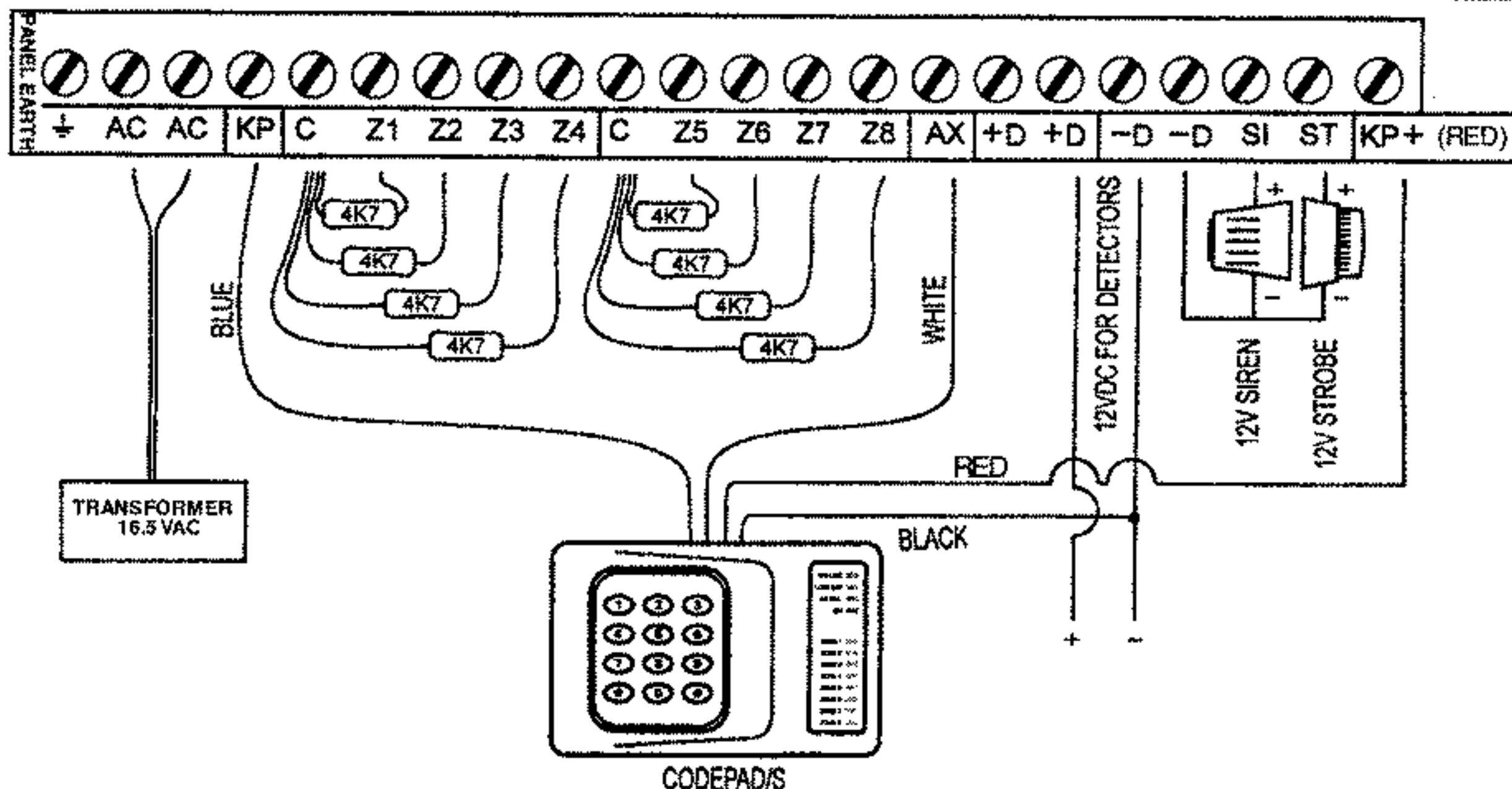
- **FEATURING**
- Dialler formats: Local, Contact ID and Personal.
- Two key Panic, Duress, Test and Quick-arm codes.
- Walk Test Mode with siren squawk, zone light latch and siren / strobe test.
- Review Mode to view zone and non-zone alarms including first zone.
- Optional dialler lockout per zone (1 trigger per zone)
- Optional siren lockout per zone (1 siren activation per zone)
- Optional no restore and no isolate reporting.
- Separate zone programming for home mode.
- Optional reporting in home mode.
- Sequenced entry via optional primary zones.
- Door monitor zones in home mode with keypad beep and optional siren squawk.
- Optional no installer code reset for prevention of unauthorised panel takeovers.
- Optional away and home (Zone 8) key-switches.
- Optional entry / exit warning beeper.
- Optional Siren squawk on entry, exit turn on / turn off or zone alarm in home mode.
- Programming feedback via zone LEDs including address and data displays.
- Set options to factory default feature.
- Sixteen user codes.
- Timed Test reports ranging from 1 hour to 165 hours with trimming capability.
- Optional one time code. (Code 15) See address 096 option 4
- Optional siren toggle zone. (Zone 7)
- Optional pulse count zones with programmable pulse count and time out.
- Optional fast response with programmable response times for vibration sensors.
- Improved upload / download times. (With modem)
- Optional delay on AC fail. (30 minutes)
- Delay on low battery alarm and restore. (10 minutes)
- Force Arming with siren squawk. (pg. 19)

Terminals & Wiring

Terminals	Description
Earth	Panel earth connection.
AC	16.5 VAC supply from transformer.
AC	16.5 VAC supply from transformer.
KP	Remote codepad(s) blue wire.
C	Common for Zones 1-4 (Negative).
Z1	Zone 1 input. 4K7 end of line.
Z2	Zone 2 input. 4K7 end of line.
Z3	Zone 3 input. 4K7 end of line.
Z4	Zone 4 input. 4K7 end of line.
C	common for zones 5-8 (Negative).
Z5	Zone 5 input. 4K7 end of line.
Z6	Zone 6 input. 4K7 end of line.
Z7	Zone 7 input. 4K7 end of line.
Z8	Zone 8 input. 4K7 end of line.
AX	Remote codepad(s) white wire.
+D	12VDC positive supply for detectors.
+D	12VDC positive supply for detectors.
-D	12VDC negative supply for detectors. Also remote codepad black wire.
-D	12VDC negative supply for detectors. Also common for siren and strobe.
SI	Siren output. 12VDC positive when in alarm.
ST	Strobe output. 12VDC positive when in alarm.
KP+(Red)	Remote codepad/s red wire
KY C (molex pin)	Keyswitch input. Apply momentary to arm or disarm the panel. Also used to restore the Installer code to factory default setting, simply power up the panel with the KY input molex pin shorted to C . Wait 5 seconds. Remove the KY molex pin short to C . The installer code is now defaulted to 1111.

P02
KY C

(TELEPHONE)	R
RD TD	T
(OUT)	(IN)



Getting Started

POWERING UP

When installation is completed, turn on transformer and connect the battery.
The following will happen:

- The keypad will beep 3 times followed by a single beep.
- The panel will "Reset". This means that the microprocessor is forced to read programming stored in the on-board memory. Reset on powering up is the same as performing a reset at address 254 (see page 4). The reset does not wipe out any programmed data, the on-board memory can only be defaulted by programming address 250 (see page 5) or powering up with the KY input connected to C (molex pin – P02) which only defaults the install code.
- 24hr zones will be temporarily disabled. This is to allow you to complete working on the panel with the panel tamper unsealed. When you have finished and the panel's lid tamper switch is sealed, turn the panel on then off to enable 24hr zones.

PROGRAMMING

To enter Program Mode

enter ----- (current installer code) All zone lights will flash. Waiting for a command.

enter 7 (enters program mode) ON-LINE light flashing indicates program mode.

Installer Code & Master Code

Factory default installer code is **1111**

The Installer code can:

- Program all addresses except for address 252
- Review the panel memory

Factory default Master code is **0000**

The Master code can:

- Turn the panel on and off
- Program user codes
- Program the temporary telephone number
- Program address 252 to restrict the installer code
- Review the panel memory

Note: The Master code can completely disable the Installer code.
See notes on address 252 on page 25.

Only the Installer code and Master code can enter program mode.

Getting Started

PANEL RESET

Definition of Panel Reset:

- *The panel will reset when power is first applied. This means that the microprocessor is forced to read all programming stored in the on-board memory.*
- *Reset on powering up is the same as performing a reset at address 254 (see below).*
- *The reset does not reset or wipe out any programmed data.*
- *Reset is the same as a "boot-up" in computer terminology.*

How to Reset the panel.

1. The panel can be reset by removing all power temporarily (a "power-up" reset). This means both the mains supply and the battery back-up supply must be disconnected.
2. Or the panel can be reset by entering program mode and accessing address 254. This automatically resets the panel and is the equivalent of a "power-up" reset.

Behaviour of 24hr zones after Reset

24hr zones will be temporarily disabled. This is to allow you to complete working on the panel with the panel tamper unsealed. When you have finished and the panel's lid tamper switch is sealed, turn the panel on then off to enable 24hr zones.

Restoring factory defaults

Enter program mode and follow the instructions for defaulting the panel on the next page.

If installer code is unknown

See below.

Behaviour of dialler after reset

Following a reset, the dialler will answer incoming calls on the first ring and then, after two minutes, answer calls after 15 rings. This is a handy feature which allows quick remote access into the system when programming by telephone. For example, you may ask the client to enter program followed by address 254, then dial the panel using upload / download software. The panel will answer on the first ring for remote programming.

Why Reset?

The Panel may need to be reset for any of the following reasons:

1. To disable 24hr zones. A handy function which allows the installer easy access to the panel. Reset the panel using address 254. The 24 hour zones will be disabled until the next time the panel is turned on and then off.
2. To enable the Panel to answer an incoming call on the first ring, (if it is programmed to answer calls). When the panel is powered off and then turned on again, it temporarily sets the dialler to answer an incoming call on the first ring for two minutes. At the end of the two minute period the panel reverts to answer after 15 rings.

Defaulting the panel

Defaulting the Panel

There are two types of initialising for the panel.

1. Setting the installer code to factory default of 1111
2. Setting all panel options back to a factory default.

If address 255 is set to "9" then no panel Initialisation can take place. This means the panel cannot be re-programmed unless you have the installer code. This prevents panels being "taken over" without the installers permission.

To default the INSTALLER CODE only, simply power up the panel with the KY input molex pin shorted to C. Wait 5 seconds. Remove the KY molex pin short to C. The installer code is now defaulted to 1111. (If address 255 was set to "9" then no code change was made).

To set panel options back to factory default, use the installer code to go into programming mode and set lights at address 250 (Yes / No option) as below. The options will automatically be set to one of two factory defaults and the panel will then reset.

Keys to enter at address 250	Default
2 5 7 8	Personal reporting
4 5 7 8	Business monitored (With all monitoring options)

Default 2

Personal Reporting

Personal Reporting allows dialler reports to be sent to any telephone including mobile phones. When triggered, the panel will immediately seize the line and dial a pre-programmed number. The panel will then output an alternating high/low siren type sound to indicate that an alarm has occurred. See page 13 for further information on personal reporting.

Default 4

Business Monitored

The business monitored defaults set up the panel for back to base reporting with all dialler functions enabled.

See pages 26 and 27 for a summary of pre-programmed options for the two default types.

Programming - Key functions

Key Functions In Program Mode

The table below summarises the use of all keys once a legal address has been entered:

Key	Operation
★	Back to start of program mode waiting for 3 address digits
★★	Exit programming operation - back to idle
0 key	Used to enter decimal data, in Yes / No mode sets all options to off
1 - 8 keys	Used to enter decimal or Yes / No data
9 key	Used to enter decimal data, in Yes / No mode turns all options on
# 1 to # 6	Used to enter 10, 11, 12,13,14 or 15 for decimal options only. For example # 6 is used to make codes non-operational and sets the end of phone numbers. # 5 is used to put a pause in a telephone number.
# 0	Momentarily displays current address.
# 7	Illegal
# 8	Illegal
# 9	Illegal
# #	Increment current address
#★	Illegal

Operation of Non-Zone Lights in Program Mode

ON-LINE Light	LOW BATT Light	AC FAIL Light	ON Light	MEANING
FLASHING	OFF	OFF	OFF	Waiting for the first digit of an address
FLASHING	FLASHING	OFF	OFF	Waiting for the second digit of an address
FLASHING	FLASHING	FLASHING	OFF	Waiting for the third digit of an address
ON	ON	ON	ON	Displaying Decimal data
ON	ON	ON	FLASHING	Displaying Yes / No data

When all three digits of each address have been entered, the zone lights will display data in one of two ways depending on the type of option, decimal or Yes/No. Note that the ON light shows whether the option is Decimal or Yes/No.

Storing Data

Note that there is no store key within the Panel. The option is automatically stored as the data is entered. Pressing the ★ key once while programming an option takes you back to address entry mode to allow another 3 address digits to be entered. The On-Line light will be set to flashing and all other lights will be off. Pressing the ★ key a second time will exit programming mode.

The momentary display of address information is done by quickly flashing the 3 address digits using the zone lights in decimal mode sequentially for about 1.5 seconds per digit. The non-zone lights show what address digit is being displayed as follows:

Mode	ON LINE Light	LOW BATT Light	AC FAIL Light	ON Light
Displaying first address digit	On	Off	Off	Off
Displaying second address digit	Off	On	Off	Off
Displaying third address digit	Off	Off	On	Off

For example if address 150 was to be displayed the following light sequence would occur:

1. On-Line light and Zone 1 light on for 1.5 secs.
2. Low Batt light and Zone 5 light on for 1.5 secs.
3. AC Fail light and no zone lights on for 1.5 secs.
4. Back to display of data stored at address 150.

Programming – How to

PROGRAMMING...

Decimal options

Decimal options may only be selected by their start address. For example the primary telephone number can only be selected by address 128. When a decimal option is first selected, all digits of the option are displayed in sequence in the same manner as the display address option. If displaying a telephone number then the display terminates if it encounters a "15" or "f" digit (end of telephone number). Whilst displaying the digits, (each digit for 1.5 secs) the ON-LINE, AC FAIL, LOW BATT and ON lights will turn on sequentially, one at a time as each new digit of the option is displayed. (If the decimal option is only a single digit option the "sequential display" is skipped). If any key is entered whilst displaying decimal data, the rest of the display sequence is skipped.

Once all the digits are displayed, all zone lights will momentarily light and the display will revert to normal entry mode, starting at the start address of the selected decimal option. New data may now be entered by simply typing the required digits. Each digit entered can range from 0 to 15. As each digit is entered it will momentarily be displayed before advancing to the next address and displaying its contents. The # 0 sequence will still show what address you are up to whilst the # # sequence will increment to the next address.

When the required number of digits (or # # sequences) has been entered, the Panel will revert back to address entry mode.

Key Press	Value stored	Decimal Options Zone lights lit	This table applies to the programming of decimal addresses such as telephone numbers, user codes, timers.
0	0	None	
1	1	Light 1	To program a value greater than 99. use the # 1 to # 6 key sequences. For example, to program entry delay for 155 seconds, enter # 6, 5 in 100. This gives. $\begin{array}{r} 15 \times 10 = 150 \text{ seconds} \\ + 5 \text{ seconds} \\ \hline \text{Total} = 155 \text{ seconds} \end{array}$
2	2	Light 2	
3	3	Light 3	
4	4	Light 4	
5	5	Light 5	
6	6	Light 6	
7	7	Light 7	
8	8	Light 8	
9	9	Lights 1 and 8	
# 1	10	Lights 2 and 8	
# 2	11	Lights 3 and 8	
# 3	12	Lights 4 and 8	
# 4	13	Lights 5 and 8	
# 5	14	Lights 6 and 8	
# 6	15	Lights 7 and 8	

How to Program Decimal Addresses

Example – Programming Telephone Number 1 to be 9123 1234.

enter	----	(current installer code)	<i>All zone lights will flash. Waiting for a command</i>
enter	7	(enters program mode)	<i>ON-LINE light flashing indicates program mode.</i>
enter	128	(address for telephone No 1)	<i>The current telephone number will read back.</i>
enter	91231234	(telephone number digits)	<i>Each digit is displayed as it is entered.</i>
enter	# 6	(to end the telephone number)	
enter	*	(back to program mode)	

At this stage you can enter the address of another program option or press * to exit program mode.

Programming – How to

PROGRAMMING...

Yes / No options

When a Yes / No option is selected the state of the 8 options is displayed on the 8 zone lights, the light on means that the option is set. The state of each option may be toggled by pressing the relevant digit key from 1 to 8. The 9 key sets all options and the 0 key clears all options. When the 8 options are programmed as required simply press ★ to allow another 3 digit address to be selected or press # # to advance to the next address.

Pressing # 0 displays the current address being edited. Yes / No options are only stored at even addresses.

Most programming addresses are Yes / No type addresses. The obvious exceptions are telephone numbers, account numbers, timers, etc, where a value is directly entered rather than selecting a yes or no.

Yes / No Options

Value	Zone lights lit
Option 1 selected	Light 1 on
Option 1 not selected	Light 1 off
Option 2 selected	Light 2 on
Option 2 not selected	Light 2 off
Option 3 selected	Light 3 on
Option 3 not selected	Light 3 off
Option 4 selected	Light 4 on
Option 4 not selected	Light 4 off
Option 5 selected	Light 5 on
Option 5 not selected	Light 5 off
Option 6 selected	Light 6 on
Option 6 not selected	Light 6 off
Option 7 selected	Light 7 on
Option 7 not selected	Light 7 off
Option 8 selected	Light 8 on
Option 8 not selected	Light 8 off

How to Program Yes/No Addresses

Example – Programming zone 1 to trigger siren, dialler and strobe in home mode.

enter ----- (current installer code) *All zone lights will flash. Waiting for a command.*

enter 7 (enters program mode) *ON-LINE light flashing indicates program mode.*

enter 070 (addr for Options Grp 1, zone 1) *KP lights show currently selected options.*

enter 2 3 5 7 (the options for siren, dial, strobe and home mode) *Lights 2, 3, 5, 7 will be on.*

enter ★ (back to program mode)

At this stage you can enter the address of another program option or press ★ to exit program mode.

Keypad Operation – General

The LED Keypad

Keypad Entry Errors

When an error is made in entering digits, the keypad will do a long beep and resume idle mode. Listed below are the use of the indicator lights when in normal operation.

<u>Light</u>	<u>Meaning if on</u>	<u>Meaning if off</u>	<u>Meaning if flashing</u>
On-Line	Dialler on line	Dialler not on line	
Low Batt	Battery charge voltage low	Battery OK	Had Low Batt alarm
AC Fail	Power not connected	Power OK	Had AC Fail alarm
ON	Panel is on (away)	Panel is off	Panel is on (home)
Zone 1 - 8	Un-sealed, Manual or Auto isolated	Zone is sealed	Had alarm

Note that the status of the zones will only be displayed if the Display Lights option is set (address 096, option 1) and the relevant zone attributes are non zero. The Low Batt and AC Fail lights will show the current state of these inputs, however the alarm (or restore) condition may have to be present for a period before a report is initiated.

Note that flashing zone, AC Fail or Low Batt lights will be cleared if programming mode or a # sequence is performed. Review mode can then be used to view past alarms if desired.

Keypad lockout

If an incorrect code is entered 16 (V.22) times then the keypad will be locked out for 60 seconds. During this time the zone lights will be on and the beeper will sound continuously.

Keypad Beeper Operation

The keypad beeper will sound under the following circumstances:

- | | |
|--|-------------------------------|
| • Any key press | - short beep |
| • Turn panel OFF | - short beep |
| • Turn panel ON | - 2 short beeps will be heard |
| • Display of new data in program mode | - 2 short beeps |
| • Wrong key or illegal action | - long beep |
| • Press * key | - long beep |
| • In Home Mode when a Home Beep zone is triggered | - short beep |
| • Keypad lockout due to too many code entry attempts | - Continuous beep |
| • During exit delay if address 098, option 1 is enabled | - Continuous beep |
| • During entry delay if address 098, option 2 is enabled | - Continuous beep |

All zone lights on plus a continuous beeper

Means the keypad is locked out for 60 seconds caused by 16 (V.22) consecutive incorrect code entries.

All zone lights flashing

1. Means the Panel is being accessed remotely. If an installer is performing an upload / download then no key should be pressed. If the Panel is being accessed by a person for the purposes of turning on or off the Panel or after a tone key in personal dialling mode, then again keys should not be pressed unless you want to force the Panel to hang up in which case you may press the # key or -
2. Indicates a legal code has been entered (or the # key) and the Panel expects another key to be pressed to select the desired function within 5 seconds. To cancel simply wait 5 seconds or press the * key.

Outputs

Siren Output

Turning siren ON.

Any active input can be programmed to trigger the siren. When in Home Mode, there is a separate option for enabling sirens for any zone, see: Zone Options Group 2.

Note that zones with the siren lockout option set for that zone can only trigger the siren once during any one armed period. Note that panic, test and duress key sequences simply trigger the respective inputs and will only sound the siren if the siren is enabled for those inputs.

If address 240, option 7 is on, siren can be toggled on and off by triggering zone 7. See page 25.

Turning siren OFF.

- Siren will turn off at the end of siren time which is set by address 104. Siren time can be set between 01 and 99 minutes and is accurate to about 1 second/minute.
- Siren can be toggled off by triggering zone 7 only if it was turned on by zone 7. If an alarm zone turned the siren on, zone 7 will not turn the siren off. This is valid only if address 240, option 7 is on
- Siren will turn off low battery is sensed. If low battery is sensed at any time, the strobe and siren will be turned off if they are on. This reserves battery power for the dialler.
- Siren will turn off when a valid user code turns the panel off.

If fail to Communicate (address 066) is programmed to sound the siren, it will only sound the siren when the dialler has made the programmed number of attempts to communicate. If an open or close report fails to communicate, the siren will not be triggered.

Strobe Output

Turning Strobe On:

Any active input can be programmed to trigger the strobe. When in Home Mode there is a separate option for enabling the strobe for any zone, see: Zone Options Group 2.

Note that panic, test and duress key sequences simply trigger the respective inputs and will only trigger the strobe if the strobe is enabled for those inputs.

Turning Strobe Off:

Strobe will turn off when a valid user code turns the panel off.

By low battery being sensed. If low battery is sensed while the strobe is on, it will be turned off immediately. The siren will also be turned off if it is on. This reserves battery power for the dialler.

Panel Operation - keypad functions

Panel Operation

Keypad Key Functions

After a code is entered or the **#** key is pressed you have 5 seconds to select the operation you wish to perform. During this time all 8 zone light will flash to indicate that a key should be pressed. If no key is pressed within 5 seconds, the keypad will revert to idle mode. Enter the code to start again.

The ***** key is always used as "clear key" to abort the current operation. Listed below are the possible operations:

1 PANIC	2 DURESS	3 TEST
4 REV	5 WALK / T	6 ISOL
7 PROG	8 HOME	9 ON
* CLEAR	0 OFF	#

Panic, Duress, Test - Keys 1, 2, 3

Enter a user code followed by **1** or **# 1** to trigger the panic input. (Programmed at address 088).
Enter a user code followed by **2** or **# 2** to trigger the duress input. (Programmed at address 086).
Enter a user code followed by **3** or **# 3** to trigger the test input. (Programmed at address 090).

Action taken will then depend on whether the inputs are armed (usually 24 hour) and how the inputs are programmed. Note that pressing **# 3** to initiate the test sequence will not affect the test report timer if enabled.

Review - Key 4

Enter a user code followed by **4** or simply enter **# 4** to enter review mode. The ON-LINE, LOW BATT, AC FAIL & ON lights will all be on to indicate you are in review mode. Review mode displays information about past alarms and events within the panel. This past information is cleared when the panel is reset. It can also be cleared by pressing the **0** key whilst in review. While in review mode, various events will be displayed by pressing the following keys:

- Key 1 Displays past zone alarms since last reset.
- Key 2 Displays past alarms other than zones.
- Key 3 Display previous events (miscellaneous).
- Key 0 Clear review memories. (Also cleared on Panel reset)
- Key 9 Displays the panel's software version. (in binary)
- Key ***** Exit review mode.

When first entered, review shows past zone alarms. The tables below show how to interpret the various displays..

Review 1 PREVIOUS ZONE ALARMS

While in REVIEW mode, pressing key 1 displays:

Zone Light	Meaning
1-8	Previous alarm on zones 1 - 8 since panel last reset. Note: The first zone that was triggered will be flashing.

Review 2 PREVIOUS NON-ZONE ALARMS

While in REVIEW mode, pressing key 2 displays:

Zone Light	Meaning
1	Duress input triggered since last panel armed.
2	Panic input triggered since last panel armed.
3	Test input triggered since last panel armed.
6	ON input triggered since last panel armed.
7	Fail-to-communicate input triggered since last panel armed.
8	Spare input triggered since last panel armed.

Panel Operation - Keypad functions

Review ... continued...

Review 3 PREVIOUS EVENTS (Miscellaneous)

While in REVIEW mode, pressing key 3 displays:

Zone Light	Meaning
Zone 1 light on	Siren has sounded since panel last armed. (not squawks)
Zone 2 light on	Strobe has been turned on since panel last armed.
Zone 3 light on	Dialler has been triggered since panel last armed.
Zone 4 light on	Dialler failed (reached max. attempts)
Zone 5 light on	Nil
Zone 6 light on	Maximum code attempts has been activated since panel last armed.
Zone 7 light on	Low battery has turned off siren (and strobe)
Zone 8 light on	Answered phone since last armed

Walk Test - Key 5

Selecting this operation whilst the panel is off will initiate walk-test mode. This operation is only available to codes 0 to 7. Walk-test mode allows all zones and the siren and strobe to be tested. Operation is as follows:

When first entered all 8 zone lights will be turned off. The AC Fail light will show whether AC is present or not. The Low Batt light will show whether the battery charging voltage is adequate.

As zones are alarmed the siren will squawk and the relevant zone light will turn on and remain turned on. This allows a "one man" walk-test by walking through all zones and coming back to the panel to check that all zones alarmed where detected by checking that the relevant zone light is illuminated. Pressing the 0 key turns off all zone lights and allows the test to be repeated if desired.

Pressing the 1 key will turn on the siren. Pressing the 2 key will turn on the strobe. This enables you to check the individual operation of the siren and strobe. Pressing the 3 key will turn off the siren and strobe.

Press the ★ key to exit walk-test.

Isolate - Key 6

This key allows zones to be manually isolated or re-enabled at any time and is only available to codes 0 and 2 - 7. The ON-LINE, LOW BATT, AC FAIL and ON lights will illuminate and the zone lights will show the current manual isolate status of the zones, on means manually isolated. Note that other "non-zone" inputs cannot be isolated in this mode.

As Keys 1 to 8 are pressed, the relevant zone light will toggle on or off. When the light is on the zone is isolated. A key must be pressed at least every 10 seconds or else isolate mode will terminate. The ★ key also terminates isolate mode.

Note that isolated zones only remain isolated until next time the off operation is selected, even if the Panel is already off. AC fail, Low battery, Panic, Test and Duress inputs cannot be isolated.

Program - Key 7

Enter installer or master code followed by 7 to enter programming mode. Only available to the master code and the installer code. See section on programming for more details (page 3).

On (Arm Home) - Key 8

Enter any user code followed by 8 or enter # 8 to turn the panel on in Home mode. ON light will flash to indicate panel is armed in Home mode. Only zones which are programmed as Home zones will be active.

On (Arm Away) - Key 9

Enter any user code followed by 9 or enter # 9 to turn the panel on in Away mode. ON light will turn on to indicate panel is armed in Away mode. Only zones which are programmed as Away zones will be active. All user codes are allowed to arm the panel.

Off (Disarm) - Key 0

Enter any user code followed by 0 to turn the panel OFF. Turning the panel OFF will also turn the sirens and strobe off and re-enable manually isolated zones even if the panel is already off.

Dialler Functions

DIALLER FUNCTIONS

Personal Reporting

Personal reporting allows dialler reports to be sent to a person rather than a central station if an alarm occurs. When an alarm occurs, the panel will immediately seize the line and dial a pre-programmed number. The panel will then output an alternating high / low siren type sound to indicate that an alarm has occurred.

If Send Zone ID (address 170, option 6) is set then the panel will output a series of beeps, the number of beeps equal to the zone number that was triggered.

Every 3 seconds the tones will pause, allowing any key to be pressed to acknowledge the call and cause the panel to announce the current state of the panel 1 beep for off, 2 beeps for on. The # key may now be used to hang up the panel immediately or it will hang-up anyway after 2 minutes. During this time the panel can be turned on or off - see page 15, section on Ringing Up the Panel.

If after one minute no key has been pressed, the panel will hang up and try again. See page 22, section on Operation of Telephone Numbers for retry logic.

During reporting in personal format mode, prior to a key being pressed by the answering party, the report may be aborted by entering any valid code on the panel keypad. Note that once the called party has pressed a key, the panel lights will be set flashing indicating that the called party is in control.

A special temporary telephone number can be programmed by the master code to replace the primary telephone number. When programmed, this number will replace the primary telephone number until the panel is next turned off from away mode, at which time the first digit of the temporary number is erased (disabling the temporary number) and operation will revert to the primary telephone number.

Contact ID Reporting

Contact ID allows zone descriptive information to be sent to the Central Station. There are about 200 or so standard messages to choose from, each message has a 3 digit identifier. The panel allows you to choose a 3 digit message for every logical input. The messages start at address 176. Each message must be 3 digits. For a complete list of all possible messages, contact your Central Station.

Zone bypass uses the fixed message "570" which will be displayed at the central station as "Zone Bypass".

Dialler Functions

Automatic Test Report

Program the following addresses for automatic test reports:

- | | |
|---------------------------------|--|
| Address 090 (Test Input) | - Turn on options 3 and 8 to enable test reporting |
| Address 106 (Test Time) | - Sets the time between test reports. From 0 - 165 hours. |
| Address 246 (Test Report Delay) | - Sets the delay before first test report after panel reset. From 0 - 165 hours. |
| Address 108 (Trim Time) | - Adjusts the test timer for greater accuracy. From 0 - 165 minutes. |

Address 090 (Test Input)

Address 090 enables the test report input. Enable options 3 (for dialler) and 8 (for 24 hour) in this address to enable test reports.

Address 106 (Test Time)

Sets the time between test reports. (From 0 - 165 hours).

To program test times greater than 99 hours use the # key sequence as described on page 21.

Address 246 (Test Report Delay)

If a time is programmed in address 246 (Test Report Delay), then the first test report will occur that many hours after a panel reset.

The reason for delaying the first test report is to set the time of day when the panel will actually send test reports. Most central stations prefer test reports to be sent during non-peak hours, i.e., midnight to 6am. If a Test Report Delay is not set, the panel will send test reports at the intervals programmed by the test time starting when the panel is reset after programming.

Example.. If you program Test Reports for 24hrs and you are installing and programming the panel at 4pm then test reports will be sent at 4pm every day; this time may not suit the central station. To make the panel send test reports at 3am every day, program address 246 (Test Report Delay) for 11 hours. Therefore if the panel is programmed and reset at 4pm, the first test report will follow 11 hours later at 3am. From there on, test reports will follow every 24hrs.

Address 108 (Trim Time)

The Trim Time option can be used to make the time reporting period more accurate. Setting Trim Time to a number other than 00 will reduce the time between test reports by that many minutes. For example if the Test Time was set to 12 (hours) but the reports were actually 12 hours, 7 minutes apart, then setting Trim Time to 07 would correct the error.

Note 1: If the test input is enabled, pressing key # followed by 3 will manually trigger a test report.

Note 2: When you have finished programming, reset the panel (address 254) to enable new settings.

Note 3: On panel reset, a test report will be sent if a Test Time has been programmed. This initial report will be delayed by the number of hours set by Test Report Delay (address 246).

Dialler Functions

Ringling up the panel

The panel can be rung up for the following purposes:

- By any person to see if the system is on or off.
- By a code 0 or code 2 - 7 holder to turn the panel from off to away or away to off.
- By a computer using "SW-Connect" software and modem.
- By a code 0 - 7, 13 or 14 holder to trigger panic remotely.
- By a code 13 holder to listen to sounds in the house or talk to a person in the house.
- By a code 14 holder to activate the home automation functions.

Only codes 0 - 7 , 13 & 14 are allowed remote access by ringing into the panel.

When on line to the panel, the following telephone keys may be used:

Key	Operation
#	Hang-up procedure for V23 and V26 -Use master or user code follow by #.
*	Clear Key (and annunciate panel status)
0 - 9	Used to enter a digit of a code and activate talk / listen and home automation functions.

Whenever a legal code between 0 and 7 is entered, the panel will wait an additional 3 seconds for a fifth key to be pressed, Allowable keys are:

Key	Operation
0	Turn panel off if it is on.
7	Enter download mode (Installer code only).
9	Turn panel to away if it is off.

If no code entry occurs for 2 minutes, the panel will hang up. Note that normal dialler operation will be suspended until the panel hangs up.

Note that when first powered up or reset (address 254). The panel will answer the phone on the first ring for the next 60 seconds as long as the Required Rings (address 168) is not set to zero.

- User code followed by 1 to trigger panic remotely.

Programming - Address Descriptions

INSTALLER, MASTER & USER CODES

These settings apply to all factory defaults.

Code	Address	Default	Notes
Master Code (User code 0)	000	0000	Master code can turn the panel on and off and change user codes and the temporary telephone number as well as functions at address 252.
Installer code (User code 1)	004	1111	Installer code has access to all programming except address 252.
User Code 2	008	NONE	Has access to all functions except programming.
User Code 3	012	NONE	Has access to all functions except programming.
User Code 4	016	NONE	Has access to all functions except programming.
User Code 5	020	NONE	Has access to all functions except programming.
User Code 6	024	NONE	Has access to all functions except programming.
User Code 7	028	NONE	Has access to all functions except programming.
User Code 8	032	NONE	Can only turn the panel on and off.
User Code 9	036	NONE	Can only turn the panel on and off.
User Code 10	040	NONE	Can only turn the panel on and off.
User Code 11	044	NONE	Can only turn the panel on and off.
User Code 12	048	NONE	Can only turn the panel on and off.
User Code 13	052	NONE	Talk / Listen - in (V.22)
User Code 14	056	NONE	Home Automation (V.22)
User Code 15	060	NONE	Can only turn the panel on and off. Also used as once only code. See address 096, option 4.

The Installer code can:

- Program all addresses except for address 252
- Review the panel memory

The Master code can:

- Turn the panel on and off
- Program User codes
- Program the Temporary telephone number
- Program address 252 to restrict the installer code
- Review the panel memory

Note: The Master code can completely disable the Installer code. See notes on address 252 on page 25.

User Codes 0 or 2 - 7 can:

- Turn the panel on and off
- Review the panel memory

User Codes 8 -15 can:

- Turn the panel on and off

User Code 15 can:

- Turn the panel on and off
- This code can also be used as a once only code if programmed as such (address 096, option 4). When a once only code is used to turn the panel off from Away or Home mode, the first digit of the code is automatically erased, preventing it from being used again. Simply re-program the first digit of code 15 to re-enable the code. This is handy for allocating a temporary code to, for example, cleaners, tradesmen.

ERASING CODES

To erase a code, enter # 6 in place of the first digit.

Programming - Address Descriptions

ZONE OPTIONS GROUP 1 & NON-ZONE INPUTS

Factory defaults shown are Default 2 (Personal). See pages 26, 27 for values of other factory defaults. The option selected for each address is indicated by the relevant keypad light being ON or OFF.

Keypad Light >		1	2	3	4	5	6	7	8
	Address	Delay	Siren	Dialler	Auto Isolate	Strobe	Away	Home	24hr
Zone 1	070	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Zone 2	072		Yes	Yes	Yes	Yes	Yes	Yes	
Zone 3	074		Yes	Yes	Yes	Yes	Yes	Yes	
Zone 4	076		Yes	Yes	Yes	Yes	Yes	Yes	
Zone 5	078		Yes	Yes	Yes	Yes	Yes	Yes	
Zone 6	080		Yes	Yes	Yes	Yes	Yes	Yes	
Zone 7	082		Yes	Yes	Yes	Yes	Yes	Yes	
Zone 8	084		Yes	Yes	Yes	Yes	Yes	Yes	
Open / Close	064								
Fail to Comm	066								
Duress Input	086								
Panic Input	088		Yes			Yes			Yes
Test Input	090								
Low Battery	092								Yes
AC Fail	094								Yes

1. Delay

Zones selected for delay have entry delay as long as a delayed **Primary Delay** zone has been triggered first (see next page). If a Delay zone is triggered before a Primary delay zone, the alarm will be instant (known as handover delay). Note that delay will be ignored if selected for 24 hour inputs. In home mode, there will be no delay if the **Home Instant** option is set (address 098, option 7).

If during entry delay an instant alarm occurs, this will be actioned immediately without affecting the delayed inputs operation.

If the panel is turned ON in home mode and Home Instant (address 098, option 7) has been enabled, then all delayed inputs will be instant while the panel is in home mode. All 24 hour inputs are treated as instant even if they have been programmed for Delay or Primary Delay.

At the end of the entry delay, all delayed inputs that were triggered will go into alarm unless the panel has been turned OFF before the end of the entry delay.

2. Siren

Any active input can be programmed to trigger the siren. When in Home Mode, there is a separate option for enabling sirens for any zone. See.. Zone Options Group 2.

3. Dialler

Zones selected for dialler will trigger the dialler when alarmed. If a zone is triggered in home mode, it will only trigger the dialler if the **Home Report** option is on. Selecting Dialler for the Fail to Communicate input will be ignored.

4. Auto-Isolate

Zones selected for Auto-Isolate will be isolated if still un-sealed at the end of exit delay. Generally speaking the Auto-Isolate option is not programmed for 24 hour zones.

5. Strobe

Any active input can be programmed to trigger the strobe. When in Home Mode, there is a separate option for enabling strobe for any zone. See Zone Options Group 2.

6. Away

Zones selected for Away will be armed at the end of exit delay when panel is turned on in Away mode.

7. Home

Zones selected for Home will be armed at the end of exit delay when the panel is turned on in Home mode.

8. 24hr

Zones selected as 24hr will be permanently armed. Note that 24hr zones are not recognised until the panel is reset See page 4 for panel reset information.

Programming - Address Descriptions

ZONE OPTIONS GROUP 2

Factory defaults shown are Default 2 (Personal). See page 26, 27 for values for other factory defaults. The option selected for each address is indicated by the relevant keypad light being ON or OFF.

Keypad Light >	1	2	3	4	5	6	7	8
Address	Primary Delay	Home Beep	Siren Lockout	Report Lockout	Home Siren	Home Report	Home Strobe	Pulse Zone
Zone 1 224	Yes				Yes	Yes	Yes	
Zone 2 226		Yes			Yes	Yes	Yes	
Zone 3 228		Yes			Yes	Yes	Yes	
Zone 4 230		Yes			Yes	Yes	Yes	
Zone 5 232		Yes			Yes	Yes	Yes	
Zone 6 234		Yes			Yes	Yes	Yes	
Zone 7 236		Yes			Yes	Yes	Yes	
Zone 8 238		Yes			Yes	Yes	Yes	

1. Primary Delay

Setting this option will cause this zone to be a primary zone. An entry delay can only be started by a delayed primary zone. At least one zone must be made a primary zone for entry delay to operate.

Once the entry delay timer has started any further inputs triggered that are programmed as Delay zones are also regarded as delayed although the entry timer is not re-started. (See previous page for Delayed zone operation).

2. Home Beep

Setting this option will cause this zone to sound the keypad beeper in home mode when triggered. If the Home Squawk option (address 098, option 5) is also on, then the siren will also squawk momentarily in home mode when this home zone is triggered.

3. Siren Lockout

Setting this option will cause any zone to trigger sirens once only. Note that the dialler may still be re-triggered as long as the **Report Lockout** option is off.

4. Report Lockout

Setting this option will cause this zone to report only one alarm even if triggered more than once. A zone isolate will also be sent if programmed by the **Send Isolated Zone Reports** option (address 170, option 8). This is independent of the **Siren Lockout** option.

5. Home Siren

Setting this option will cause this zone to sound the siren in home mode when triggered. Note that if not set then this zone will never sound the siren in home mode.

6. Home Report

Setting this option will cause this zone to trigger the dialler in home mode when alarmed. Note that if not set then this zone will never trigger the dialler in home mode.

7. Home Strobe

Setting this option will cause this zone to turn on the strobe in home mode when alarmed. Note that if not set then this zone will never turn on the strobe in home mode.

8. Pulse Zone

Pulse count operation applies to zones 1 to 8 when turned on in Away or Home mode and to 24 hours. The zones may be delayed or instant. Operation is as follows:

When the first zone with the Pulse Zone option set is triggered, a pulse timer is started. The pulse timer expires in the time set by address 244. If the programmed number of triggers are processed from any pulse count zone within the pulse count time, all the triggered pulse count zones will then go into alarm. If the pulse timer expires before that required number of pulse triggers has occurred, then all pulse triggers to that point are ignored. The zone activation is still saved in review even if the trigger is not actioned.

This feature enables false alarms to be reduced by specifying at least 2 triggers from a zone(s) before considering an alarm condition to exist.

Programming - Address Descriptions

PANEL OPTIONS 1 (Address 096)

Factory defaults shown are Default 2 (Personal). See page 26, 27 for values for other factory defaults.
The option selected for each address is indicated by the relevant keypad light being ON or OFF.

Address 096								
Keypad Light >	1	2	3	4	5	6	7	8
Description >	Display Lights	Quick Away	Quick Home	Code 15 Once	AC Fail Delay	Quick Review	Not Used	Force Arming Squawk
Value >	Yes				Yes			

1. Display Lights

If this option is turned off, the keypad will not display zone lights.
On-Line, Low Batt, AC Fail and On will still display.

2. Quick Away

Allows the use of # 9 to turn the panel on to Away Mode.

3. Quick Home

Allows the use of # 8 to turn the panel on to Home Mode.

4. Code 15 Once

Allows user code 15 to only turn the panel off once only. As soon as the code is used it is automatically erased. Handy as a single use code to be handed out to temporary staff or cleaners etc.

5. AC Fail Delay

Normally AC Fail is immediately reported (if programmed to do so) as soon as AC power is interrupted. When AC Fail delay is selected, the panel does not report power failure unless the power is interrupted for longer than 30 minutes. Note that in idle mode the keypad lights display the current state of this input with no delay.

6. Quick Review

Allows use of # 4 to review the panel memory (previous alarms etc, see page 11).

7. Not Used

8. Force Arming Squawk

We have new programmable feature address 096, option 8. When this option is set, if any zone programmed for auto-isolate is unsealed at end of exit delay the siren will squawk for the time (in milliseconds) programmed at address 110.

Note:

On/Off squawk should not be programmed when the forced arming squawk is used.

See next page for more Panel Options...continued.

Programming – Address Descriptions

PANEL OPTIONS 2 (Address 098)

Factory defaults shown are Default 2 (Personal). See page 26, 27 for values for other factory defaults. The option selected for each address is indicated by the relevant keypad light being ON or OFF.

Address 098

Keypad Light >	1	2	3	4	5	6	7	8
Description >	Exit Beep	Entry Beep	Exit Squawk	Entry Squawk	Home Squawk	On /Off Squawk	Home Instant	No Arming if Low Batt
Value >	Yes	Yes					Yes	

- Exit Beep**
If this option is turned on, the keypad beeper will sound continuously during exit delay. If any key is pressed during exit delay, the beeper will stop sounding.
- Entry Beep**
If this option is turned on, the keypad beeper will sound continuously during entry delay. If any key is pressed during entry delay, the beeper will stop sounding.
- Exit Squawk**
If this option is turned on, the siren output will squawk momentarily at the end of exit delay.
- Entry Squawk**
If this option is turned on, the siren output will squawk momentarily at the start of entry delay.
- Home Squawk**
If this option is turned on, the siren output will squawk momentarily every time a Home Beep zone is triggered in Home mode.
- ON/OFF Squawk**
If this option is turned on, the siren output will squawk momentarily every time the panel is turned ON and OFF. Two Squawks = turned ON. One squawk = turned OFF.
- Home Instant**
If this option is turned on, all zones in Home mode will be instant even if programmed for delay. This does not affect delay timers in Away mode.
- No Arming if Low Battery**
If this option is turned on, the panel will check the state of the battery charging voltage prior to turning on to Away mode with the quick arm sequence and if low will not allow.
- Force Arm Squawk**
If address 096, option 8 is selected, any zone programmed for auto-isolate is unsealed at end of exit delay the siren will squawk for the time (in milliseconds) programmed at address 110.

Siren Squawk Operation

The length of siren squawks are determined by the bell squawk time option at address 110. (ON / OFF squawks are fixed in length).

Types of siren squawks:

- At the end of exit delay if the Exit Squawk option is enabled at address 098, option 3.
- At the start of entry delay if the Entry Squawk option is enabled at address 098, option 4.
- Every time the panel is turned ON or OFF if the ON / OFF Squawk is enabled at address 098, option 6. [1 squawk for ON, 2 squawks for OFF].
- Every time a zone is alarmed in home mode as long as Home Beep and Home Squawk is programmed for that zone(s).

Note:

On/Off Squawk should not be programmed when the force arming squawk is used.

Programming – Address Descriptions

DELAYS & TIMERS

These settings apply to all factory defaults.

Address	Description	Factory Default	Min/Max Value Allowed
100	Entry Time	30 sec	00 - 165 seconds
102	Exit Time	60 sec	00 - 165 seconds
104	Siren Time	5 min	00 - 165 minutes
106	Test Time	00 hrs	00 - 165 hours
246	Test Report Delay	00 hrs	00 - 165 hours
108	Trim Time	00 min	00 - 165 minutes
110	Bell Squawk Time	10 m/sec	00 - 165 milliseconds

Note that the Bell Squawk Time does not apply to on/off squawks. Any time may be extended past 99 if desired by using the # 1 to # 6 sequences.

NOTES ON EXTENDING TIMES PAST 99

Any two digit decimal address such as the timers above will allow the entry of a value over 99. This is achieved by entering the hexadecimal values A through F (equivalent the decimal values 10 through 15).

Hex values are entered using the # 1 through # 6 sequences as shown below.

Keys to enter	Hex value	Decimal value
# 1	A	10
# 2	B	11
# 3	C	12
# 4	D	13
# 5	E	14
# 6	F	15

EXAMPLE:

If the entry delay is required to be 124 seconds, program # 3, 4 at address 100.

3 enters a decimal value of 12, this is internally multiplied by 10. Therefore = 120.

The last digit, 4, is added to 120.

Therefore $120 + 4 = 124$ seconds.

Programming – Address Descriptions

DIALLER OPTIONS

TELEPHONE NUMBERS & ACCOUNT NUMBERS

These settings apply to all factory defaults

Address	Description Default	Factory	Min /Max value allowed
112	Temporary telephone number	nil	15 digits maximum
128	Telephone number 1	nil	15 digits maximum
144	Telephone number 2	nil	15 digits maximum
160	Account number 1	9999	4 digits
164	Account number 2	nil	4 digits

All telephone numbers must end with # 6 to be recognised.

Operation of telephone numbers

All telephone calls will be sent to the first telephone number first. If the second telephone number is programmed, then after every 2 calls to the primary number, 2 calls will be tried to the second number. Whenever the second telephone number is used, the second account number will be used if programmed.

When sending reports to a Central Station the Panel will make the number of attempts set in address 175 to communicate the information. If the number of attempts is set to at least 6 then the Panel will be able to use its anti-jam logic to attempt to clear a jammed line. The time between calls will vary according to the anti-jam logic.

When calling in personal format, the Panel will swap between the first and second telephone number (if programmed) every alternating call that fails. If the temporary number is programmed it will be used instead of the primary number.

Operation of second telephone number and fail to communicate

When sending reports to a Central Station the Panel will make the number of attempts set in address 175 to communicate the information. If the number of attempts is set to at least 6 then the Panel will be able to use its anti-jam logic to attempt to clear a jammed line. The time between calls will vary according to the anti-jam logic. If the second telephone number is programmed, then after every 2 calls to the primary number, 2 calls will be tried to the second number. Whenever the second telephone number is used, the second account number will be used if programmed.

When calling in personal format, the Panel will swap between the first and second telephone number (if programmed) every alternating call that fails. If the temporary number is programmed it will be used instead of the primary number.

The Fail to Communicate input will be triggered when the dialler has made the programmed number of unsuccessful attempts which is set by address 242. If enabled, Fail to Communicate may trigger the strobe and the siren as long as a zone alarm has occurred since the panel was last armed. Fail to Communicate will not trigger the dialler even if programmed to do so.

Programming – Address Descriptions

DIALLER OPTIONS

Factory defaults shown are Default 2 (Personal). See pages 26, 27 for values of other factory defaults. The option selected for each address is indicated by the relevant keypad light being ON or OFF.

Address 170

Keypad Light >	1	2	3	4	5	6	7	8
Description >	Rotary Dial	Open after alarm	not used	not used	not used	Send Zone ID (personal dialling)	Send restoral reports	Send isolated zone reports
Value >	Yes							

1. **Tone / Rotary dial**

The panel is factory programmed for tone dialling. Turn on this option to enable rotary (decadic) dialling.

2. **Open After Alarm**

If Open After Alarm is selected, the panel will send an opening report only if zone alarms have occurred during the last armed period. This reduces the number of telephone calls made but allows the central station to be informed when an authorised access is taking place after an alarm has occurred.

To use the open after zone alarm facility simply:

- Enable Open after alarm at address 170, option 2.
- Disable all options at address 064 except for option 8.

Note that if the Open after alarm option is set, the central station will never receive a closing report.

3. not used

4. not used

5. not used

6. **Send Zone ID (Personal Dialling)**

If this option is selected, when the panel rings a telephone in personal format, it will output a series of beeps, the number of beeps equal to the zone number that was triggered. If the option is turned off, the panel will output the high / low siren tone.

7. **Send Restoral Reports**

If this option is selected, the dialler will send a restoral report when the alarmed input has resealed.

8. **Send Isolated Zone Reports**

If this option is selected, the dialler will send isolated zone reports along with the closing report when the panel is turned on.

Programming – Address Descriptions

OTHER DIALLER OPTIONS

Factory defaults shown are Default 2 (Personal). See pages 26, 27 for values of other factory defaults.

Address	Description	Factory Default	Min /Max value allowed
168	Required Rings	15 rings	00 - 99 rings
175	Max. dialling attempts	8 attempts	00 - 10 attempts
242	Attempts before fail to communicate	5 attempts	00 - 10 attempts

Address 168

Required Rings

Sets the number of rings before the panel will answer the phone. If set to 00, the panel will never answer the phone. Enable fax bypass by setting required rings to 99. Fax bypass is designed to allow remote connection to the panel when it is sharing a telephone line with a fax machine or answering machine. Ring the panel once and hang up. Ring back immediately, the panel will answer on the first ring.

Address 175

Maximum Dialling Attempts

Sets the maximum number of attempts the dialler will make when triggered. Factory default is 8 attempts. Do not set to over 10 attempts.

Address 242

Attempts Before Fail to Communicate

Sets the number of unsuccessful dialling attempts the panel will make before triggering the fail to communicate input (address 066).

DIALLER REPORTING FORMAT

Factory defaults shown are Default 2 (Personal). See pages 26, 27 for values of other factory defaults. The option selected for each address is indicated by the relevant keypad light being ON or OFF.

Address 174

Keypad Light >	none	1	2	3	4
Description >	Local, No dialler (Factory default)	not used	not used	Contact ID	Personal Dialling
Value >	Yes				

Address 174

Local, No Dialler

This option is not normally programmed by the installer. The factory default setting is for local operation.

Contact ID

Sets the dialler to report alarms in Contact ID format. (Automatically selected if the panel is set to default 4 at address 250).

Personal Dialling

Sets the dialler to report alarms in Personal (audible) format.

Programming – Address Descriptions

GENERAL OPTIONS

Factory defaults shown are Default 2 (Personal). See pages 26, 27 for values of other factory defaults. The option selected for each address is indicated by the relevant keypad light being ON or OFF.

Address 240

Keypad Light >	1	2	3	4	5	6	7
Description >	Enable external zones	Response time	Response time	not used	not used	Zone 8 Home Key	Zone 7 Siren toggle
Value >		Yes	Yes				

Address 240

Enable External Zones

Enables the three additional inputs on the expansion pins on the panel PCB. These inputs are labelled Panic, Duress and Test and are treated as normal zone inputs when enabled; resistors required. See page 28 for further information. Note that no restoral reports are sent by these three inputs.

Fast Response

Sets the response time for zones (and external inputs, if enabled) to adjust sensitivity when used with vibration sensors.

Keypad Light >	2	3	
	Off	Off	Normal response
	On	Off	Fast response
	Off	On	Medium response
	On	On	Slow response

Zone 8 Home Key

Setting this option will allow Zone 8 to be used as a Home Mode key switch. Each activation of Zone 8 will toggle the panel between home and off. Note that the panel cannot be turned off from away mode with this input.

Zone 7 Siren Toggle

Setting this option will cause any activation of Zone 7 to toggle the siren on and off. Note that the siren cannot be toggled off by this method if the siren had been turned on by an alarm.

SPECIAL FUNCTIONS – For Master Code Only

Factory defaults shown are Default 2 (Personal). See pages 26, 27 for values of other factory defaults. The option selected for each address is indicated by the relevant keypad light being ON or OFF.

Address 252

Keypad Light >	1	2	3	4	5	6	7	8
Description >	No	No	No	not	not	not	not	not
	Installer	Computer	Remote					
		access	access					
Value >								

Address 252 (THIS ADDRESS IS ONLY AVAILABLE TO THE MASTER CODE)

No Installer

Setting this option will disable the Installer code from working.

No Computer Access

Setting this option will prevent the panel from communicating with upload/download software.

No Remote Access

Setting this option will prevent the panel from being turned On or Off remotely. The panel can still be rung up to check the On / Off status.

Programming - Quick Reference page 1

Installer, Master & User Codes

	Address	Default
Master code	000	0000
Installer code	004	1111
User code 2	008	
User code 3	012	
User code 4	016	
User code 5	020	
User code 6	024	
User code 7	028	
User code 8	032	
User code 9	036	
User code 10	040	
User code 11	044	
User code 12	048	
User code 13	052	
User code 14	056	
User code 15	060	

Telephone & Account Numbers

	Address	Default
Telephone temp	112	
Telephone No 1	128	
Telephone No 2	144	
Account No 1	160	9999
Account No 2	164	

Timers

	Address	Value
Entry time	100	30 sec
Exit time	102	60 sec
Siren time	104	5 min
Test time	106	00 hrs
Test report delay	246	00 hrs
Trim time	108	00 min
Bell squawk time	110	10 m/sec

Zone Options Group 1 & Non-Zone Options

	Address	Default 2 Personal Dialling	Default 4 Business Monitored
Zone 1	070	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Zone 2	072	2 3 4 5 6 7	2 3 4 5 6 7
Zone 3	074	2 3 4 5 6 7	2 3 4 5 6 7
Zone 4	076	2 3 4 5 6 7	2 3 4 5 6 7
Zone 5	078	2 3 4 5 6 7	2 3 4 5 6 7
Zone 6	080	2 3 4 5 6 7	2 3 4 5 6 7
Zone 7	082	2 3 4 5 6 7	2 3 4 5 6 7
Zone 8	084	2 3 4 5 6 7	2 3 4 5 6 7
Open / Close	064		3 6 7 8
Fail to Comm	066		
Duress Input	086		3 8
Panic Input	088	2 5 8	2 3 5 8
Test Input	090		3 8
Low Battery	092	8	3 8
AC Fail	094	8	3 8

Available options >

1=Delay 2=Siren 3=Dialler 4=Auto Isolate 5=Strobe
6=Away 7=Home 8=24hr

Zone options Group 2

	Address	Default 2 Personal Dialling	Default 4 Business Monitored
Zone 1	224	1 5 6 7	1 5 6 7
Zone 2	226	2 5 6 7	2 5 6 7
Zone 3	228	2 5 6 7	2 5 6 7
Zone 4	230	2 5 6 7	2 5 6 7
Zone 5	232	2 5 6 7	2 5 6 7
Zone 6	234	2 5 6 7	2 5 6 7
Zone 7	236	2 5 6 7	2 5 6 7
Zone 8	238	2 5 6 7	2 5 6 7

Available options >

1=Primary Delay 2=Home beep 3=Siren lockout
4=Report lockout 5=Home siren 6=Home report
7=Home strobe 8=Pulse zone

Programming - Quick Reference *page 2*

Panel Options 1

Address 096

Available options >

Personal Dialling

1 5

1=Display lights 2=Quick away 3=Quick home 4=Code 15 once
5=AC Fail delay 6=Quick review

Business Monitored

1 5

Panel options 2

Address 098

Available options >

1 2 7

1=Exit beep 2=Entry beep 3=Exit squawk 4=Entry squawk 5=Home squawk
6=On/Off squawk 7=Home instant 8=No arm low batt

1 2 7

General Options

Address 240

Available options>

23

1=Enable external zones 2=Response time 3=Response time 6=Zone 8 Home Key
7=Zone 7 siren toggle

2 3

Dialler Options

Address 170

Available options >

6

1=Rotary dialling 2=Send opening after alarm 6=Send zone ID in personal dialling
7=Send restoral reports 8=Send isolated zone reports

7 8

Dialler Format

Address 174

Available options >

4

3=Contact ID 4=Personal dialling

3

Maximum dial attempts

Address 175

Available options >

8

0 - 99 attempts

8

Attempts before fail to communicate

Address 242

Available options >

0

0 - 99 attempts

5

Contact ID Reporting Codes

These values apply where Contact ID reporting format is selected.

	Address	Value
On/Off input	176	401
Fail to communicate	179	000
spare	182	000
Zone 1	185	130
Zone 2	188	130
Zone 3	191	130
Zone 4	194	130
Zone 5	197	130
Zone 6	200	130
Zone 7	203	130
Zone 8	206	130
Duress input	209	121
Panic input	212	120
Test input	215	601
Low battery	218	302
AC Fail	221	301

Other Options

These options apply to all defaults.

	Address	Value
Required rings to answer phone	168	15
Zone pulse count (if enabled)	243	3
Zone pulse time	244	90
Default 2. Personal	250	2578
Default 4. Business Monitored	250	4578
Panel reset	254	

Addendum – Non Zone Inputs

The Non-Zone Inputs

OPEN/CLOSE INPUT (Address 064)

The "Open/Close" input is designed to send opening and closing reports to the monitoring station when the panel is turned on and off. If enabling, select Dialler and 24hr options only.

FAIL TO COMMUNICATE INPUT (Address 066)

The Fail to Communicate input is intended to trigger the sirens and strobes if the dialler fails to establish contact with the monitoring station after the number of attempts set by address 242.

DURESS, PANIC & TEST INPUTS

The DURESS, PANIC and TEST functions are all physical inputs to the panel. As with zone inputs, they can be triggered by connecting a switch of some kind directly to the panel. These physical inputs are in addition to the eight alarm zones: they are accessed by three pins on the Panel PCB and, like the zone inputs, require 4K7 resistors to be fitted if used.

NOTE: Duress, Panic and Test are simply labels assigned by the reporting format. Duress, Panic or Test buttons can be connected to any of the eight zone inputs and will perform in a similar manner.

DURESS INPUT (Address 086)

The Duress pin on the panel PCB is programmed the same way as any zone input. The Duress function is also available as a keypad function if the input is first enabled.

PANIC INPUT (Address 088)

The Panic pin on the panel PCB is programmed the same way as any zone input. The Panic function is also available as a keypad function if the input is first enabled.

TEST INPUT (Address 086)

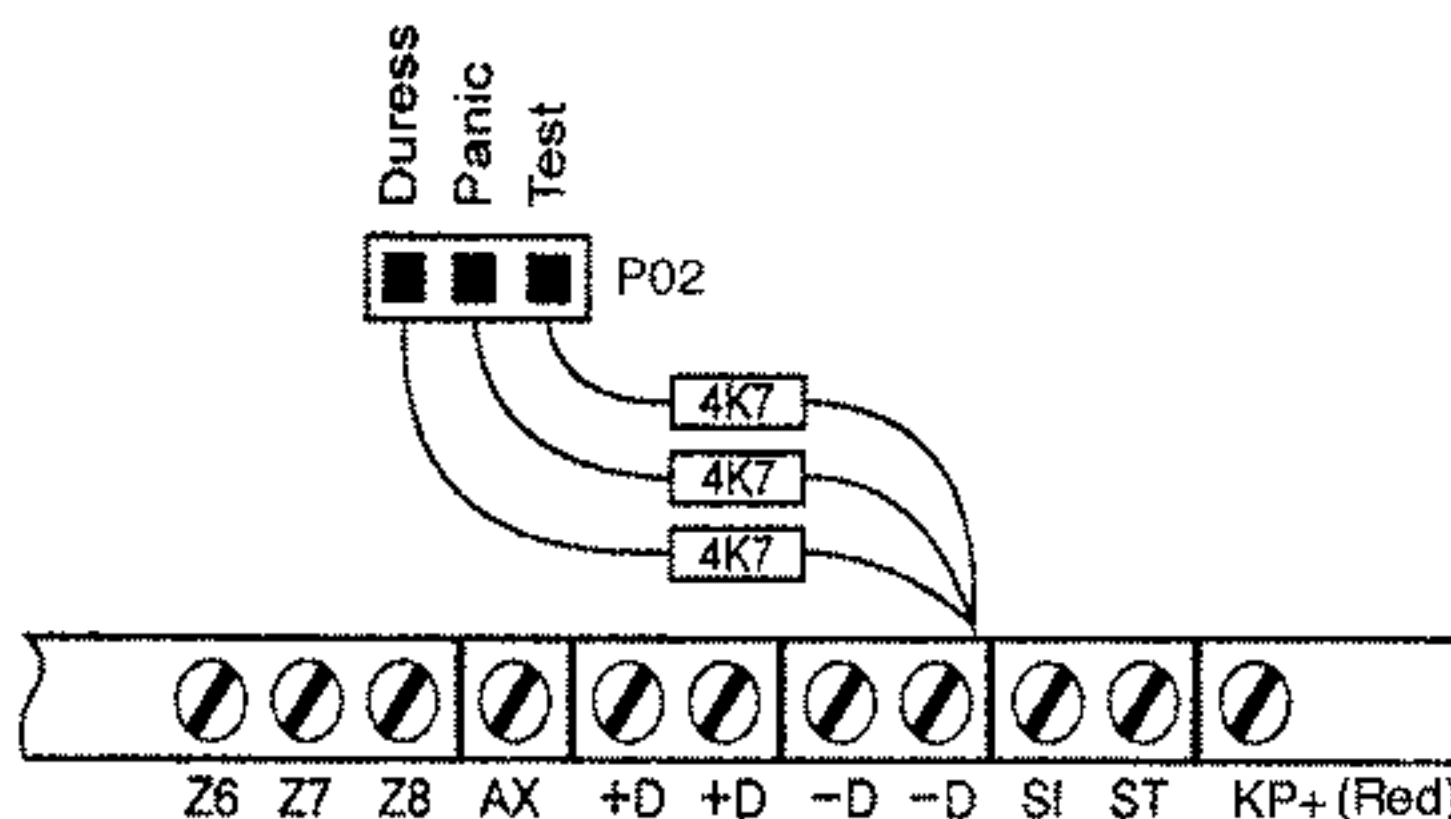
The Test pin on the panel PCB is programmed the same way as any zone input. The Test function is also available as a keypad function if the input is first enabled.

LOW BATTERY (Address 092)

This input transmits low battery when the battery voltage is below 11.5 volts. Normally programmed to trigger the dialler only.

AC FAIL (Address 094)

This input is normally programmed to trigger the dialler only.



Note: Resistors are ONLY necessary if the pins are being used as physical inputs and are being externally triggered

Simplify Programming

USER PROGRAMMING

Default Master Code = 0000

Change Master Code

Enter master code = 0000

Enter command = 7

Enter address = 000

Enter new code = ????

Change User Code 2

Enter master code = 0000

Enter command = 7

Enter address = 008

Enter new user code 2 = ????

INSTALLER PROGRAMMING

Default Installer Code = 1111

Change Installer Code

Enter installer code = 1111

Enter command = 7

Enter address = 004

Enter new code = ????

ENTER PROGRAMMING

Press 1111 (All zones led flashing)

Press 7 (On-line led flashing)

Press ??? (Address)

Press ??? (Value)

Press * (Store)

Press * (Exit)

ZONES

	Addr.	Keypad Light	
Zone 1	070 224	1,2,3,4,5,6,7 1,5,6,7	(Delay zone)
Zone 2	072 226	2,3,4,5,6,7 2,5,6,7	(Instant zone)
Zone 3	074 228	2,3,4,5,6,7 2,5,6,7	(Instant zone)
Zone 4	076 230	2,3,4,5,6,7 2,5,6,7	(Instant zone)
Zone 5	078 232	2,3,4,5,6,7 2,5,6,7	(Instant zone)

Simplify Programming

	Addr.	Keypad Light	
Zone 6	080 234	2,3,4,5,6,7 2,5,6,7	(Instant zone)
Zone 7	082 236	2,3,4,5,6,7 2,5,6,7	(Instant zone)
Zone 8	084 238	2,3,4,5,6,7 2,5,6,7	(Instant zone)
	Addr.	Time	Min / Max
Entry time	100	30 sec.	0 - 165 seconds
Exit time	102	60 sec.	0 - 165 seconds
Siren time	104	05 min.	0 - 165 minutes

PANEL OPTIONS

Addr.	Keypad Light
096	1,5
098	1,2,7

SENSITIVITY

Addr.	Keypad Light
240	High 2 Medium 3 Low 2,3

PERSONAL DIALLING

Default 2	Addr. 250	= 2,5,7,8
Telephone 1	Addr. 128	= 15 digit & press #6 when finish
Telephone 2	Addr. 144	= 15 digit & press #6 when finish
Required rings	Addr. 168	= 15

	Addr.	Keypad Light
Dialler options	170	6
Reporting format	174	4 (default 0)
Dialling attempts	175	8
Panic	088	2,5,8

CMS DIALLING

Default 4	Addr. 250	= 4,5,7,8
Telephone 1	Addr. 128	= 15 digit & press #6 when finish
Telephone 2	Addr. 144	= 15 digit & press #6 when finish
Account #1	Addr. 160	= CMS Account #
Account #2	Addr. 164	= CMS Account #
Required rings	Addr. 168	= 15

	Addr.	Keypad Light
Dialler options	170	7,8
Reporting format	174	3
Dialling attempts	175	8
Open / close	064	3,6,7,8.
Duress	086	3,8
Panic	088	2,3,5,8
Auto test	090	3,8
Low battery	092	3,8
AC failure	094	3,8
Auto test time	106	24 hrs

Installation of Supamon -

1. Programme address 174 to 4

2. Talk /Listen Function (Refer Below)

Programme user code 13 into address 052.

To activate Talk/Listen function,

- use Code 13 followed by 3 to listen (Turn ON microphone)
You may immediately enter code to invoke another function
- use Code 13 followed by 4 to talk (Turn ON speaker)
You may immediately enter code to invoke another function
- use Code 13 followed by 0 (Turn OFF speaker and microphone)

3. Home Automation Function (Refer Below)

Programme user code 14 into address 056.

To activate Home Automation function,

From Keypad

- use Code 14 followed by 1 to trigger Output 1 (LED OUT 1)
You may immediately enter code to invoke another function
- use Code 14 followed by 2 to trigger Output 2 (LED OUT 2)
You may immediately enter code to invoke another function

Remotely by Phone

- use Code 14 followed by 1 to hear status of Output 1 (LED OUT 1). Press 1 again to toggle between status of Output 1 and hear status.
You may immediately enter code to invoke another function
- use Code 14 followed by 2 to hear status of Output 2 (LED OUT 2). Press 2 again to toggle between status of Output 2 and hear status.
You may immediately enter code to invoke another function
- 1 beep indicates LED OUT 1 or LED OUT 2 is OFF
3 beeps indicates LED OUT 1 or LED OUT 2 is ON

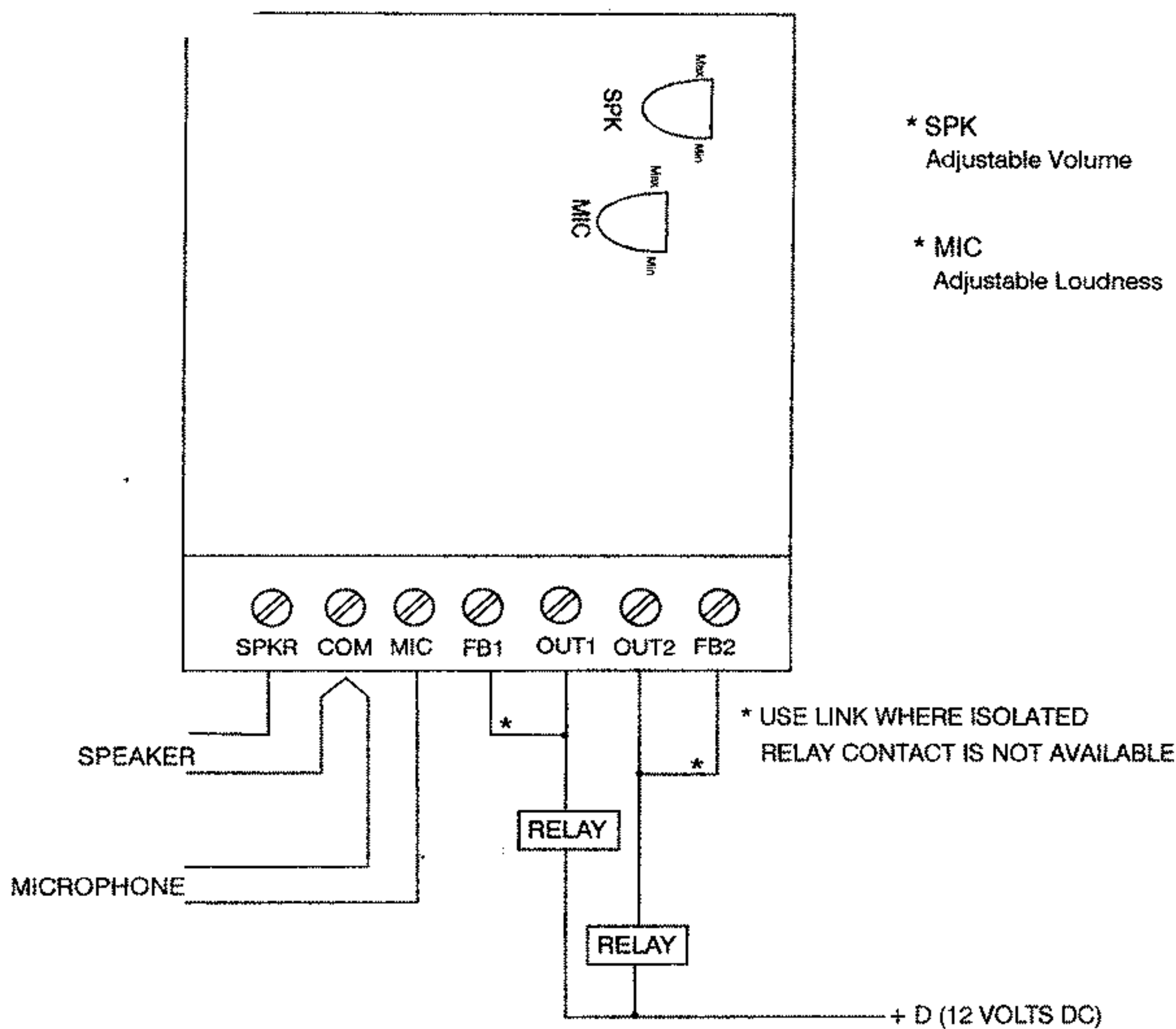
Home Automation Wiring Instructions

- OUT 1 [-12V] and OUT 2 [-12V] trigger negative signals. (OUT=Output)
- FB1 and FB2 receive the negative signals. (FB=Feedback from Output)
- Short OUT 1/2 and FB1/2 together to enable the status feedback.
- The Relays get +12V from Terminal +D on the main board.

Note :

- Press * to Exit at any time to enter another function
- Press # to Hang up (or else it will stay on-line for 2 minutes after the last keypress)

Connection Options



System Specifications

Panel Depth	90 mm	Code Lockout time	32 sec
Panel Width	313 mm	Non-volatile memory for options	Yes
Panel Height	230 mm	Number of logical inputs to dialler	16
Panel Weight (without battery)	2.1 Kg	Restore reporting	Yes
Maximum operating ambient temperature	50°C	Contact ID	Yes
AC supply voltage (transformer)	16.5 V	Report types sent open/close report,	
DC supply voltage	11 - 14 V	System report, Duress report	
Nominal battery charge voltage	13.75 V	Test report, Input alarm report	
Maximum continuous D+ current	350 mA	Maximum dialling attempts	8
Reverse battery protection	Yes	Fail to communicate triggers siren option	Yes
Charger fuse	2 Amp	Ring detection	Yes
Power fuse	3 Amp	No of rings to answer phone	00 to 16
Low battery detection voltage	11.5 V	(1 after panel reset)	
Typical battery capacity	12 V, 7 Ah	Automatic dial tone detection	Yes
Supply current (idle)	30 mA	Decadic / Tone dial selection	Yes
Supply current (on-line)	75 mA	Anti-jam logic	Yes
Additional current per DC driver on	20 mA	Max. on-line time to monitoring station	4.25 min
Backup time (idle) external load 0mA	175 hrs	Telephone connection mode	Mode 5
Backup time (idle) external load 100mA	40 hrs	Digital decoding / generation	Yes
Backup time (idle) external load 200mA	20 hrs	Line isolation voltage	> 1.5W
Maximum DC output current (intermittent)	2 Amp	EMI standard	AS3548 Class B
Peak DC current output	5 Amp	DTMF output level (typical)	-5 dBm
End of line monitored inputs	Yes	Handshake receive sensitivity (typical)	-43 dBm
End of line resistor value	4K7	Call progress tone sensitivity (typical)	-43 dBm
User code length	4 digits	DTMF decode sensitivity (typical)	-35 dBm
Code attempts before lockout (ver.22)	16	DTMF decode minimum digit duration	45 mSec
		Return loss (typical @ 1 KHz, 50mA)	20 dB
		Maximum continuous line current	120 mA