Engineer Program Mode (Prog) 9 9 9 9 → To exit engineer program mode (Reset)

1 Alarm test (see page 17)
- 2 Strobe test
- 3 Bell test
- 4 Low volume sounder
- 5 High volume sounder
- 6 Walk test

3 Flags A (see page 18)
- 1 Silent PA
- 2 RKP PA enable
- 3 Engineer reset
- 4 Anti-code reset
- 5 Enable Door bell on PTS
- 6 Enable single key setting
- 7 Enable strobe on setting
- 8 Enable Bell in Fire

4 Flags B (see page 19)
- 1 Not applicable
- 2 Not applicable
- 3 User Reset PA
- 4 User Reset Fire
- 5 Not applicable
- 6 Not applicable
- 7 Not applicable
- 8 Entry deviate

5 Zone Type (see page 13)
- 1 Zone 1 type
- 2 Zone 2 type
- 3 Zone 4 type
- 4 Zone 5 type
- 5 Zone 6 type
- 6 Zone 7 type
- 7 Zone 8 type

6 Zone Attributes (see page 14)
- 1 Double Knock
- 2 Omit Prevent
- 3 Zone Delay
- 0 Disabled
- 1 Security
- 2 Fire
- 3 24h Fire
- 4 PTS
- 5 Keyswitch

7 Timers and Counters (see page 20 & 21)
- 1 Bell timer
- 2 Bell delay timer
- 3 Service timer
- 4 Re-arm counter (00 to 99)
- 5 Anti-code reset site code

8 Codes (see page 12)
- 1 Change User code 1
- 2 Change User code 2
- 3 Not applicable
- 9 Change Engineer's code

9 Lighting Controller (see page 22)
- 1 Channel 1 assigned zones
- 2 Channel 2 assigned zones
- 3 Channel 3 assigned zones
- 4 Channel 4 assigned zones
- 5 Channel 5 assigned zones
- 6 Channel 6 assigned zones
- 7 Channel 7 assigned zones
- 8 Channel 8 assigned zones
- 9 Channel 9 Hold time (0-99s)
- Prog Set the light threshold level (0 - 99%)

(Prog) Set up program (see page 15&16)
- 1 Program 1
- 2 Program 2
- 3 Program 3
  - 1 Used Zones
  - 2 Timed Zones
  - 3 Time inhibit zones
  - 4 Entry time
  - 5 Exit time
  - 6 Exit mode
    - 0 Disabled
    - 1 Timed
    - 2 Terminated set
    - 3 Final Door Set
    - 4 Silent set (use exit time)

(Chime) View the event log (see page 19)

(Reset)

For Technical Support
☎ : 01268 563270

SL8
Intruder alarm system
Engineering Information

SL SECURITY LIGHTING

Features

8 z | MEM 8 | REMOTE SET | RKP 4 | PART SET | 5/9

8SP 402 SL8 G3 panel with remote LED keypad

- ☐ 8 zones, all programmable for Security, Fire, 24H Fire, PTS or keyswitch applications
- ☐ PA input
- ☐ Tamper input
- ☐ Outputs for Bell and Strobe
- ☐ 3 Access level Codes, User 1, User 2, and Engineer, all programmable
- ☐ 3 fully selectable part set programs
- ☐ Chime on any zone
- ☐ 8 event memory
- ☐ Programmable timers including bell cut off
- ☐ Walk Test facilities
- ☐ Quick set feature
- ☐ Remote keypad with on board PA and illuminated keys
- ☐ Option for connection of Lighting controllers
- ☐ Options to connect up to four remote keypads / Lighting controllers
- ☐ NVM for protection of engineer programme
- ☐ Service warning indicator, programmable between 100 and 800 set and unset events
- ☐ Battery capacity of up to 2.1Ah

The above intruder system is designed to comply with the installation requirements of BS 4737 1986/87.

This manual provides information on installation design, panel fixing, wiring, power up and programming of the intruder panels.

Contents

Installation Design

The purchase of this alarm system represents a major step forward in the protection of the property and its occupants. It is important to plan the installation before proceeding and then follow the procedures and advice contained in this manual.
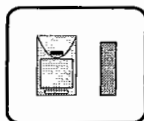
Plan the position of each part of the alarm system and the cable runs. **Detectors** should be sited with particular regard to the degree of coverage required and the function of each of the zones.
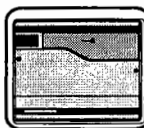
All of the system wiring is connected directly to the **panel**. The panel may be concealed inside a cupboard or loft space, but it must be installed within the protected premises and in a position which is convenient for a mains supply.

The **Remote keypads** (RKPs) should be mounted in positions which allows ease of operation for the system users, typically within the entry/exit route close to the final door and the master bedroom.
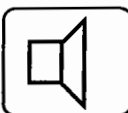
Additional internal **sound speakers** are recommended, these will provide high volume alarm tones and low volume entry/exit tones. Speakers should be positioned to provide good sound distribution throughout the building and so that the exit tone is audible outside the main entry / exit door. This will enable the system operator to check that the system is setting correctly.

Finally note that the **total current** output of this control system (in alarm condition) is 1Amp when supported by a fully charged battery. Calculate the total current consumption of every part of the system including the panel, remote keypads, siren (bell) with strobes and detectors to ensure that this rating is not exceeded.

LA

Depending on which area you live, you may be required, by law to notify the **Local Authority** and Police of the new security alarm installation. The local authority requirements may differ from area to area, therefore, it is advisable to contact local environmental officer to obtain full details of your area requirements.
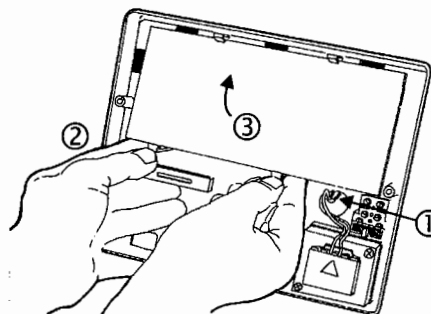
Fixing the panel

⚠️ **When positioning the control panel ensure that it is located in a dry place away from damp areas.**

a. Remove the front cover(s) from the panel.
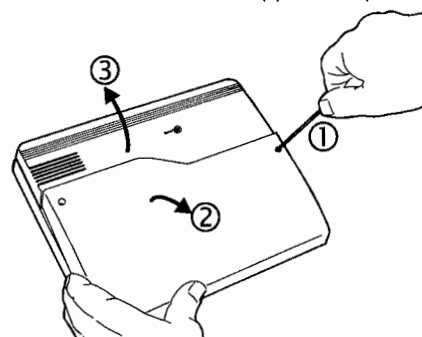
Disconnect the transformer wires from the transformer marked *AC* terminals on the board. Carefully remove the board by gently pushing down the holding clips on the bottom edge of the board and withdraw it from the base.

ℹ️ **When replacing the board, align it on the round support pillars to the bottom and allow it to click down past the clips at the top of the case. Refit the transformer wires into the terminal.**

b. Fit the panel to the wall with suitable fixings. Ensure the wall surface is flat to prevent base distortion. There are cable entry holes provided in the rear of the base and around the outside edges through the thinned out plastic sections which may be cut away as required.

c. The hole provided adjacent to the mains transformer is a dedicated mains cable entry point.
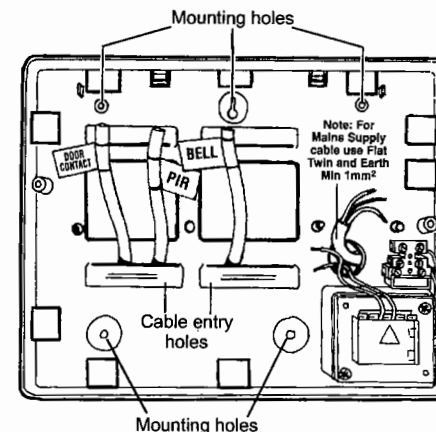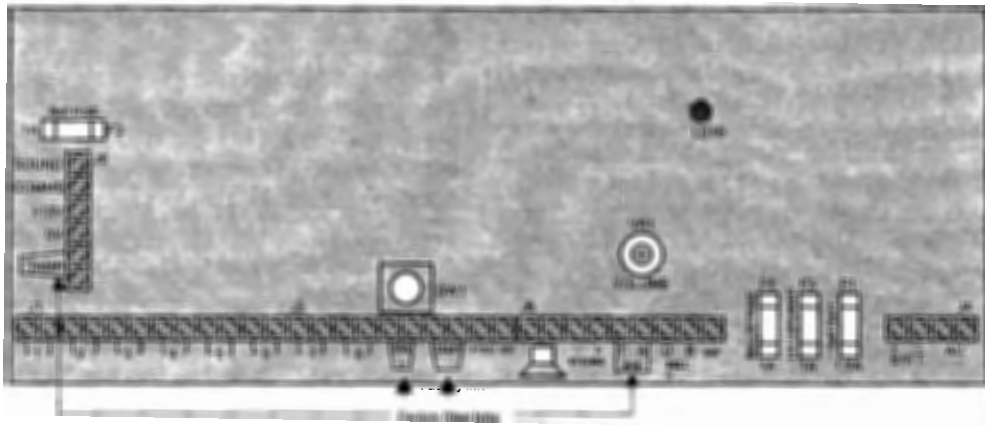

Board

There are four fuses mounted on the circuit board, all are 20mm quick blow.

F1 1.6A - to protect the +ve line of 12V battery
F2 1A - to protect the RKP 13V supply
F3 1A - to protect the Speaker 13V supply
F5 1A - to protect the Bell and Strobe supply

As supplied, wire links are fitted across the PA and Tamper terminals to represent a closed circuit.

Wiring the system

⚠️ **Always power-down the panel when wiring external circuits, to prevent damage to the panel electronics.**

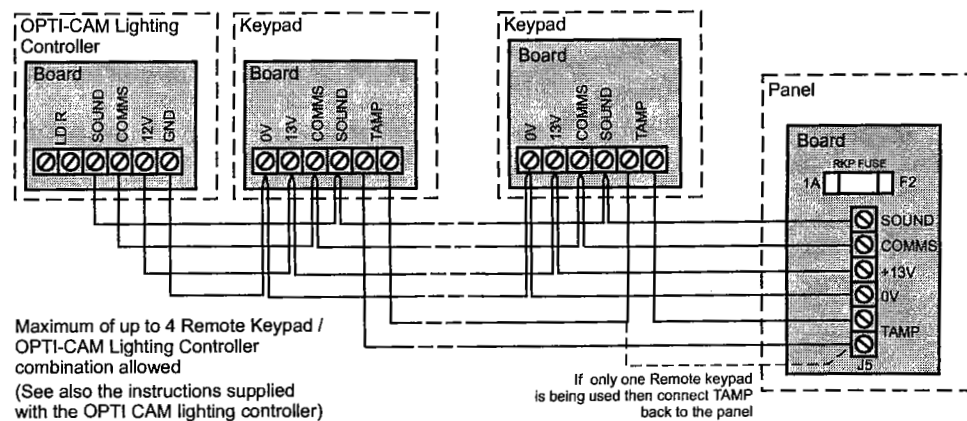Systematically wire and test each circuit:

☐ Zone, Tamper circuit and PA circuits

☐ Finish by wiring any additional extension speaker sounders, external siren (bell), strobe and the 13V supply.

Tamper network

The Tamper circuit is used to protect all cables and detectors in the system from unauthorised access including the panel and RKP covers.

The zone and PA tampers should be series wired and connected to the TAMP terminals. Terminals T & A are for the external siren (bell) tamper. The TAMP terminals at the bottom left of the board are for the RKP tampers.

Tamper alarms that occur in the Day mode operate internal sounders only. Tamper alarms in Set mode cause a full alarm condition. Tamper is indicated on the control panel and RKPs by the **Tamper** indicator.

Maximum of up to 4 Remote Keypad / OPTI-CAM Lighting Controller combination allowed

(See also the instructions supplied with the OPTI CAM lighting controller)

If only one Remote keypad is being used then connect TAMP back to the panel

Connecting Remote Keypads / Lighting controllers

🛈 **Ensure there is at least one remote keypad wired to the panel before first power up.**

A combination of up to four remote keypads and lighting controller can be connected to the panel. The cable length between RKP and panel must not exceed 100m.

Fitting the Remote Keypad

If a remote keypad is fitted in the installation.

a. Separate the RKP baseplate from the main assembly by slackening the retaining screw.

b. Cut away the required thin wall sections around the edges of the baseplate for cable entry.

c. The baseplate mounting holes are 60mm centres which allow it to be fixed to a single gang electrical metal box. As an alternative the baseplate may be fitted directly to the wall using the screws and wall plugs supplied, if these are not appropriate for the wall then use suitable alternative fixings.

⚠️ **The board must not be removed from the front moulding and doing so may invalidate the warranty.**

d. Bring the cables into the baseplate and wire to the terminal block on the baseplate, see diagram on the next page.

e. Refit the RKP main assembly to the baseplate by hooking it onto the top holding clips. Check that the wiring does not foul the tamper switch/spring or the PCB support pillars. Resecure the screw in the bottom of the case.

Security zones
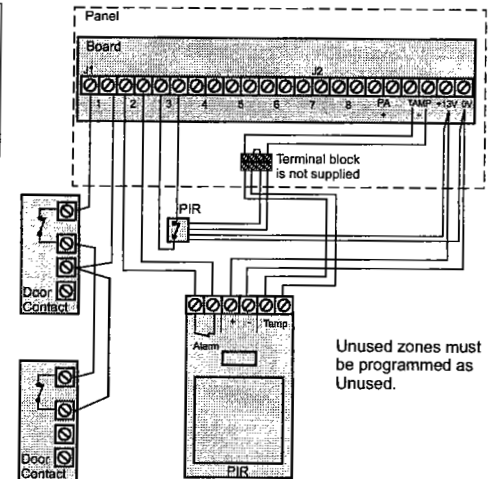
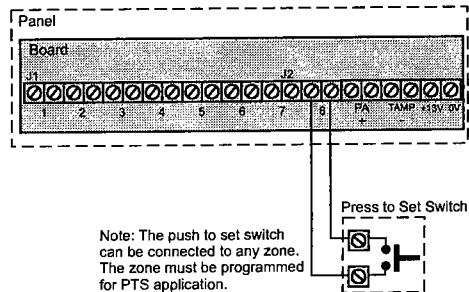Unused zones must be programmed as Unused.

🛈 **The panel is not supplied with wire links for unused zones. All unused zones must be programmed out by setting them to *disabled* using the Zone Type function see page 13.**

It is recommended that no more than 10 magnetic contacts are connected to the same zone.

Push to set zone

Any zone can be wired and configured as a Push to Set input. This can be a standard door bell push located outside the premises. After starting the exit timer the building is vacated. As the switch is then momentarily closed, a chime tone is produced and the system Sets. Sometimes referred to as 'Terminate Set' this facility is mandatory for communicating systems installed to NACOSS guidelines

Note: The push to set switch can be connected to any zone. The zone must be programmed for PTS application.

Press to Set Switch

Remote keyswitch zone

Any zone can be wired and programmed as a keyswitch input and used with a remote keyswitch or lock switch. For security reasons it is recommended that a tamper proof switch is used and that the switch wiring is not accessible from outside the premises.

Note: A keyswitch can be connected to any zone. The zone must be programmed for keyswitch application.
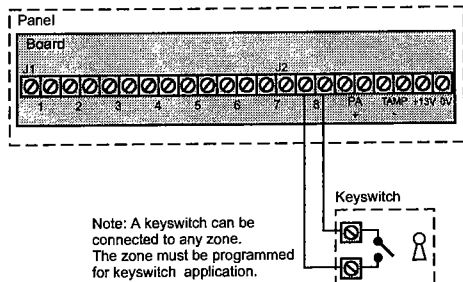
Keyswitch

The keyswitch may be used to Set (open contacts) or Unset (closed contacts) independently of RKPs. However in this situation the keyswitch may have to 'catch up' with the system. For example if the system is Set via an RKP and Unset with the keyswitch, it would have to be momentarily turned to its Set position then returned to its Unset position.

The keyswitch will always Set program 1. It will also Unset the system or switch off an alarm activation. To Reset after an alarm and return to Day mode, the Reset key on the RKP will have to be pressed.

Fire zone

Any zone may be programmed as a fire zone. This will automatically exclude the availability of the zone from programs and normal security applications.

Fire detector

Note: Fire detector with relay base for output to intruder system.
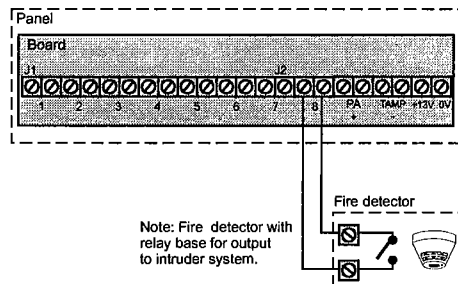
There are two types of fire zone, **Standard** and **24 hour** type. The **Standard fire** zone detects fires only when the system is Set, where as the **24 hour fire** zone detects fires all the time and will operate whether the system is Set or Unset. A fire will cause a distinctive internal sounder tone. The external siren will pulse on and off at 2 second intervals and all RKP indicators will flash the affected zone.

PA circuit

Any quantity of normally closed type personal attack button may be wired in series and then connected to the PA circuit. Operational in Day and Set, the PA circuit will cause a full alarm condition when activated. PA is indicated on the control panel or RKP as Attack.

Panic Button

Panic Button
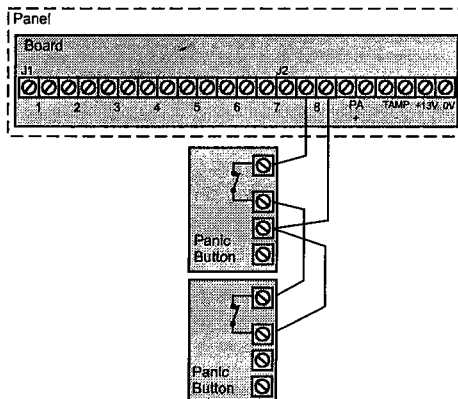
PA buttons may be fitted near the front door, or in a bedroom.

Extension speaker

Extension speaker may be connected to the loudspeaker terminals to produce high volume alarm tones and low volume entry / exit / fault tones.

16 ohms Extension Speaker

16 ohms Extension Speaker
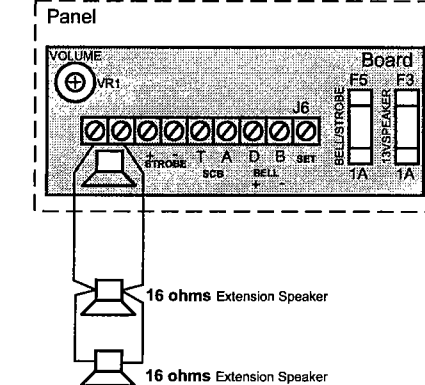
Up to two 16 ohms extension speakers may also be wired across the speaker terminals. Mounted in convenient positions within the installation the extension speakers will reproduce all of the alarm tones generated by the control panel.

A control marked VOLUME in the centre of the board may be used to adjust the low volume entry/exit tones to suit environmental conditions.

External siren (Bell) and Strobe

The bell is usually installed in a high position from where the bell could be seen and heard.

Terminal T A D B are for connection to the external siren (bell). These terminals provide a power/hold-off supply, sounder trigger and tamper circuit to protect the external siren housing.

The terminals are summarised as follows:

T - -Ve tamper return
A - -Ve supply (0V)
D - +Ve supply (12V)
B- -Ve Sounder trigger

For ease of installation, Sonade sounders and modules use the same markings.

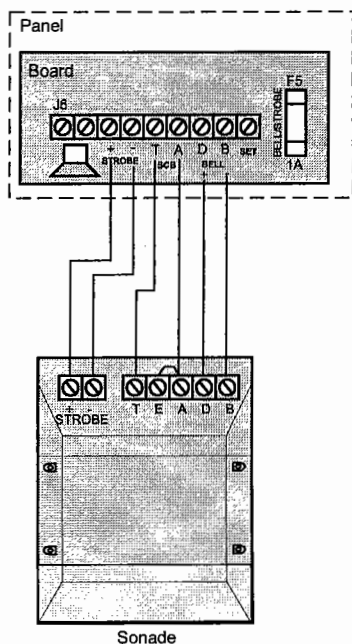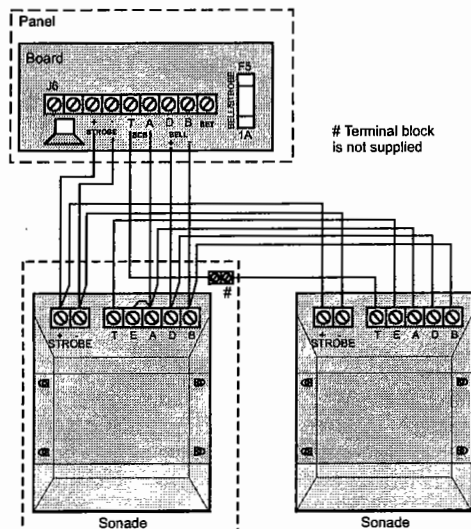Where a discrete bell sounder is used, it should be connected to terminals D & B. Terminals T & A are then used for tamper protection for the sounder housing.

Sonade

Terminal block
is not supplied

Sonade   Sonade

Where self contained / powered sounders are used, carefully follow the manufacturers instructions, match each of the terminals to those above.

13V Supply output

The 13V output is to power detectors which require a voltage supply (PIR detectors etc). The supply is present at all times and may be used to supply a total load of 350mA.

Set

The output, marked SET, is used with latching detectors. The output becomes positive on correct Set of the system and is removed at the commencement of entry time or entry of the valid user code.

Factory set condition

User code 1 - - - - - - - 0123
User code 2 - - - - - - - - Not programmed
Engineer Code - - - - - - - 9999
Bell Duration - - - - - - - 20 minutes
Bell Delay - - - - - - - - - No delay

Program 1

Zone 1 - - - - - - - - - Timed
Zone 2 - - - - - - - - - Time Inhibited
Zones 3...8 - - - - - - Immediate
Exit time - - - - - - - 30 seconds
Entry - - - - - - - - - 30 seconds
Exit mode - - - - - - timed

Program 2

Zone 1 - - - - - - - - - Timed
Zone 2 - - - - - - - - - Time inhibited
Zone 3...8 - - - - - - - Immediate
Exit time - - - - - - - 30 seconds
Entry time - - - - - - 30 seconds
Exit mode - - - - - - Disabled

Program 3

Zone 1 - - - - - - - - - Timed
Zone 2 - - - - - - - - - Time Inhibited
Zone 3...8 - - - - - - - Immediate
Exit time - - - - - - - 30 seconds
Entry time - - - - - - 30 seconds
Exit mode - - - - - - Disabled

Security Zones - - - - - - Zones 1...8
Standard Fire zones - - - - None programmed
24 hour Fire zones - - - - None programmed
Push to set zones - - - - - None programmed
Keyswitch zones - - - - - - None programmed
Double Knock zones - - - - None programmed
Omit prevent zones - - - - None programmed
Zone debounce period - - - 300mS ALL zones

Flag A

Silent PA - - - - - - - - - No
RKP PA Enable - - - - - - Yes
Engineer Reset - - - - - - No
Anti Code Reset - - - - - - No
Door bell on push to set - - No
Single key setting - - - - - No
Strobe on setting - - - - - - No
External siren (bell) on Fire - No

Flag B

User Reset PA - - - - - - - No
User Reset Fire - - - - - - - No
Rearm counter - - - - - - - 3 (re-arms)
Service counter - - - - - - - Off
Site Code - - - - - - - - - - 00

Light Controller

Light Threshold - - - - - 50%
Light Hold Time - - - - - 30 seconds
Light Channel 1 - - - - - - No zones assigned
Light Channel 2 - - - - - - No zones assigned
Light Channel 3 - - - - - - No zones assigned
Light Channel 4 - - - - - - No zones assigned
Light Channel 5 - - - - - - No zones assigned
Light Channel 6 - - - - - - No zones assigned
Light Channel 7 - - - - - - No zones assigned
Light Channel 8 - - - - - - No zones assigned

First Power up

Powering up the panel for the first time.

a.   Check that the factory fitted links are connected to terminals PA, TAMP and T-A.

b.   Fit the battery wires to the BATT terminals on the board, Red to + and Black to -.
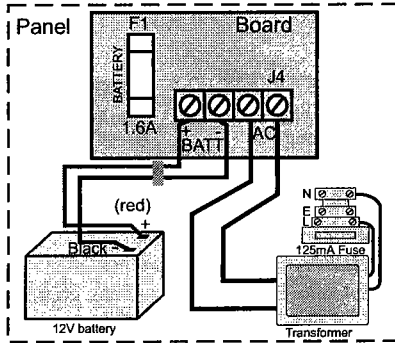
c.   On connecting the battery the system will now go into alarm condition and Tamper is indicated

⚡ **Tamper** and there is an audible

indication. 🔊 **Alarm**.

d.   Fit the cover to hold down the tamper spring at the bottom centre of the board.

e.   Enter the user code: ⓪ ① ② ③ (factory set code). The alarm condition will cease and the system will go to Day mode
⚡ **Day**

f.   Immediately enter the engineer code
(Prog) ⑨ ⑨ ⑨ ⑨

The system is now in *Engineer program mode* and can be programmed. Note the
⚡ **Tamper** Tamper indicator is lit.

ℹ️ **The panel is not supplied with wire links for unused zones. All unused zones must be programmed out by setting them to *disabled* using the Zone Type function see page 13.**

Mains Connection

The mains power should be connected using a 3 core cable of not less than 1mm sq. from a fused spur to the mains connector inside the control panel. The 2 Amp fused spur must be located close to the control panel.

ℹ️ **The mains supply must be connected by a technically competent person and according to current IEE regulations.**

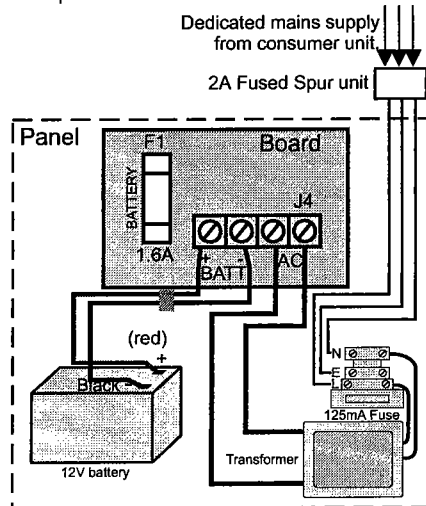⚠️ **To avoid the risk of electrical shock you must always totally isolate the mains supply before opening the control panel cover(s).**

☐ Mains Input Fuse rating: 125mA, 250V type T (anti surge) and of a type approved to IEC 127 part 2 sheet III.

On connecting the mains supply to the panel the power indicator is lit.

⚡ **Power**

Testing the system

Complete the wiring of the system and then:

☐ Fully test the system and ensure it is fault free.

☐ Fully program the system.

☐ Fill in the installation log at the back of the manual and retain if for future reference.

☐ Finally explain the operation of the system to the end user. The Operating Instructions are attached to the centre of this manual. Detach them and leave them with the user.

Engineer program mode

The panel may be programmed to suit a wide variety of installations. .

Once the *engineer program mode* has been accessed, each configuration may be changed in any order. As each configuration is completed the system will automatically return to top level of engineer program mode.

Before entering *engineer program mode* the system should be in the Day mode, with the Day and Power indicators lit.

Key:

⚡ ⚡ LED steady On indication

-⚡- -⚡- LED flashing indication

○ LED Off
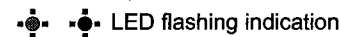
Internal sound
🔊 **Sound description**
NOTE: In general a flat beep is an indication of an incorrect key press.

External devices
🔦 Strobe

🔔 External siren (bell)
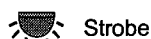
To exit

(Reset) Quit the current function
Leave program menu
Down one menu level

System indications

⚡ Day ⚡ Power - Unset system indication

⚡ Power - Set system indication
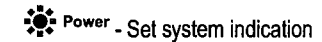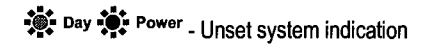
To enter Engineer program mode

ℹ️ **The factory configured engineer's access code is 9999. If however this code is changed then enter the appropriate code.**

(Prog)

⚡ ZONE 1 - 8
Momentarily On
⑨ ⑨ ⑨ ⑨

🔊 Acknowledge

⚡ Tamper   ○ Day

To Exit Engineer program mode

(Reset)

⚡ Day

To reset panel to Factory settings

⚠️ **All configurations of the panel are restored to factory 'default' conditions.**

Within 5 seconds of powering up the panel
(Reset) (Reset)

🔊 reset beeps
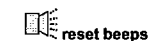
Access Codes

There are three codes used in the system, all are 4 digits in length and can be set to any number from 0000 to 9999. The access codes ensure that only authorised users can operate the system.

User 1 and 2 codes

The User 1 and User 2 codes have the same operation for testing, Setting and Unsetting, but User 1 code which is usually considered to be the Managers code has the authority to add, change or delete the User 2 code and duress code.

Engineer code

Accesses the Engineer Program mode to allow the system to be programmed. The engineer code will not set or unset the system.

If configured the Engineers access code can be used to reset the system after an alarm.

> **ℹ** **Entering an invalid User code will operate the code tamper. After nineteen incorrect key pushes a full alarm condition will be generated.**

Example: To change User 1 code to 3457 Press:

(Prog) (9) (9) (9) (9) (8) (1)
(3) (4) (5) (7) (Reset) (Reset)
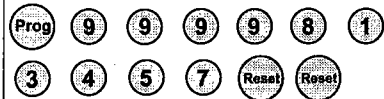
Enter Engineer program mode

(8) Codes

⟡ Attack

- (1) Change User code 1
- (2) Change User code 2
- (9) Change Engineer code

⟡ Day
⟡ ZONE 1-4

(n) (n) (n) (n) New code

NOTE - The sounder will produce a flat beep if the code is rejected. The Code is rejected if it is already in use.

🔊 Rising beeps

○ ZONE 1-4

○ Day

(Reset) Exit codes ○ Attack

(Reset) Leave engineer mode

⟡ Day 🔊 Acknowledge ○ Tamper

Zone Type

The G3 panel is **not supplied with wire links** to terminate unused zones. Therefore all unused zones must be programmed out by setting them to *disabled* using the **Zone Type** function.

Example: To disable an unused zone 8, Press:
(Prog) (9) (9) (9) (9) (5) (8) (0) (Reset) (Reset) (Reset)

Enter Engineer program mode

(5) Zone Configuration

⟡ Attack

⟡ All Zones

Press a number button to select Zone to be configured:
- (1) Zone 1 type
- (2) Zone 2 type
- (3) Zone 3 type
- (4) Zone 4 type
- (5) Zone 5 type
- (6) Zone 6 type
- (7) Zone 7 type
- (8) Zone 8 type

⟡ Day

Press a number button to select zone type:
- (0) Disabled
- (1) Security
- (2) Fire
- (3) 24h Fire
- (4) PTS
- (5) Keyswitch

Appropriate Zone indicator is lit to show Zone type

Factory default

- ⟡ Zone 1
- ○ Zone 2
- ○ Zone 3
- ○ Zone 4
- ○ Zone 5

🔊 Acknowledge

(Reset) Exit to zone type ○ Day

(Reset) Exit zone configuration ○ Attack

(Reset) Leave engineer mode

⟡ Day 🔊 Acknowledge ○ Tamper

Zone Attributes

Example: To configure zones 4 and 5 for 'Double knock' operation, Press:

(Prog) (9) (9) (9) (9) (6) (1) (4) (5) (Reset) (Reset) (Reset)

Enter Engineer program mode

(6) Zone Attributes

☀ Attack

—(1) Double Knock

—(2) Omit Prevent   ☀ ZONE 1 - 8 Momentarily On

—(3) Zone Delay   ☀ Day

▼

(0) Deselect all zones

(1) Zone 1

(2) Zone 2   Appropriate Zone indicator is lit to show zone having 800mS delay, Omit prevent or double knock.

Factory defaults:

No zones are in double knock

(3) Zone 3

(4) Zone 4

No Zones are set as omit prevent

(5) Zone 5   ☀ Zone n selected   All zones have delay of 300mS

(6) Zone 6   ○ Zone n deselected

(7) Zone 7   (Reset) Exit to zone type ○ Day
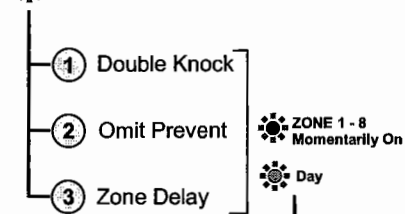
(Reset) Exit zone attributes ○ Attack

(8) Zone 8   (Reset) Leave program mode

☀ Day ▯▯ Acknowledge ○ Tamper

Press number button to select / deselect zone delay, Omit zone or Double knock

Zone attribute descriptions

Double knock: The panel will require 2 activations of the same detector before causing an alarm condition. This setting is used as a false alarm measure.

ⓘ **Double knock must not be used on zones having magnetic door/window contacts.**

Omit Prevent: The panel will prevent the zone from being omitted by the user when setting the system.

Zone Delay: The panel programs a zone delay to 800mS to give extra immunity to false alarms.

Programs

The panel uses 3 Part Set routines known as Programs. In each Program the exit mode can be changed and the zone may be set up to have a different function.

The examples below show how 3 typical Programs could be used in a house.

☐ **Program 1** : To arm all of the zones and become Set as the user leaves the property and closes the final door.

☐ **Program 2** : To protect the perimeter of the property in the evening and become Set after say 20 seconds.

☐ **Program 3** ; To protect the downstairs areas of the house at night and become Set instantly and silently.

ⓘ **The above are purely examples. The installer must program the panel to configure all the circuits to the customer's exact requirements.**

Zone function

Timed : This function would be used to protect the main entry/exit door of the entry route.

Time inhibited: This is a zone which, on setting the panel, allows access to the Entry / Exit zone. However, if the panel is set and an time inhibited zone is triggered before an Entry /Exit zone then an alarm will be generated immediately.

Immediate: This is a zone which will, when entered, go into alarm when the panel is set.

Unused : A zone that is programmed as an Unused zone by the Engineer is ignored by the panel. Primarily used for Part set options.

Exit Modes

Timed: A timed Program will become Set as the Exit timer expires.

Terminated Set:
This sets an infinite time out, which will only set once the PTS input is operated.

Final Door: A final door program will be Set 5 seconds after a timed zone has opened and closed.

Silent Set: This operates exactly the same as 'Timed' but completely silent without the internal sounder signal.

ⓘ **If a program is not selected when the user Sets the system, Program 1 will automatically Set. Therefore Program 1 is usually considered as the Full Set Program containing all of the zones.**
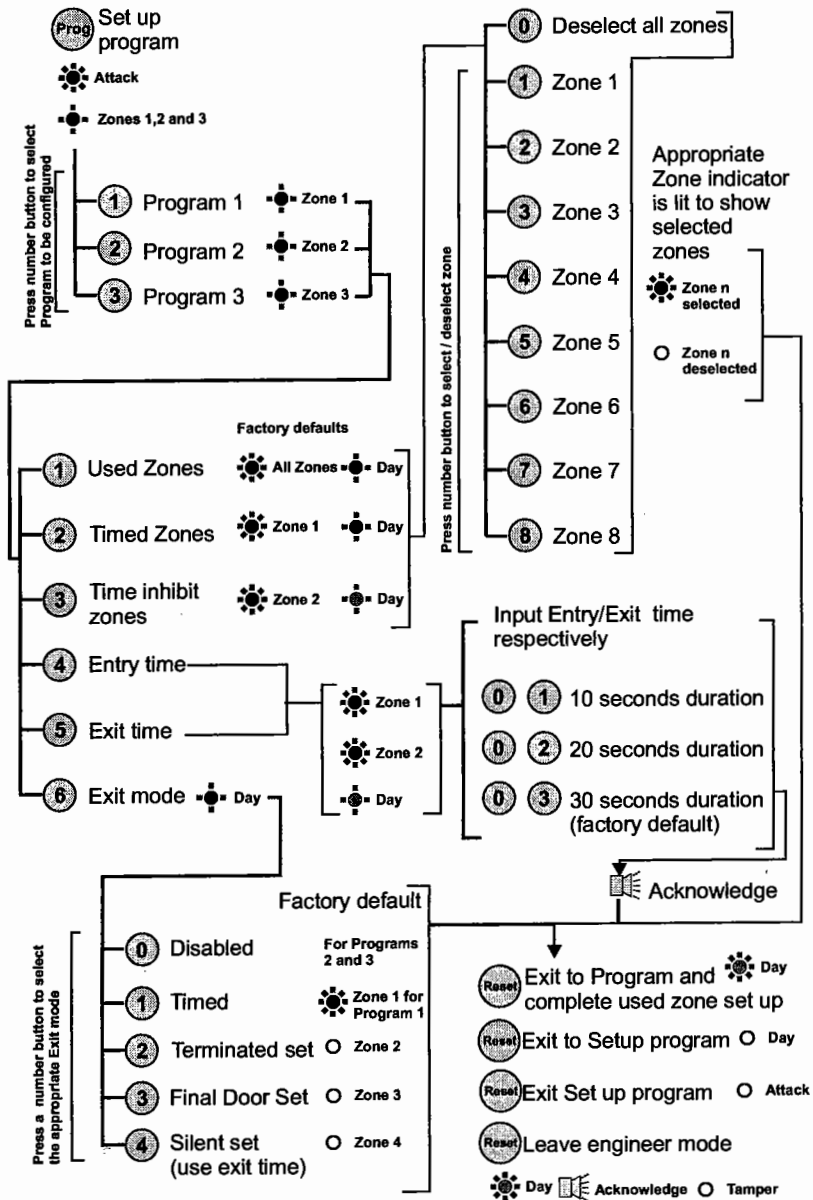
Programs 1,2 and 3

Example: To configure Program 1 Exit mode to Final door set, Press:
(Prog) (9) (9) (9) (9) (Prog) (1) (6) (3) (Reset) (Reset) (Reset) (Reset)

Enter Engineer program mode

(Prog) Set up program
:¤: Attack
■●■ Zones 1,2 and 3

Press number button to select Program to be configured

(1) Program 1 ■●■ Zone 1
(2) Program 2 ■●■ Zone 2
(3) Program 3 ■●■ Zone 3

(0) Deselect all zones
(1) Zone 1
(2) Zone 2
(3) Zone 3
(4) Zone 4
(5) Zone 5
(6) Zone 6
(7) Zone 7
(8) Zone 8

Press number button to select / deselect zone

Appropriate Zone indicator is lit to show selected zones

:¤: Zone n selected
○ Zone n deselected

Factory defaults

(1) Used Zones :¤: All Zones ■●■ Day
(2) Timed Zones :¤: Zone 1 ■●■ Day
(3) Time inhibit zones :¤: Zone 2 ■●■ Day
(4) Entry time
(5) Exit time
(6) Exit mode ■●■ Day

:¤: Zone 1
:¤: Zone 2
■●■ Day

Input Entry/Exit time respectively

(0) (1) 10 seconds duration
(0) (2) 20 seconds duration
(0) (3) 30 seconds duration (factory default)

〖IE Acknowledge

Factory default

Press a number button to select the appropriate Exit mode

(0) Disabled
(1) Timed
(2) Terminated set ○ Zone 2
(3) Final Door Set ○ Zone 3
(4) Silent set (use exit time) ○ Zone 4

For Programs 2 and 3
:¤: Zone 1 for Program 1

(Reset) Exit to Program and complete used zone set up :¤: Day
(Reset) Exit to Setup program ○ Day
(Reset) Exit Set up program ○ Attack
(Reset) Leave engineer mode
:¤: Day 〖IE Acknowledge ○ Tamper

Alarm and Walk tests

Example: To start bell test and thereafter to stop bell test.
(Prog) (9) (9) (9) (9) (1) (3) (0) (Reset) (Reset)

Enter Engineer program mode

(1) Alarm test
:¤: Attack

Press zero to turn off options 2,3,4 and 5 before selecting a new one

(2) Strobe test ☀ Strobe On :¤: Day
(3) Bell test 🔔 Bell on :¤: Day
(4) Low volume sounder 📢 internal low volume sound :¤: Day
(5) High volume sounder 📢 internal high volume sound ☀ Strobe On :¤: Day
(6) Walk test ☀ Strobe :¤: Day

📢 x1 for zone 1
x2 for zone 2
|
x4 for zone 4
flat x1 for zone 5
flat x2 for zone 6
|
flat x4 for zone 8

Appropriate zone lights are lit(latched)
:¤: Zones

Rapid for PA :¤: Attack
Rapid for Tamper :¤: Tamper

(0) OFF ○ Day

(Reset) Exit current level ○ Attack
(Reset) Leave engineer mode
:¤: Day 〖IE Acknowledge ○ Tamper

The alarm test function allows you to test the Strobe (Bell), Low and high volume sounders of the system.

The walk test function allows each detector to be checked in order to verify that they are functioning correctly.

'Flag A' Options

Example: To set the panel for engineer reset, Press:

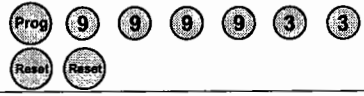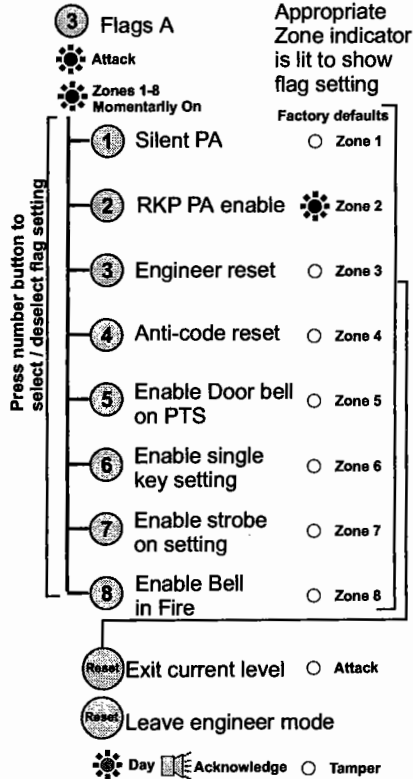(Prog) (9) (9) (9) (9) (3) (3)

(Reset) (Reset)

Enter Engineer program mode

(3) Flags A

Attack

Zones 1-8 Momentarily On

Appropriate Zone indicator is lit to show flag setting

Factory defaults

(1) Silent PA   ○ Zone 1

(2) RKP PA enable   ● Zone 2

(3) Engineer reset   ○ Zone 3

(4) Anti-code reset ○ Zone 4

(5) Enable Door bell on PTS ○ Zone 5

(6) Enable single key setting ○ Zone 6

(7) Enable strobe on setting   ○ Zone 7

(8) Enable Bell in Fire   ○ Zone 8

(Reset) Exit current level ○ Attack

(Reset) Leave engineer mode

Day | Acknowledge ○ Tamper

Flag A descriptions:

Silent PA : When this flag is set and on operating PA will cause a Silent PA alarm.

RKP PA Enable: When this flag is set the keypad PA buttons are enabled.

Engineer Reset: When this flag is set an Engineer code must be entered to reset the system after a full alarm. When the flag is clear the system can be reset by the user.

Anti-code Reset: When this flag is set it enables the anti code reset function.

Enable Door bell on PTS: When this flag is set it allows a zone circuit programmed as PTS to operate as a door bell.
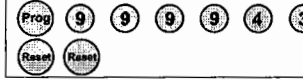
Enable single key setting: When this flag is set it allows the panel to be set by pressing the SET button (ie code entry is not needed), however a 4 digit code is needed to Unset the panel.

Enable strobe on setting: When this flag is set the external strobe will flash for 3 seconds once the panel has successfully set.
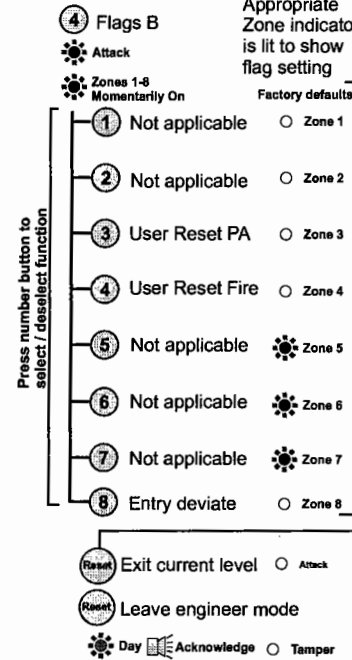
Enable external Fire bell: When this flag is set the system siren (bell) will sound 2 seconds On / 2 seconds Off during a fire alarm.

'Flag B' options

Example: To set the panel for user to reset PA, Press:

(Prog) (9) (9) (9) (9) (4) (3)

(Reset) (Reset)

Enter Engineering program mode

(4) Flags B

Attack

Zones 1-8 Momentarily On

Appropriate Zone indicator is lit to show flag setting

Factory defaults

(1) Not applicable   ○ Zone 1

(2) Not applicable   ○ Zone 2

(3) User Reset PA   ○ Zone 3

(4) User Reset Fire ○ Zone 4

(5) Not applicable   ● Zone 5

(6) Not applicable   ● Zone 6

(7) Not applicable   ● Zone 7

(8) Entry deviate   ○ Zone 8

(Reset) Exit current level ○ Attack

(Reset) Leave engineer mode

Day | Acknowledge ○ Tamper

Flag B descriptions:

User Reset PA: When this flag is set it permits the user code to reset the system after a PA alarm, even if Engineer reset flag is set.

User Reset Fire: When this flag is set it permits the user code to reset the system after a Fire alarm, even if Engineer reset flag is set.

Entry deviate: When this flag is set it permits an immediate zone to be activated during the entry period without causing a full alarm.

Viewing the event log

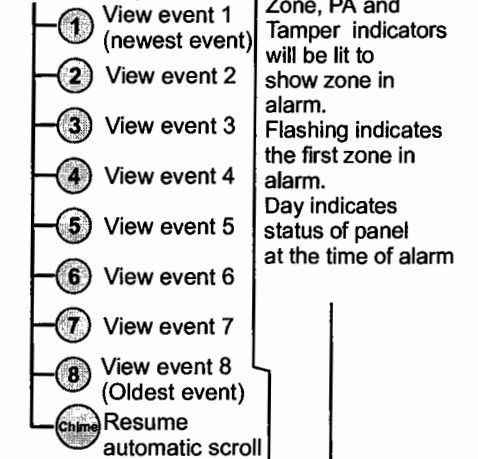Example: To view up to 8 previous events and thereafter to stop the event scroll, Press:

(Prog) (9) (9) (9) (9) (Chime)
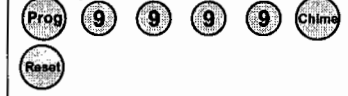
(Reset)

Enter Engineer program mode

(Chime) View the event log

○ Tamper

Automatic event scroll Starting from event 1 to 8

To manually scroll

(1) View event 1 (newest event)

(2) View event 2

(3) View event 3

(4) View event 4

(5) View event 5

(6) View event 6

(7) View event 7

(8) View event 8 (Oldest event)

(Chime) Resume automatic scroll

Zone, PA and Tamper indicators will be lit to show zone in alarm. Flashing indicates the first zone in alarm. Day indicates status of panel at the time of alarm

(Reset) Stop event scroll / view ● Tamper

Leave engineer mode

Day | Acknowledge ○ Tamper

External siren (Bell) and Service Timers

Example: To set bell timer for 10 minutes duration, Press:

(Prog) (9) (9) (9) (9) (7) (1) (1) (0) (Reset) (Reset)

Enter Engineer program mode

(7) Timers and Counters

☀ Attack

(1) Bell timer ———
(2) Bell delay timer ———
(3) Service timer
(4) Re-arm counter (00 to 99)
(5) Anti-code reset site code

☀ Zone 1
☀ Zone 2
☀ Day

(0) (0)	Continous operation
(0) (1)	1 minute bell duration
(0) (2)	2 minute bell duration
(0) (3)	3 minute bell duration
(2) (0)	20 minute bell duration (factory default)
(9) (9)	99 minute bell duration

☀ Zone 1
☀ Zone 2
☀ Day

(0) (0)	No delay (Factory default)
(0) (1)	1 minute bell duration
(0) (2)	2 minute bell duration
(0) (3)	3 minute bell duration
(2) (0)	20 minute bell duration
(9) (9)	99 minute bell duration

☀ ZONE 1 - 8 Momentarily On
☀ Day

Press a number button to select Service timer

(0) Service timer disabled (Factory default)
(1) 100 Set/Unset   ○ Zone 1
(2) 200 Set/Unset   ○ Zone 2
(3) 300 Set/Unset   ○ Zone 3
(4) 400 Set/Unset   ○ Zone 4
(5) 500 Set/Unset   ○ Zone 5
(6) 600 Set/Unset   ○ Zone 6
(7) 700 Set/Unset   ○ Zone 7
(8) 800 Set/Unset   ○ Zone 8

Appropriate Set / Unset values LED is lit

☀ Lit when selected
○ Day

(Reset) Exit

🔊 Acknowledge

(Reset) Exit Timer and counters   ○ Attack

(Reset) Leave engineer mode

☀ Day 🔊 Acknowledge ○ Tamper

Re-arm and Anticode reset code

Example: To set panel re-arms to 10 times before panel is shut down, Press:

(Prog) (9) (9) (9) (9) (7) (4) (1) (0) (Reset) (Reset)

Enter Engineer program mode

(7) Timers and Counters

☀ Attack

(1) Bell timer
(2) Bell delay timer
(3) Service timer
(4) Re-arm counter (00 to 99)
(5) Anti-code reset site code

☀ Zone 1
☀ Zone 2
☀ Day

(0) (0)	No re-arm
(0) (1)	1 re-arms
(0) (3)	3 re-arms (factory default)
(9) (9)	99 re-arms

☀ Zone 1
☀ Zone 2
☀ Day

(0) (0)	factory default code
(0) (1)	01
(2) (0)	20
(9) (9)	99

🔊 Acknowledge
○ Day
(Reset) Exit to Timer and counters ○ Attack
(Reset) Leave program mode
☀ Day 🔊 Acknowledge ○ Tamper
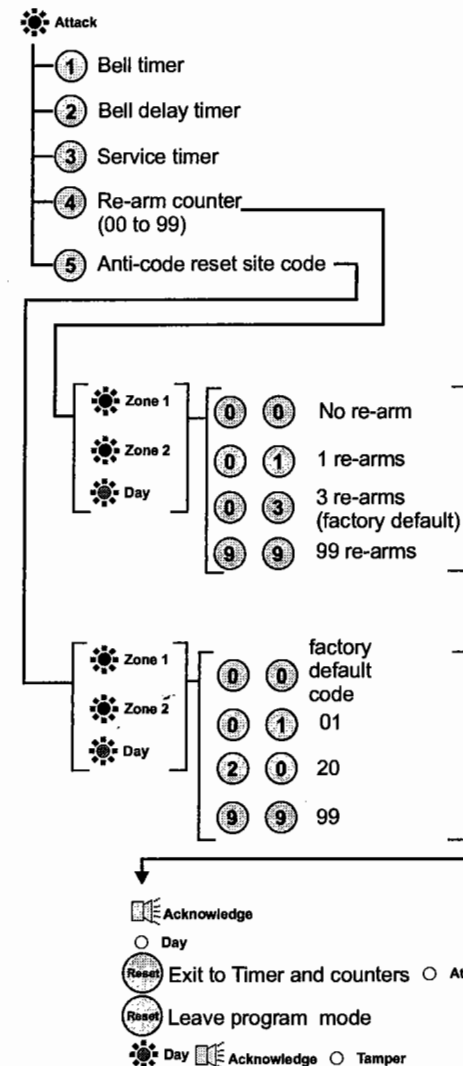
Re-arm

After an alarm the panel will automatically reset itself when the siren (bell) timer has expired. Any zones which still remain open at that time will be omitted automatically.

ℹ By default there are 3 automatic re-arms before the panel is shut down.

Anti code reset (Engineer reset)

If the system has been programmed to be engineer reset, after an alarm it will lock out and the RKP will continually display the cause of the alarm. The engineer would then be required to attend the site and use the engineer code to reset the system.

Where anti-code reset has also been enabled, the RKP will still show the alarm cause and also display a 4 digit 'quote code' by sequentially flashing zone indicators 1-8.

At this point the end user would contact the engineer. After determining the cause of the alarm and deciding that a engineer call was not necessary, a 6 digit anti-code would be given to the user which would reset the system.

This anti-code is generated from a small computer program can be run on a PC by the engineer.

Security of the anti-code reset system is maintained by a 2 digit site code which is set up in the anti-code generator programme. The same 2 digit site code must also be set up in the control panel during installation.
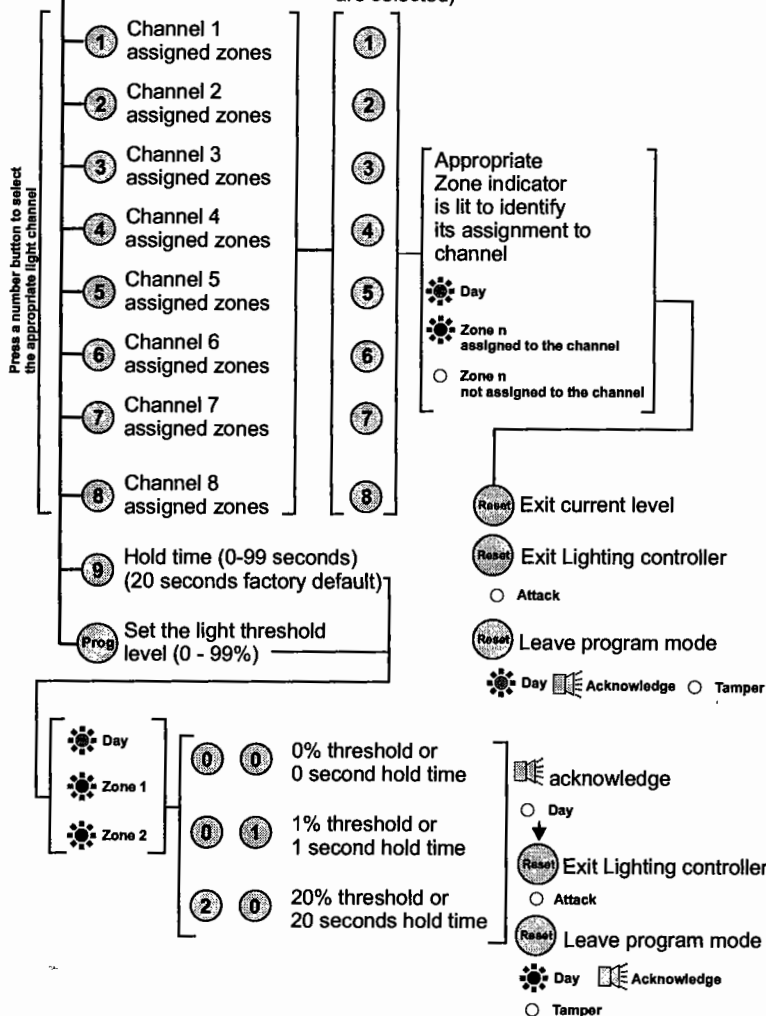
Lighting controller

Example: To assign zones 1 and 2 to lighting controller channel 1, Press:
(Prog) (9) (9) (9) (9) (9) (1) (1) (2) (Reset) (Reset) (Reset)

Enter Engineer program mode

(9) Lighting Controller

:●: Attack

•●• All Zones

Press a number button to select the appropriate light channel

To assign zones to channel press to select and again to deselect zone (Factory default: No zones are selected)

(1) Channel 1 assigned zones — (1)
(2) Channel 2 assigned zones — (2)
(3) Channel 3 assigned zones — (3)
(4) Channel 4 assigned zones — (4)
(5) Channel 5 assigned zones — (5)
(6) Channel 6 assigned zones — (6)
(7) Channel 7 assigned zones — (7)
(8) Channel 8 assigned zones — (8)

Appropriate Zone indicator is lit to identify its assignment to channel

:●: Day

:●: Zone n assigned to the channel

O Zone n not assigned to the channel

(Reset) Exit current level

(9) Hold time (0-99 seconds) (20 seconds factory default)

(Reset) Exit Lighting controller

O Attack

(Prog) Set the light threshold level (0 - 99%)

(Reset) Leave program mode

:●: Day 〚E Acknowledge O Tamper

:●: Day
:●: Zone 1
:●: Zone 2

(0) (0) 0% threshold or 0 second hold time
(0) (1) 1% threshold or 1 second hold time
(2) (0) 20% threshold or 20 seconds hold time

〚E acknowledge
O Day
↓
(Reset) Exit Lighting controller
O Attack
(Reset) Leave program mode
:●: Day 〚E Acknowledge
O Tamper

Faults

Fault conditions are often the result of minor installation errors or misinterpretation of the equipment being installed. The following points outline the most common installation and commissioning faults.

a. As supplied the user code is 0123 and the engineer code is 9999. Both codes will revert back to these default settings on clearing the NVM., see NVM clearing procedure.

b. The Engineer Program is accessed directly from Day mode via the engineer code.

c. If a tamper, PA or 24Hr fire fault is present on the system, it will go to a lock out condition (showing the appropriate indication). The keypad will not produce any audible responses and the system will not operate until the fault has been found and rectified.

d. The most common cause of a zone not responding to detection is incorrect wiring. Normally closed detectors must be wired together in a series loop before connecting into the appropriate ZONE terminals. Tampers are series wired in the same manner.

e. Where a permanent zone fault is showing and the loop resistance is found to be in order, the most probable cause is a short circuit between the zone wiring and the tamper wiring. When measured with a multimeter the series resistance between the zone and tamper wiring should be infinitely high.

f. If totally lost as to the cause of a fault, remove ALL wiring from the board. Refit the 4-links and test the system. Never fit links to any positions other than those marked on the board.

g. Before testing or replacing any fuses, ALL power must be removed. Fuses which fail continually are almost certainly the result of a short circuit or low resistance across the 13V supply or external siren (bell) supply (terminal D).
Whenever working close to the mains supply or connector, you should exercise extreme caution.

Always isolate the mains supply before removing the control panel covers.

h. Where normally open detectors are connected are being used , they must be wired in the manner shown.

The example below shows how to wire normally open detectors on zones 3 and 4.

Panel Board
J1 ... J2
1 2 3 4 5 6 7 8 PA TAMP +13V 0V
Normally open detectors
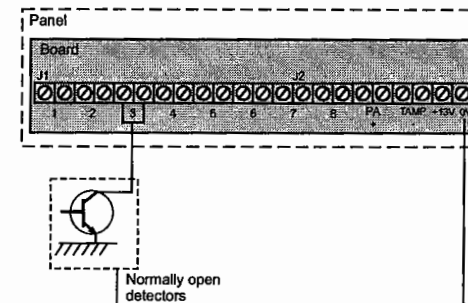
The example below shows how to wire normally open detector on zones 3 and a normally closed detector on zone 4.

Panel Board
J1 ... J2
1 2 3 4 5 6 7 8 PA TAMP +13V 0V
Normally closed detector
Normally open detectors
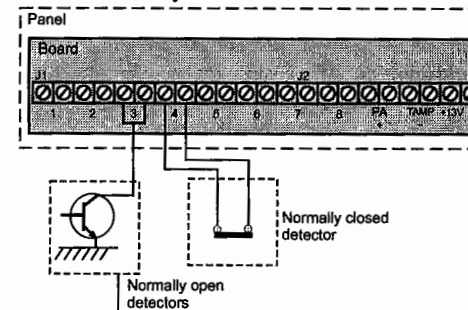
i. Where **Pressure mats** are being used these must be connected to a zone in the manner shown. The example below shows pressure mats connected to zones 3.

Panel Board
J1 ... J2
1 2 3 4 5 6 7 8 PA TAMP +13V 0V
Pressure Mats
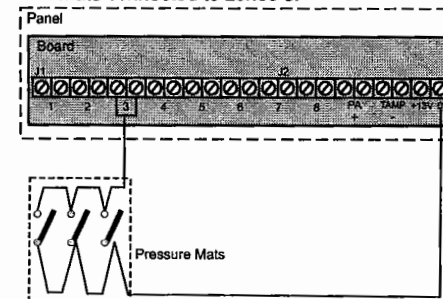
Engineering information

Specification

Indicators on RKPs	Zone 1-8, Power, Attack, Tamper and Day
8 Zones	+ve loop, programmable function in each program
Tamper	-ve loop, internal sounders in Day – Full alarm in Set
PA	+ve loop, always active
External siren (bell) Output	12V, adjustable timer (1-99 mins) or continuous
Strobe Output	12V latching
Extension Speaker	16 ohms (2 maximum) 260mA each
Exit/Entry timers seconds	Programmable (10-99 seconds)
Zone Input Delay	300 or 800mS
Set +ve Output	0V in Day (sinking 40mA) 12V in Set (sourcing 10mA)
Current Consumption Control panel	Standby 80mA Alarm 250mA
Current consumption RKP	Standby 40mA Alarm 70mA
Low voltage output	13.8V dc stabilised (+/- 5%) up to 350mA
Rechargeable Battery	12V, 1.2 or 2.1Ah
Charge Voltage	13.8V dc (+/-5%)
board Fuses	1.6A & 1A 20mm quick blow
Mains Input fuse	125mA, 250V type T (anti-surge) type approved to IEC 127, part 2 sheet III
Total Current Output	1A when supported by a fully charged battery
Mains Supply Voltage	230V (+/-10%) 50Hz max load 0.2A
Ambient Operating temperature	0°C to 40°C
Enclosure construction	3mm Polycarbonate

Dimensions

Panel
H 200mm W 253mm
D 55mm

RKP H 85mm
W 122mm D 28mm

Engineering information

Notes

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Servicing organisation Details

Servicing organisation name:

_____

Telephone number:

_____

Date of installation:

_____

Account Number:

_____

Parts

Below is a list of approved parts and accessories.

8SP 402   SL8 G3 panel
6EP 378   SL8 LED RKP
8EP 289   Extension Speaker
8EP 372   Opti-Cam Lighting Controller
A range of detectors are also available, for more information contact your supplier.

	Resistance	Area protection and equipment used (eg PIR, Contacts..)
Zone 1		
Zone 2		
Zone 3		
Zone 4		
Zone 5		
Zone 6		
Zone 7		
Zone 8		