Microprocessor Intruder Alarm System

User Guide

Glossary of Terms

Access Code	User private code (4 Digit) used to set, unset and programme the system.
Automatic Signalling Device	An optional automatic dialling unit fitted within the alarm control unit and connected via your telephone line to your alarm company central station.
Bell-Walk Test	A routine test of all alarm detectors and warning devices.
Chime (optional)	Opening a zone programmed as Chime will cause the internal speaker(s) to emit a warning tone (programmed by the engineer).
Day State	Normal unset system condition.
Deferred Set	System function (programmed by engineer), which (optional) delays the system setting when on 'Part Set' if a zone is opened during exit time.
Duress	Applicable only when a remote signalling device is fitted. Duress code entered at the keypad will unset the system but transmit a 'Duress' code to the alarm company central station.
Entry Time	A preset time delay to allow the user to reach the control panel and unset the system.
Exit Time	A preset time delay to allow the user time to leave the premises after setting.
Exit Terminator	A push button located on the outside of the premises (optional) which is used to finally set the system.
Event Log	The system memory which stores a record of alarm events.
Final Door	The last door closed by the user on exit.
Instant Set	A system function (programmed by the engineer) which over-rides the exit time when the user is remaining on the premises with the system Part Set.
LED	(Light Emitting Diode) indicator or display.
Non-Omit	An alarm circuit which cannot be omitted by the user.
Numeric Keypad	Part of the operator panel comprising number keys.
Omit	Intentionally setting the system with alarm zone(s) not included. Only zones programmed by the engineer for 'Omit Enable' can be omitted.
PA	(Panic Alarm). Emergency buttons used to set off the alarm. Will result in instantaneous transmission of alarm signal if remote signalling is fitted.
Part Set	To set only part of the alarm system.
Programme	To select the system functions or options.
Set	To arm the system.
Unset	To disarm the system.
Valid Code	A user code which has been programmed to be accepted by the system.
24Hr Circuit	An alarm circuit which has been programmed to be armed continuously whether the system is set or not.

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1 Introduction

The 9800 Electronic Intruder Alarm system uses the latest microprocessor technology to provide a simple to operate, yet highly flexible system, suitable for a wide range of small to medium sized protection applications.

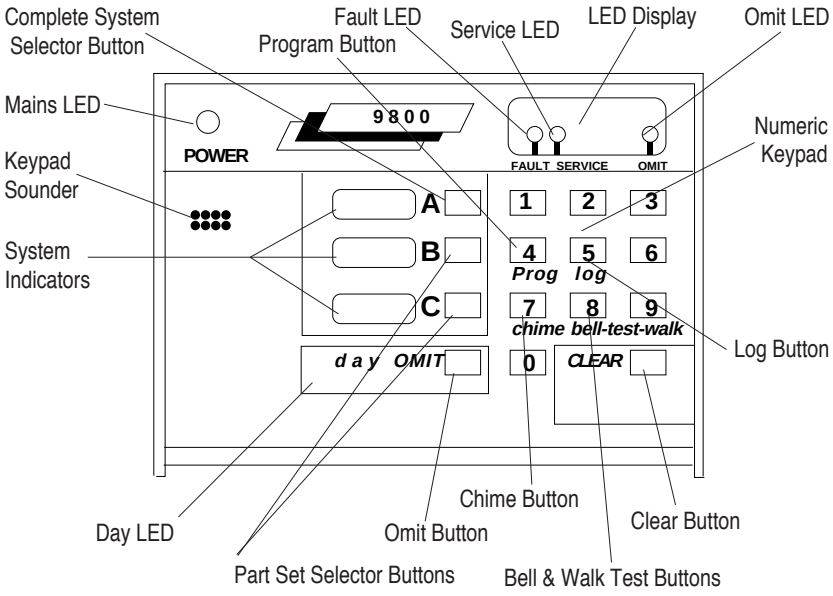
The system comprises a main control unit, housing the system control printed circuit board and power supplies. Up to four remote keypads can be connected to the system. The main control unit is normally located out of sight and the keypad(s) fitted at appropriate locations within the premises.

The keypad(s) provide the operator with the facility to set and unset the sytem and to programme the various operator functions described in this manual.

The system keypads are provided with a two digit LED display providing the user with a coded description of the system status and any system error messages. A full list and explanation of keypad codes is provided at the back of this manual.

Your system will have been programmed by the engineer on installation to permit certain functions, e.g., Chime and Omit Enable. The eight available alarm circuits will have been allocated, together with the zone allocation for Part Set ‘B’ and ‘C’. A full description of your system is provided at the back of this manual.

Operator Controls and Displays 2



Operator Codes 3

Setting, unsetting and access to the system functions are normally inhibited unless a four digit security code is entered via the remote keypad.

The system is designed to recognise up to four different security codes which may be changed by the user at any time.

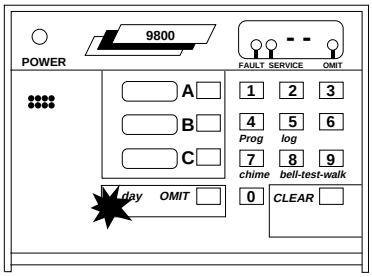
An optional keyswitch may be fitted to your system. While this facility permits the keyholder to set and unset the system without entering a code at the operator keypad, it does not permit access to the other system functions.

Each time the user enters a code at the keypad, the user code is recorded in the system event memory.

4 Normal Setting

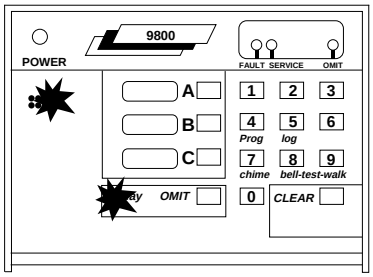
Ensure that all doors and windows are secure, check that movement detectors are not obstructed and proceed as follows:

(a)



Enter access code.

(b)



Press ‘A’. Sounder emits a continuous tone. ‘A’ indicator flashes during exit time and remains on when set.

(c) Leave the premises by the prescribed exit route. System will set when final door is closed or on expiry of exit timer, or, where applicable, on locking the final door, or pressing the exit terminator.

5 Final or Timed Setting

The alarm system will normally set after satisfactory completion of the setting procedure and on closing the final door on exit. However, where the user is remaining on the premises with the alarm set, the system will automatically set on expiry of the exit timer.

In some installations, the system will not set unless the final door is locked or an exit terminator button is pressed.

INSTANT SETTING
In certain circumstances, where an exit route is not required, your alarm system may have been programmed at installation for ‘Instant Setting’.

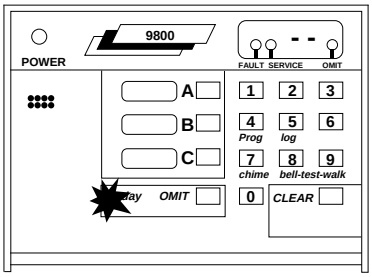
Instant Setting applies only when the system is Part Set. Where Instant Setting is programmed, the selected part of the system will set immediately unless an alarm zone has been left open. (See Part Setting procedure.)

Setting With Zones Open

6

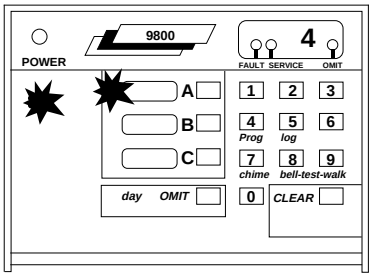
Should the user attempt to set the system with one or more zones open, the system will not set. The internal sounder will emit an interrupted tone and the LED display will indicate the open zone, proceed as follows:

(a)



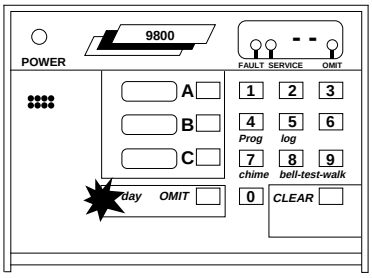
Enter access code.

(b)



Press ‘A’. Open zone displayed. ‘A’ indicator flashes. Sounder emits intermittent tone.

(c)



Enter access code. System returns to ‘Day’ state. Close open zone.

(d)

Reset the system. If no other zones are open, the system will set. If other zones are displayed, repeat steps (a) to (c).
If unable to set call engineer.

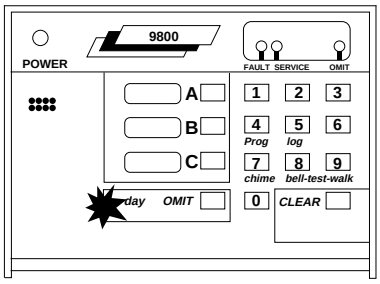
Note: *If a detector is fitted by the keypad or the final door is known to be open, the appropriate LED will be displayed. The system will set when clear of the detection. If the user is not clear by the end of the exit time an exit fault will occur (internal sounder only).*

7 Keyswitch Setting

Your system may be fitted with an optional two-position keyswitch which permits keyholders to set and unset the alarm only. This facility must be programmed into your system at the time of installation. The keyswitch does not provide access to the other system functions, which continue to be accessible only by entering a valid access code at the remote keypad.

NORMAL KEYSWITCH SETTING
The following describes setting the system using the keyswitch and the response of the keypad.

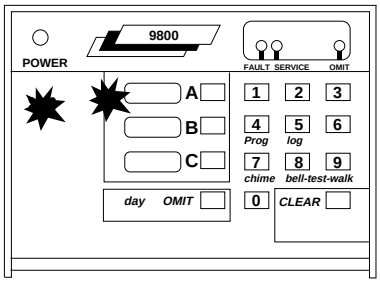
(a)



(b)

Turn the keyswitch.

(c)



Sounder emits continuous tone.

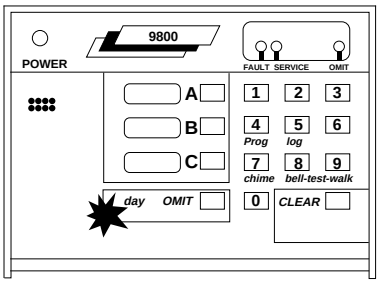
(d)

Leave the premises via the prescribed exit route, the alarm system will automatically set on expiry of the exit timer.

KEYSWITCH SETTING WITH ZONES OPEN

Should the user attempt to set the system with the keyswitch when one or more zones are open, the system will not set. The internal sounder will emit an interrupted tone and the LED display will indicate the open zone. Proceed as follows:

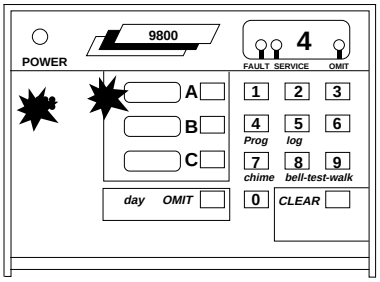
(a)



(b)

Turn the keyswitch on. Sounder emits intermittent tone.

(c)



(d)

Turn keyswitch off and close open zone indicated on keypad.

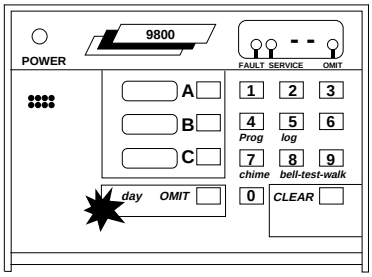
(e) Turn the keyswitch on. If no other zones are open, the system will set. Repeat step (d) if required.

Note: *If a detector is fitted at the keypad or the final door is known to be open, the appropriate LED will be displayed. The system will set when clear of the detection. If the user is not clear by the end of the exit time an exit fault will occur (internal sounder only).*

8 Part Setting

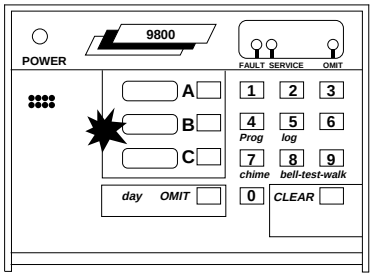
The Part Set function provides the user with the facility to set the system with only the detection allocated to Group B or C being armed. Circuits not allocated to a Part Set group will not be armed when setting, allowing normal access.

(a)



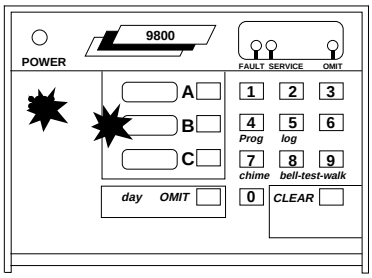
Enter access code.

(b)



Select area ‘B’ or ‘C’ for setting and press appropriate button.

(c)



(d)

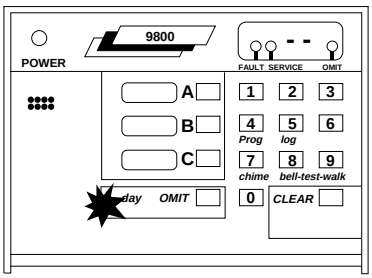
If open zone is indicated, enter codc, close zone and repeat steps (a) to (c). If unable to Part Set, call engineer.

Note: *If a detector is fitted at the keypad or the final door is known to be open, the appropriate LED will be displayed. The system will set when clear of the detection. If the user is not clear by the end of the exit time an exit fault will occur (internal sounder only).*

Setting With Zones Omitted

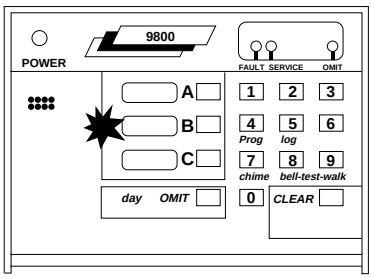
The user can set or part set the system with selected alarm zones omitted from the system. (If zone is programmed by engineer for 'Omit Enabled'.) However certain zones, classified as 'Non Omit' cannot be omitted. To set the system with zone(s) omitted, proceed as follows:

(a)



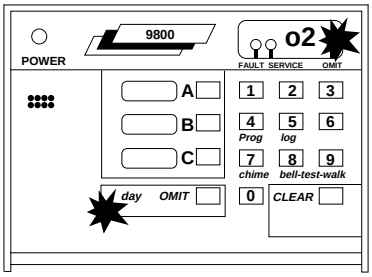
Enter access code.

(b)



Select 'A' for whole system, or 'B' or 'C' for part setting.

(c)



Press 'Omit' key within 5 seconds, followed by zone number(s) to be omitted.

(d)

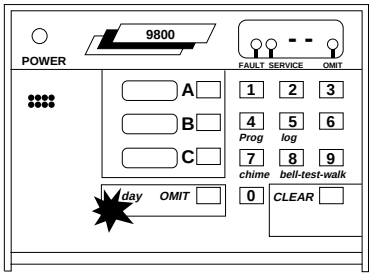
To re-instate an omitted zone, press the 'Omit' key followed by the 'Clear' key. All circuits omitted are re-instated when the system is unset.

(e) Repeat step (c) for other zones to be omitted. The system will set as normal. Omit LED will extinguish when system sets.

Omitting a 24Hr Zone

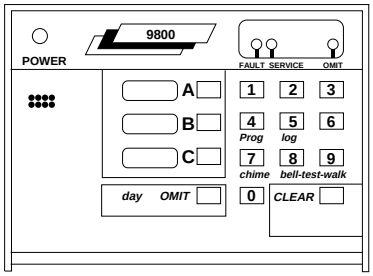
If necessary, the user can omit a 24hr circuit when the system is unset. (If zone is programmed by engineer for 'Omit Enable'.) To omit a 24hr circuit proceed as follows:

(a)



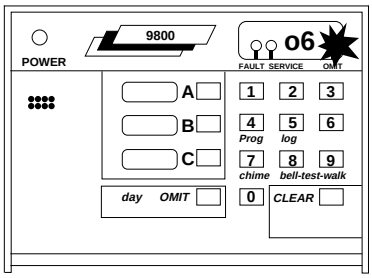
Enter valid code.

(b)



Press 'Omit' within 5 seconds followed by 24hr circuit numbers to be omitted.

(c)



Display clears after 10 seconds.

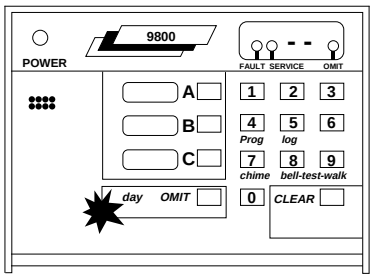
(d)

To return the 24hr circuit to normal operation, enter access code and press 'Omit' then 'Clear' keys within 5 seconds.

Unsetting the System

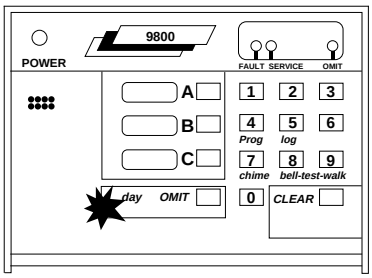
On entering the premises the sounder will be emitting a continuous tone. The user should proceed immediately to the keypad via the prescribed entry route and unset the alarm as follows:

(a)



Enter access code within the preset entry time.

(b)



System unset.

Note: *If unsetting from Part Set, the 'B' or 'C' LED will be illuminated at step (a). If zones have been omitted on setting, the omitted zone number will be displayed at step (a). If a keyswitch is fitted, the system is unset by turning the keyswitch off.*

Exceeding the Entry Time

If the alarm system is not unset before the expiry of the preset entry time, the internal sounder will change to emit a high pitched tone. You have not caused a full alarm and still have the time of a second stage timer (30 seconds).

On expiry of the second stage timer, the system will enter into a full alarm state. If your system is fitted with a remote signalling device, a signal will be transmitted automatically to your alarm company central station, and the police authority will be contacted.

IMPORTANT NOTE
If the full alarm condition has been caused by a delay in unsetting the system and an automatic signalling device is fitted to your alarm system, you must contact your alarm company immediately in order that the police call can be cancelled.

Straying From the Entry Route

If the user should stray from the prescribed entry route on normal entry to the premises, a full alarm condition will occur, (external bells and internal sounder). If your system is fitted with a remote signalling device, a signal may be automatically transmitted to your alarm company central station.

Your system may be programmed with an 'Abort' feature, which works as follows: The 9800 gives a full alarm if the user leaves the entry route or exceeds the entry time. The 9800 sends a 'Restore' signal to the central station if the user enters a valid access code at the keypad within 90 seconds of the alarm (avoiding Police action). If the user fails to disarm the system within 90 seconds the 9800 witholds the 'Restore' signal and full Police action will be taken. After either situation, the system will require to be reset by the engineer, or by following the 'Remote Reset' procedure (if programmed).

IMPORTANT NOTE
If your system is fitted with a remote signalling device and a full alarm condition has been caused by accidental deviation from the entry route and you have been able to unset the system during the second stage timer (if applicable), it is important that you immediately contact your alarm company central station in order that action can be cancelled.

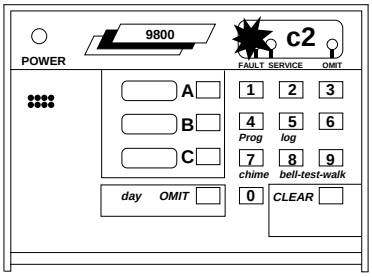
Remote Reset

Many local police authorities are concerned about the rising number of false alarms raised at central stations by user error or system malfunction. The police now ask installers to program systems fitted with remote signalling to be ‘Engineer Reset’. This means that after a user silences an alarm, they must call their alarm company to reset the system or make any repairs.

The ‘Remote Reset’ facility (if enabled), allows a user to reset the system under alarm company supervision over the telephone, without calling out an engineer. This ensures that the user contacts the central station to acknowledge accidental alarms or system problems.

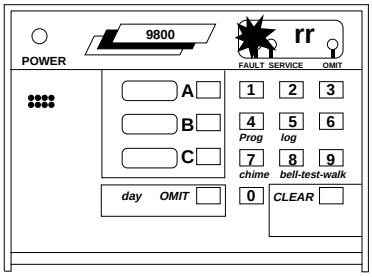
If the alarm has activated following a genuine intrusion, procedural error or for other reasons, proceed as follows:

(a)



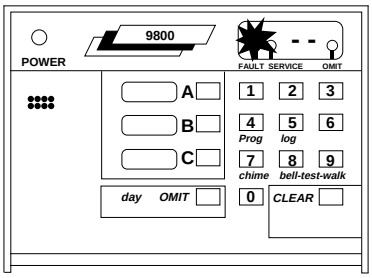
Go to a system keypad, then key-in your valid access code. The display will show the circuit which first caused the alarm, plus the ‘Fault’ and ‘Service’ lights.

(b)



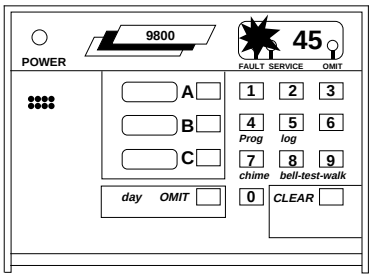
Key in your access code again.The display will show ‘RR’ (Reset Required).

(c)



Press the ‘Clear’ key. The display will show ‘--’ (Function Required).

(d)

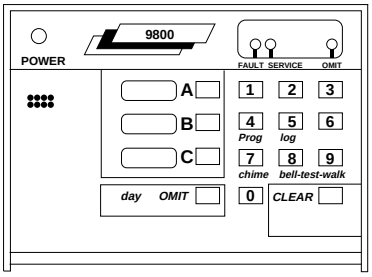


Press the ‘6’ key. The display will show a 4-digit ‘Control Code’ as two pairs of numbers, e.g. ‘45’ then ‘68’. The ‘Control Code’ will be displayed 7 times, write down code.

(e)

Call your alarm company central station, follow the verification procedure (usually a code name or number) and give the 'Control Code'. You will then be given a 4-digit 'Reset Code'.

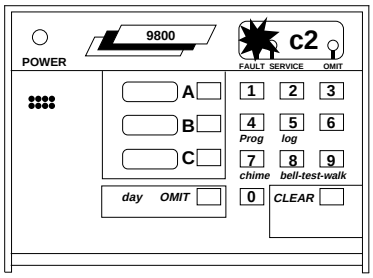
(g)



Key-in the 4-digit 'Reset Code'. The display will clear and the 'Fault' and 'Service' lights will go out.

Your system is now Reset.

(f)

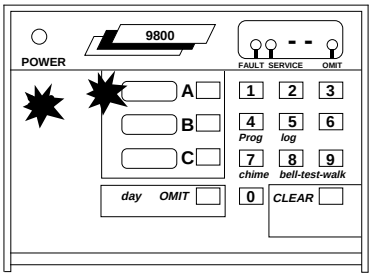


The display will have returned to the first circuit to alarm, e.g., 'c2'. ***Note:*** *If you fail to write down the 'Control Code', repeat procedure (a) to (f)*

Unsetting After an Alarm

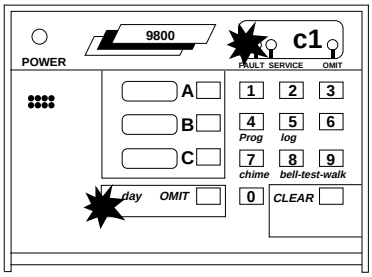
On entering the premises following an intrusion, a full alarm condition will exist. To cancel the alarm, the user should proceed directly to the remote keypad via the prescribed entry route and proceed as follows:

(a)



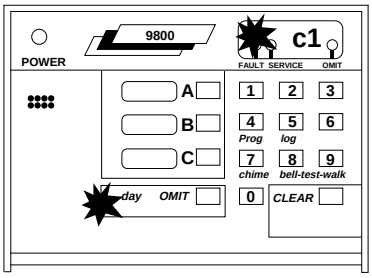
Enter access code.

(b)



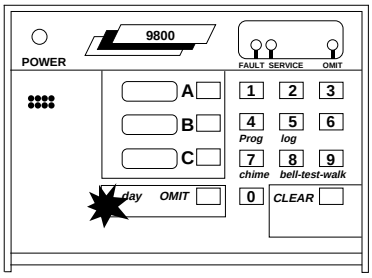
The instruction which first caused the alarm condition will be displayed. The 'Fault' LED will also be be illuminated.

(a)



Enter access code.

(b)



Display will clear only if programmed for customer reset.

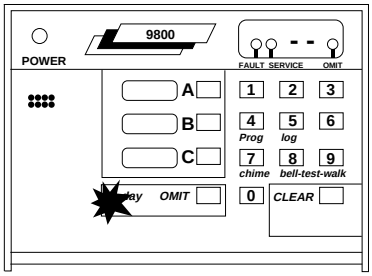
Note: *If the system is programmed for Engineer Reset and an alarm condition has occurred, the service LED will also be illuminated.*

IMPORTANT NOTE
If a remote signalling device is fitted, you must contact your alarm service company for resetting the system.

Chime Setting

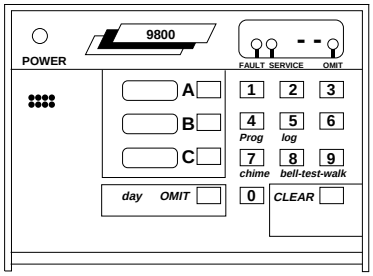
The chime function is only available if programmed during installation and can only be selected if the system is unset. When set to chime, the internal sounder will emit a ‘Chime’ tone if any normal alarm, entry route or final door zone is opened. Where an exit terminator is fitted, this will act as a door bell when the system is set to chime. To set the system to chime, proceed as follows:

(a)



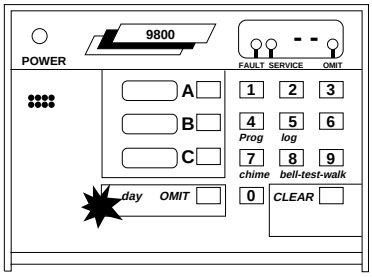
Enter access code.

(b)



Press chime key (No. 7).

(c)



System set on chime.

(d)

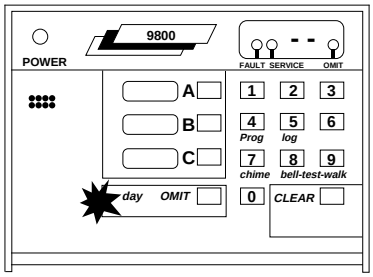
To return to the normal ‘Day’ state press the clear button.

To disable Chime, repeat steps a) to d).

Changing Access Codes

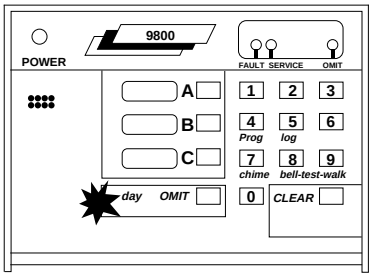
The system will accept up to four different user access codes, the first of which is pre-programmed. The user can allocate or amend all four codes at any time, or amend the 'Duress' code as follows:

(a)



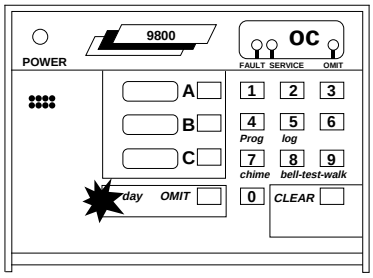
Enter access code.

(b)



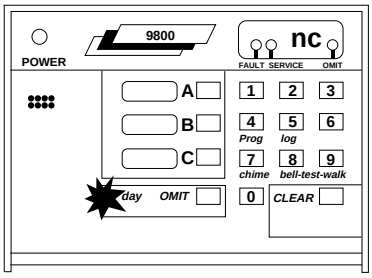
Press 'Prog' key (No. 4 key).

(a)



Display will ask for old code (oc). Enter old code.

(b)



Display will ask for new code (nc). Enter new four digit code (see note).

(e) Press the 'Clear' button to register the new code in the system memory and to return the system to the 'Day' state.

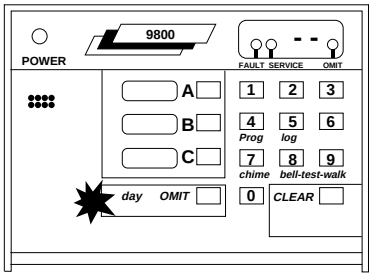
(f) Repeat steps (a) to (e) to allocate or amend the other three codes if required. The user can also change the 'Duress' code in the same way, by entering the old code, new code and pressing 'Clear'.

Note: *If you are adding a 2nd, 3rd or 4th code for the first time, enter AAAA for second code, BBBB for third code, CCCC for the fourth code and OMIT OMIT OMIT OMIT for the Duress code when asked for the old code (oc). This is the only time that these keys are used as an access code. When and existing code is to be changed, the user must enter the old four-digit code.*

Reviewing the Event Log

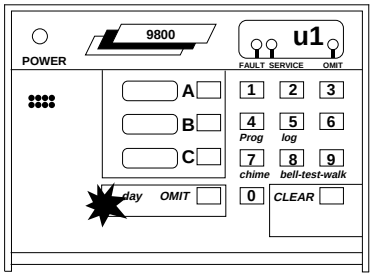
With the alarm system in the 'Day' state, the user can scan the coded event log to obtain a record of system events. The event log will display events chronologically, with the most recent event first. To scan the event log, proceed as follows:

(a)



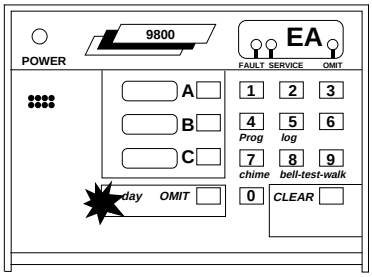
Enter access code.

(b)



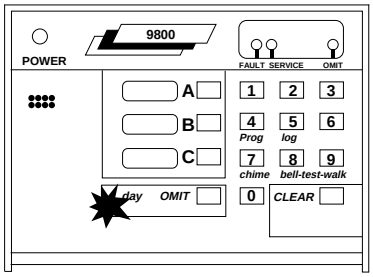
Press 'Log' key (No 5 key). Display shows user number.

(a)



Press 1 key to move log back to previous events or 3 key to move log forward to more recent events.

(b)

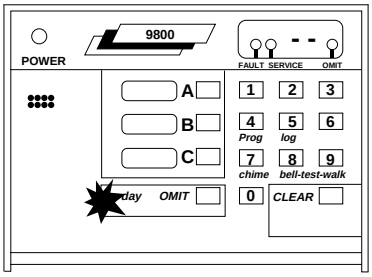


Press 'Clear' key twice to end log review and to return to the 'Day' state.

Sounder, Bell & Strobe Test

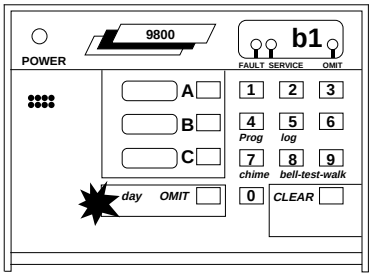
The user can test the operation of the internal and external sounders, bell and strobe as follows:

(a)



Enter access code.

(b)



Press ‘Bell Test’ (No. 8 key).

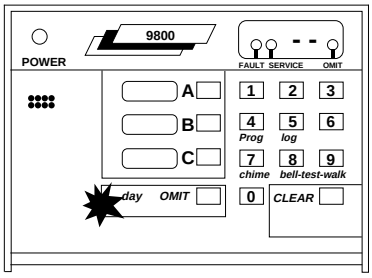
(c) External sounder operates for 3 seconds.
Strobe operates for 3 seconds.
Internal sounder operates for 3 seconds.
Keypad sounder operates for 3 seconds.

(d) Press ‘Clear’ key to return the system to the ‘Day’ state.

System Walk Test

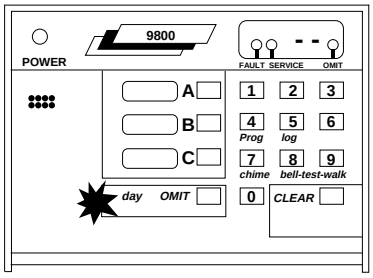
The user can 'Walk Test' the system and test the operation of each detector circuit (with the exception of panic alarms or fire circuits) as follows:

(a)



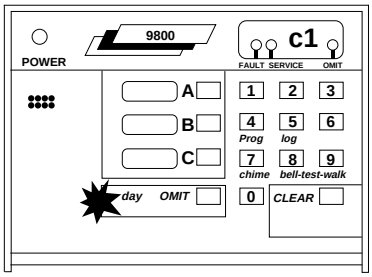
Enter access code.

(b)



Press 'Walk Test' (No. 9 key).

(c)



Any circuits which are open will be displayed in sequence. If no circuits are open the display will show "-- --".

(d)

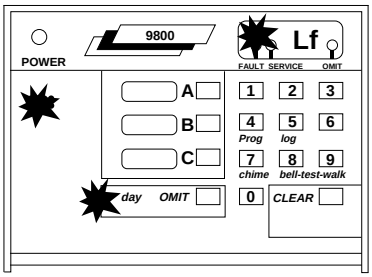
Open each detector circuit in turn. The keypad and external sounder will operate for each circuit opened and the circuit number will be shown on the display.

(e) To stop the walk test and return the system to the 'Day' state, press the 'Clear' key twice.

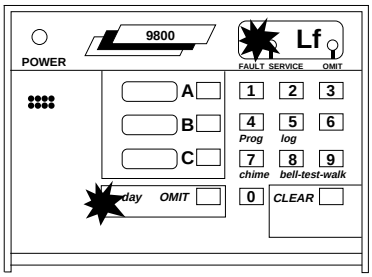
TELEPHONE LINE FAULT

If your system is fitted with a remote signalling device which operates over the standard telephone network, a local alarm condition will warn the user if a telephone line fault exists as follows:

(a)



(b)



Enter valid code.

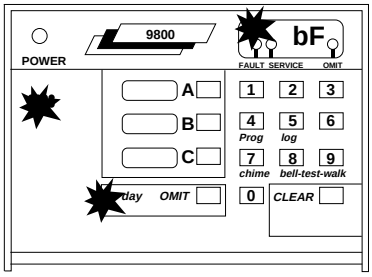
(c) If a telephone Line Fault (Lf) is indicated following the silencing of the local alarm, entering a valid access code again may clear the indication. If this is the case, an Engineer will not be required unless a permanent **Lf** condition is indicated. You may still be able to set your alarm system in the normal way, but note that automatic alarm communication with your alarm company central station will not operate until the fault has been repaired.

Note: *If a line fault condition occurs when the system is set, the system response will depend on programming of the system during installation. Either an alarm condition will be initiated, or the system will respond as above when unset.*

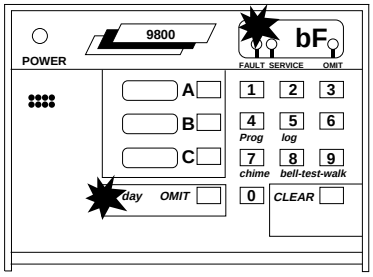
BATTERY FAULT

If a battery fault condition occurs when the system is unset, a local alarm condition will be initiated. To cancel the local alarm, proceed as follows:

(a)



(b)



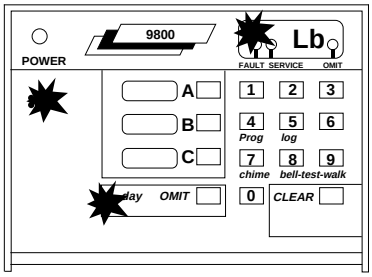
Enter access code.

(c) Contact your alarm company engineer and report the fault. You will be unable to set the alarm system until the fault is cleared.

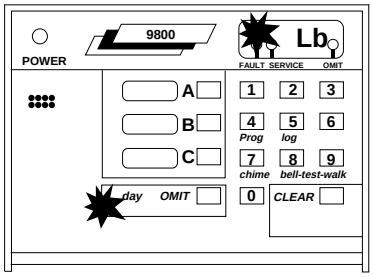
BATTERY LOW CONDITION

Your alarm system automatically monitors the voltage of the standby battery. If for any reason the battery voltage falls below pre-set limits, the system will enter into a local alarm condition. To cancel the alarm proceed as follows:

(a)



(b)



Enter access code.

(c) Contact your alarm company engineer and report the fault. You will be unable to set the alarm system until the fault is cleared.

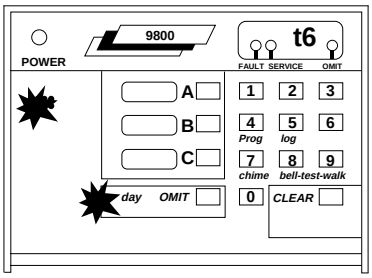
TOTAL POWER FAILURE

If the display on the keypad is indicating **'Sr'**, the mains and battery power to the system has failed. Contact your alarm company engineer and report the fault. You will be unable to set the alarm system until the fault is cleared.

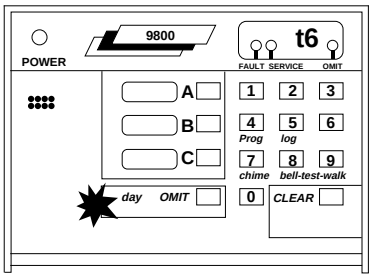
Daytime Tamper Alarm

The alarm system automatically monitors the main control panel, keypads, external bell and circuit wiring and will automatically enter into an alarm condition if any attempt is made to interfere with the equipment. However, if the tamper alarm occurs when the system is unset, a local alarm only will be initiated. Check for any obvious causes and then cancel the alarm as follows:

(a)



(b)



Enter access code.

(c) Call your alarm engineer and report the fault. You will be unable to set your alarm system until the fault has been cleared.

Explanation of Codes

c1 to 8	Detector circuit open.
t1 to 8	Circuit tamper open.
o1 to 8	Detector circuit omitted (isolated).
E1 to 8	Entry via a detector circuit.
S1 to 8	Detector circuit on Soak test.
EA	Alarm on entry
EF	Exit fault
bF	Control panel battery fault
PF	Mains supply failure.
Sr	System reset (Total power failure).
AP	Aux. (Detector) power failure.
Lb	Control panel low battery.
rt	Illegal use of keypad (excess number of keypresses).
rP	Remote keypad missing.
rr	Total power failure (engineer reset required).
u1 to u9	User access number (U5 = Duress, U9 = Keyswitch)
AE	Access Engineer
AA	Arm area A (Full set).
Ab	Arm area B (Part set).
Ac	Arm area C (Part set)
Lt	Control panel tamper.
tr	External bell tamper.
cF	Communications failure (External signalling).
LF	Telephone line fault.
cc	Communications completed successfully.

Your Circuit Description

ZONE	DESCRIPTION	WHOLE SYSTEM	PART SET B	PART SET C	OMIT ALLOWED	CHIME
1						
2						
3						
4						
5						
6						
7						
8						

Installed by (Engineer's signature) . . . . . .

Date Completed . . . . . .

ENGINEER RESET . . . . . .

BELL DURATION . . . . . .

COMMUNICATOR FITTED . . . .

EXIT TIME . . . . . .ENTRY TIME . . . . . .

Service Record

DATE	ENG	REPORT

Your Service Contact

COMPANY NAME . . . . . .

ADDRESS . . . . . .

. . . . . .

. . . . . .

. . . . . .

Service Telephone Number

Manufactured in the UK by Scantronic Ltd.
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