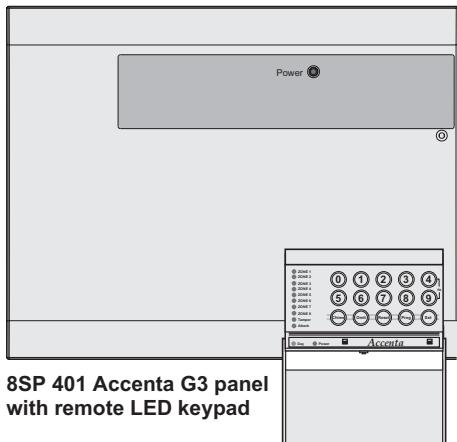


Intruder alarm system

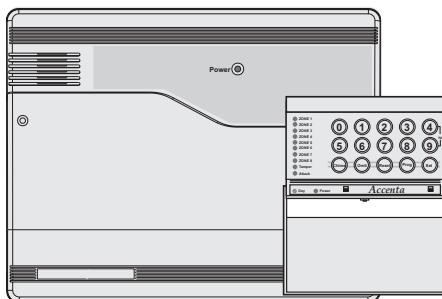
ACCENTA **G3** Engineering Information OPTIMA **G3**



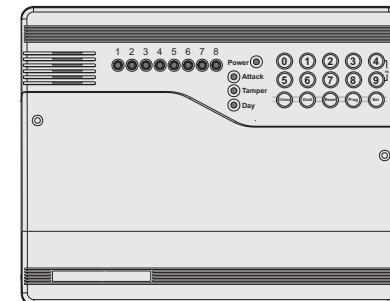
8SP 401 Accentra G3 panel
with remote LED keypad



8EP 395 Optima G3 panel
with built-in keypad



8SP 400 Accentra mini G3 panel
with remote LED keypad



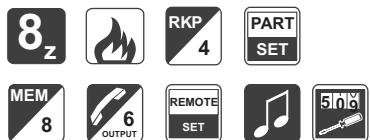
8EP 396 Optima compact G3 panel
with built-in keypad

The above intruder systems are 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.

Engineering information

Features



- 8 zones, all programmable for Security, Fire, 24H Fire, PTS or keyswitch applications
- PA input
- Tamper input
- Outputs for Bell and Strobe
- 4 Access level Codes, User 1, User 2, Engineer and Duress, 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 standard for Accenta panels and Optional for Optima panels
- Option for connection of Lighting controllers
- Options to connect up to four remote keypads / Lighting controllers
- NVM for protection of engineer programme
- 6 digital outputs for a wire-in digital communicator, Red Care STU or dialler
(Not applicable for Optima compact G3 panel)
- Service warning indicator, programmable between 100 and 800 set and unset events
- Battery capacity of up to :
2.1Ah in Accenta/Optima G3 mini enclosure
7Ah in Accenta/Optima G3 enclosure
- Optima G3 and Optima G3 mini are supplied with built in keypad

Features

Accenta/Optima G3 Intruder system

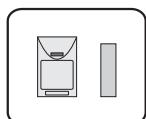
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Accenta/Optima G3 intruder system

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 the follow the procedures and advice contained in this manual.



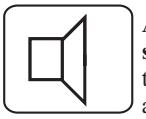
Plan the position of each part of the alarm system and the cable runs. **Detectors** should be sited with particular regard to the degree of coverage required and the function of each of the zones.



All of the system wiring is connected directly to the **panel**. The Accenta 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 Optima panel may be installed near an entry/exit point.



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,

Engineering information

bell/sounders, strobes and detectors to ensure that this rating is not exceeded.



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

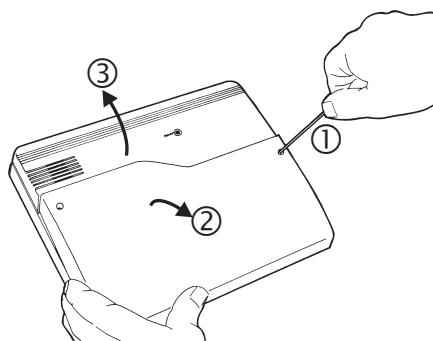
local authority requirements may differ from area to area, therefore, it is advisable to contact local environmental officer to obtain full details of your area requirements.

Fixing

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

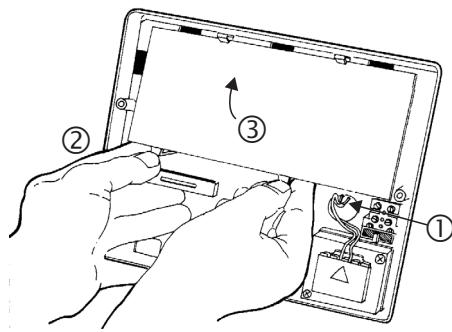
The Accenta mini G3 enclosure is illustrated here, however the procedures for the other panels are similar.

- Remove the front cover(s) from the panel.

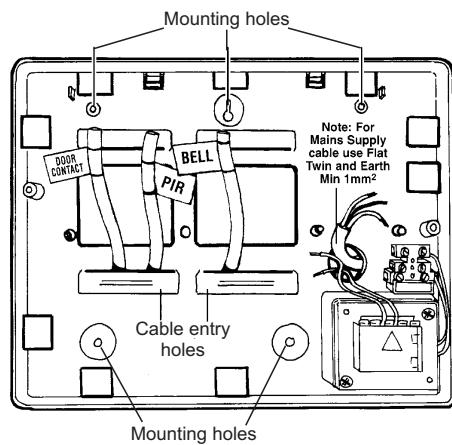


Disconnect the transformer wires from the transformer marked *AC* terminals on the board. Carefully remove the PCB by gently pushing down the holding clips on the bottom edge of the PCB and withdraw it from the base.

Fixing



Note: When replacing the PCB 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.



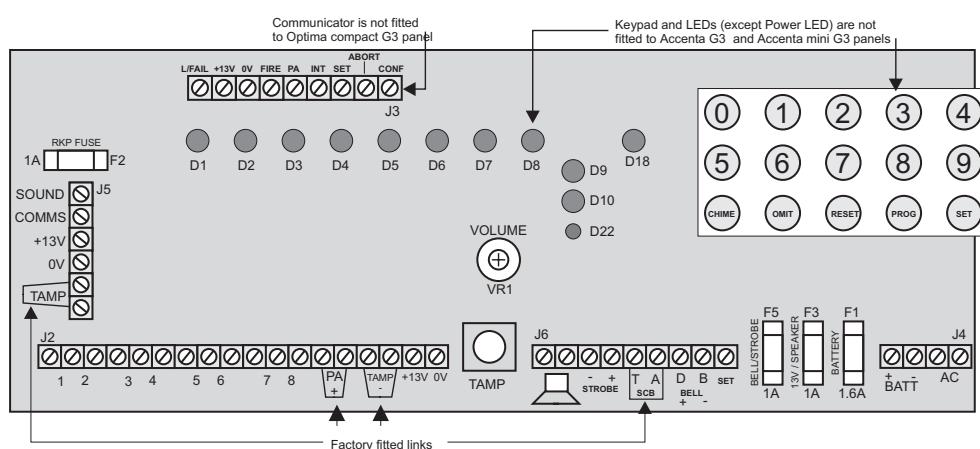
- b. Fit the panel to the wall with suitable fixings. Ensure the wall surface is flat to prevent base distortion. There are cable entry holes provided in the rear of the base and around the outside edges through the thinned out plastic sections which may be cut away as required.
- c. The hole provided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



Accenta/Optima G3 intruder system

Wiring the system

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

Systematically wire and test each circuits.:.

- Zone, Tamper circuit and PA circuits
- Finish by wiring any additional extension speaker sounders, external bell/sounder, 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 bell / sounder tamper. The TAMP terminals at the bottom left of the PCB are for the RKP tampers. Tamper alarms that occur in the Day mode operate internal sounders only. Tamper alarms in Set cause a full alarm condition. Tamper is indicated on the control panel and RKPs by the **Tamper** indicator.

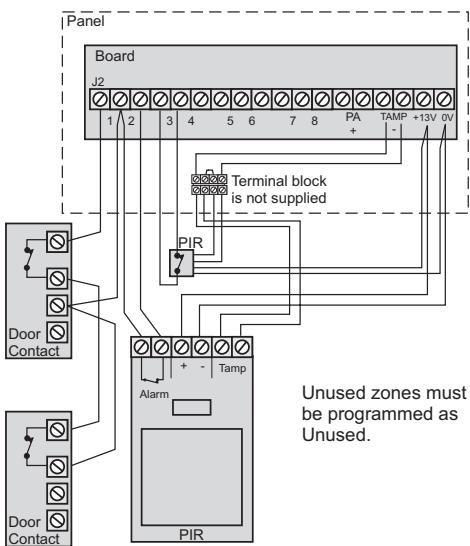
Connect Remote Keypads / Lighting controllers

Note: Where an Accenta G3 or Accenta mini G3 panel is being installed ensure there is at least one remote keypad wired to the panel before first power up.

Engineering information

A combination of up to four remote keypads and lighting controller can be connected to the panel.

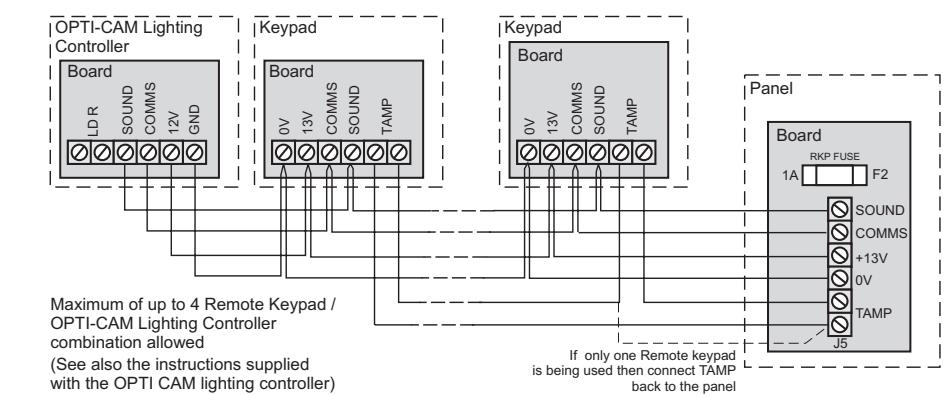
Security zones



Wiring the system

Note: The G3 range of panels are **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 19.

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

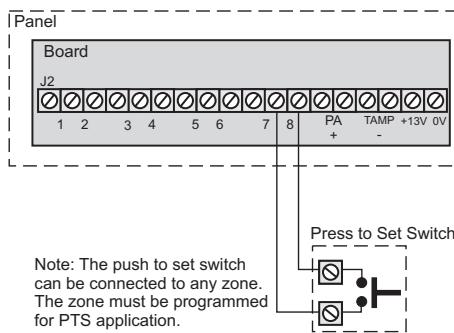


Engineering information

Push to set zone

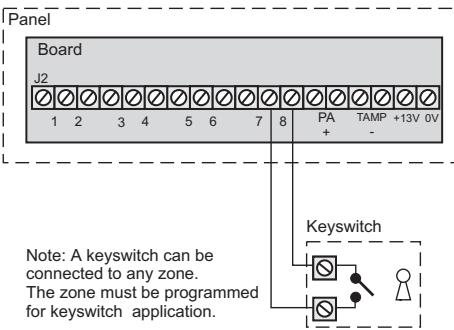
Any zone can be wired and configured as a Push to Set input. This can be a standard door bell push located outside the premises After starting the exit timer the building is vacated. As the switch is then momentarily closed, a chime tone is produced and the system Sets. Sometimes referred to as 'Terminate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

Push to set zone



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.



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

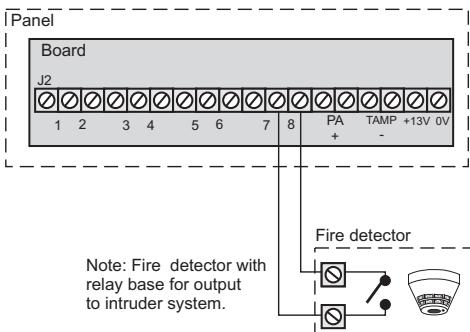
Accenta/Optima G3 Intruder system

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.



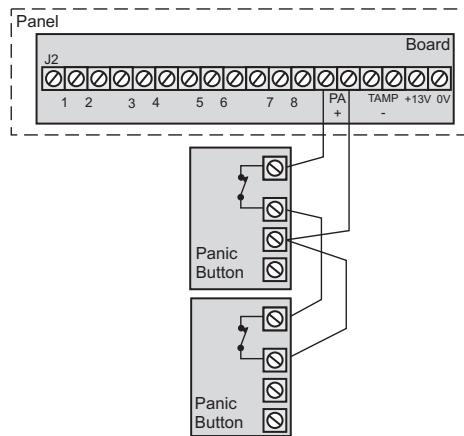
There are two types of fire zone, **Standard** and **24 hour** type. The **Standard fire** zone detects fires only when the system is Set, whereas the **24 hour fire** zone detects fires all the time and will operate whether the system is Set or Unset. A fire will cause a distinctive internal sounder tone. The external sounders 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.

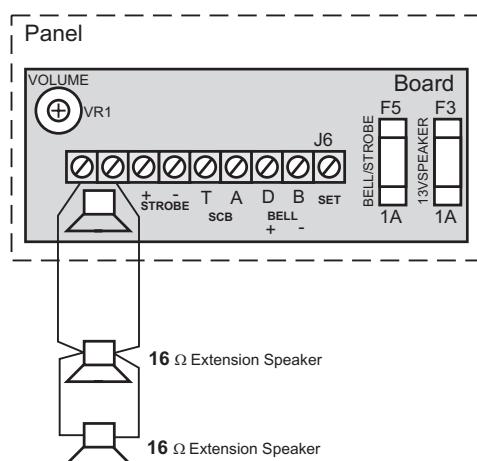
Accenta/Optima G3 intruder system



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.



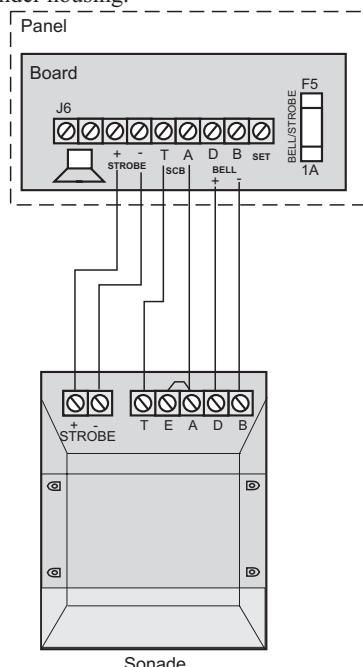
Up to two 16 ohm extension speakers may also be wired across the speaker terminals. Mounted in convenient positions within the installation the extension speakers will reproduce all of the alarm tones generated by the control panel.

Engineering information

A control marked VOLUME in the centre of the PCB may be used to adjust the low volume entry/exit tones to suit environmental conditions. To adjust this control, partially lift up the top cover.

Bell Output (External sounder)

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 bell or sounder. These terminals provide a power/hold-off supply, sounder trigger and tamper circuit to protect the external sounder housing.



Extension speaker

The terminals are summarised as follows:

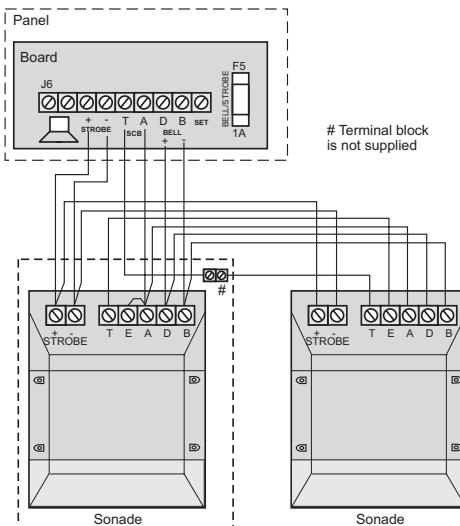
- T - -Ve tamper return
- A - -Ve supply (0V)
- D - +Ve supply (12V)
- B - -Ve Sounder trigger

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

Where a discrete bell sounder is used, it should be connected to terminals D & B. Terminals T &

Engineering information

A are then used for tamper protection for the sounder housing.



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.

Accentra/Optima G3 Intruder system

Remote signalling Input and Outputs

These outputs are not applicable to the Optima compact G3 panel.

These terminals have been provided for connection to remote signalling equipment such as a digital communicator, Red Care STU or speech dialler.

Note: The operating polarity of the Communicator output terminals are programmable.

L/FAIL This is a telephone line fail input which is held at approximately 6V by the panel circuitry. The input is activated when pulled to 0V by the telephone line fault output of the communicator. This is usually a voltage free relay or open collector transistor.

When a telephone line fault occurs in the Day mode the panel provides an audible double beep every 10 minutes. This indication is automatically cleared when the fault is removed.

A telephone line fault which occurs while the system is Set will not cause an alarm condition but any bell delay which is programmed will be cancelled and any intruder alarm which is triggered will operate instant sounders.

13V 0V These terminals provide a 13V supply for the communicator up to a total load of 200mA. The output is protected by a 250mA thermal fuse. If this fuse operates it may be reset by removing the load and allowing a few seconds for it to recover.

OUTPUT PORT By default these outputs are programmed as active low output. They are held at 13V and fall to 0V when active, it can source or sink 10mA. The output polarity can be programmed.

Accentra/Optima G3 intruder system	Engineering information
<p>These outputs would normally be connected directly to the input channels of wire in type communicators and STUs.</p> <p>Alternatively each output can be used to drive a relay(coil resistance > 1200 Ω) connected between the output terminal and the 13V supply terminal. The relay will energise when the output port operates. It is recommended that a back EMF protection diode is used in parallel with the relay coil.</p> <p>FIRE The fire output operates when the fire zone is triggered.</p> <p>PA The PA output operates when a PA alarm is triggered or a duress code is used.</p> <p>INT The intruder output is operated when an intruder condition is triggered whilst the system is set.</p> <p>SET The Set output operates whenever the system becomes set and is used to indicate opening and closing.</p> <p>ABORT Operates when an intruder alarm condition is switched off.</p> <p>CONF The confirmed alarm output operates when 2 independent zones are activated during the same alarm condition.</p> <p>Important Notes</p> <ul style="list-style-type: none"> a. Each output has been configured as active low and will normally require the EPROM or NVM for the communicator or STU to be programmed as active low or positive removed. However there may be differences between some pieces of equipment and some Alarm Receiving Centres (ARCs). b. Where the communicator is powered from an external source, not the panel and the outputs are being used without relays, the panel and external power supply will require a commoned negative supply rail. 	<p>c. If the communicator is not fitted inside the panel and abort is being used, care should be taken to ensure that the abort connection cannot be damaged or severed as this could cause the ARC to incorrectly filter an alarm signal.</p> <p>d. It is very important that communicating systems are fully tested and that all signals are correctly received at the ARC when the system is installed and serviced.</p> <p>Filtering of Intruder alarms</p> <p>A condition of most police Force Policies and under the guidance of NACOSS NACP 14 (Code of Practice for intruder Alarm Systems Signalling to Alarm Receiving Centres) is that all intruder alarm signals received by an Alarm Receiving Centre (ARC) must be filtered to establish their validity before passing to the police.</p> <p>The exact method of filtering should be decided according to the regional Police Force Policy and ARC procedures.</p> <p>In general, the panels offer the following methods which could be used to filter an alarm.</p> <p>Set/Unset A Set or Unset signal which is received by the ARC at around the same time as an intruder signal can be used to filter the alarm.</p> <p>Abort Output The abort output operates whenever a user code is entered or a keyswitch is used to switch off an intruder alarm condition. When an abort signal is received by ARC at or around the same time as an intruder signal, the alarm can be filtered.</p> <p>Restore of the Intruder Output The intruder alarm output is restored to 12V whenever a user code is entered or a keyswitch is used to switch off an intruder alarm condition. Where an intruder alarm is shortly followed by a restore at the ARC, this can be used to filter the alarm.</p>

Factory set condition

User code 1 - - - - - 0123
User code 2 - - - - - Not programmed
Duress Code - - - - - 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- - - - - 30seconds
Entry - - - - - 30seconds
Exit mode - - - - - timed

Program 2

Zone1 - - - - - Timed
Zone 2 - - - - - Time inhibited
Zone 3...8 - - - - - Immediate
Exit time- - - - - 30seconds
Entry time - - - - - 30seconds
Exit mode - - - - - Disabled

Program 3

Zone 1 - - - - - Timed
Zone 2- - - - - Time Inhibited
Zone3...8 - - - - - Immediate
Exit time- - - - - 30seconds
Entry time - - - - - 30seconds
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 bell on Fire - - - - No

Flag B

Note: The entries marked # are not applicable for Optima compact G3 panel.

#Communicator Output
active high - - - - - No (active low)
#Line Fail
active high - - - - - No (active low)
User Reset PA - - - - - No
User Reset Fire - - - - - No
#Program 1 to report - - - - Yes
#Program 2 to report - - - - Yes
#Program 3 to report - - - - Yes
Rearm counter - - - - - 3 (re-arms)
Service counter - - - - - Off
Site Code- - - - - 00

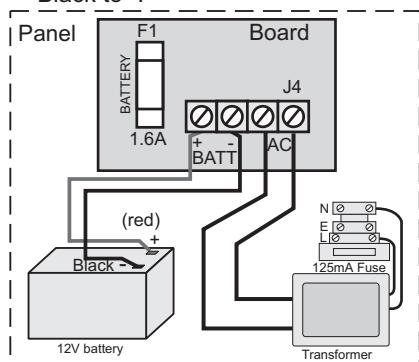
Light Controller

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

Before power up for Optima compact only - fit the top cover on to the base and connect the speaker wires. Leave the cover in position throughout the reset of the installation.

- Check that the factory fitted links are connected to terminals PA, TAMP and T-A.
- Fit the battery wires to the BATT terminals on the PCB, Red to + and Black to -.



- On connecting the battery the system will now go into alarm condition and Tamper is indicated

Tamper and there is an audible indication. **Alarm**.

- Fit the cover to hold down the tamper spring at the bottom centre of the PCB.
- Enter the user code:

(factory set at 0123). The alarm condition will cease and the system will go to Day mode

- Immediately enter the engineer code

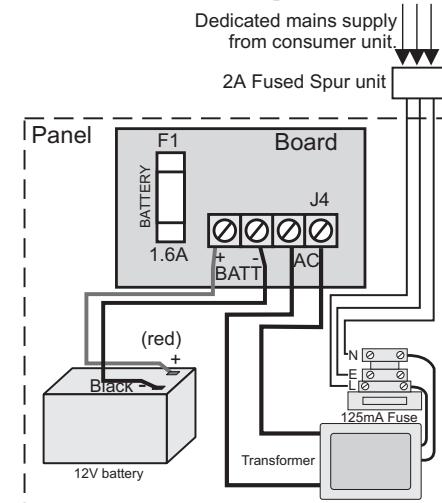
The system is now in *Engineer program mode* and can be programmed. Note the

Tamper Tamper indicator is lit.

Note: The G3 range of panels are **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 19.

Mains Connection

The mains power should be connected using a 3 core cable of not less than 0.75mm 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.



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

CAUTION: 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

Engineering information**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 engineering 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
	ARC Output to Alarm Receiving Centre Communicator outputs are not applicable for Optima compact G3 panel
	Internal sound Sound description NOTE: In general a flat beep is an indication of an incorrect key press.
	External devices Strobe
	Bell

To exit

- Quit the current function
- Leave program menu
- Down one menu level

Accentra/Optima G3 Intruder system**System indications**

Day Power - Unset system indication

Power - Set system indication

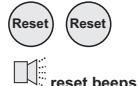
To enter Engineer program mode

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

**To Exit Engineer program mode****To reset panel to Factory set conditions**

CAUTION: All configurations of the panel are restored to factory 'default' conditions.

Within 5 seconds of powering up the panel



Accenta/Optima G3 intruder system

Engineering information

Access Codes

There are four codes used in the system, all are 4 digit 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.

Duress code

Should be used in a hold up situation where there is pressure to Set or Unset the system. Entry of the code will allow the system to work normally but also generate a silent PA type alarm by operating the PA communicator output.

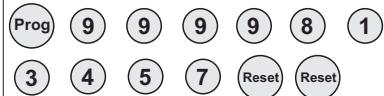
Engineer code

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.

Note: 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:

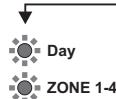


Enter Engineer program mode

⑧ Codes

Attack

- ① Change User code 1
- ② Change User code 2
- ③ Change Duress code
- ⑨ Change Engineer code



Ⓐ Ⓑ Ⓒ Ⓓ 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

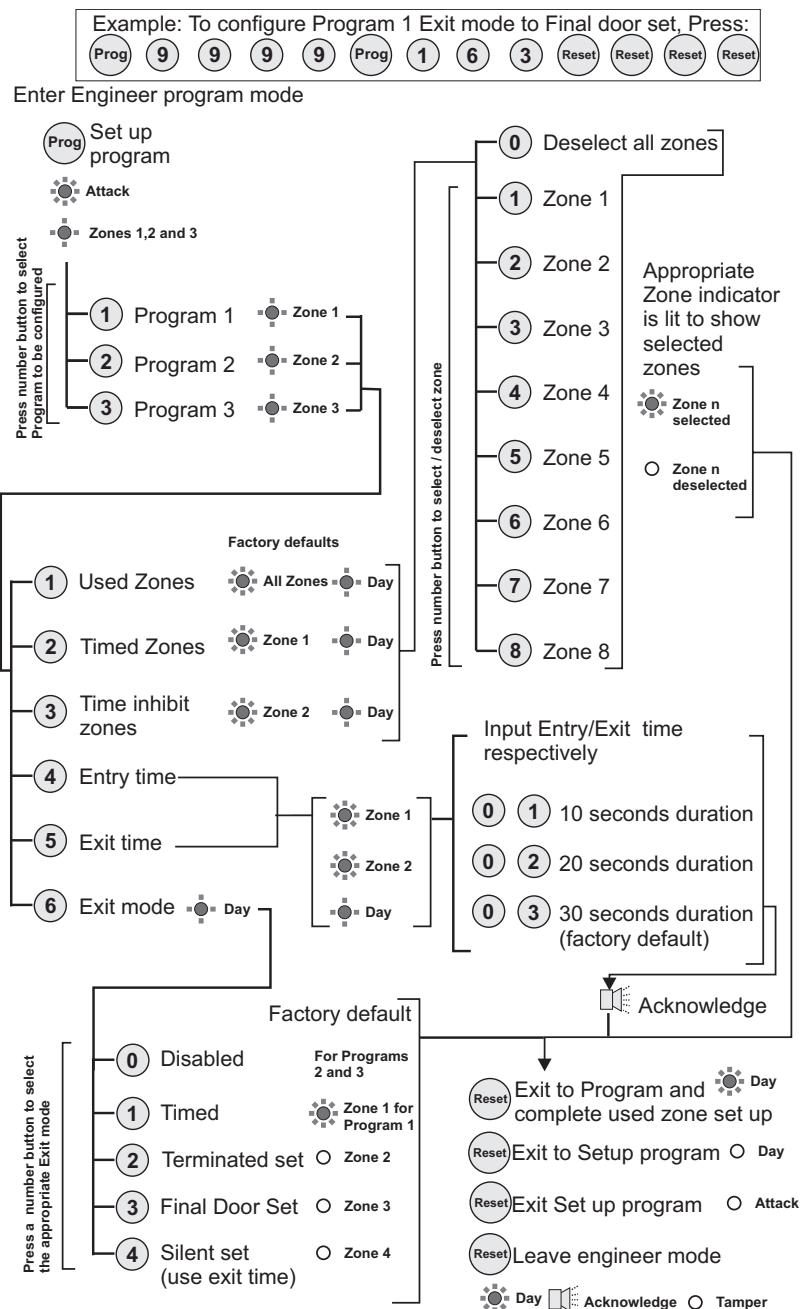
Reset Leave engineer mode

🔇 Day 🔊 Acknowledge ○ Tamper

Access Codes

Engineering information		Accentra/Optima G3 Intruder system
Programs	<h2>Programs</h2> <p>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.</p> <p>The examples below show how 3 typical Programs could be used in a house.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Program 1 : To arm all of the zones and become Set as the user leaves the property and closes the final door. <input type="checkbox"/> Program 2 : To protect the perimeter of the property in the evening and become Set after say 20 seconds. <input type="checkbox"/> Program 3 ; To protect the downstairs areas of the house at night and become Set instantly and silently. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note: The above are purely examples. The installer must program the panel to configure all the circuits to the customer's exact requirements.</p> </div>	<h2>Exit Modes program</h2> <p>Timed A timed Program will become Set as the Exit timer expires.</p> <p>Terminated Set This sets an infinite time out, which will only set once the PTS input is operated.</p> <p>Final Door A final door program will be Set 5 seconds after a timed zone has opened and closed.</p> <p>Silent Set This operates exactly the same as 'Timed' but completely silent without the internal sounder signal.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note: 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.</p> </div>
	<h2>Zone Function per Program</h2> <p>Timed : This function would be used to protect the main entry/exit door of the entry route.</p> <p>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.</p> <p>Immediate: This is a zone which will, when entered, go into alarm when the panel is set.</p> <p>Unused : A zone that is programmed as an Unused zone by the Engineer, then is ignored by the panel. Primarily used for Part set options.</p>	

Programs 1,2 and 3



Programs 1,2 and 3

Alarm and Walk tests

Alarm and Walk tests

Example: To start bell test and thereafter to stop bell test.

Enter Engineer program mode

1 Alarm test



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

- 2 Strobe test Strobe On
 - 3 Bell test Bell on
 - 4 Low volume sounder internal low volume sound
 - 5 High volume sounder internal high volume sound Strobe On
 - 6 Walk test Strobe

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)

Rapid for PA —

Rapid for Tamper —

OFF

Exit current level

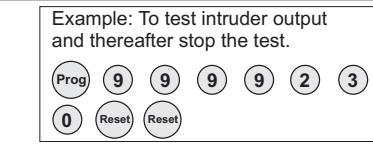
Leave engineer mode

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

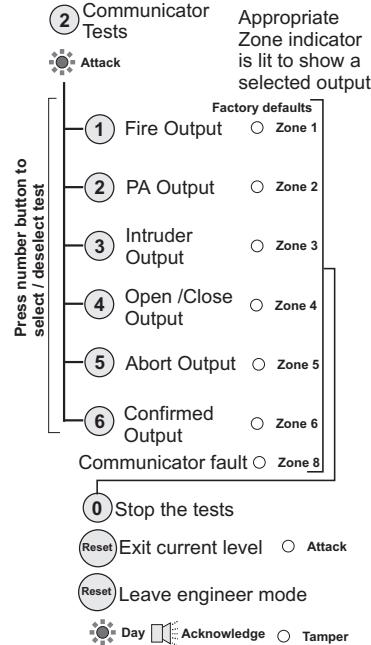
The walk test function allows each detector to be checked in order to verify that they are functioning correctly.

Communicator tests

Note: These tests are not applicable to Optima compact G3 panel.



Enter Engineer program mode



The Zone 8 LED is lit to show there is a communicator line fault.

Flag A descriptions:

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

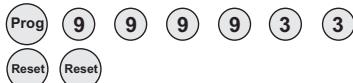
RKP PA Enable: When this flag is set the keypad PA buttons are enabled.

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.

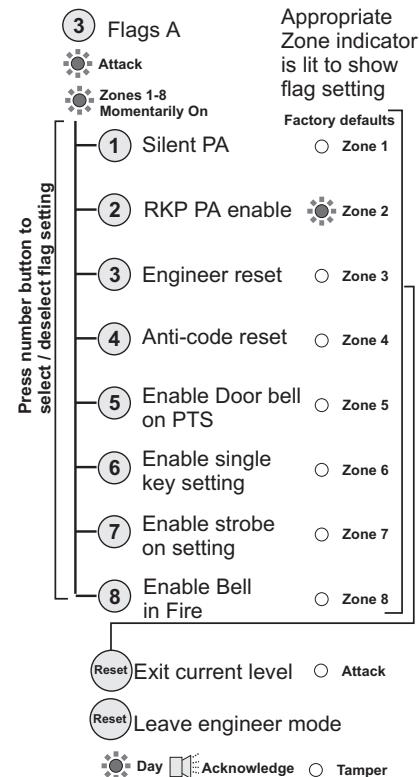
Anti-code Reset: When this flag is set it enables the anti code reset function.

'Flag A' Options

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



Enter Engineer program mode



Communicator tests

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.

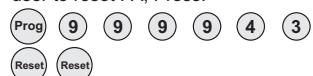
Enable strobe on setting: When this flag is set the external strobe will flash for 3 seconds once the panel has successfully set.

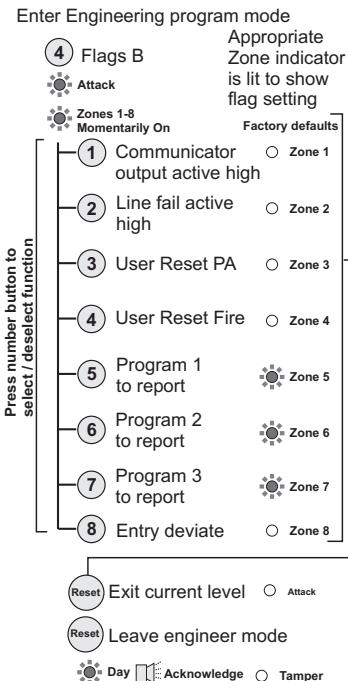
Enable external Fire bell: When this flag is set the system bell will sound 3 seconds On / 3 seconds Off during a fire alarm.

Engineering information

'Flag B' options

Note: The following settings:
Communicator output, Line Fail, Program 1, 2 and 3 to report are not applicable to Optima compact G3 panel.

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




'Flag B' options

Accentra/Optima G3 Intruder system

Viewing the event log

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


Enter Engineer program mode

④ Chime View the event log

○ Tamper
 Automatic event scroll
 Starting from event 1 to 8

To manually scroll

① View event 1 (oldest event)	Zone, PA and Tamper indicators will be lit to show zone in alarm.
② View event 2	Flashing indicates the first zone in alarm.
③ View event 3	Day indicates status of panel at the time of alarm
④ View event 4	
⑤ View event 5	
⑥ View event 6	
⑦ View event 7	
⑧ View event 8 (Newest event)	

④ Chime Resume automatic scroll

④ Reset Stop event scroll / view ● Tamper

Leave engineer mode

● Day  ○ Tamper

Flag B descriptions:

Communicator output active high: When this flag is set it configures the polarity of communicator outputs to active high, that is output is held at 0V rising to 12V in alarm.

Line fail active high: When this flag is set it configures the polarity of line fail input.

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.

Program n to Report: When this flag is set it allows program n to activate the intruder and confirmed outputs. (Main use is to prevent a night time program from communicating).

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

Zone Type

The G3 range of panels are **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:

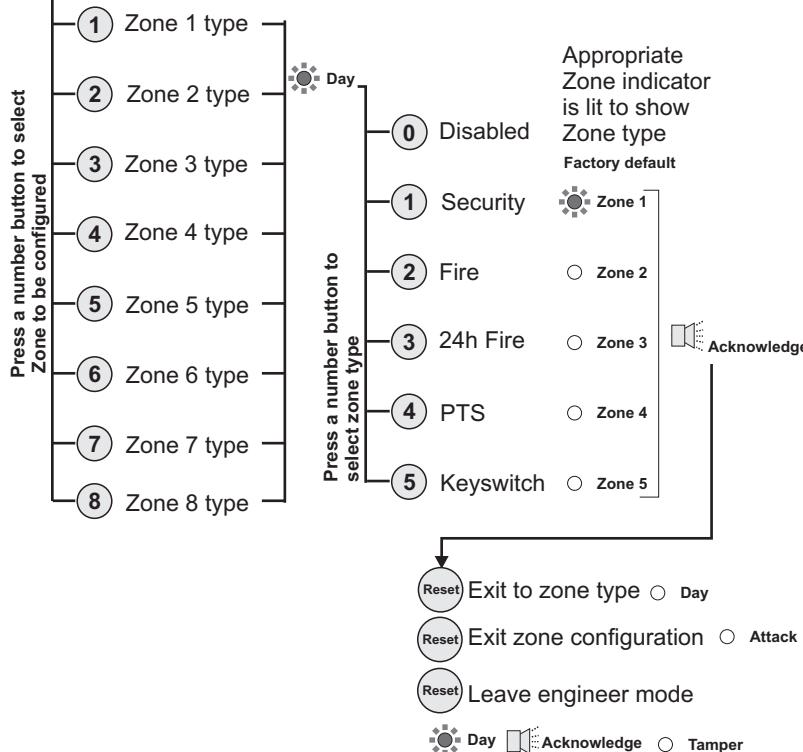
Prog **9** **9** **9** **9** **5** **8** **0** **Reset** **Reset** **Reset**

Enter Engineer program mode

5 Zone Configuration



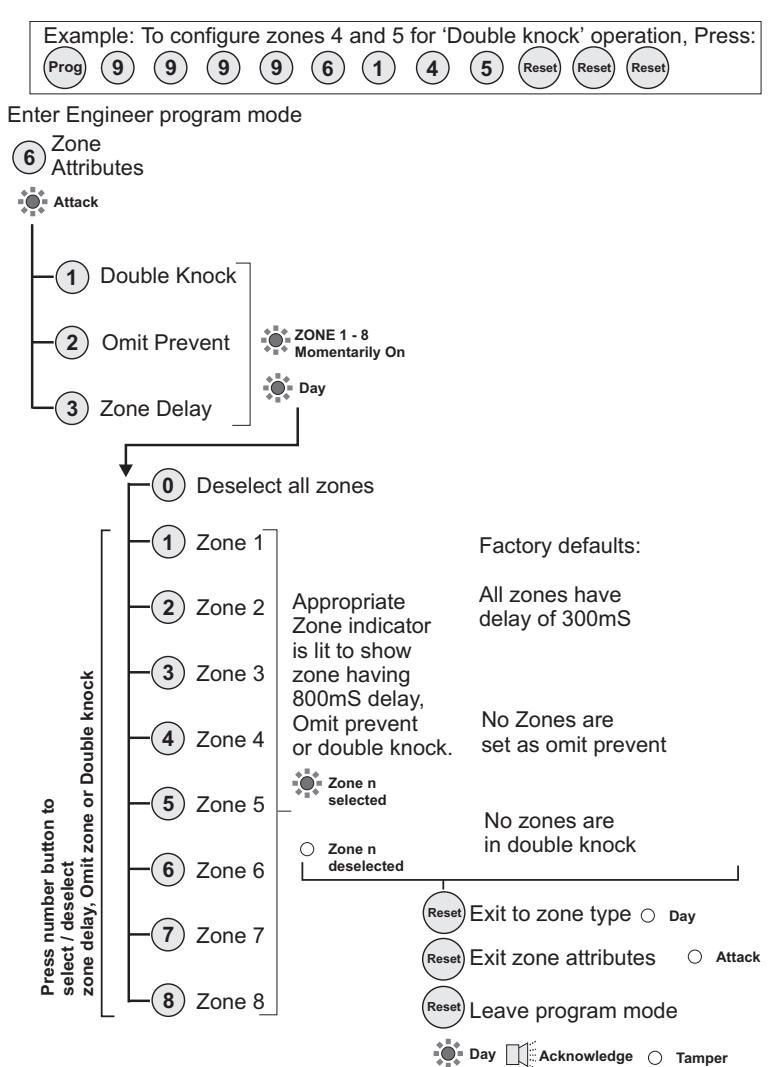
All Zones



Zone Type

Zone Attributes

Zone Attributes



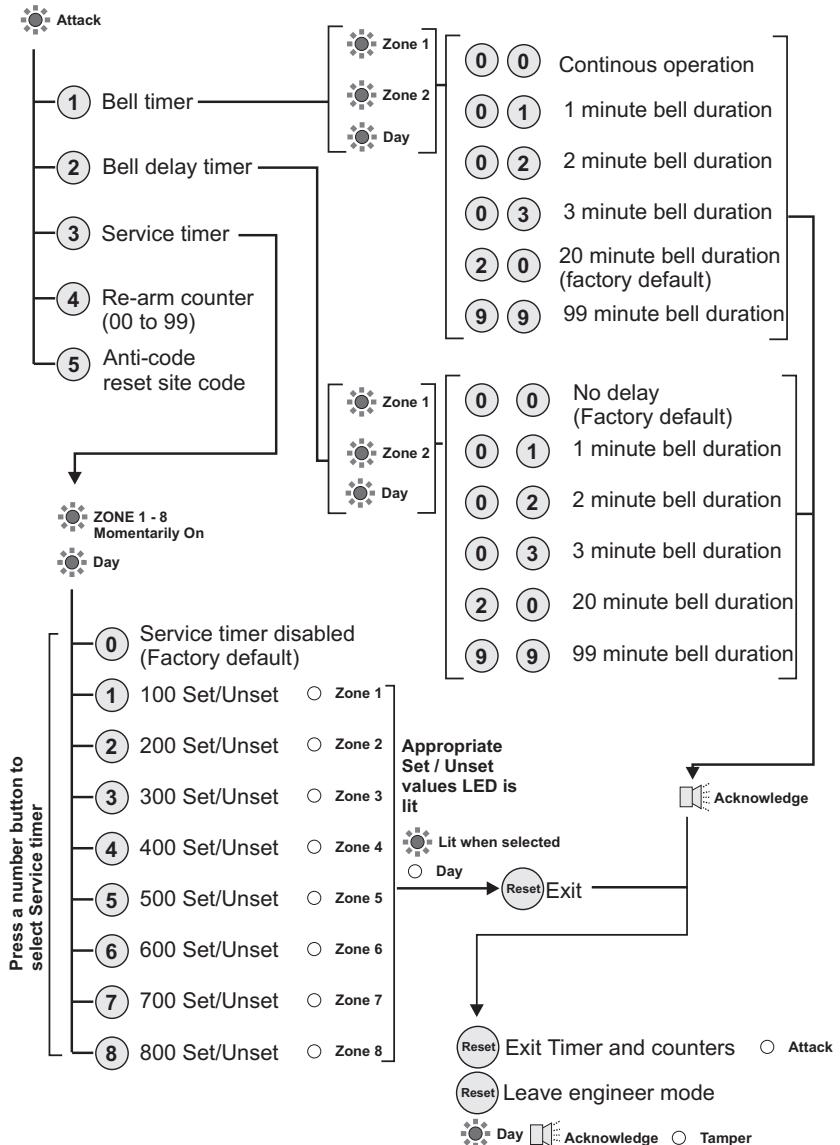
Bell and Service Timers

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

Prog 9 9 9 9 7 1 1 0 Reset Reset

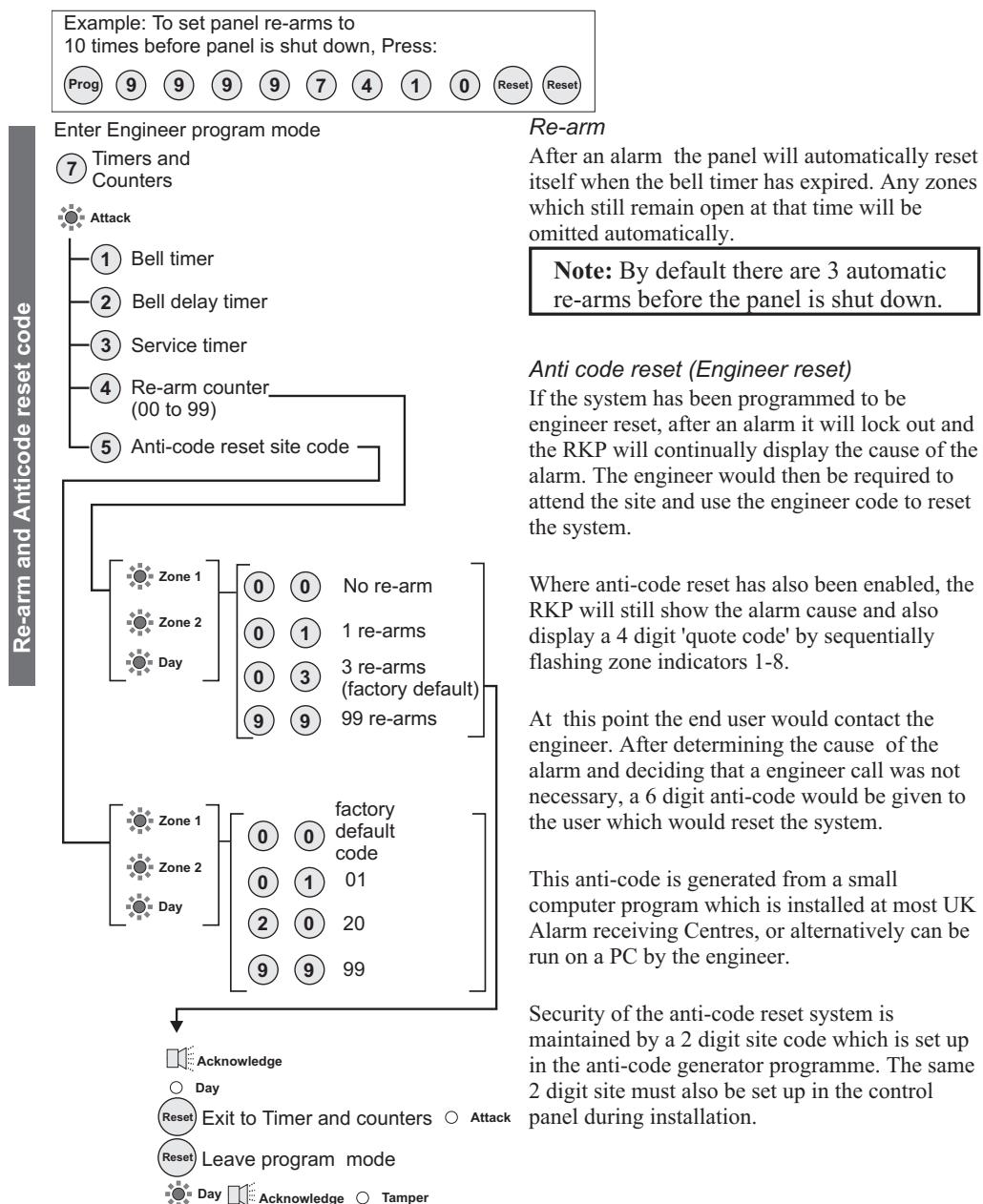
Enter Engineer program mode

7 Timers and Counters



Bell and Service Timers

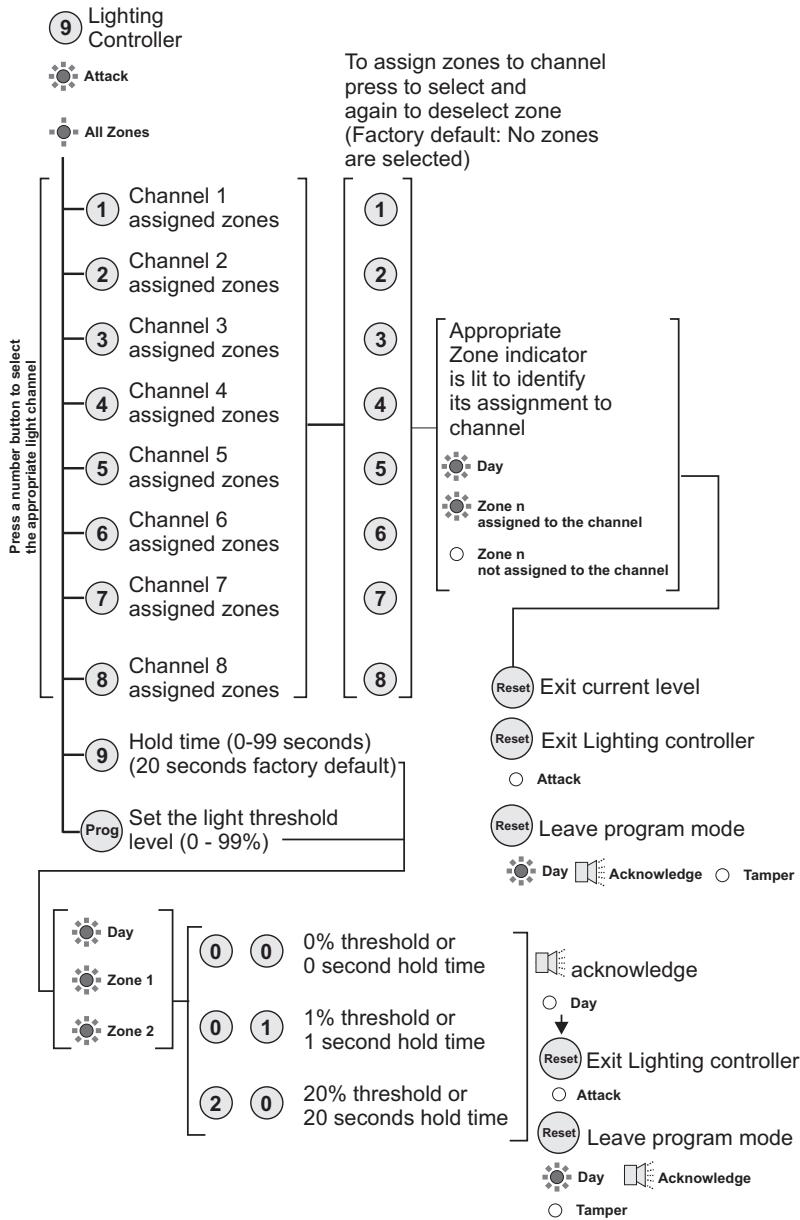
Re-arm and Anticode reset code



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



Engineering information

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.

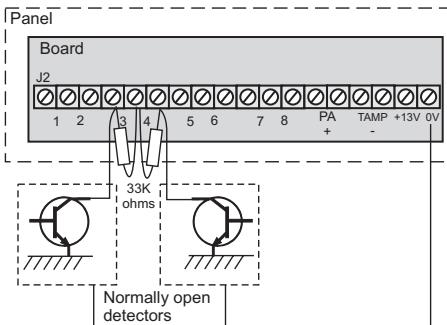
- a. As supplied the user code is 0123 and the engineer code is 9999. Both codes will revert back to these default settings on clearing the NVM.
- b. The Engineer Program is accessed directly from Day mode via the engineer code.
- c. If a tamper, PA or 24Hr fire fault is present on the system, it will 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 PCB. Refit the 4-links and test the system. Never fit links to any positions other than those marked on the PCB.

Faults

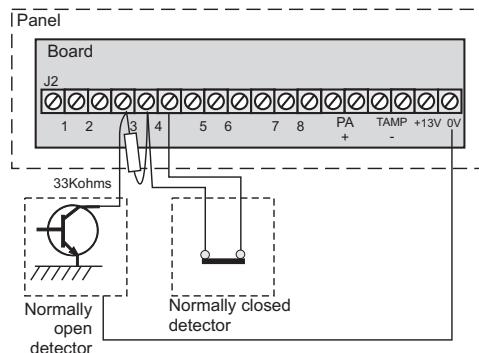
Accentra/Optima G3 Intruder system

- 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 bell supply (terminal D).
- h. 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.
- i. Where normally open detectors are connected to adjacent zones two pull-up resistors (not supplied) of value 33kohms must be installed.

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

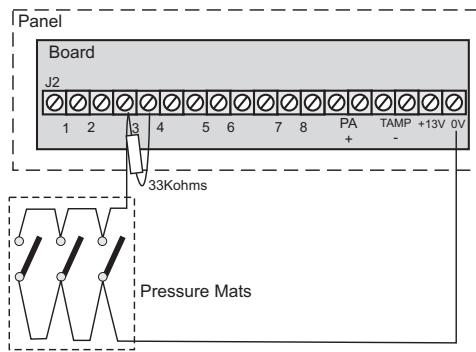


The example below shows how to wire normally open detector on zones 3 and a normally closed detector on zone 4.



Accenta/Optima G3 intruder system

- j. 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.



Engineering information

Current consumption RKP	Standby 40mA Alarm 70mA
Low voltage output	13.8V dc stabilised (+/- 5%) up to 350mA
Rechargeable Battery	Accenta/Optima G3 mini/compact - 12V, 1.2 or 2.1Ah
Charge Voltage	Accenta/Optima G3 - 12V, up to 7Ah
PCB Fuses	13.8V dc (+/-5%)
Mains Input fuse	1.6A & 1A 20mm quick blow
Total Current Output	125mA, 250V type T (anti-surge) type approved to IEC 127, part 2 sheet III
Mains Supply Voltage	1Amp when supported by a fully charged battery
Total Current Output	230V (+/-10%) 50Hz max load 0.2A
Mains Supply Voltage	1Amp when supported by a fully charged battery

Specification

Specification

Indicators on Control panel or 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
Bell Output	12V, adjustable timer (1-99 mins) or continuous
Strobe Output	12V latching
Extension Speaker	16 ohms (2 maximum) 130mA each
Exit/Entry timers seconds	Programmable (10-990 seconds)
Zone Input Delay	300 or 800mS
Set +ve Output	0V in Day (sinking 40mA)
Current Consumption Control panel	Standby 80mA Alarm 250mA

Specification

Engineering information		Accentra/Optima G3 Intruder system	
Index		F	Push to Set 6,10 wire links. 4
I		Factory set conditions 10,12 Faults 24 Final door set. . . 14,15 Fire zone 6,19 Flag A 17 Flag B 18 Full Set. 14 Fuses 4,24	Q Quick set 2 quote code 22
A	13V Supply . . . 8 24 hour fire zone . 2,6,10,19 3 Part Set 14	H Hold time. 23	R Re-arm 22 Rearm counter . . 10 Red Care STU . . 2,8 Remote keypad . . 2,5 Remote keyswitch 6 RKP 3,10,25 RKP PA enable. . 17
B	AC terminals . . . 3 Access Codes. . . 13 Alarm test 16 Anti Code Reset . 10,17,22 ARC 9	I Immediate zone . 14	S Security Zones . . 5,10,19 Service counter. . 10 Service timer . . . 21 Set 8
C	Battery 11,25 Bell Delay 10 Bell Duration . . 10 Bell in fire 17 Bell Output 7,25 Bell timer. 21 Board. 4 BS 4737 1986/87. 1	K Keyswitch zone . 10,19	Set system 12 Silent PA 10,17 Silent Set. 14,15 Single key setting 10,17 Site Code. 10 Speakers 3 Specification . . . 25,26 Standard Fire zone 6,10 Strobe on setting . 10,17
D	Charge Voltage. . 25 Chime 2 Codes. 2 Communicator . . 17 Communicator Outputs 8,10 Current Consumption 25	L light channel . . . 23 Light Hold Time . 10 Light threshold . . 10,23 Lighting controller 2,10,23 Line Fail 10 Local Authorit . . 3	T T A D B 7 Tamper 25 Tamper fault . . . 24 Tamper network . 6 Terminated Set . . 6,14,15 Time inhibited zone 14,15 Timed. 14 Timed exit 15 Timed zones 15 Total current . . . 3
E	Day mode 11 Detectors 3 Dimensions. 25 Door bell 10,17 Double knock . . . 10,20 Duress Code 10,13	M Mains. 11,25 Managers code . . 13	U Unset system 12 Unused zone 14,15 User code 1 10 User 1 2 User 1 and 2 codes 13 User 2 2 User code 2. 10 User reset fire . . . 10,18 User reset PA. . . . 10,18
P	Omit prevent . . . 10,20 Operating temperature 25	N NACOSS 6,9 NACP 14. 9 Normally closed detectors 24 Normally open detector 24 NVM 2,9	V Volume. 7
R	PA 2,6,25 PA fault. 24 PCB Fuses 25 Pressure mats. . . 25 Program 1 10,14 Program 1 to report10,18 Program 2 10,14 Program 2 to report10,18 Program 3 10,14 Program 3 to report10,18 Programs 1,2 and 315 PTS zone 2,19	W Walk Test 2,16	

Accenta/Optima G3 intruder system **Engineering information**

Servicing organisation Details

Servicing organisation name:

Telephone number:

Date of installation:

Account Number:

Parts

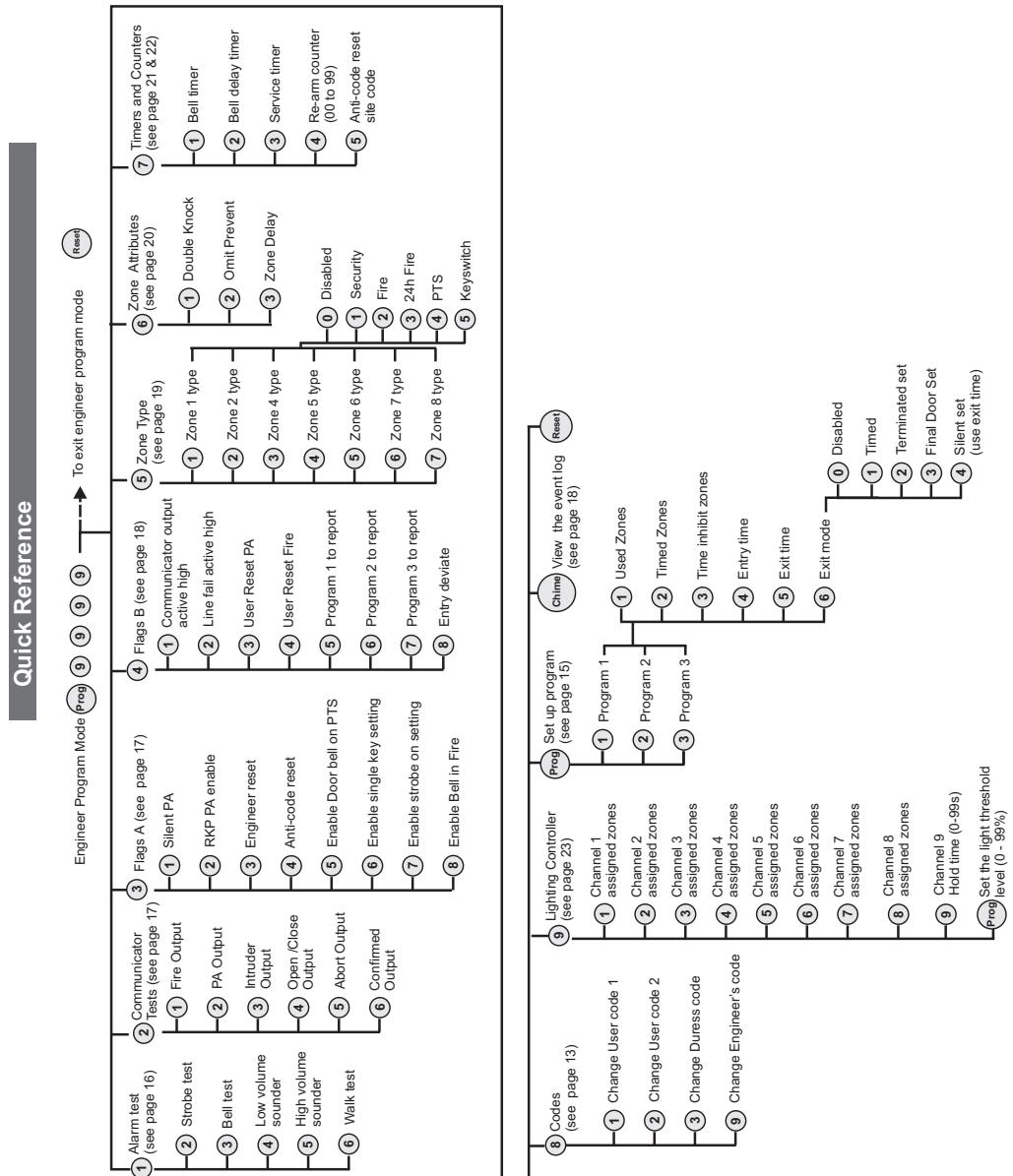
Below is a list of approved parts and accessories.

8SP 401 Accenta G3 panel
8SP 400 Accenta mini G3 panel
8EP 395 Optima G3
8EP 396 Optima compact G3 panel
8EP 219 Accenta LED RKP
8EP 332 Accenta LCD RKP
8EP 336 Accenta Speech Dialler
8EP 276 Informa
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		

Servicing organisation Details

Quick Reference



CE

The panels conform to the requirements of the European EMC and Low Voltage directives, and carries the CE mark

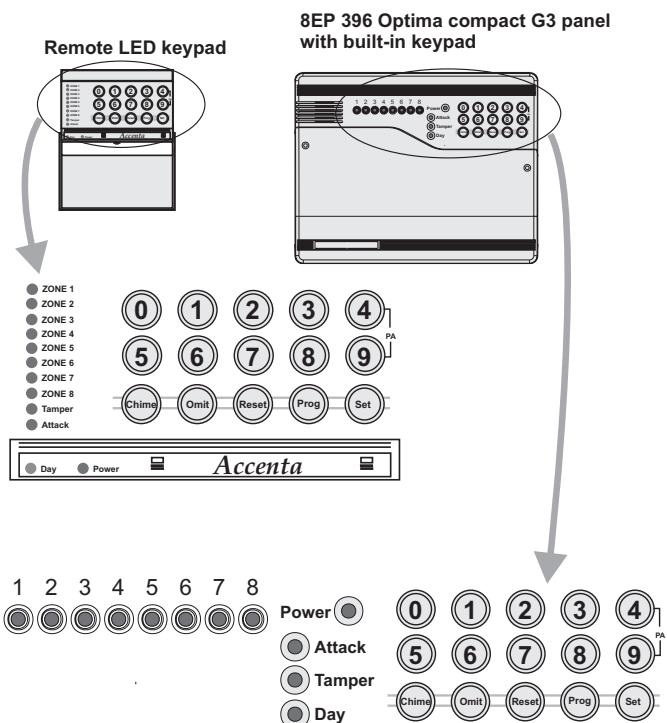
For Technical Support
 : 0151 549 1550



: 0151 549 1550

Intruder alarm system

Operating Instructions



These operating instructions cover the following intruder system:

- 8SP 401 Accenta G3 panel with remote LED keypad
- 8SP 400 Accenta mini G3 panel with remote LED keypad
- 8EP 395 Optima G3 panel with built in keypad
- 8EP 396 Optima compact G3 panel with built in keypad

For Clarity, the information given on setting the system, assume that all Programs use a timed or final door setting routine.

Unset system indications

Unset system indications

An unset system will have both Day and Power indicators lit. This is a normal indication when the system is disarmed.

Note: If the Power indicator goes off at any time then there is a mains supply failure at the security panel, consult your servicing organisation.

Key

- LED steady On indication
- LED flashing indication
- LED Off
- ARC Output to Alarm Receiving Centre Communicator outputs are not applicable for Optima compact G3 panel
- Internal sound
- Sound description
- NOTE: In general a flat beep is an indication of an incorrect key press.

External devices

- Strobe
- Bell

Set System indication

An active 'Set' system will have only the Power indicator lit. This is an armed system indication.

Operating instructions

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Set System indication	- - - - -	1
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Access codes

There are two User codes used in the system, all are 4 digit and can be set to any number from 0000 to 9999, signified by:



The user 1 and 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.

- User 1 code - 0123 factory set
- User 2 code - not programmed.

How to operate Personal Attack

Personal Attack buttons on the keypad are used to activate the alarm, irrespective of whether the system is armed or not.

Press Simultaneously:



Accentra/Optima G3 Intruder system

How to unset system in alarm

Enter your code. Entering the code will turn the alarm off and the cause of the alarm will be displayed. After investigation press Reset to clear the indication.



● FIRST ZONE IN ALARM

● OTHER ZONES IN ALARM

Investigate the Alarm



Note: If the alarm indication does not clear, then the system may need to be reset by the installation engineer, contact you installer for further information.

Programs 1, 2 and 3

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 silently.

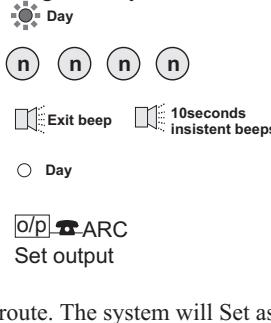
The above are purely examples. The installer has the ability at the programming stage to configure all the circuits to the customer's exact requirements.

Accenta/Optima G3 intruder system

Operating instructions

How to set the system (on program 1)

The green Day indicator should be showing.



route. The system will Set as the beep tone stops.

Push to Set Switch

In some systems a Push to Set switch may be fitted outside the premises near to the main exit door. This should be used to complete the setting procedure once the building has been vacated. As the switch is operated, the exit beep tone will stop and a chime tone will be produced to acknowledge setting.

Keyswitch Set

Your system may have been fitted with a remote keyswitch. This can be used as an alternative to arming the system with a code and will set Program 1.

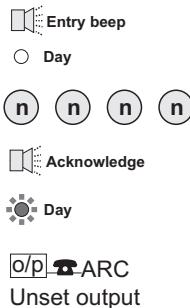
Where a keyswitch is used it may be necessary on occasions to allow it to catch up with the system. For example if the alarm was set with a code, to Unset with the keyswitch, it would have to be momentarily turned to Set then returned to Unset.

Faults during setting

If the system is not clear when you try to Set it, the sounder will produce an open zone tone and the fault will be displayed. Either re-enter your code to turn off and investigate or omit the faulty zone(s) from the system.

How to unset the system (turn off)

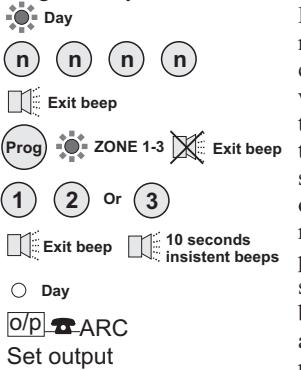
On entering the premises an entry beep tone comes on. Enter your code, the green Day indicator is lit. The system is unset and disarmed.



How to set the system (on program 1)

How to set program 1,2 or 3

The green Day indicator should be showing.



The exit beep tone will start and you should leave by the approved route. The system will Set as the beep tone stops.

It is important that you follow the correct procedure when setting the system. After leaving the protected area it is absolutely essential that you wait until the exit tone stops, before assuming the system has set.

Operating instructions

How to Quick set

During the exit period (on entering User code) the system may be Set quickly by pressing Set. This removes the exit time period.



5 seconds
insistent beeps

○ Day

[o/p] ARC

Set output

How to Omit zone(s) on setting system

During the exit period after entering User code and selecting a program press OMIT, the exit tone will stop and zones that are about to be armed will be displayed. Key in the zone number(s) to be omitted which will flash to confirm selection. Zone indicators which show steady are still about to be armed. When the selection is complete press Set and the exit tone will start.

If a zone refuses to be omitted, it may be because the engineer has programmed the panel to prevent you from turning off the zone. If in doubt ask your installer for advice.

Fire Alarm

The fire zone will operate on detection of a fire, whether the system is Set or Unset, when configured as a 24 hour zone, and cause a distinctive internal sounder tone. The external sounders will pulse on and off at 2 second intervals and all keypad indicators will flash to attract attention.

How to Quick set

Accentra/Optima G3 Intruder system

How to set Chime Zones

Example: To set zone 3 and 4 to chime, Press:

Chime 3 4 Reset



Chime Timeout after 5 seconds if no selection is made



0 Deselect all zones (Factory default - no chime)

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 Chime

Appropriate Zone indicator is lit to show chime zone(s)

Zone n Chime selected

Zone n Chime deselected

Reset Leave chime mode



Chime is a low security monitoring system for use when the system is Unset. When a zone that is set to chime is operated, the internal sounder will produce a low volume two stage warning tone and the Zone indicator will show. The indicator may be cancelled by pressing Reset.

Chime is particularly useful in a shop to warn of a customer presence or in a house to warn that a door or particular area has been accessed.

Any zone may set to be on or off chime by pressing the CHIME key and then keying in the required zone number(s). Key 0 to cancel all zones from chime. After a few seconds the system will automatically return to the Day mode.

Operator's Program mode

The information below shows the programmable options available and how to change them.

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

Note: When programming the system should be in the Day mode, with the Day and Power indicators lit.

To exit operation at any time

On pressing the Reset key you will quit the current level of operation.

-  Quit the current function
- Leave Engineering menu
- Down one menu level

How to enter Operator's program mode

To enter the Operator's program mode the system should be in Day mode with the Day and Power indicator lit.

-   ZONE 1 - 8 Momentarily On
-    
- 

 Tamper  Day

How to view the event log

The panel can hold up to 8 previous events which can be scrolled automatically or manually. The automatic scroll starts with the newest event (number 8) to the oldest one (number 1).

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

-      
- 

Enter Operator's program mode

 View the event log

 Tamper

Automatic event scroll
Starting from event 1 to 8

To manually scroll

-  View event 1 (oldest event)
-  View event 2
-  View event 3
-  View event 4
-  View event 5
-  View event 6
-  View event 7
-  View event 8 (Newest event)
-  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

 Stop event scroll / view  Tamper

Leave program mode

 Day  Acknowledge  Tamper

Operating instructions

How to create/omit User 2 code

User 1 code which is usually considered to be

Example: To create user 2 code 4567, Press:

Prog	0	1	2	3	7
4	5	6	7	Reset	

the Managers code has the authority to add, change or delete the user 2 code.

How to create/omit User 2 code

Enter Operator's program mode

(7) Change / omit User code 2
(By user 1 only)

Attack

ZONE 1-4

New code

NOTE - The sounder will produce a flat beep if code is rejected.

Or

To omit the user 2 code

Rising beeps

ZONE 1-4 Attack

Leave program mode

Day Acknowledge Tamper

How to change current user code

You can change the current user 1 or user 2 code for security reason.

Example: To change user 1 code from 0123 to 7777, Press:

Prog	0	1	2	3	8
7	7	7	7	Reset	

Enter Operator's program mode

(8) Change the code of Current user (either User 1 or User 2)

Attack

ZONE 1-4

Current user new code

NOTE - The sounder will produce a flat beep if code is rejected.

Rising beeps

ZONE 1-4

NOTE - Factory default code for User 2 is not programmed

Attack

Leave program mode

Day Acknowledge Tamper

Accentra/Optima G3 Intruder system

How to create/change/omit the Duress code

The Duress code is used in a hold up situation where there is pressure to Set or Unset the system. Entry of the code will allow the system to work normally but also generate a silent PA type alarm by operating the PA communicator output. The duress code is not preprogrammed and can be created.

Example: To create duress 5555, Press:

Prog	0	1	2	3	9
5	5	5	5	Reset	

Enter Operator's program mode

(9) Change / Omit the Duress Code (By user 1 only)

Attack

ZONE 1-4

New duress code

Rising beeps

ZONE 1-4

Attack

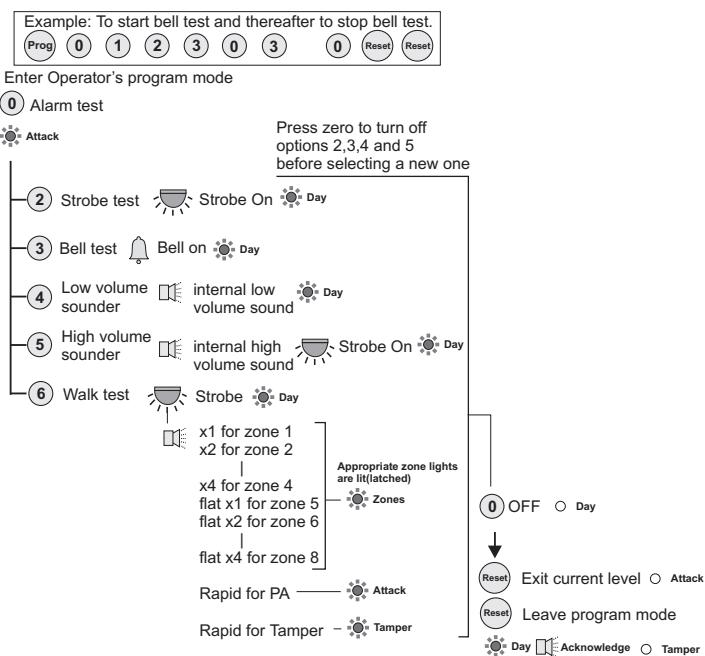
Leave program mode

Day Acknowledge Tamper

How to carry out Alarm and Walk tests

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.



How to carry out Alarm and Walk tests

Servicing organisation details

Servicing organisation name:

Telephone number:

Date of installation:

Account Number:

Installation Date:

Bell Time: _____

Bell delay: _____

Area protected	Program 1	Program 2	Program 3
Zone 1			
Zone 2			
Zone 3			
Zone 4			
Zone 5			
Zone 6			
Zone 7			
Zone 8			

T = Timed (Entry/Exit - Zone)

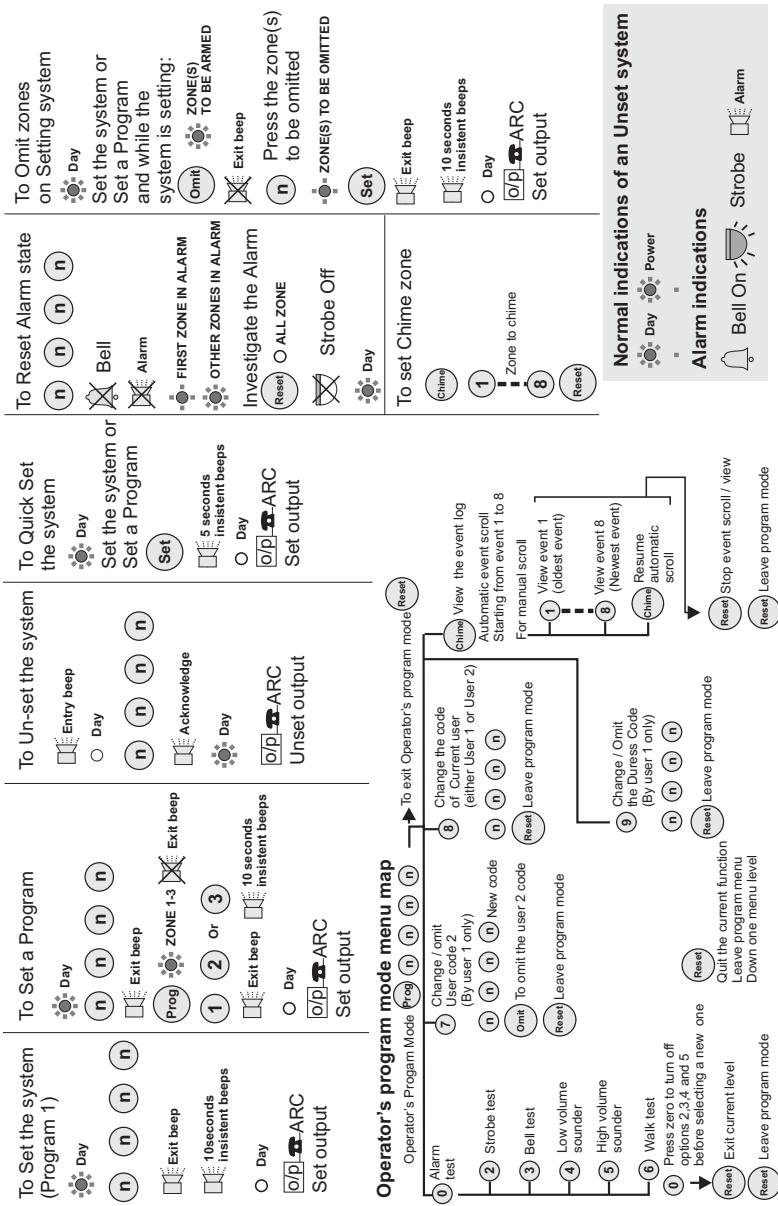
TI = Time Inhibited (Access zone to keypad)

I = Immediate (All zones armed to give full alarm)

Operating instructions

Accenta/Optima G3 Intruder system

Quick Reference



The panels conform to the requirements of the European EMC and Low Voltage directives, and carries the CE mark