PARAGON® PLUS

INSTALLATION INSTRUCTIONS

PYRONIX LIMITED

JAN 1996

This product is approved for use in the Residential, Commercial and Light Industrial Environment.

CE

RDOC133A issue 7

6 ZONE PROGRAMMING STATUS LABEL

ROOM	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5	ZONE 6
0 FULL SET						
1 PART SET						
2 PART SET						
3 PART SET						

STATUS KEY:
E = ENTRY / EXIT A = ACCESS I = IMMEDIATE O = OMITTED

ENTRY / EXIT TIME ____ SECS

BELL OUTPUT SAB ____ SCB ____

BELL TIME ____ MINS

PIR LEDs ____ ENABLED ____ DISABLED

Pyronix LIMITED

ENGINEER NAME

No.

INSTALLATION DATE

SERVICE DATE ____ ACTION

SERVICE DATE ____ ACTION

SERVICE DATE ____ ACTION

RLBLO83 Issue 3.

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WARRANTY

This product is sold subject to our standard warranty conditions and is warranted against defects in workmanship for a period of 2 years. In the interest of continuing improvement of quality, customer care and design, Pyronix reserve the right to amend specifications without giving prior notice.

A copy of our warranty can be obtained from the above address.

15 ENGINEER QUICK REFERENCE PROGRAMMING SECTION

The information on this page is intended as a quick reference for installation engineers who are totally conversant with the programming of the Paragon Plus.

If unsure, consult the main programming section of this manual

The Engineer has access to all the Master User functions but must prefix all functions by: (0) Except when setting and unsetting.

i.e. (✱)(0) = (1) to (7)

1. Entering Engineer mode.

   Enter (✱)(0) = (X)(X)(X)(X) (Engineer Code)

2. Exiting Engineer mode.

   Enter (✱)(0)(0) = (X)(X)(X)(X) (Engineer Code)

3. Programming Zones.

FULL SET Key (✱)(1)(0)
PART SET 1 Key (✱)(1)(1)
PART SET 2 Key (✱)(1)(2)
PART SET 3 Key (✱)(1)(3)

then

(X) then (^) or (v) to display E
Zone number or A
or i
or o
Press (✱) when required Zone type is displayed. Repeat sequence for every zone on each set mode

Should you wish to view any zone status within a set mode use the same procedure, but do not scroll the (^)(v) keys. press (✱) to exit.

4. Changing Bell Time.

   Enter (✱)(1)(4) = (2) to (2)(0) = (✱)
   (New Bell Time 2-20 mins)

5. Changing Entry / Exit Time.

   Enter (✱)(1)(5) = (2) to (2)(5)(5) = (✱)
   (New Entry/Exit Time 2-255 secs)

6. Changing Engineer Code.

   Enter (✱)(1)(6) = (X)(X)(X)(X) = (X)(X)(X)(X) = (X)(X)(X)(X)
   Old Engineer Code — New Engineer Code — New Engineer Code

7. Change log reset status

   Enter (✱)(1)(7)

14.2 MASTER USER FUNCTIONS

The Master User has access to all the Limited User functions plus the following:

a. Clear Event Log.

Enter ⌃ 3 (If allowed by Engineer)

b. Change Limited User Code.

Enter ⌃ 4 = X X X X = X X X X = X X X X

Master User Code | New Limited User Code | New Limited User Code Again

c. Change Master code.

Enter ⌃ 5 = X X X X = X X X X = X X X X

Master User Code | New Master User Code | New Master User Code Again

d. Test mode.

Enter ⌃ 6 = All LEDs are switched on except the fault LED and backlight LED.

= The strobe is switched on.

= The bell is switched on.

= The internal sounder is switched on.

⌃ to exit.

e. Clear flashing alarm LED.

Enter X X X X or X X X X

Master User Code | Limited User Code

f. Walk test ⌃ 7 Then set the panel in the normal way.

Unset the panel to exit walk-test mode.

CONTENTS

1 INTRODUCTION

The Paragon Plus is a full featured intruder alarm control panel, based around a microprocessor with 6 fully programmable zones and 3 dedicated '24-hour' zones (Fire alarm, Personal Attack alarm and a System-Tamper alarm.). It is operated via either a 16 - key onboard keypad or up to 5 additional remote keypads (Paragon RKPs) situated at convenient points around the premises. Each keypad has an arrangement of 8 LEDs to show the status of the system, and a 7-segment display to show programming data and events held in the event-log memory.
All features are fully programmable and there are three levels of access to the system. These are:
Master user (1 2 3 4), Limited User (5 6 7 8) & Engineer (9 9 9 9)
The Master User level gives access to all setting and unsetting facilities, but also allows the changing of code numbers and testing of the system.
The Limited User gives access to the basic functions needed for everyday setting and unsetting of the system.
The Engineer level gives total access to the system including the ability to reconfigure the system and reset the system's event-log memory. The Engineer cannot, however, set or unset the system.

2 SAFETY

The equipment should be mounted so that no access can be gained to the mains cable entry point.
Mains: The mains supply to the control panel is connected via a 3 way terminal block, located on the power supply unit (Top left corner of control panel).
The mains cable should be secured in addition to the screwing down of the conductors in the 3 way terminal block.
Signal wires to detectors, etc., should be securely tied together on completion of the installation, to prevent the possibility of a safety hazard in the event of a wire becoming loose.
This equipment is not suitable for location in bathrooms or damp conditions
** Always remove / isolate mains before carrying out work on the panel**
The mains installation should be carried out in accordance with current IEE regulations by a technically competent person

14 QUICK REFERENCE GUIDE

14.1 LIMITED USER FUNCTIONS

a. Unsetting. Enter (X)(X)(X)(X) (Limited User Code)

b. Full set. Enter (≪)(Stay)(0) (Low Tone Volume)
or (X)(X)(X)(X) (Max Tone Volume)

c. Part set. Enter (≪)(Stay)(∨) or (1) (Low Tone Volume)
Enter (≪)(Stay)(∧) or (2) (Low Tone Volume)
Enter (≪)(Stay)(3) (Low Tone Volume)

d. Clear flashing Alarm LED. Enter (X)(X)(X)(X) (Master User Code)
or (X)(X)(X)(X) (Limited User Code)

e. Zone omit on exit. Enter (≪)(0)(X)(≪)

f. Instant Fire Alarm. Enter (≪)(Fire)

g. Instant Panic Alarm. Enter (≪)(Panic)

h. Chime on/off. Enter (≪)(1)

i. Read Log. Enter (≪)(2). To scroll forward: (∨). To scroll back: (∧).

Symbols stored in the log and their meaning:

E Entry/Exit zone activation.The panel was not unset before the end of the entry time period, or User did not leave in time.

1 to 6 Activation of a programmable zone.

– This shows the next event in the log has triggered the alarm system.

o This shows that a zone was omitted and refers to the number which precedes it in the log.

t Tamper fault or sabotage.

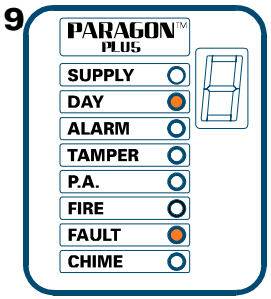
P Personal attack activation.

F Fire alarm activation.

Leaving read-log function. Enter (≪)

9. Mains Failure.

1. Check 2Amp fuse in fuse spur.
2. Check 250mA fuse on power supply unit (Top Left Hand Corner)



10. Panel Waiting for Further Commands.
Day LED will flash if you have started a function but not finished the sequence. e.g

a. Enter ⏫ 2 (View Log)

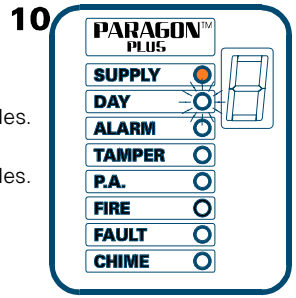
Panel awaiting ⏫ to terminate function.

b. ⏫ 4 (Change Limited User code) Awaiting codes.

c. ⏫ 5 (Change Master User code) Awaiting codes.

d. ⏫ 6 (Customer Test Procedure)

Use Nº keys to scroll, ⏫ to terminate.

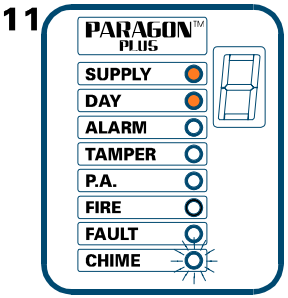


11. Walk Test Mode.

Enter ⏫ 7 Chime Light will flash

Set Panel to desired set mode (Full, 1, 2 or 3)
Walk Test circuits.

Enter X X X X (Master Code) to exit.



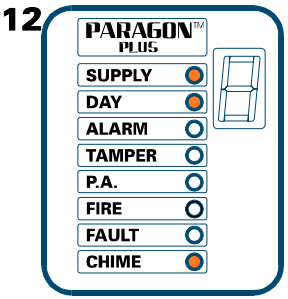
12. Chime Mode.

Enter ⏫ 1 Chime Light will stay on.

The Paragon Plus will remember its last Set Mode i.e (Full, 1, 2 or 3).
Any zone programmed as Entry / Exit will chime on going open circuit.

Enter ⏫ 1 to terminate feature.

LED will clear.



3 ACCESS LEVELS

3.1 Limited User level enables:
a. Panel setting and unsetting with a unique pass code.
b. Setting and unsetting of the door chime facility.
c. Event log viewing.

3.2 Master User level enables:
a. All Limited User facilities.
b. Alteration of both Limited and Master User codes.
c. Walk test facility for all four set modes.
d. Clearing of event log (if allowed by the Engineer).
e. LED / Strobe / Bell / Extension Speaker test facility.

3.3 Engineer level enables:
a. All Master User facilities except setting and unsetting
b. Zone programming for all four set modes
c. Bell timer setting
d. Entry / Exit timer setting
e. Alteration of Engineer code
f. Enabling or Disabling of Event log reset by Master user

4 FEATURES

- 3 Access-Level Codes, all programmable
- Easy-set facility
- 6 Programmable alarm zones
- 4 Set / Part Set modes
- Fire alarm zone with unique alarm sound
- Personal Attack alarm zone
- Tamper zone
- 16 Key backlit keypad
- Dedicated Personal Attack key on keypad
- Dedicated Fire alarm key on keypad
- 18 Event Memory Log with forward and backward scroll
- Selectable Master User or Engineer Log reset
- 7 Segment LED display for reading Event Log and zone programming
- 8LEDs for immediate indication of panel status
- Independent Walk Test facilities for each Set / Part set mode
- System Test Function
- Built in sounder with volume control and software override
- Optional remote keypads with internal sounders
- Programmable from any remote keypad
- Separate Bell and Strobe lamp outputs
- Zone omit facility on exit

5 FUNCTIONAL DESCRIPTION

5.1 Operating Modes

Day Mode This is the state of the panel when unset (not armed). Fire, Personal Attack and Tamper inputs, however, remain active 24 hours a day.(These are referred to as 24 hour zones). Day mode is identified by the green "Day"' LED on the front of the Panel.

Set Modes When the panel is set (armed) an activation of any Access, Immediate or 24 hour zone will cause an alarm condition. When an alarm is generated the internal and external sounders will operate for the length of time programmed and the tone of the internal sounder will be two notes repeated rapidly. The strobe lamp will also be activated and will continue to operate until the panel is reset.

Fullset / Partset

At the time of setting the control panel, any one of four set modes can be selected. i.e

Full set:	Whole system armed; nobody on premises.
Part set 1:	Upstairs off, Downstairs armed.
Part set 2:	Upstairs armed, Downstairs off.
Part set 3:	Garage and kitchen off, remainder on.

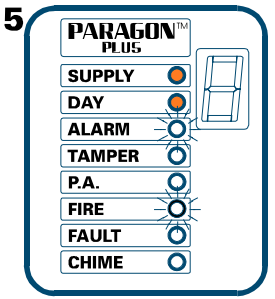
The above are purely examples. The Engineer has the ability at the programming stage to configure all the circuits to the customer's exact requirements.

5.2 Entry / Exit Mode

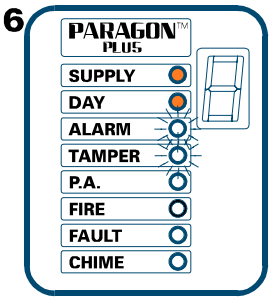
Entry When the panel is set and an Entry / Exit zone is triggered the Entry / Exit timer will begin to count down. During this period an Entry / Exit tone (single repeated bleep) will be produced by the internal sounder and any zones which are programmed as Access zones will be ignored. If either user code is entered before the end of the count down period the panel will return to 'day' mode. If the timer is allowed to elapse before a user code is entered the panel will go into an alarm state. In this case the system needs to be 'Unset'

Exit With the panel in 'day' mode, if either a user code or an Easy-set key sequence is entered the Entry / Exit timer will begin. If all the Immediate zones are clear, then the Entry / Exit tone will be heard. Leave the protected area by the predetermined Entry / Exit route. As you trigger Access zones the tone will change temporarily to a repeated low tone. When all the zones are clear, the Entry / Exit tone will continue again until the end of the time-out period. The panel will then be set.

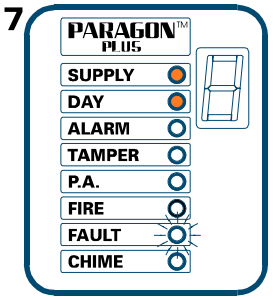
5. Fire Circuit activated.
   Check devices are normally closed.
   Check cable runs for broken circuits.
   If no Fire devices on system
   Link out FR circuit.



6. Tamper Alarm activated.
   Check Tamper circuits:
   1.k- shorted to kT (If no Remote Keypad used)
   2.B- shorted to BT(BellTamper)
   3. TT (Global Tamper circuit)
   4. Control Panel Lid Tamper.
   5. Remote Keypad Lid Tamper.
   6. k- shorted to KTR (if Remote Keypad is used)
   Locate open Tamper circuit.
   Close circuit.
   Try resetting control panel.
   If still unable to locate fault:
   1. Remove cables from (K- KT) (B- BT) (T T)
   2. Replace with links i.e Closed circuits.
   3. Replace Panel lid and reset system.
   4. Reconnect the tamper circuits, one at a time, until the fault is identified.

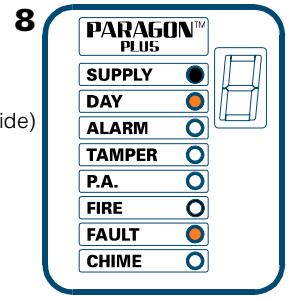


7. Engineer Mode.
   To enter Engineer mode:
   Enter ⌃⌃ 0 9 9 9 9 (Factory set 9999)
   To exit Engineer mode:
   Enter ⌃⌃ 0 0 9 9 9 9 (Factory set 9999)



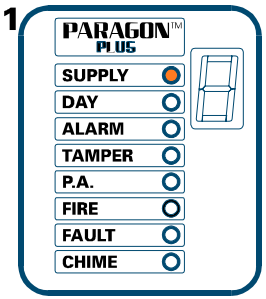
8. Fault light stays on (Not flashing).
   1. Check 1 Amp aux fuse.
   2. Check Sounder fuse
   3. Check N.V.M Jumper link is disconnected.

(Fuses located on main processor board -Top Left Hand Side)

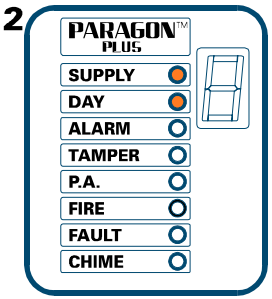


13 TROUBLESHOOTING

1. Panel set /on



2. Panel unset / off



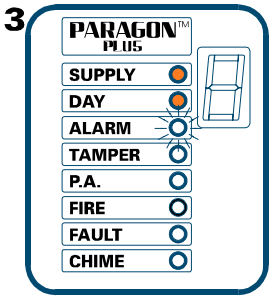
3. Panel switched off, showing an alarm has occurred

To view log, enter ⏫ 2

Last event will appear on 7 segment display.

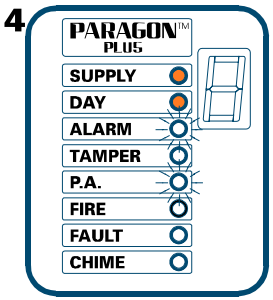
Scroll the ⏶ ⏷ keys. Press ⏫ to exit.

To clear alarm light enter Master User or Limited User code.



4. Personal Attack activated.

If no device on system - Link out circuit.
Enter Master User or Limited User code to clear P.A light.
Reset Personal Attack buttons if necessary.



6 ZONES

6.1 Engineer Programmable Zones

Entry / Exit This is a zone which allows limited-time access to the premises in order to set or unset the system.

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

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

Omitted If a zone is programmed as an Omitted zone by the Engineer, then it is ignored by the panel. Primarily used for Part set options. It also allows the user to continue to use the alarm system even if a fault has been discovered on one or more zones.

6.2 24 hour zones

Personal Attack Triggering of the Personal Attack (P.A) zone will always cause a full alarm activation regardless of whether or not the panel is set.

Tamper A tamper zone activation will only generate an internal alarm, if the panel is in Day mode. If a tamper fault is present and the panel is then set, the system will give a second internal alarm. Triggering of a tamper zone when the panel is set will always give an external as well as internal alarm

Fire Triggering of the fire zone will only operate the internal sounder. A fire alarm is identified by a three note rising sound which is easily distinguished from all other tones.

The Fire Zone is intended as an extra feature to the Intruder Alarm system and must not be regarded as a total fire protection system

7 CONTROLS AND FUNCTIONS

Volume Control

This is only accessible when the front cover has been removed and will only affect the volume of the internal sounder together with any extension speakers. The volume control is overridden when the panel is in an alarm state, and also if the the panel has been set by either the Master User or Limited User four digit codes. This feature will allow a reduced volume tone on part-set modes.

Chime

Chime function applies to 'day' mode only and if selected will cause the panel to generate a three-note sound when an entry/exit zone is triggered. This feature is to inform the occupants of the building that some one has entered.

Event Log

The Paragon Plus control panel incorporates a memory log of the last 18 alarm events and is accessible to both Users and the Engineer. It will record Fire, Intruder, Personal Attack and Tamper alarms and also show if any of the 6 alarm zones have been triggered or omitted.The Engineer can set the clearing of the log for either Engineer-only or Master User and Engineer.

Auto Rearm

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

Walk test

The walk test function allows each of the fullset / partset modes to be checked in order to verify that all the intruder detectors on the alarm system are functioning correctly. When undergoing a walk test the Engineer or Master User can choose which of the set-modes he wishes to test. Any zones used in that set-mode will cause a chime at the Control panel if they are triggered.

8 INSTALLATION AND WIRING

Before beginning any installation work read through this section carefully. Plan out the various areas and degrees of protection required from each zone. It is important to decide which type each zone should be if partsets are to be used. Work out the cable routes avoiding mains cabling and consider the chosen position for the control panel and its mains supply.

11 LED FUNCTION

Supply light on	:	Indicates there is mains on the system
Day light on	:	Indicates the system is off. (Day mode)
Fault light on	:	Blown Auxiliary fuse or Blown Bell fuse or Mains Supply disconnected
Alarm light flashing	:	Indicates an Alarm activation
Tamper light flashing	:	Indicates a Tamper alarm
P.A light flashing	:	Indicates a Personal Attack activation
Fire light flashing	:	Indicates a Fire alarm activation
Fault light flashing	:	Engineer mode
Chime light on	:	Chime is on - Entry/Exit circuits of last set-mode used

12 TECHNICAL SPECIFICATION

12.1 POWER SUPPLY

Power input		
230V version	:	230V ac +/- 10%, 50Hz/60Hz
220V version	:	220V ac +/- 10%, 50Hz/60Hz
110V version	:	110V ac +/- 10%, 50Hz/60Hz
Power input fuse		
240, 230, 220V versions	:	250mA quick blow.
110V version	:	500mA quick blow.
Low voltage output	:	13.2Vdc fused, 0.5A Continuos 1.0A peak(20min)
Low voltage output fuse	:	1 Amp quick blow.
Battery charge voltage	:	13.7Vdc
Rechargeable battery capacity	:	12V sealed lead acid, 1.2 to 6 AH.

12.2 CONTROL PCB

Current consumption (day mode)	:	45mA (quiescent)
	:	55mA (with keypad LEDs)
(set mode)	:	45mA
(test)	:	120mA (all LEDs on)
(alarm)	:	210mA
Auxiliary DC output supply	:	Regulated 13.2 Vdc for use with PIR, microwave, and shock sensors.
Extension Speaker load	:	8 to 32 Ohms
Alarm Bell current	:	0.5 Amps (maximum)
Alarm Bell timer	:	2 to 20 minutes (software programmable)
Strobe current	:	0.5 Amps (maximum)
Zone type	:	Normally closed loops which activate when opened or connected to 0 volts from dc power supply.
Zone loop current	:	1.2 to 1.5mA
Zone activation resistance	:	2k Ohms (minimum)
Zone loop activation time	:	0.35 seconds
Entry / Exit timer	:	2 to 255 seconds (software programmable)

12.3 MECHANICAL

Dimensions	:	223 x 205 x 78 mm (8.78 x 8.07 x 3.07 inches)
Case Material	:	3mm thick Polycarbonate with screw fixing front cover
Colour	:	White
Weight (excluding battery)	:	1.48kg

12.4 ENVIRONMENTAL

Operating temperature	:	0 to +40 deg C	(+32 to +104 deg F)
Storage temperature	:	-20 to +60 deg C	(-4 to +140 deg F)

12.5 CLEANING

DO NOT use strong detergents to clean this panel. To remove any dirt or grime, wipe with a clean damp cloth ONLY.

To exit test mode press the ⌃⌃ key again.

Test 1) All LED's are switched on except the fault LED.
2) The strobe is switched on.
3) The bell is switched on
4) The internal sounder is switched on

10.2.6 Walk Test Mode

Enter ⌃⌃ 7

When the walk test mode is enabled the 'chime' LED will flash. If the panel is then full set or part set each active zone will cause a chime when triggered. This enables all the zone configurations to be walk tested individually. The walk test mode is cleared when the panel is unset. The numbers of any activated zones will be entered into the event log.

C. ENGINEER FACILITIES
The engineer mode can only be accessed when the panel is in 'day' mode.

10.3.1 Entering Engineer Mode

Enter ⌃⌃ 0

then X X X X Engineer code (Factory set 9999)

The fault light will flash for as long as the panel is in Engineer mode.

10.3.2 Leaving Engineer Mode

Enter ⌃⌃ 0 0

then X X X X Engineer code (Factory set 9999)

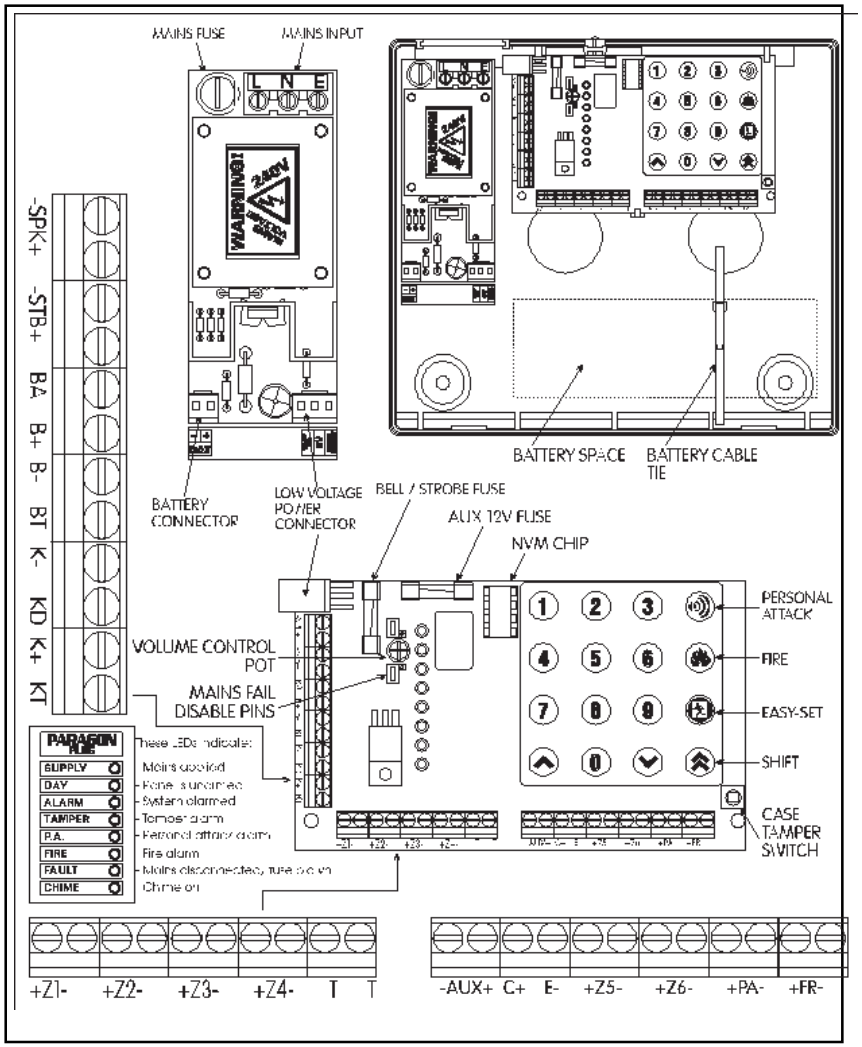
This will return the panel to 'day' mode and the fault light will stop flashing.

10.3.3 Master User Facilities
The engineer has access to all the Master facilities but must prefix the function numbers by 0

Key sequences are as follows:

- ⌃⌃ 0 1 Chime on/off
- ⌃⌃ 0 2 View event log
- ⌃⌃ 0 3 Clear event log
- ⌃⌃ 0 4 Change Limited User code
- ⌃⌃ 0 5 Change Master User code
- ⌃⌃ 0 6 Enter System Test Mode
- ⌃⌃ 0 7 Enter Walk Test Mode

8.1 PLAN VIEW WITH COVER REMOVED



8.2 MOUNTING

a Remove front cover.

b Disconnect the power supply connector from the controller Printed Circuit Board (PCB).

c Take out the controller PCB by pulling back the central retaining clip and removing the PCB from underneath the guide rails.

d Hang the control panel base onto the wall with the central mounting hole using one of the screws and plugs provided.

e If possible use a spirit level or some other means to position the control panel squarely then drill two more holes into the wall to locate the other two screws and plugs.

8.3 MAINS CONNECTION

a The mains supply connector should be carefully wired to an ac mains supply using a suitably rated 3 core cable with a current carrying capacity of not less than 5 Amps. It should be connected to a fused spur with a fuse rating of not more that 2 Amps.

b The mains connections at the power supply input are coded as follows:

L	:	LIVE
N	:	NEUTRAL
E	:	EARTH

8.4 BATTERY CAPACITY

It is recommended that the rechargeable battery used with the ParagonPlus control panel should be capable of powering the alarm system for a minimum of 8 hours, and that this time period should include 20 minutes of bell/strobe operation. The minimum battery capacity should be calculated from the current consumption of the individual system components. A typical example is shown below:

Non alarm current for control panel (7hrs 40min)	:	45mA (0.045 A)
Steady state current for detectors (eg 5 x 15mA for 8 hours - Pyronix PIRs)	:	75mA (0.075 A)
Typical standby current for external sounder (eg Self Actuating Bell for 8 hours)	:	50mA (0.050 A)
Typical on state current for external sounder (20 mins)	:	350mA (0.35 A)
Alarm state current for control panel (20 mins)	:	210mA (0.21 A)
Typical current for external strobe (8 hours)	:	150mA (0.15A)

Total battery capacity = (Panel standby current x 7hrs 40min)
+ (Detector, SAB and strobe current x 8 hrs)
+ (Panel in alarm with external sounder x 20min)

ie 0.045 x 7.67 hrs
+ (0.075 + 0.05 + 0.15) x 8 hrs
+ (0.21 + 0.35) x 0.33 hrs
= 2.7 Amp Hours.

For this example it is recommended that you use a battery of not less than 2.8 AH.

10.2.2 Resetting alarm LED after an Activation

Turn system off / back to Day Mode

Enter: (X)(X)(X)(X) Master User Code

or (X)(X)(X)(X) Limited User Code

Alarm LED will be flashing View log

Enter (^^)(2) Last event will appear on the 7 segment display

Scroll through events:

(^) Backwards

(v) Forwards

To clear 7 segment display

Enter (^^)

To clear Alarm LED

Enter (X)(X)(X)(X) Master User code

or (X)(X)(X)(X) Limited User code

10.2.3 Changing Limited User Code

Enter (^^)(4)

then (X)(X)(X)(X) Master User code (Factory set 1234) - 2 Bleeps

then (X)(X)(X)(X) New Limited user code - 2 Bleeps

then (X)(X)(X)(X) New Limited user code again - 2 Bleeps

The 'day' led will flash when this function is entered and an acknowledge tone will be sounded after each code has been entered. If an incorrect key is entered an error tone will be given and the function ended.

10.2.4 Changing Master Code

Enter (^^)(5)

then (X)(X)(X)(X) Master User code, (Factory set 1234) - 2 Bleeps

then (X)(X)(X)(X) New Master User code - 2 Bleeps

then (X)(X)(X)(X) New Master User code again - 2 Bleeps

Errors will be identified as above.

10.2.5 System Test Mode

Enter (^^)(6)

This function performs a number of tests which are listed below.
The next test is selected by pressing any numeric key.

The table below shows the symbols stored in the event log and their meanings.

E	Entry/Exit zone activation.The panel was not unset before the end of the entry time period, or User did not leave in time.
1 to 6	Activation of a programmable zone.
-	This shows the next event in the log has triggered the alarm system.
o	This shows that a zone was omitted and refers to the number which precedes it in the log.
t	Tamper fault or sabotage.
P	Personal attack activation.
F	Fire alarm activation.

10.1.8 Omitting one or more zones

If one or more 'immediate' zones are triggered whilst in exit mode a low pitched error tone will be produced. If this occurs return the panel to 'DAY' mode by entering either the Master code or Limited User code. If the log is then viewed any faulty zones will be displayed as above. First check for any obvious reason for these zones to have been activated. This may simply be due to a monitored door or window being left open or a pet being left in a protected area. If the fault cannot be rectified it is possible to omit faulty zones but this should only be used as a last resort if the building is to be left unoccupied.

Example:

Set panel (error tone will be heard).
Unset panel (alarm LED will be flashing).
View log (✱)(2) to see which zones are faulty
and investigate fault(s) if possible.
Set panel,

then: If no error tone heard, exit via normal route.
or: If error tone heard:

Enter: (✱)(0)

then; number(s) of zones to be omitted (1 to 6)

then: (✱) - Entry / Exit timer will start again.

then: exit building by normal route.

10.2 MASTER USER FACILITIES

The Master has access to all the Limited User facilities as well as those listed below. The Paragon Plus control panel has to be in 'day' mode after resetting with the Master code for these additional features to be accessed.

10.2.1 Event Log Reset

Enter: (✱)(3)

This feature will only operate if, whilst programming, the engineer
selected the (✱)(1)(7) feature allowing the Master User to clear event log.

8.5 LOW VOLTAGE CONNECTIONS

Extension loudspeakers (-SPK+)
Minimum 8 Ohms load or 2 x 16 Ohms in parallel.

-SPK (- terminal)	:	0 volts
SPK+ (+ terminal)	:	speaker supply

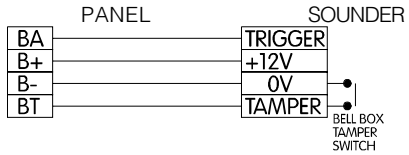
Strobe Lamp (-STB +)

-STB (-terminal)	:	negative trigger
STB +(-terminal)	:	12 volts dc supply

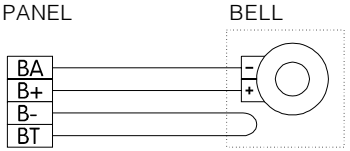
External Sounder/Bell

BA	:	negative trigger
B+	:	12 volts dc supply
B-	:	0 volts
BT	:	Bell Tamper (Negative return)

Wiring for External Sounder:



Wiring for mechanical bell:
(non self actuating)



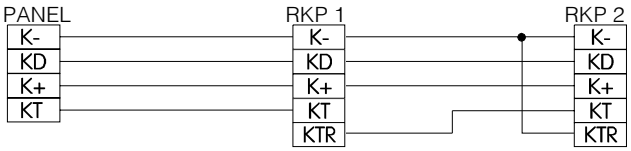
Remote keypads (optional)
If a remote keypad is NOT fitted, the keypad tamper terminal (KT) should be connected to 0V (K-)

K-	:	0V supply
KD	:	data transmit/receive
K+	:	12 volts dc supply
KT	:	keypad tamper

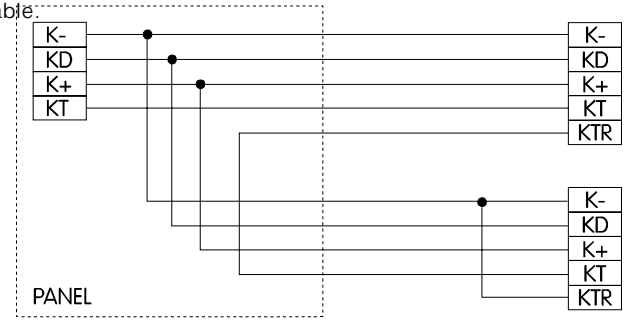
Wiring to single remote keypad. This requires 4 core cable.

PANEL RKP

Wiring for multiple remote keypads (daisy chain). This requires 4 core cable.

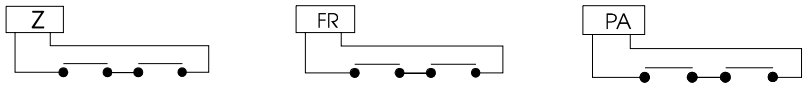


Wiring for multiple remote keypads (star configuration). This requires 5 core cable.

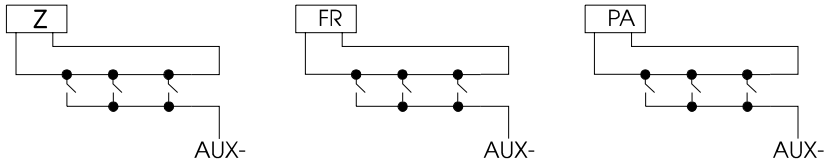


Alarm, P.A and Fire Zones

Wiring for normally closed contacts.



Wiring for normally open contacts.



Part set 2 (eg upstairs only armed):

Enter  or 

Volume will be determined by volume pot. i.e Reduced volume.

Part set 3 (eg whole house armed except garage):

Enter  Volume will be determined by volume pot. i.e Reduced volume

10.1.3 Unsetting the panel

The panel can be unset by entering the building via the entry exit route and then keying either of the two user codes.

10.1.4 Activating the Personal Attack Alarm (PA)

To activate the Personal Attack Alarm enter 

10.1.5 Activating the Fire Alarm

To activate the Fire Alarm enter 

10.1.6 Turning Chime On and Off (Panel must be in 'day' mode)

Enter 

The status of the chime facility is indicated by the 'chime' LED on the front of the control panel. When the chime mode is selected a two tone chime will be produced by the internal sounder and any extension speakers when an Entry / Exit zone is activated. The same key sequence can be used to turn off the chime facility.

10.1.7 Reading Event Log (Panel must be in 'day' mode)

Enter 

The 'day' led will flash and the most recent event stored in the log will be displayed. If the up arrow key is pressed the previous log entry will be displayed. Similarly if the down arrow key is pressed the next most recent entry will be displayed.
The event log can be scrolled backwards and forwards using the up and down arrow keys to allow the last 18 events to be viewed.

To leave this function press the  key. An error tone will be produced if an attempt is made to scroll outside either end of the event memory.

The Entry / Exit time is factory set to 30 seconds.

9.9 Changing the Engineer Code

Enter ⌃ 1 6

then X X X X the old Engineer Code (Factory Set at 9999)
- gives an audible acceptance tone

then X X X X the new Engineer Code
- gives an audible acceptance tone

then X X X X the new Engineer Code again
- gives an audible acceptance tone

If an incorrect key is entered an error tone will be given and the function ended.

9.10 Changing Event Log Reset Status

Should your customer request the ability to clear the memory log then:

Enter ⌃ 1 7

Selecting this function will change the reset status from Engineer only, to Master and Engineer reset and back again.
This facility is factory set to Engineer reset only.

9.11 Exiting Engineer Mode

Enter ⌃ 0 0

then X X X X
Engineer Code

10 USING THE PARAGON PLUS AFTER PROGRAMMING

10.1 LIMITED USER FACILITIES

10.1.1 Full Setting the panel

Enter either of the following:

X X X X Limited User Code (Factory set to 5 6 7 8)
By using this method, maximum volume will be heard.

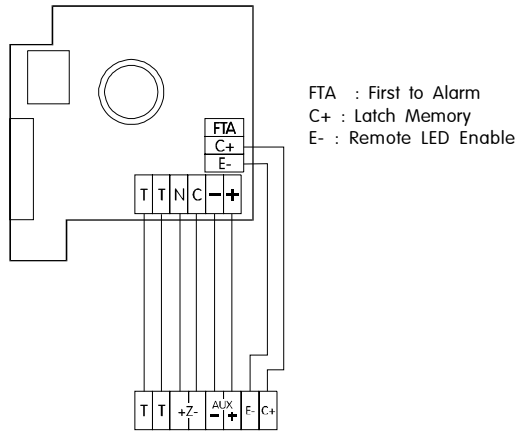
or ⌃ 0
By using this method, volume will be determined by volume pot.

10.1.2 Part setting the panel

Part set 1 (eg downstairs only armed):

⌃ 1 or ⌃ ⌄
Volume will be determined by volume pot. i.e. Reduced volume.

Wiring to PIRs



FTA : First to Alarm
C+ : Latch Memory
E- : Remote LED Enable

NOTE: C+, E- and FTA connections are all optional. FTA connects to all other PIRs in the same alarm zone. FTA should NOT be connected to the control panel.

Latch Memory (C+)

This feature is very useful when more than one detector has to be wired to a particular zone as it will show which detectors triggered if an alarm was generated. If there has been an alarm and latch memory was used then when the panel is reset an LED indication will be given at the relevant detector(s). Resetting of latch memory requires the panel to be set again for not less than 5 seconds, and then unset.

Any unused zones should NOT be left open circuit

8.6 POWERING UP YOUR PANEL

a. Insert the battery and secure it with the cable tie provided.

b. Connect the battery. An alarm will now occur.
Replace the front cover and enter the Master User code:

X X X X (Factory Set 1234)
The audible alarm will now stop, day LED will illuminate.

c. Switch on the mains supply. The mains LED will illuminate.
Now proceed to the "9. Programming" section

9 PROGRAMMING

IF NO Remote Keypad is used, link K- terminal to the KT terminal.

9.1 Factory Defaults

The panel is now programmed to its factory settings as shown below.

Master User code	:	1234 (0000-9999)
Limited User code	:	5678 (0000-9999)
Engineer code	:	9999 (0000-9999)
Bell timer	:	20 minutes (programable 2 to 20 mins)
Entry/exit time	:	30 seconds (programable 2 to 255 secs)
Event log	:	Engineer reset of log

The following key applies to the table below:

E = Entry/exit zone
A = Access zone
i = Immediate zone
o = Omitted zone (not active)

	Zone number					
	1	2	3	4	5	6
Full set	E	A	i	i	i	i
Part set 1 (v)	E	A	i	i	i	i
Part set 2 (^)	E	A	i	i	i	i
Part set 3	E	A	i	i	i	i

9.2 Entering Engineer Mode

Key (^^) (0) (9) (9) (9) (9)

The fault LED will flash when the Paragon Plus is in Engineer mode.
The day LED will flash during programming of any of the functions.

Whilst in Engineer mode, you are able to remove any covers without creating a tamper alarm.

9.3 Setting Part-Set Volume Control

The Paragon Plus has been designed with a unique feature enabling the customer to have a reduced volume tone on part-setting of the control panel.
This volume is controlled via the adjustable volume pot on the main processor board.

1. Remove lid.
2. Set volume pot to desired volume
3. Depressed a number key to check desired volume has been reached.
4. Replace cover.

This volume control can be overridden for full setting purposes by simply pressing in the 4 digit Master or Limited User code.

9.4 Resetting the Non Volatile Memory (NVM) to Factory Settings

Disconnect the mains supply.
Hold down Keys 1 and 4 on the keypad whilst reconnecting the supply. The backup battery should also be disconnected during this procedure.

9.5 Setting the panel when mains fails

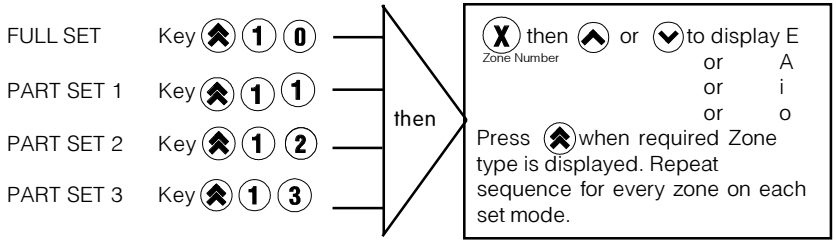
Under normal operation the panel will indicate a fault condition if the mains supply is disconnected. In this state the panel cannot be set. This feature can be overridden by shorting together (with the jumper supplied) the mains fail disable pins on the PCB (directly below the volume control).

9.6 Programming Set Modes.

Any zone may be programmed to be any one of the following:

Entry / Exit = E	Access = A
Immediate = I	Omitted = O

To program the zones for the 4 set modes, the following key sequence should be used.



Should you wish to view any zone status within a Set mode use the same procedure, but do not scroll the (^) (v) keys. Press (^^) to exit.

9.7 Setting the Alarm Bell Time

To adjust the alarm bell cut off time press (^^) (1) (4)

followed by the required time in minutes ((2) to (2) (0) minutes)

followed by (^^).

Incorrect entry gives an audible error tone and correct entry gives three bleeps.
The alarm bell cut off time for the Paragon Plus is factory set to 20 minutes.

9.8 Setting Entry / Exit Time

To set the required time for Entry / Exit time, press (^^) (1) (5)

followed by the time required in seconds ((2) to (2) (5) (5) seconds)

followed by (^^). Incorrect entry gives an audible error tone and correct entry gives three bleeps.