

# CONTENTS

	IMPORTANT2
1	Introduction3
2	System Installation - Wiring4
3	Resetting Factory Defaults12
4	Programming14
	Moving Around14
	Headers & Options14
	Common Options with Menu Numbers17
	Programming Zones18
	Reporting a Mains Fail on a PSU
	Programming Setting Modes
	Programming Entry Times
	Programming Bells / Sounders40
	Programming Keypad44
	Programming Digicom / Vo-Comm Off/On48
	Programming Linefault Modes58
	Programming Panic60
	Programming PGM2 / PGM3 / Timers62
	Programming Reset Modes66
	Programming Sounder Levels68
	Programming PGM 1 / Timers70
	Programming Engineer Code72
	Programming Service73
	Programming Custom Screens75
	Programming Diagnostics / Log76
	Programming Alarm Confirm (Notes)80
	Programming Alarm Confirm (Scenarios)82
	Programming Alarm Confirm84
	NovActive Description & Programming89
	Programming Point ID & SIA Protocols91
	Linefault Sounders Description93
	Engineer Reset94
	Wiring Proximity 'E' & 'I' Readers95
	Clearing 'Test Fail' Indication96
5	Specifications97
	Power Supply Rating98
6	4 Wire Contour RKP Wiring Information100

<b>IMPORTANT!</b>				
Input: AC230V +/-10% ~50Hz 125mA Max. 35W Max				
Nominal Temp Range: 0 - 50°				
	eurösec Plastic Versions For Indoor Use Only			
This equipment is intended only for use as a Security Alarm Control Panel. Adequate ventilation away from heat and humidity must be provided. The unit must be fixed securely to a non-flammable surface using suitable fixings.				
All mains wiring must conform to the relevant current IEEE wiring regulations (or appropriate international regulatory standards). See Mains Supply Connection section within this manual for more detailed instructions.				
All wiring must be protected from s	harp or jagged edges.			
All low voltage (alarm) wiring must be to the appropriate international regulatory standards and comply to good wiring practice and should be routed away from the mains cables.				
Replacement fuses should be of the same type and rating conforming to IEC 127.				
The maximum current draw from the unit for all output combinations <b>must not exceed</b> 1A. Please see note: * <i>Power Supply Rating in Specifications chapter</i> .				
The unit is intended for use with a suitable re-chargeable lead acid battery permanently connected to the appropriate terminals.				
All documentation and manuals must be thoroughly read by suitably qualified installation personnel prior to installation.				
The unit has no user serviceable parts inside. Internal access should only be by suit- ably qualified personnel.				
Provision is provided for an earth connection within the mains input connector block, this connection is for protection of the wiring only and is not functional for the unit.				
<b>Battery Fuse</b> An in-line Battery Fuse has now been incorporated into this product. The fuse rating is 2 Amp Anti-Surge. The fuse holder is spring loaded, therefore you should ensure that the battery lead is not under tension in order to maintain a good connection between the fuse and the holder.To change the fuse push the two halves of the holder together and twist anti-clockwise. Please ensure correct battery charge on completion of the installation and during each service visit.				

# **1** INTRODUCTION

The eurösec CPX Control Panel is a microprocessor based unit that has been designed to be suitable for all types of domestic and commercial installations. All zones are fully programmable by the engineer.

On power up / reset, the Control Panel can be set to the old BS or EN2 (Grade 2) operating standards. It is <u>ESSENTIAL</u> that a 4 6 YES NO reset is done to all new systems before commencement of programming.

Upon completion of the installation the engineer may, if required, re-program several factory set options so as to tailor the Control Panel to suit the requirements of the system.

The CPX control panel uses 32 character LCD Remote Keypads for control of the system via User Code(s) and programming of the system via an Engineer Code. The Factory Default Codes are

Default Master User Code	5678
Default Engineer Code	1234

The Engineer code may be 'Locked' into the system during engineer programming and it should be noted that if the 'Locked' code is not known the only way to have it returned to the factory default is to return the PCB to the factory.

**Option Formats.** When an option cannot be changed the display will show a : rather than the usual = sign. Pressing the No key is disregarded and the panel will react as though the Yes key has been pressed (i.e. it will move onto the next option).

## **2** System Installation - Wiring

## Planning the Control Panel Location

Consideration in locating the fixing position of the Control Panel should be given to:

Access for the routing of cables for the system from detection devices, sounders (internal and external), remote keypads, mains, etc.

The position of the underside retaining screw.

The fixing of a 3 amp fused spur with disconnection facility.

When fitting the RKP(s) consideration should be given to: Operation of the keypad.

Readability of the display.

The Panel should be fixed to the wall using appropriate wall plugs and No.8 screws at least 30mm long. Do not tighten the screws at this stage, wait until all your wiring is in place.

## Wiring Considerations

With the exception of the mains wiring all interconnections should be made with multicore 7/.02 alarm cable.

Good wiring practice should be observed throughout the installation and the following tips may prove useful.

Never run alarm cables parallel to mains cables, telephone cables or any other cables that may be carrying inductive loads

Whenever you have to cross mains cables with alarm cables ensure that you do so at  $90^\circ$ 

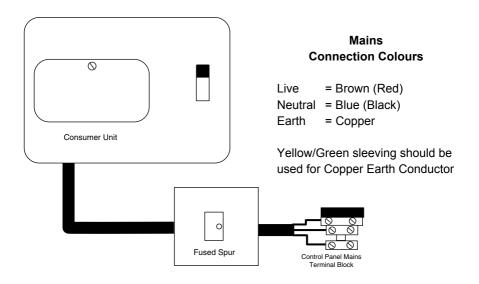
Whenever possible wire the mains connection for the control panel back to the consumer unit via a 3A fused spur with disconnection facility.

Never tap into ring main circuits that have fridges/freezers on them.

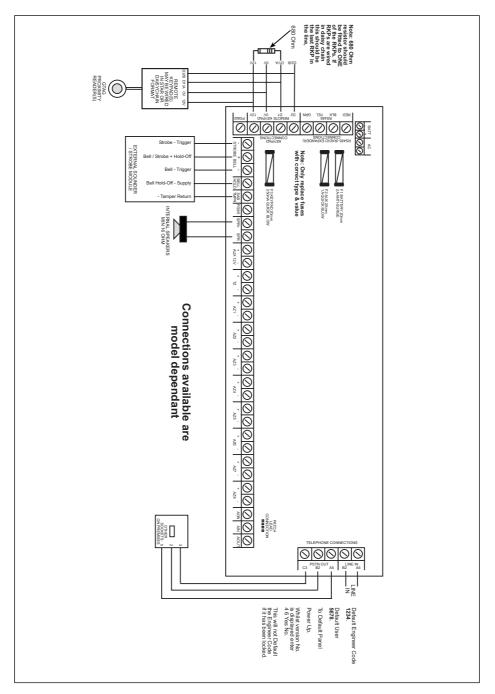
Never tap into lighting circuits that have fluorescent lighting units on them.

## Mains Wiring

A 230V a.c supply should be taken directly from the consumer unit. In order to comply with the relevant current wiring regulations this should be via a 3 Amp fused spur with disconnection facility.



## Wiring Diagrams - CPX PCB

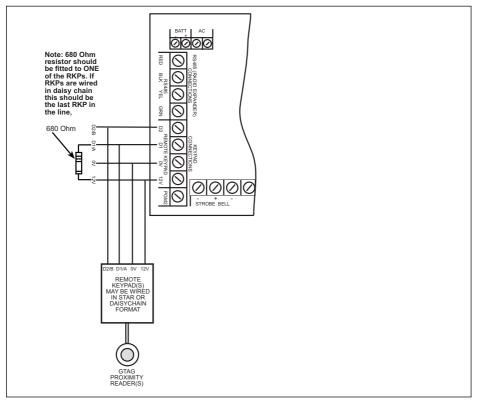


## Remote Keypads

Up to four remote keypads may be fitted to the eurösec CPX control panel. Each Keypad offers a 32 character backlit LCD.

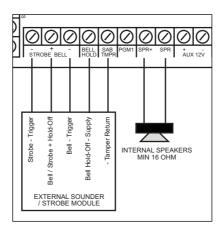
A four core connection will be required between the control panel and remote keypad(s), keypads may be in a 'daisy chain' or 'star' format.

- Note: 680 Ohm resistor must be fitted to ONE RKP. If the RKPs are wired in daisy chain format this should be the last RKP in the line.
- Note: Each keypad must be programmed onto the system in order for it to be recognised by the system.
- Note: Depending on the variant of keypad fitted external G-Tag Proximity Reader(s) may be fitted to each Remote Keypad.



Note: Please refer to the back of this manual if the Control Panel has been supplied with a <u>4 Wire Contour RKP (with added zones)</u> for wiring information.

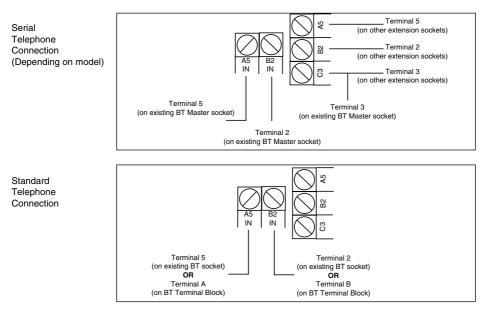
## **Control Panel Output Connections**



## Digi Modem

The eurösec CPX control panels feature an onboard Digi modem. The Digi provides all the features of an eight channel communicator whilst the Modem provides facilities for Gardtec Remote Upload/Download software package.

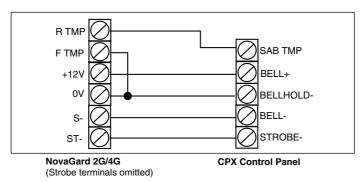
## **Telephone Connections**



Page 8

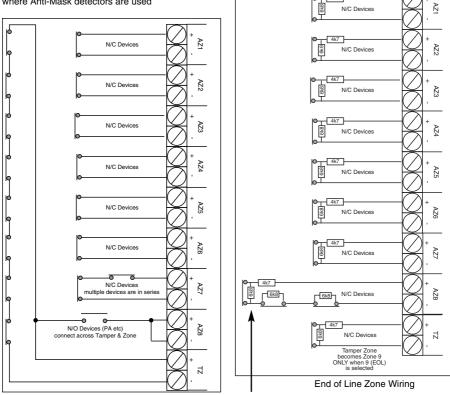
4k7

## **Typical Novagard 2G/2G Connections**



## Control Panel Input (Zone Connection)

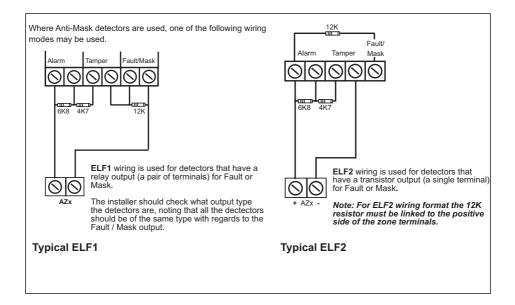
Please see following page for further wiring modes where Anti-Mask detectors are used



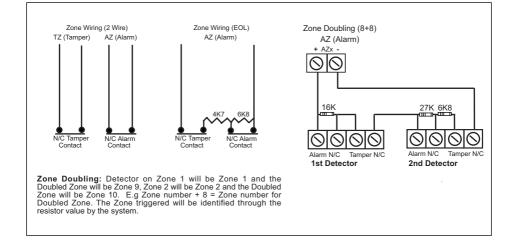
Standard (2 Wire) Zone Wiring

Multiple units can only be used with BS Standard. If using EN2, one unit per zone.

## Typical Wiring Modes



## More Zone Wiring Methods

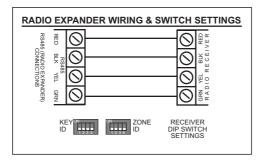


## Radio Zone Expander

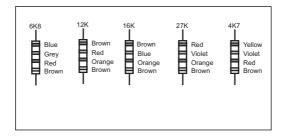
One GardTec Radio Zone Expander may be fitted directly to the RS485 Bus connections on the control panel PCB without the need for any interface card. A Radio Expander card will allow eight wireless zones & eight wireless Fobs.

## **Radio Zone Programming**

When programming Radio Zones the zone numbering for the Radio Zones will start at 91. When programming Radio Fobs the numbering of the Fobs will start at 81.



## **Resistor Colour Codes**



## **3 RESETTING FACTORY DEFAULTS**

Several reset to factory default routines are available to the engineer at system powerup but it should be noted that none of these routines will 'Un-Lock' a ' Locked' Engineer Code.

The following default routines are available.

- a) Pressing **1**, **9**, **YES**, **NO** during initial power up will revert the Master Code and Engineer Code (not locked engineer code) back to factory defaults.
- b) Pressing **3**, **7**, **YES**, **NO** during initial power up will revert all system settings back to defaults with the exception of the User Names and Zone Descriptors.
- c) Pressing 4, 6, YES, NO during initial power up will revert all system settings back to factory defaults. *It is <u>ESSENTIAL</u> that a 4 6 YES NO reset is done to all new systems before commencement of programming.*
- Pressing 5, 5, YES, NO during initial power up will revert all system settings to factory defaults and will also set the comms options up for GardTec Remote.
   ie Modem On; No Return. For commissioning systems for use with GardTec Remote use this option.

## Reset of the factory defaults and entering Engineer Mode:-

## Note: It is <u>ESSENTIAL</u> that a 4 6 YES NO reset is done to all new systems before commencement of programming.

- 1) Remove all power from the system for at least ten seconds
- Apply mains power to the control panel. The display will show, for example:-(Display will differ dependant on panel version)
- Whilst this display is showing (the first five seconds) press the keys shown in a, b, c or d for the reset required. (E.g. 4 6 Yes No).

The display will show:-This may show for several minutes.

4) The display will then show:-

**Selecting 1:BS** - Panel may be programmed to comply with the old BS4737 Standards. DD243 requirements will still apply.

**Selecting 2:EN2** - Panel may be programmed to comply with EN50131-1 for Grade 2 Systems. DD243 requirements will still apply.

5) Select **2:EN2**.The display will then show:-This may show for several minutes.

Note: This document assumes that 2:EN2 has been selected.

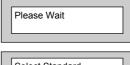
The display will then show:-

- 6) Enter Engineer code. (1234 default). The display will show:-
- 7) Enter the Authorisor code. The Authorisor code is the Master User, (default 5678). The display will show:-

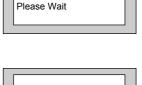
**Note:** It may be required that an engineer has to be authorised by a user before access to the engineer mode is granted.

8) Press Yes. The display will show:-





Select Standard 1:BS 2:EN2



00:01:50

Enter Authorisor Code . . . . .

01 Jan

Do you want to
Use ENGNR. Mode ?

Program Zones
Zones ?

## 4 **PROGRAMMING**

## **Moving Around**

Enter Engineer mode as described on page 13.

The display will show:-



Whenever three underscores are shown on the display the screen is a header.

Pressing the NO key will move to the next header.

Pressing the YES key whilst viewing a header will enter into the options under that header.

Pressing 0 will escape back one step (except when a numeric entry is required).

You are able to jump to various common options when programming by entering the relevant menu numbers. With a **Header** showing, key in the appropriate menu number, then press Yes. (See Page 17 for Common Options with Menu Numbers).

Below is given a complete list of headers (**Shown in Bold Underline**) and options that appear under each header.

**Headers & Options** 

## **Headers & Options**

## Program Zones

Zone Types Zone Descriptors Zone Wiring Zone Attributes *(Test/Part/Chime)* Zone Double Knock/Arm/Log Zone E/E Mode Event Tags

## Setting Modes

Setting For Full Sets Setting For Part 1 Sets Setting For Part 2 Sets Setting For Part 3 Sets Setting Delay Setting Sounders Setting Conformation Auto Part Set

## Entry Times

Entry Time 1 Entry Time 2

## Bells / Sounders

Bell Type Bell Delay/No Arms Bell & Sounder Ring Bell Tamper Mode Bell For Part Set

## Keypad / Keyswitch

Keypad Alert 1 Keys Keypad Alert 2 Keys Quick Key Number of Keypads Keypad Backlight Mode Ace / Prox

**Headers & Options** 

## **Headers & Options**

## **Digicom**

Type or Test Vo-Comm Start Delay Channels Digicom/Modem Functions

## Line Fault Modes

Line Fault Sounders Line Fault Mode in Exit Line Fault Log Mode Line Fault Detect Time

## Panic / Duress

PA Mode Testable / Non-Testable Duress Off (To conform with EN standards, Duress is defaulted to Off and cannot be changed)

## Sounder Levels

Chime Level Entry/Exit Level Key Beep Level

## PGM1/Custom

PGM1 O/P Custom Output 1 Custom Output 2 Custom Output 3 Custom Output 4 Custom Output 5 Custom Output 6 Custom Output 7 Custom Output 8

## Engineer Code

Engineer Code Engineer Code Locked/Unlocked

## PGM2 / PGM3 / Timers

PGM 2 Mode PGM3 Mode Timer 1 On Time Timer 1 Off Time

## Reset Modes

Mains Fail Delay Alarm Reset Tamper Reset Alarm Restore On/Off Abort Time

## **Headers & Options**

## **Service**

Service Timer / PTM Time To Next Service Service Tel No. Lock-Out On/Off Engineer Mode Constant/Timed

## **Custom Screens**

LCD Status Display LED Status Display

## **Diagnostics / Log**

List Event Log Change List Diagnostics

## Headers & Options

## Alarm Confirm

Window Time On Entry Sounder Mode Reset Mode Secondary Time ET Mode Bell Mode Strobe Mode Start Delay Comms Restore Keypad Opening

In conclusion, the Yes and No Keys are used to navigate. The No Key is also used to change a value (may also require a numeric input) and the Zero Key is used to move back a level (not when display is expecting a numeric input)

If you are confident in programming the CPX Control Panel please use the headers and options above to continue

Otherwise

Please continue with the next section for a Step by Step Guide to programming the CPX Control Panel.

Only the major options will be covered in the Step by Step sections. After completing the sections you should be confident to program the remaining options.

## **Common Options with Menu Numbers**

You are able to jump to various common options when programming by entering the relevant menu numbers. With a **Header** showing, key in the appropriate menu number, then press Yes.

### Menu Jumps to

- 1 PGM 1 Output
- 2 Timer 1 On Time
- 4 Timer 1 Off Time
- 6 PA Mode
- 8 Chime Level
- 9 Entry Exit Level
- 10 Exit Sounder Mode
- 11 Final Set Delay
- 12 Full Set Setting Time / Setting Mode
- 13 Part 1 Set Setting Time / Setting Mode
- 14 Part 2 Set Setting Time / Setting Mode
- 15 Part 3 Set Setting Time / Setting Mode
- 20 Alert 1 Keys Mode / On Off
- 21 Alert 2 Keys Mode / On Off
- 22 Install Keypads
- 23 Bell Delay / No. of Bell Arms
- 24 Bell Ring Time / Sounder Mode
- 26 NovActive On Off
- 27 Bell Tamper Ring On Off
- 28 Entry Time 1
- 29 Entry Time 2 / Warning Bell
- 30 Fire Zone Delay
- 34 Digicom Type
- 35 Key Beep Level
- 37 Zone Re-Arm / Double Knock Time
- 38 Engineer Code
- 40 Line Fault Sounders
- 41 Line Fault Mode
- 42 Line Fault Log
- 44 PGM 1 Output
- 46 Main Fail Delay
- 47 Tamper Reset Mode
- 48 Backlight Mode
- 50 Zone Response
- 51 Zone Types
- 52 Test Zone (Attributes)
- 53 Save Panel NVM to PTM / Service Timer
- 54 Service Due Weeks
- 55 Zone Log Limit
- 58 Digicom Channels
- 64 Alarm Restore / Abort Time
- 65 Test Digicom Channels
- 66 E/E Zones in Part Set
- 67 Engineer Code Locked / Unlocked
- 68 Strobe Confirm

### Menu Jumps to

- 69 Auto Part Set
- 70 Part Set Bells
- 71 Zone Types (Enter Zones)
- 72 On Board Pairing
- 75 Program Zone Wiring
- 92 LCD Status
- 97 List Event Log
- 131 NovActive
- 139 PSU Test Time
- 153 Test Zones
- 155 Confirm Time Window (DD243 Section)
- 156 Secondary Time Window
- 157 Confirm on Entry On Off
- 158 Sounder Trigger
- 159 Unconfirm Reset Mode
- 160 E/T Mode
- 161 Bell Trigger
- 162 Confirm Start Delay
- 164 Strobe Timer
- 165 Strobe Trigger
- 166 Custom 1 OP Mode
- 167 Custom 2 OP Mode
- 168 Custom 3 OP Mode
- 169 Custom 4 OP Mode
- 170 Custom 5 OP Mode
- 171 Custom 6 OP Mode
- 172 Custom 7 OP Mode
- 173 Custom 8 OP Mode
- 174 Comms Restore On Off

## **Programming Zones**

1)	With the display showing:-	01 Jan 00: 00: 01
2)	Enter the Engineer code <b>(1234 default)</b> The display will show:-	Enter Authorisor Code
3)	Enter the Authorisor code. The Authorisor code is the Master User, <b>(default 5678)</b> . The display will show:-	Do you want to Use ENGNR. Mode ?
4)	Press YES. The display will show:- This is Engineer Mode.	Program Zones ?
5)	Press Yes. The display will show:-	Program Zone Types ?
6)	Press Yes. The display will show:-	Enter Zone #
7)	Enter the zone number you wish to program e.g 1 followed by Yes. The display will show, for example:-	001 = Ent/Ex = Remove -
8)	Press No. The display will show:-	001 > Ent/Ex = Remove -

9) Note the chevron has now appeared before the Zone Type. Now press the No key until the Zone Type you require is displayed.

## Zone Types available are:-

## 12 Hour

Full Alarm if Control Panel is Set.

## Access

Will allow to pass through on exit. Will allow to pass through on entry only if E/E is opened first.

## 24 Hour

Internal Sounder if Unset. Full alarm if Set. Remains active in Engineer Programming Mode.

## Entry/Exit (or E/E)

Zone used as last exit point (will terminate exit time if setting mode is set to E/E or Time+E/E). Will start E/E time if opened when Control Panel is Set

## Part E/E

As Access if Control Panel is Full Set As Entry/Exit if Control Panel is Part Set

#### Panic

24Hour Personal Attack (or Panic Attack). Active if Control Panel is Set, Unset or in Engineer Programming Mode . May only be tested via Engineer code if programmed as testable.

#### Alert

Internal Sounder Only, Recorded to Log when Unset Recorded to Log when SET

#### Fire

Will give Fire alarm when activated (pulsed sounders) with Control Panel Set or Unset.

Remains active in Engineer Programming Mode.

## EΤ

Exit terminator. Used for final setting of the system. Exit Mode must be programmed for ET.

## Monitor

Will write to the log once only in any one set or unset unless chime is allocated then all activations are written to the log.

## KSW Bat

When used, zone should be connected to the trouble/status output of third party radio equipment that is capable of giving a low battery signal.

## Line Fault

When used, acts as a Line Fault input to the control panel.

#### Fault

When used, will act as an Fault input to the control panel when an internal fault has been detected within the PIR.

#### Mask

When used, will act as an input to the control panel if the detector has been blocked or covered.

**Note**: Fault and Mask are treated as 24Hr but trigger a Fault Sound in Day (Unset) Mode. The Fault sound is a three tone sounder.

10) When you are satisfied with your selection press Yes. The display will show for example:-

001 = Ent/Ex > Remove -

We will now be changing the Zone Attributes. Options available are:

- **Remove-** The zone may not be Removed (Omitted) by the end user. (Part Sets are still allowed).
- **Remove+/DK** Zone may be Removed (Omitted) by the end user and is a Double Knock Zone (2 activations required within time window or zone left open for 15 seconds).
- **Remove-/DK** Zone may not be Removed by end user (Part Sets are still allowed) and is Double Knock Zone.
- Off Zone is turned Off (Use with caution).
- **Norm Key** Zone is a Keyswitch Zone for a normal type Keyswitch
- Bias Key Zone is a Keyswitch Zone for a Bias (momentary) type Keyswitch
- **Remove+** Zone may be Removed by end user.
- 11) Press No until the setting you require is displayed then press Yes.
- 12) The display will show the next zone to program. You should repeat from Step 7 until you have programmed all the zones.
- 13) When all required Zones have been programmed press 0 (zero) key **twice**. The display will show:-

Press No. The display will show:-

Program Zone Types ?	
-------------------------	--

Program Zone Descriptors ?

14)

15) Press Yes. The display will show:-

Enter Zone #	

16) Enter the Zone number you wish to program the Descriptor for followed by Yes. The display will show for example:-

Zone 001 Name = Zone 001

Zone 001 Name =

- 17) Press No. The display will show:-
- 18) You should now program the Descriptor you require using the template below for the key allocation in a similar way that you you would type a text message on a mobile telephone.

As the desired character is displayed press the Yes key to move on to the next character.

Continue until the line is complete.

1	2	<b>3</b>
ABC	DEF	GHI
<b>4</b>	5	6
JKL	MNO	PQR
7	8	<b>9</b>
STU	VWX	YZ Space
<b>No</b>	<b>0</b>	<b>Yes</b>
Delete	1234567890	Enter Character

19)	As you enter the last character the display
	will move on to the next Zone. For example:-

Zone 001 Name = Zone 001

20) Repeat from Step 16 until all the Descriptors you require have been programmed. Then press 0 (zero) key twice.
 The display will show:-

Program Zone

Descriptors ?

Press No. The display will show:-

21)

- 22) Press Yes. The display will show:-*Note: Zone Response time is defaulted to 400ms and may not be changed.*
- 23) Press Yes. The display will show:-Note: Zone response time may be programmed as a global parameter. The default time is 400ms and may be reprogrammed from 2 to 14 seconds. (increments of 2 seconds).

Wiring ?

Program Zone

Zone Response :400 mS

Fault / Mask Zones Response=Norm

The time programmed for this option will apply to all zones, there is no option for individual response times per zone. It is a global setting.

Once the Fault / Mask as been triggered the response time for the Fault / Mask will revert to the default time of 400ms until the fault / mask problem has cleared.

- 24) Press No until the required settings you require are displayed then press Yes. The display will show:-
- On-Board Zones =9<EOL>

## Wiring Modes available are.

- 8 (2 Wire) Two wires are used for the zone and a global tamper is used.
- 9 (EOL) Two wires are used in conjunction with two resistors to give End Of Line wiring, this is the most secure wiring format.
- **8+8 (EOL)** This wiring method uses double EOL format to give 16 Zones from the control panel.

## Note: For information on how to wire for the various wiring modes please refer to the wiring section within this manual.

If selecting 9 (EOL) follow steps 24 through to 26. If selecting 8+8 (EOL) jump to step 28.

- 25) With the display showing:-Press Yes.
- 26) The display will show:-

On-Board Zones =9<EOL>

On-Board	EOL
=Norm	

**On-Board Zones** 

**On-Board Zones** 

On-Board Pairing

>8+8<EOL>

=Off

=9<EOL>

#### Three wiring options are available under 9 (EOL):

- **Norm:** Standard GardTec wiring configuration without Mask or Fault detection. *Note:* Does not give any Fault or Masking detection and should only be used with Zone pairing.
- **ELF1:** ELF1 wiring is used for detectors that have a relay output (a pair of terminals) for Fault or Mask..
- **ELF2:** ELF2 wiring is used for detectors that have a transistor output (a single terminal) for Fault or Mask.

**Note:** We would recommend that either ELF1 Format or ELF2 Format (dependant on detector output type, Relay or Transistor) is used. ELF1 or ELF2 wiring modes will allow for Alarm, Tamper, Fault and Masking to be monitored from a single zone without the need for zone pairing.

**Note:** The installer should check what output type the detector are, noting that all the detectors should be of the same type with regards to the Fault / Mask output.

27)	Press No until the setting you require is displayed	Radio ZEX
	then press Yes. The display will show.	=Off

#### If 8+8 EOL wiring option is required.

With the display showing: Press No until 8+8<EOL> is displayed.

The display will show:-

29) Press Yes. The display will show:-

#### Zone Pairing.

A zone is used to monitor Masking and Fault.

This is achieved by selecting Zone Pairing as on. Zone Pairing cannot be used in ELF1 or ELF2 wiring modes.

When using Zone Pairing each zone will have a corresponding paired zone that will be used for Masking and Fault signals. This is done by using the Odd numbered zones for the normal alarm detection and the Even numbered zones for Masking and Fault Detection. For example.

Pared Zone for Mask / Fault
Zone 2
Zone 4
Zone 6
Zone 8

Please note that half the zones on the system would be lost for processing the Mask and Fault signals and it would be more prudent to use the ELF1 or ELF2 modes as described previously.

- 30) Press No until the setting you require is displayed. Then press YES. The display will show:-
- 31) With the display showing:-
- 32) If you are not using Radio Detectors press Yes and jump to Step 33

Otherwise

Press No until the display shows:-

Radio ZEX	
= Off	



Radio ZEX	
= On	

Comprehensive instructions on how to setup and program the Radio Expansion are given in the document Hybrid Wireless Set-Up & Programming Guide supplied with the Radio Receiver.

33)	Press Yes. The display will show:-	Program Radio Functions ?
34)	Press No. The display will show:-	Program Zone Wiring ?
35)	Press No. The display will show:-	Program Zone Attributes ?
36)	Press Yes. The display will show:-	Test None

Any 12Hr type zone(s) may be placed on Test. A Zone on Test will never trigger an alarm or send a central station signal. If the Zone(s) fails the Test when the system is Set the display will show Test Fail when the user Un-Sets the system. After 20 successful Sets and Un-Sets the Zone(s) will be taken out of Test by the system. (To reset a Test Failed display <u>FULLY</u> Set then Unset the system).

37) If you do not wish to put a Zone(s) on Test press Yes and jump to Step 43

Otherwise

38) Press No. The display will show:-

Enter Zone #
then +YES or -NO
,

Test 003

- 39) Enter the Zone number you wish to place on Test followed by Yes.The display will show for example:-
- 40) To add more Zone(s) to the Test repeat from Step 38.

- 41) When you have finished adding Zones to Test press Yes.
- 42) The display will show:-

Pt-1 None

Three Part Sets are available on the CPX control panel. Zones added to the PT-1 (Part 1) screen will be Removed (Omitted) when the system is Part 1 Set. Zones added to the PT-2 (Part 2) screen will be Removed (Omitted) when Part Set 2 is used. When Part Set 3 is used Parts 1 & 2 are combined and Removed (Omitted).

43) If you do not wish to enter PT-1 Zone press Yes and jump to Step 47

Otherwise

Press No. The display will show:-

Enter Zone #
then +YES or -NO

44) Enter the Zone number you require for PT-1 followed by Yes.The display will show for example:-

45) To add more Zones to PT-1 repeat from Step 43

- 46) When you have finished adding Zones to PT-1 press Yes
- 47) The display will show:-

Pt-1 004

Pt-2 None

Otherwise

and jump to Step 52

48)

Press No. The display will show:-

If you do not wish to enter PT-2 Zone press Yes

- 49) Enter the Zone number you require for PT-2 followed by Yes. The display will show for example:-
- 50) To add more Zones to PT-2 repeat from Step 47
- 51) When you have finished adding Zones to PT-2 press Yes
- 52) The display will show:-

Please refer to the User Manual for details.

Chime.

Two Chime suites are available on the CPX control panel so for example you would have the Front Door on Zone 1 programmed into Ch1 and the Rear Door on say Zone 6 programmed into Ch2. When the system is Unset opening the Front Door will produce a Chime. Opening the Rear Door will produce a different

Pt-2 005
1 (-2 005

Enter Zone # \_ \_ \_ \_ then +YES or -NO

Ch1 None
----------

53) If you do not wish to enter Ch1 Zone press Yes and jump to Step 57

Otherwise

Press No. The display will show:-

54)	Enter the Zone number you require for Ch1
	followed by Yes.
	The display will show for example:-

55)	To add more 2	Zones to Ch1	repeat from	Step 53
00,	10 uuu moro z		ropout nom	0.00 00

- 56) When you have finished adding Zones to Ch1 press Yes
- 57) The display will show:-
- 58) If you do not wish to enter Ch2 Zone press Yes and jump to Step 62

Otherwise

Press No. The display will show:-

59) Enter the Zone number you require for Ch2 followed by Yes. The display will show for example:- Enter Zone # \_ \_ \_ \_ then +YES or -NO

Ch1 001	

Ch2 None

Enter Zone # \_ \_ \_ then +YES or -NO

Ch2 006	1

- CPX Engineer's Reference Guide
- To add more Zones to Ch2 repeat from Step 58
- 61) When you have finished adding Zones to Ch2 press Yes
- 62) The display will show:-(See notes on Sec & Per after step 65).

This concludes the Step by Step instruction for the Zone Programming. 63) You may continue within this section to program

> Secondary Zones Perimeter Zones Double Knock Time Window Zone Re-Arm Zone Log Limit Zone E/E Mode Event Tags

64) Press 0 (zero) twice to return to:-

65) At this point you may press No to move to the next Header. Or Press 0 (zero) until the display shows:-

Secondary Zones:

Zones programmed as secondary will not active any sounders or comms until a normal zone activates.

This will then trigger a confirmed signal and activate the sounders as programmed.

#### Perimeter Zone:

Zones programmed as perimeter will activate the alarm as normal but will also activate a comms channel programmed as perimeter.

#### DKnock/Arm/Log:

Zones on double knock are required to activate within the double knock time window or stay active for fifteen seconds to generate an alarm condition.

Arm is used to program the zones to automatically re-arm after an activation. It should be noted that a zone still violated when the system times out after an alarm, will not re-armed.

- Note: Zone Log Limit is defaulted to On and may not be changed. Only five activations from any one zone will be recorded in the log during any set period.
- Note: E/E in part set entry exit zones will start the entry timer if opened in part set. 12Hr in part set entry exit zones will be instant when opened in part set.

_	
Program	

01 Jan	00: 00: 01
--------	------------

Zones ?

Sec. None	

60)

## Reporting a Mains Fail on a PSU.

In order to report a Mains Fail on a PSU the Fault output on the PSU would be wired to a Zone on the Control Panel. Program Zone Event Tags ?

The Zone Type would be programmed as 'Fault'.

Program the Zone Descriptor as External PSU.

At the end of the Program Zones menu we have a menu called Program Events Tags, enter this option and select the Zone number you have programmed as Fault.

Program the Tag as Mains Fail. Then program a Digi Channel as Mains Fail.

This will allow for full reporting of External PSUs.

>Set by TIME

## **Programming Setting Modes**

Setting Modes are the modes that the control panel will use to set the system for a particular type of set. An example of this may be that the Full Set Modes is programmed as Final Exit Door (door opening and closing during exit will set te panel) whilst the Setting Mode for Part Set 1 is timed. Each type of Set (Full, Part 1, Part 2, Part 3) may have its own Setting Mode.

1)	Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-	Program Zones ?
2)	Press No. The display will show:-	Program Setting Modes ?
3)	Press Yes. The display will show:-	Program Setting for FULL set ?
4)	Press Yes. The display will show:-	F-Exit time =30s =Set by TIME
5)	Press No <b>twice</b> . The display will show:-	F-Exit time >s =Set by TIME
6)	Enter the time you require as the Exit Time (in seconds) followed by Yes. The display will show for example:-	F-Exit time =20s

7) Use the No key to scroll through the Setting Modes.

Options available for Setting Modes are.

Set By	Time	The system will Set after the Time Exit Time.	shown in the
Set By	ET	The system will set when the Exit T outside the premises is pushed (thi a Zone to be programmed as Exit T	s option will require
Set By	E/E	Once the user has started to Set the will continue until the Final Exit Door This option will require a Door Con-	or is opened then closed.
Set By	Time+E/E	Once the user has started to Set th Set on either the Time expiring or t closing. This option may require a l	he door opening and
8)	When the Setting press Yes. The d	) Mode you Require is displayed isplay will show:-	Program Setting for FULL set ?
9)	Press No. The di	splay will show:-	Program Setting for PART 1 set ?
10)	Press Yes. The c	lisplay will show:-	P1-Exit time =30s =Set by TIME
11)	Press No <b>twice</b> .	The display will show:-	P1-Exit time >s =Set by TIME

12) Enter the time you require as the Exit Time (in seconds) followed by Yes. The display will show for example:-

P1-Exit time =20s >Set by TIME

- 13) Use the No key to scroll through the Setting Modes.
- 14) When the Setting Mode you require is displayed press Yes. The display will show:-

15) Press No. The display will show:-

- 16) Press Yes. The display will show:-
- 17) Press No twice. The display will show:-
- Enter the time you require as the Exit Time (in seconds) followed by Yes.
   The display will show for example:-
- 19) Use the No key to scroll through the Setting Modes.
- 20) When the Setting Mode you Require is displayed press Yes. The display will show:-

Program Setting for PART 1 set ? Program Setting

for PART 2 set ?

P2-Exit time =30s =Set by TIME

P2-Exit time >\_ \_s =Set by TIME

P2-Exit time =20s >Set by TIME

Program Setting for PART 2 set ?

21) Press No. The display will show:-Program Setting for PART 3 set ? 22) Press Yes. The display will show:-P3-Exit time =30s =Set by TIME 23) Press No twice. The display will show:-P3-Exit time >\_\_s =Set by TIME 24) Enter the time you require as the Exit Time (in seconds) followed by Yes. The display will show for example:-P3-Exit time =20s >Set by TIME 25) Use the No key to scroll through the Setting Modes. 26) When the Setting Mode you Require is displayed press Yes. The display will show:-Program Setting for PART 3 set ? 27) Press No. The display will show:-Program Setting Delay? 28) Press Yes. The display will show:-Final Set Delay

The Final Set Delay is a period of time in seconds after the expiry of the Exit Time and is intended to allow any PIRs for example that are on the Exit Route to settle before the system finally Sets. The majority of PIRs will settle within the Default Time of 3 seconds but some may need a Final Setting Delay of up to 10 seconds.

= 03s

- 29) Press No twice. The display will show:-
- 30) Enter the Time required (in seconds) followed by Yes. The display will show:-
- 31) Press No. The display will show:-

#### Setting Sounders refers to Part-Sets Only

The Setting Sounders option determines if any, or all Part Sets are audible (Exit Tones) or not. This is a useful feature when part of the family may already be asleep when the system is being Part Set.

- 32) Press Yes. The display will show:-
- 33) Press the No key to scroll through the options

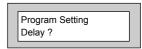
Options available for Setting Sounders are.

- Always Audible Exit Sounder will be audible for Full Set and all Part Sets
- Silent If Part 1 Exit Sounder will be silent during a Part 1 Set
- Silent If Part 2 Exit Sounder will be silent during a Part 2 Set
- Silent If Part 3 Exit Sounder will be silent during a Part 3 Set
- Always Silent Exit Sounder will be silent during ANY Part Set

When using a silent Part Set a single beep will be heard at the end of the Exit Time to confirm the system has Set.

34) When you have the required setting displayed press Yes. The display will show:-

Final Set Delay



Program Setting Sounders ?

Exit Sounder	
= Always Audible	
/ anaje / aanoie	

Program Setting
Sounders ?

35) Press No. The display will show:-

Program Setting Confirmation ?

# Setting Confirmation uses the Strobe Light to confirm that the system has finally set.

36) Press Yes. The display will show:-

Strobe C	onfirm	
= Off		
= 011		

37) Press the No key to scroll through the options

Available options for Strobe Confirm are.

Off Strobe Confirm is turned Off

Full-Set The Strobe will Confirm only on Full Set

Any-Set The Strobe will Confirm on Any Set (Full or Part)

38) When the required setting is displayed press Yes. The display will show:-

Program Setting Confirmation ?

Program Setting for Auto-Part ?

39) Press No. The display will show:-

Auto Part Set allows the system to decide if the Setting should be Full Set or Part 1 Set. In order to use this option the Setting Mode for Full Set MUST be Time+E/E and a Door Contact must be fitted to the door.

If the system sees the door open and close during a setting procedure the system will Full Set.

If the system does not see the door open and close during a setting procedure the system will Part 1 Set.

It is not possible to use Silent Part Sets with this option as the decision to do a Part 1 set is taken after the Entry Time has expired.

Auto Part-Set = Off

- 40) Press Yes. The display will show:-
- 41) To change this press No **twice**. The display will show:-
- 42) Press Yes. The display will show:-
- 43) This concludes the programming for Setting Modes. Press 0 (zero) to return to:-

Or

Press 0 (zero) until the display shows:-

Auto Part-Set	
= On	
0	

Program Setting	
r rogram Setting	
for Auto-Part ?	

-	
Program Setting Modes ?	

01 Jan	00: 00: 01
--------	------------

### **Programming Entry Times**

Two Entry Times are available (Entry Time 1 & Entry Time 2). On entry to the premises via the Entry Door Entry Time 1 will start. If deviation from Entry Route during Entry Time 1 then Entry Time 2 starts. Entry Time 2 is 30 seconds and cannot be changed. Note that comms cannot take place until the later of the theoretical expiry of Entry Time 1, or the expiry of Entry Time 2.

**Note:** Entry Time 1 is defaulted to 30 seconds but maybe changed to a maximum of 45 seconds.

Note: Entry Time 2 is defaulted to 30 seconds and may not be changed.

- 1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No twice. The display will show:-

3) Press Yes. The display will show:-

4) Press Yes. The display will show:-

5) Press No twice. The display will show:-

6) Enter the Time required (in seconds) followed by Yes. The display will show:-

Program . . . . \_ \_ \_ \_ Zones ?

Program Entry Time 1 ?

Entry Time 1 = 30s

Entry Time 1 > \_ \_s

Program Entry Time 1 ?

Program Entry Time 2 ?

#### 7) Press No. The display will show:-

#### Press Yes. The display will show:- *Note:* Entry Time 2 is defaulted to 30 seconds and may not be changed.

**Warning Bell.** Default is set to On but may be changed to Off. If Warning Bell is On, then Bells will operate during Entry Time 2, after the theoretical expiry of Entry Time 1 has been reached. If set to Off, the bells will activate only when both Entry Time 1 and 2 have expired.

- Press No to change the setting followed by Yes The display will show:-
- 10) This concludes the programming for Entry Times. Press 0 (zero) to return to:-

Or

Press 0 (zero) until the display shows:-

Entry Time 2 : 30s Warning Bell = On

Program Entry

Time 2?

Program .... \_\_\_\_ Entry Times ?

01 Jan	00: 00: 01
--------	------------

# Programming Bells / Sounders

1)	Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-	Program
2)	Press No three times. The display will show:-	Program Bells / Sounders ?
3)	Press Yes. The display will show:-	Program Bell Type ?
4)	Press Yes. The display will show:- For information on NovActive refer to page 89	NovActive = Off
5)	This option should remain Off unless you are using a NovActive Bell Box Press Yes. The display will show:-	Type = SAB Normal

Two Types of Bell may be programmed.

- **SAB** Self Actuating Bell. The Bell + terminal stands at 12V and the Bell terminal switches negative on activation.
- SCB Self Contained Bell. The Bell + and Bell stand at 12V and 0v. The 0V is removed on activation.

The majority of Bells sold in the UK are SAB you should only change the Bell Type if you are sure the Bell Type you have is SCB.

The other option on this screen may be programmed as

- Normal Normal UK trigger for the UK
- Irish A Pull-Up resistor is required on the Bell Trigger this option is only required for the Irish Republic.

Program Bell Type ?

The display will show:-

7) Press No. The display will show:-

8) Press Yes. The Display will show:-

9) Press No twice. The display will show:-

10) Enter the number of minutes you require for the Bell Delay followed by Yes. The display will show:-

Note: Bell delay is defaulted to 0 but maybe programmed to a maximum of 10 minutes.

Be careful when using Bell delay, the Bell will not sound for the period programmed after the the alarm has been activated. Bell Delay used to be a Police requirement but is now not often used in the UK.

11) Press No.The display will show:-

Number of Arms is the number of times the bell is capable of sounding during a Set period. It is normal to set this option to 3 or 4, If left at 99 the number of Arms is infinite.

Note: If this option is programmed to 0 the bell will not activate.

12)	Enter the required Number of Arms followed by
	Yes. The display will show:-

Bell Delay = 00 m	
No. Arms >	

Bell Delay = 00 m No. Arms = 99

Bell Delay = \_ \_ m No. Arms = 99

Bell Delay = 00 m

No. Arms > 99

Program Bell Delay / No. Arms ?

Program Bell 13) Press No. The display will show:-& Sounder Ring? Bell Ring = 10 m 14) Press Yes. The Display will show:-Sounder = Constant Bell Ring = \_ \_ m Press No twice. The display will show:-15) Sounder = Constant 16) Enter the Bell Ring Time you require(in minutes) Bell Ring = 15 m followed by Yes. The display will show:-Sounder > Constant

**Note:** Bell Ring is defaulted to 10 minutes and is programmable from a minimum of 1 minute to a maximum of 15 minutes.

# The term Sounder refers to the Internal Speakers fitted to the system and also the speaker(s) fitted to the RKPs

Options available for Sounder are.

**Constant** Will continue after the Bell Time has elapsed.

Timed Will Time out with the Bell Time

17) Press No until your required setting is displayed then press Yes. The display will show:-

Strobe Timer = 000 m

Strobe Timer

Program Bell & Sounder Ring ?

=\_\_\_ m

# The Strobe light will normally continue after the Bell Time has elapsed. You may Time the Strobe if required. To do so.

- 18) Press No twice. The display will show:-
- 19) Enter the time required (in minutes) followed by Yes. The display will show:-

Note: Strobe Timer is defaulted to 0 minutes but is programmable to a maximum of 120 minutes.

Program Bell Tamper Mode ?

- 20) Press No. The display will show:-
- 21) Press Yes. The display will show:-

# With the Bell Tamper Ring On tampering the Bell Box will also trigger the Bell Output from the control panel. With Bell Tamper Ring of the Bell Trigger from the panel is not activated.

22)	Press No until your required setting is displayed	
,	then press Yes. The display will show:-	Progra

23) Press No. The display will show:-

24) Press Yes. The display will show:-

25) Press No until the required setting is displayed then press Yes. The display will show:-

26) This concludes the programming for Bells & Sounders. Press 0 (zero) to return to:-

Or

Press 0 (zero) until the display shows:-

Bell Tamper Ring	
= On	
- 011	

		Program Bell Tamper Mode ?
--	--	-------------------------------

Program Bell for Part-Set ?

1	
	Part-Set Bells
	= On

Program Bell	
for Part-Set ?	

Program Bells / Sounders ?					
01 Jan	00: 00: 01				

# **Programming Keypad**

Up to 4 RKPs (Remote Keypads) may be fitted to The CPX control panel on a 4 wire BUS. A four core connection will be required between the control panel and the remote keypad(s), keypads maybe in a "daisy chain" or "star" format

Note: A 680 Ohm resistor must be fitted to ONE RKP. If the RKPs are wired in the "daisy chain" format then this should be the last in the line.

Note: Each keypad must be programmed onto the system in order for it to be recognised by the system.

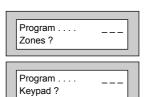
**Note:** Depending on the variant of the keypad fitted, external G-Tag Proximity Reader(s) may be fitted to each keypad.

- 1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No four times. The display will show:-
- 3) Press Yes. The display will show:-

# Alert 1 Keys refers to the PA keys being pressed together or keys 1&3 being pressed together. P&F refers to PA keys. 🝵 🍵

/• T

- 4) Press Yes. The display will show:-
- 5) Press the No Key to scroll through the settings for Alert 1. When the setting you require is displayed press Yes. The display will show:-
- 6) Press No. The display will show:-
- 7) Press Yes. The display will show:-



Program Keypad Alert 1 Keys ?

Alert 1 =Off

Alert 1 =Off	
1&3 = On	P&F > On

- 8) Press Yes. The display will show:-Program Keypad Alert 1 Keys 9) Press No. The display will show:-Program Keypad Alert 2 Keys Alert 2 Keys refer to Key 7&9 pressed together. Alert 2 = Off 10) Press Yes. The display will show:-7&9 Keys = Off Press No until the required setting is displayed 11) Alert 2 = Off then press Yes. The display will show:-7&9 Keys > Off Alert 2 = Off 12) Press No. The display will show:-7&9 Keys > On 13) Press Yes. The display will show:-Program Keypad Alert 2 Keys 14) Press No. The display will show:-Program Keypad Quick Key ?
- 15) Press Yes. The display will show:-

Quick Key = Off

The available options for the Quick Key are.

Off The Quick Key is disabled

Quick-Set Reduces the Exit Time after Exit has started.

Full-Set Enter user code then Quick Key

Part-Set Enter user code then Quick Key for Part 1 Set

- 16) Press No until the required setting is displayed then press Yes. The display will show:-
  - Press No. The display will show:-

This option is used to program the Number of Keypads you have on the system. It should be noted the there are no jumpers in the RKP to ident them this is done from the program option.

,	 	 	

Press Yes The display will show -

17)

18)

19) Press Yes. The display will show:-

20) Enter the Number of the keypad you wish to program onto the system (1 to 4) then press Yes. The display will show:-

21) Press the No & the Yes buttons together on the selected keypad. The display will show:-

Program Keypad Quick Key ?

Program Keypad
Number ?

Enter Keypad # \_\_\_\_\_ then +YES or -NO

Press NO + YES on Selected Keypad

Keypad Installed OK

Install Keypad ?

Then:-

Enter Keypad # \_\_\_\_\_ then =YES or -NO

22)	Repeat from Step 19 until all the RKPs have ben installed onto the system.	
23)	Press 0 (zero). The display will show:-	Program Keypad Number ?
24)	Press No. The display will show:-	Program Keypad Backlight Mode ?
25)	Press Yes. The display will show:-	Backlight = On if EE/Key
26)	Press No until the setting you require is displayed then press Yes. The display will show:-	Program Keypad Backlight Mode ?
27)	Press No. The display will show:-	Program Keypad ACE/Prox ?
28)	Press Yes. The display will show:- <b>Note:</b> Use of this option will require a compatible G-Tag RKP. Default is Off, but maybe changed to On. It is intended for use with the (E-Reader) and monitors the antenna of the reader for being discont	1
29)	Press No until the setting you require is displayed then press Yes. The display will show:-	Program Keypad ACE/Prox ?
30)	This concludes the programming for Keypad. Press 0 (zero) to return to:-	Program
	Or Press 0 (zero) until the display shows:-	01 Jan 00: 00: 01

# Programming Digicom / Vo-Comm Off/On

Within this section we will program the Digicom and Modem. Both of these devices are built on the main PCB of the control panel. Only the main functions will be covered within this Step by Step section.

If required, the **5**, **5**, **Yes**, **No** default may be used to set the basic comms configuration. When this default is used all other settings that have been programmed will be returned to factory defaults. When this default is used the following will be set.

Digicom Type	Mod+F/F
Modem Mode	No Return

This will allow for connection to GardTec Remote for programming functions.

- 1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No five times. The display will show:-
- 3) Press Yes. The display will show:-
- Press Yes. The display will show:-

Digicom Types available are.

Mod+F/FModem enabled and Ademco Fast Format Central<br/>Station protocol enabled.Mod+SIAModem enabled and SIA Central Station protocol enabled.Mod+PIDModem enabled and Point ID Central Station protocol<br/>enabled.

For programming details on PID (Point ID Protocol) and SIA please refer to page 91

Program . . . . \_ \_ \_ \_ Zones ?

Program Digicom ?	
----------------------	--

Program Digicom Type or Test ?

Digicom Type . . . . =Mod+F/F

5) Note:	Press No until the required setting is displayed, then press Yes. The display will show:- If <b>On</b> is selected, the Vo-Comm menu will now appear in the USER mode. Please refer to CPX User Guide for further programming information.	VoComm =Off
6)	Press No until the setting you require is displayed, then press Yes. The display will show:-	Test Digicom Channels ?
7)	Press No. The display will show:-	Program Digicom Type or Test ?
8)	Press No. The display will show:-	Program Digicom Delay / Part
9)	Press Yes. The display will show:-	Fire Zone Delay =90 Secs
10)	Press No twice. The display will show:-	Fire Zone Delay > Secs
11)	Enter the number of seconds you require for the Fire Zone Delay, followed by Yes. The display will show:-	Digi Delay = 00s Part - Alarm = On

With Digi Delay programmed, the alarm transmission to Central Station will be delayed for the number of seconds programmed. With Part Alarm programmed to Off there will be no transmission of Alarm,

- Alarm B or Alarm Abort if the system is Part Set.
- 12) Press No **twice**. The display will show:-
- 13) Enter the number of seconds you require for the Digi Delay in Part Set followed by Yes. The display will show, for example:-
- 14) Press No until the required setting is displayed, then press Yes. The display will show:-

15) Press No. The display will show:-

Digi Delay = \_\_s Part - Alarm = On

Digi Delay = 99s
Part - Alarm > On

Program Digicom
Delay / Part

Program Digicom Channels

16) Press Yes. The display will show:-

Ch1 = Off Ch4 = Off

When programming Digicom Channels Channel 1 is normally Fire, Channel 2 is normally PA (Panic), Channel 3 is normally Alarm (unconfirmed) and Channel 4 is normally Open/Close.

Channels 5, 6, 7 & 8 will be advised by your Central Station.

Other signals you may require for DD243 are.

Alarm Abort Zone Exclude Alarm B (Confirmed)

Channel settings available are.

Off Zone 24Hr Gen. Tamper Alert Fire Part-Set **Open/Close** Panic Alarm Alarm B Alarm Abort Power Fail Watchdog Mains Fail Perimeter Zone Exclude Const. Lo-Bat (Radio) Radio Lost (Radio) Const. Jjam. (Radio)

17) Press No until the required setting is displayed.

18) Press Yes. The display will show:-

Ch1 = Off	
Ch4 >Off	

19) Press No until the required setting is displayed.

20) Press Yes. The display will show:-

21) Press No until the required setting is displayed.

22) Press Yes. The display will show:-

23) Press No until the required setting is displayed.

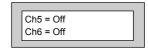
- 24) Press Yes. The display will show:-
- 25) Press No until the required setting is displayed.
- 26) Press Yes. The display will show:-

27) Press No until the required setting is displayed.

28) Press Yes the display will show:-

# Ch2 = Panic Ch3 = Alarm

Ch2 = Panic Ch3 > Alarm



Ch5 = Off	
Ch6 > Off	

	Ch7 = Off Ch8 = Off
L	

- 29) Press No until he required setting is displayed.
- 30) Press Yes. The display will show:-

- Ch7 = Off Ch8 > Off
- 31) Press No until the required setting is displayed.
- 32) Press Yes. The display will show:-
- 33) Press No. The display will show:-
- 34) Press Yes. The display will show:-
- 35) Press No. The display will show:-
- 36) Press Yes. The display will show:-
- 37) Press Yes if you require connection to a local PC. The display will show:-

Otherwise

38) Press No. The display will show:-

- Program Digicom Channels ?
- Program Digicom Functions ?
- View Modem Log ?
- Program Modem Functions ?

Access Via Local PC ?

Remote Access	

L.	Modem Mode
	=Off
1	=Off

Choose from the following settings.

- **No Return** Communication to the panel is from GardTec Remote via Patch Lead or PC Modem.
- **Return PC** The panel will ring the PC back on the number the PC has passed to the panel.

Return

- **#1 or #2** The panel will ring back the PC on the #1 or #2 number programmed into the panel.
- **Return #1 Only** The panel will ring back the PC on the #1 number programmed into the panel.
- **Return #2 Only** The panel will ring back the PC on the #2number programmed into the panel.
- From Site Only Remote Access will be initialised by the user On-Site.
- Off Modem Functions are disabled.
- 39) Press No until the required setting is displayed, then press Yes. The display will show:-

	= Off	
L		_

# This option may be used when when the panel is on a shared line and GardTec Remote is also used.

40) Press No until the required setting is displayed, then press Yes. The display will show:-

Keypad	Lock = Off	
In-Use	Text = Off	

You may continue to program other Modem options if required. For the purpose of this Step by Step section.

41) Press 0 (zero). The display will show:-

42) Press Yes. The display will show:-

Comms = Off

Program Comms Functions ?

#### Press Yes. The display will show for example:-

Press No twice. The display will show:-

In the UK the Site ID Code is normally a four digit number, your Central Station may have supplied you with a six digit number. If this is so please use the last four digits.

- 45) Press No. The display will show:-
- 46) Enter your Site ID Code followed by Yes. The display will show:-

We will be entering two Phone Numbers. If your Central Station has only supplied you with one Phone Number please use the same one twice.

- 47) Press No. The display will show:-
- 48) Enter Phone Number one followed by Yes. The display will show:-

Press Yes. The Display will show:-

50) Press No. The display will show:-

43)

44)

Site ID Code
Is Un-Programmed

Phone Number 1
is Un-Programmed

Phone Number 1

Inhibit Display
of New Number ?

is Un-Programmed		Phone Number 2 is Un-Programmed
------------------	--	------------------------------------

F	Phone Number 2
Ŀ	



Site ID Code

Dial = Tone

- 51) Enter Phone Number 2 followed by Yes. The display will show:-
- Inhibit Display of New Number ?

52) Press Yes. The display will show:-

# This option refers to the line mode of the telephone line. In the UK most telephone lines are Tone Dial.

53) Press No until the required setting is displayed, then press Yes. The display will show:-

Line Monitor = Tone + Volts

Settings available for Line Monitor are.

- Tone + Volts The Line Monitor will check the Dial Tone and the Line Voltage This setting should be used when the control panel is connected to a dedicated telephone line.
- Off Line Monitor is turned Off
- Dial ToneThe Line Monitor will only monitor the Dial Tone. This setting<br/>should only be used on a dedicated telephone line.

Line Volts Then Line Monitor will monitor the Line Voltage. This setting should be used when the control panel is connected to a telephone line that has other telephone equipment on it (shared line).

54) Press No until the required setting is displayed then press Yes. The display will show:-

Settings available for Line Security are:-

- HighThe Line Voltage is monitored at a High Level. This setting should<br/>be used on dedicated lines only.
- Low The Line Voltage is monitored at a Low Level. This setting should be used when the control panel is sharing the line with other telephone equipment.

55) Press No until the required setting is displayed then press Yes. The display will show:-

Channel 1 2 3 4 5 6 7 8 R/Rep = 0 0 0 1 0 0 0 0

Channel 1 2 3 4 5 6 7 8 R/Rep = \_ \_ \_ \_ \_ \_ \_

Channel 1 2 3 4 5 6 7 8 R/Rep = 1 1 1 1 1 1 1 1

This option determines what Digi Channels will send a Restore Signal to Central Station when the system is Reset. Most Central Stations will require a Restore Report for all channels.

- 56) Press No. The display will show:-
- 57) Enter eight ones so the display shows:-

Open/Close Channel/s = 4

58) Press Yes. The display will show:-

Channel 4 normally needs an inversion of the signal that is sent to Central Station. By having 4 as the setting for this option channel 4 will be inverted. If you have reports from the Central Station that the Open/Close channels are the wrong way around proceed as follows to remove the inversion on the control panel.

59) If you do not need to change this option press Yes and jump to Step 61.

Or

To change the setting. Press No. The display will show:-

_	
L	Open/Close
	•
1	Channel/s >
L	

60)	Press 0 followed by Yes.	The display will show:-
-----	--------------------------	-------------------------

Program Advanced Functions ?

You may continue to program other Advanced options if required. For the purpose of this Step by Step section.

61) Press 0 (zero) three times. The Display will show:-

Program	
Digicom ?	

# **Programming Linefault Modes**

1)	Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-	Program
2)	Press No <b>six times</b> . The display will show:-	Program Linefault Modes ?
3)	Press Yes. The display will show:-	Program Linefault Sounders ?
4)	Press Yes. The display will show:-	Linefault Sounders =ON if Un-Set
5)	Press No until the required setting is displayed then press Yes. The display will show:-	Program Linefault Sounders ?
6)	Press No. The display will show:-	Program Linefit Mode in Exit ?
7)	Press Yes. The display will show:-	Linefit Mode = Detect in Exit
8)	Press No until the display shows the required setting	

then press Yes. The display will show:-

Program Lineflt Mode in Exit ?

9)	Press No. The display will show:-	Program Lineflt Log Mode ?		
10)	Press Yes. The display will show:- Note: Line Fault is defaulted to Limited and may not be changed. This limit is set to 3 events.	Lineflt Log : Limited		
11)	Press Yes. The display will show:-	Program Linefit Log Mode ?		
12)	Press No. The display will show:-	Program Lineflt Detect Time ?		
13)	Press Yes. The display will show:-	Detect = 30 Secs		
With Detect programmed as 00 Linefault detection is instant or it may be delayed if required.				
14)	Press No twice. The display will show:-	Detect >Secs		
15)	Enter the time you require (in seconds) followed by Yes. The display will show:-	Program Lineflt Detect Time ?		
16)	This concludes the programming for Linefault Sounders. Press 0 (zero) to return to:-	Program Linefault Modes ?		
	Or			
	Press 0 (zero) until the display shows:-	01 Jan 00: 00: 01		
For information on Linefault Sounders refer to page 93				

### **Programming Panic**

Note: Duress is defaulted to Off and cannot be changed. Duress 7 is now no longer available.

You should also check current legislation if Panic signals are allowed for the grade of system that you are fitting.

Program . . .

Program . . . .

Panic / Duress ?

PA = Bells Only

= Non-Testable

Zones?

- Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No seven times. The display will show:-
- 3) Press Yes. The display will show:-

# It should be noted that with PA = Bells Only no PA signals will be sent to Central Station.

Available setting for PA are

Bells Only	Activating a Panic will only sound the Bells.
Bells Always	Activating a Panic will Sound the Bells and send a signal to Central Station provided that a Digi Channel is programmed as Panic.
Silent Always	Activating a Panic will only send a signal to Central Station providing that a Digi Channel has been programmed as Panic.
Bells if LFIt	As Silent Always but will revert to Bells if a Linefault is present.

- 4) Press No until the required setting is displayed then press Yes. The display will show:-
- PA = Bells Only > Non-Testable

Duress :Off	
Duroco .on	

Program Panic / Duress	

01 Jan 00: 00: 01
-------------------

- 5) Press No until the required setting is displayed then press Yes. The display will show:-*Note: Duress is defaulted to Off and may not be changed.*
- 6) Press Yes. The display will show:-
- 7) Press 0 (zero) until the display shows:-

# Programming PGM2 / 3 / Timers

PGM2 refers to the PGM2 terminal on the control panel PCB situated near to the RKP terminals.

PGM3 Refers to the Strobe terminal, if this is not used for the Strobe (for example if a NovActive Bell Box is used) it may be re-programmed for other uses.

One Timer is also available. It should be noted that the times programmed will operate seven days per week, you are not able to program separate time for weekends etc.

- 1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No eight times. The display will show:-
- 3) Press Yes. The display will show:-
- 4) Press Yes. The display will show:-

Options available for PGM2 / 3 are.

Bell Strobe Latch Any Any Digi Status Perimeter Zone Exclude Custom 1 to 8 Int. Sounder E/E Timed 1 Alert

Program Zones ?	

Program PGM2 / 3 / Timers ?
-----------------------------

Program PGM2 / 3 Operating Modes ?

PGM2 O/P	
= Bell	= +V
- Dell	v

the required setting s. The display will sh	
the required setting s. The display will sh	

	(••••)
Alm Abort	(Alarm Abort)
Any Fire	
Any Panic	
Gen. Tamper	(General Tamper)
Zone - 24Hr	
Power Fail	
Power OK	
Const. LoBat	(Radio Low Battery)
Radio Lost	(Lost Radio Detector etc.)
Const.Jamm.	(Radio Signal Jamming)
Any Fault	
Any Mask	
Watchdog Off	
Pulse Off	
Pulse On	
Any Set	
Alarm	(Unconfirmed)
After Alarm	(encentinea)
Open / Close	
Pulse Set	
Part Set	
Walktest	
Mains Fail	

(Confirmed)

cont-

Alarm B

5) Press No until the required setting is displayed then press Yes. The display will show for example:-

PGM2 O/P > +V = Bell

With the PGM2 programmed as Bell the output will operate with the Bell when this is set as +V. With this set as -V the output will be inverted e.g On, turning Off with the Bell.

6) Press No until displayed then press Yes w:-

7) Press No until displayed then press Yes w:-

Program PGM2 / 3 **Operating Modes ?** 

PGM3 O/P		
= Strobe	> +V	

- 8) Press No. The display will show:-
- 9) Press Yes. The display will show:-

10) Press twice No. The display will will show:-

11) Enter the On Time hours followed by Yes. The display will show:-

- 12) Press No. The display will show:-
- 13) Enter the On Time minutes followed by Yes. The display will show:-
- 14) Press No. The display will show:-Repeat for Timer 1 Off Time
- 15) Press Yes. The display will Show:-

Timer 1 On Time ?Timer 1 On Time<br/>= 00:00 HrsTimer 1 On Time<br/>> \_ \_ : 00 HrsTimer 1 On Time<br/>= 10:>00 Hrs

Program PGM2 / 3

Timer 1 On Time = 10:>\_ \_ Hrs

Program PGM2 / 3 Timer 1 On Time ?

Program PGM2 / 3 Timer 1 Off Time ?

Program PGM2 / 3
Timer 1 Off Time ?

#### 16) This concludes the programming for PGM2/3/Timer

17) Press 0 (zero) to return to:-

Or

Press 0 (zero) until the display shows:-

Program PGM2 / 3 /	 Timers ?	]
01 Jan	00: 00: 01	]

# **Programming Reset Modes**

1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 Program . . . With the display showing:-Zones? Press No nine times. The display will show:-Program . . . 2) Reset/Mains ? Mains Fail Delay 3) Press Yes. The display will show:-=20m Press No twice, then enter the Mains Fail Delay 4) Alarm Reset time you require. Then press Yes. The display will = Master show:-Note: Default is set at 20 minutes. Will delay the display and the necessity to reset a mains fault for the time programmed. 5) Press No until the required setting is displayed. Tamper Reset Then press Yes. The display will show:-=Eng. +Anti When Alarm Restore is turned On the Digi channels programmed with Restore On will be restored when the system is unset rather than when the system is Reset. Press No until the required setting is displayed 6) Alrm Restore = Off then press Yes. The display will show for example:-Abort Time = 60s

Alrm Restore = On

Alrm Restore = On

Abort Time > 60s

Program . . .

Reset/Mains

\_ \_ \_

Abort Time > 60s

- 7) Press No. The display will show:-
- Press No until the required abort time is set followed by Yes. (0-180 seconds in increments of 20 seconds).
- 9) The display will show:-

- 10) This concludes the programming for Reset Modes.
- 11) To return to:-

01 Jan	00: 00: 01

Press 0 (zero) twice

# Programming Sounder Levels

1)	Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-	Program Zones ?
2)	Press No <b>ten times</b> . The display will show:-	Program Sounder Levels ?
3)	Press Yes. The display will show:-	Program Sounder Chime Level ?
4)	Press Yes. The display will show:-	Chime Level = 05
5)	Press No twice. The display will show:-	Chime Level =
6)	Enter a value 1 to 9 (1=Low 9=High) followed by Yes. The display will show:-	Program Sounder Chime Level ?
7)	Press No. The display will show:-	Program Sounder Ent / Exit Level ?
8)	Press Yes. The display will show:-	Ent / Exit Level = 05

01 Jan 00: 00: 01

9)	Press No <b>twice</b> . The display will show:-	Ent / Exit Level
10)	Enter a value 1 to 9 (1= Low 9 = High) followed by Yes. The display will show:-	Program Sounder Ent / Exit Level ?
11)	Press No. The display will show:-	Program Sounder Keypad Level ?
12)	Press Yes. The display will show:-	Keypad Level = 05
13)	Press No <b>twice</b> . The display will show:-	Keypad Level =
14)	Enter a value 1 to 9 (1 = Low 9 = High) followed by Yes. The display will show:-	Program Sounder Keypad Level ?
15)	This concludes the program Sounder Levels press 0 (zero) to move back to:-	Program Sounder Levels ?
	Then Press 0 <b>twice</b> to move back to:-	<<<< UN-SET >>>>

### **Programming PGM1 / Custom**

PGM1 is located on the control panel PCB close to the Bell terminals.

Up to 8 custom outputs may be programmed on to PGM 1 to 3. A custom output may be used so that the output can follow a zone or a user code.

- 1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No eleven times. The display will show:-
- 3) Press Yes. The display will show:-

#### The options available for PGM1 are shown on page 62.

4) Press No until the required setting is displayed then press Yes. The display will show:-

With the PGM2 programmed as Bell the output will operate w set as +V. With this set as -V the output will be inverted e.g. Bell.

- Press No. until the required setting is displayed 5) then press Yes. The display will show:-
- 6) Press No to change the Cus 1 to Zone, Code or Group as required to follow. Press Yes. The display will show:-

Program . . .

PGM1 / Custom ?

PGM1 O/P

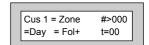
= Pulse Off

=+V

ith the Bell	whe	en	thi	s	is
On, turning	Off	w	ith	tł	ne

>+V

Cus 1 = Zone	#=000
=Day = Fol+	t=00



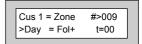
Program . . . Zones?

- 7) Press No. The display will show:-
- Enter the Zone Number or Customer Number that you wish the output to follow then press Yes. The display will show for example:-
- Press No to select when you want the output to operate followed by Yes. The display will show:-
- 10) Press No until the mode you require is displayed then press Yes. The display will show:-
- 11) Press No. The display will show:-
- 12) Enter the time required followed by Yes. The display will show:-

The t = 00 setting only applies to Fol+ Fol- Pul+ Pul-

 Repeat Steps 5 to 13 until all the Custom Outputs you require have been programmed. When you have programmed Custom 8 the display will show:-

14) Press 0 (zero) until the display shows:-





#>009
t>00

Cus 1 = Zone	#>009
+Day = Fol+	t>



Program PGM1 / Custom ?	

01	Jan	00: 00: 01

# **Programming Engineer Code**

- 1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No twelve times. The display will show:-
- 3) Press Yes. The display will show:-
- 4) Enter your New Engineer Code (4, 5 or six digits) followed by Yes. The display will show:-

Be careful if you lock your code in. If the code is forgotten you may have to return the control panel to the factory to have it unlocked, this will be a chargeable service.

- 5) Press No until the required setting is displayed then press Yes. The display will show:-
- This concludes the Program Engineer Code 6) Press 0 (zero) twice to return to:-

Program . . . Engineer Code ?

Program . . . Zones?

Now Enter Code
Then YES

Code = Unlocked

Program	
Engineer Code ?	
-	

01 Jan	00: 00: 01	
--------	------------	--



# **Programming Service**

2)

3)

4)

5)

6)

7)

8)

Otherwise

Otherwise

Within this section you will program the Service Timer. Also, if required, uploading / downloading data to the control panel via the PTM (Program Transfer Module). The Service Timer has the ability to Lock a user out of the system when the Service Time expires. Trading Standards may take action if a Lockout occurs and no Service Contract exists. Please use with care.

1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-

Press Yes. The display will show:-

Press No. The display will :-

Press No. The display will show:-

Press No twice. The display will show:-

Press Yes if you require to save to PTM

Press Yes if you require to load from the PTM

Press No thirteen times. The display will show:-

Zones ?		Program Zones ?	
---------	--	--------------------	--

Program Service / PTM ?	

5	ave	Panel	NVM
t	PT נ	Μ?	

Load Panel NVM
from PTM ?

Service Timer
= Off

Service Timer > On	
Next Service due	

in 00 Weeks

9) Press Yes. The display will show:-

**Note:** To transfer data to and from the PTM, a cable (part number 04-091) will be required. Cut off the BLUE plug at one end and wire to the RS485 terminal block on the CPX control panel PCB following the colour code. Connect the other end to the PTM.

Note: When data transfer is in progress, the LED on the PTM will flash rapidly.

- 10) Press No twice. The display will show:-
- Enter the number of weeks you require to the next Service then press Yes. The display will show:-
- Note: The system will start to warn the end user that the Service is due two weeks before the time expires.
- 12) Press No. The display will show:-
- 13) Enter the Telephone Number you wish your customer to dial for service followed by Yes. The display will show:-

With Lock - Out turned On the system will Lock the users out when the Service Time expires.

With Lock - Out turned Off the system will continue to warn of Service until the Service Timer is reset.

14) Press No until the required setting is displayed then press Yes. The display will show:-

With Engineer Mode programmed as Constant the panel will remain in Engineer Mode until the Engineer exits.

With Engineer Mode programmed as timed the panel will jump out of Engineer Mode after 1 hour if all the Tampers are clear. This prevents the Engineer accidentally leaving the panel in Engineer Mode.

- 15) Press No until the required setting is displayed then press Yes. The display will show:-
- 16) This concludes the Program Service Press 0 (zero) **twice** to return to:-

Service Tel. No.

111	LOCK - OUT ! ! !
= On	

Engineer Mode = Constant
-----------------------------

	Program Service / PTM	?	
1			

01 Jan	00: 00: 01

# Programming Custom Screens

- 1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No fourteen times. The display will show:-
- 3) Press Yes. The display will show:-

Note: The LCD Status is defaulted to None and may not be changed. The display will only show the Set / Unset status of the system for ten seconds after a Set or Unset.

- 4) Press Yes. The display will show:-
- The LED Status refers to the LED in the G-Tag 'E' or 'I' reader. Choose from:-

Off The reader LED will only show for ten seconds after a Set / Unset

- On The reader LED will always be active.
- 5) Press No until the setting you require is displayed then press Yes. The display will show:-
- 6) This concludes the Program Service Press 0 (zero) **twice** to return to:-

Program Zones ?	

Custom Screens ?		Program
------------------	--	---------

LCD Status	
:None	
L	

LED Status	
	I
= Off	I

		Program	
--	--	---------	--

01 Jan	00: 00: 01
--------	------------

# **Programming Diagnostics / Log**

The CPX control panel has some limited diagnostic features available to the engineer. To access these proceed as follows.

- 1) Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-
- 2) Press No fifteen times. The display will show:-
- 3) Press Yes. The display will show:-
- 4) Press Yes if you wish to view the Event Log The display will show for example:-

This is the last event in the Log

Use the No key to move backward in the Log

Use the Yes key to move forward in the Log

5) When you have finished viewing the Log press 0 (zero). The display will show:-

Program Zones ?
-----------------

Diagnostics / Log ?
---------------------

List	
Event Log ?	

Eng Code
01 Jan 01:18:12

Program	
Diagnostics / Log ?	

List Event Log ?

6)	Press	Yes.	the	display	will sł	now:-
----	-------	------	-----	---------	---------	-------

7) Press No. The display will show:-

8) Press Yes. The display will show:-

9) Press Yes. The display will show:-

A PSU/Battery test will be carried out at the time interval set here and each time you leave Engineer Mode. This may be turned Off by setting the Time interval to 0 (zero).

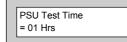
- 10) Press No twice. The display will show:-
- 11) Enter the time you require (in hours) followed by Yes. The display will show:-
- 12) Press Yes. The display will show:-

In this example any voltage over 14V or below 13V will create a warning when the PSU test is performed by the system.

13) To change these limits. Press No until the required setting for V.Max is displayed then press Yes. The display will show:-

Change / List Diagnostics ?

PSU
Diagnostics ?



PSU Test Time = \_ \_ Hrs

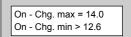
Change / List	
Test Limits ?	

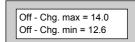


Aux. VMax = 14.0V
Aux. VMin > 13.0V

- 14) Press No until the setting required for V.Min is displayed then press Yes. The display will show:-
- 15) Press No until the required setting for On-Charge Volts max (Battery) is displayed then press Yes. The display will show:-
- 16) Press No until the required setting for On-Charge Volts min (Battery) is displayed then press Yes. The display will show:-
- 17) Press No until the required setting for Off-Charge Volts max (Battery) is displayed then press Yes. The display will show:-
- 18) Press No until the required setting for Off-Charge Volts min (Battery) is displayed then press Yes. The display will show:-
- 19) Press Yes. The display will show:-
- 20) Press Yes. The display will show:-

On - Chg. max = 14.0 On - Chg. min = 12.6





Off - Chg. max = 14.0 Off - Chg. min > 12.6



PSU Test Time = 01 Hrs	
---------------------------	--

Test Limits ?	Change / List Test Limits ?	
---------------	--------------------------------	--

# The readings given from this point on are intended as Indicator Only and should be confirmed with a calibrated Test Meter.

- 21) Press No. The display will show for example:-
- 22) Press Yes. The display will show for example:-
- 23) Press Yes. The display will show:-

The backlight will Dim at this point.

- 24) Press Yes. The display will show:-
- 25) This concludes the Program Diagnostics Press 0 (zero) until the display shows:-

Aux. V 13.6V	olts	
	olts	

1	Battery Volts
	On Charge 13.6V

Battery Volts
Off Charge 12.9V

Aux. Volts	
Aux. Volts 13.6V	

01 Jan	00: 00: 01

# Programming Alarm Confirm

This section is used to program options that are relevant to DD243. Before programming these options please take time to read the following notes that will help in your understanding of DD243.

All communications systems that require a Police URN will need to conform to DD243.

These notes intended as a guide only and should be read in conjunction with the relevant standards relating to the alarm system giving particular attention to EN50131-1and DD243. These may be obtained from the British Standards Institute.

DD243 options available are.

#### Confirm Time Window (default = 60)

This time window may be programmed between 1 and 120 minutes. To comply the required time should be between 30 and 60 minutes.

#### Confirm on Entry (default = On)

This option may be programmed to On or Off. If Confirm on Entry = Off then confirmed alarms to central station are disabled if the entry timer is started. If ACE or G-Tag is used then it is permissible to set this option to On.

#### Sounder Mode (default = Unconfirmed)

This option controls the system speakers fitted, options are confirmed or un-confirmed. If Sounder Trigger = Confirmed then internal sounder will only trigger with a confirmed alarm.

If Sounder Trigger = Unconfirmed then internal sounders will trigger with un-confirmed alarms.

This feature is not mandatory for DD243

#### Reset Mode (default = Any)

Choose from Any or Normal.

If Unconfirm = Any then any code can be used to reset an un-confirmed alarm.

If Unconfirm = Normal then the programmed reset mode for alarm will still be required i.e. if alarm reset has been programmed as engineer and Unconfirm reset is Normal then an engineer reset will be required for Un-confirmed alarms.

#### Confirm Secondary Time Window (default = 60 minutes)

This time window may be programmed between 1 and 120 minutes we would suggest a time between 30 and 60 minutes but should typically be the same time as the confirm time window. This option affects zones that have been allocated as secondary zones only. For functionality please refer to Secondary Zones Below.

#### ET (Exit Terminator) Mode (default = Set)

If ET Mode = Set then the exit terminator zone will terminate the exit procedure.

If ET Mode = Door Lock and the ET zone (door lock) is operated on entry then all confirmed alarms will be disabled.

#### Bell Mode (default = Unconfirmed)

This option controls the bells fitted to the system, options are confirmed or unconfirmed.

If Bell Trigger = Confirmed then Bell will only trigger with a confirmed alarm.

If Bell Trigger = Unconfirmed then Bell will trigger with un-confirmed alarms.

This feature is not mandatory for DD243

#### Strobe Mode (default = Unconfirmed)

This option controls the Strobe(s) fitted to the system, options are confirmed or unconfirmed.

If Strobe Trigger = Confirmed then Strobe will only trigger with a confirmed alarm.

If Strobe Trigger = Unconfirmed then Strobe will trigger with un-confirmed alarms.

This gives the ability to show to the keyholder from outside the premises that a previously unconfirmed alarm is now confirmed.

This feature is not mandatory for DD243

#### Confirmed Start Delay (default = 000m)

May be programmed between 0 & 120 minutes (default 0).

If programmed to anything other than 0 the panel cannot send confirmed signals until the time programmed has expired. This time starts when the system has set and will prevent confirmed alarms being generated in situations when a person has been accidentally locked in the building.

This feature is not mandatory for DD243

#### Ace Low Battery (default = On)

Options are On or Off. This option allows for the use of new control panel boards with V5.1 or later software to be used with earlier keypads. If older non DD243 compliant type keypads are used with V5.1 or later this option should programmed to Off. It is a requirement of DD243 2002 that when using ACE Low Battery is reported to the end user if the system is set using ACE.

#### **Secondary Zones**

The Program Part / Test /Chime option has now been renamed to Program Zone Attributes. Within this section you are able to allocate zones as Secondary Zones. Secondary type zones would be used for detectors that may be deemed as having an over sensitive nature, this will stop unwanted user call-outs. Zones that are entered as Secondary will follow the chain of events below.

During a set period triggering a Secondary Zone will start the Secondary Time Window. This will be logged but no further action is taken. If the second zone to alarm during the same set period is also a Secondary Zone then it will be logged and the Secondary Time Window will be restarted.

If the time set within the Secondary Time Window is still running and a zone that is not allocated as a Secondary Zone is triggered the event will be logged an Alarm A (unconfirmed) and Alarm B (confirmed) will be transmitted. This feature is not mandatory for DD243

#### Perimeter Zones

Within the Program Zone Attribute section you are able to allocate zones as Perimeter. Zones that are entered as Perimeter will follow the chain of events below.

When activated an unconfirmed alarm will be transmitted to the central station. An output or digi channel may be programmed as perimeter (or if using Point ID a new signal type of perimeter will be sent). This will allow central station to inform the keyholder that an unconfirmed alarm has been received and is a perimeter type device i.e window backdoor etc. etc. This feature is not mandatory for DD243.

#### Scenarios Relating to DD234.

#### Sounder / Bell Considerations

Please note careful consideration should be given when programming Confirm Sounder and Confirm Bell Modes. If both are programmed for confirmed and any of the above scenarios occur no local sounders will activate.

#### Other DD243 Notes to Consider

When a system auto re-arms with a zone in fault condition The GardTec control panel will omit the zone concerned. A signal should be sent to the central station indicating that a detector(s) has (have) been isolated. To achieve this a Digi channel should be programmed as Zone Exclude, this will automatically send the required signal as the detector is omitted.

See A.3.1 DD243 IAS Incorporating Sequential Conformation Technology Only

#### New Output Option (Status)

A new output option of Status has been added, this option has three operating modes and is intended to provide a visual indication of the system status.

System Set	Output On for 10 seconds
System Unset	Output On for 1s Output Off for 1s for a 10 second period
Confirmed Alarm reset.	Output On for 3 seconds Output Off for 1s until system

It is envisaged that this status output would be fitted to an indicator (i.e. LED) that can be seen from outside the premises.

a) Scenario specific to systems using completion of unsetting with ACE 6.4.5 DD243.

Event 1	System Set
Event 2	Entry Time Starts
Event 3	Access Zone Triggered
Event 4	Entry Expired (including Entry Time 2) Unconfirmed
	Transmitted
Event 5	non entry/access Zone Triggered
Event 6	Second non entry.access Zone Triggered Confirmed
	Transmitted

#### To achieve the above

Confirm on entry = On Ace Low Battery = On

# b) Scenario Unlocking the initial entry door disables all means of conformation 6.4.3 DD243.

Event 1 Event 2 Event 3 Event 4 Event 5	System Set Entry Door Unlocked Confirmed Alarms Disabled Open Entry Door (entry time starts) Entry Time Expires (inc Entry Time 2) Unconfirmed Alarm Transmitted Any subsequent zones triggered No Confirmed Signals Transmitted
Or	
Event 1 Event 2 Event 3	System Set Entry Door Forced Open (entry time starts) Entry Time Expires (inc Entry Time 2) Unconfirmed Alarm Transmitted
Event 4 Event 5	non entry/access Zone Triggered Second non entry.access Zone Triggered Confirmed Transmitted

#### To achieve the above

Confirm on entry = On ET Mode = Door Lock Door Lock Zone programmed as ET

# c) Scenario Opening the initial entry door disables all means of conformation 6.4.4 DD243 2002.

Event 1	System Set
Event 2	Entry Door Opened (entry time starts) Confirmed Alarms
	Disabled
Event 3	Entry Time Expires (inc Entry Time 2) Unconfirmed Alarm
	Transmitted
Event 4	Any subsequent zones triggered No Confirmed Signals
	Transmitted

#### To achieve the above

2)

3)

Confirmed on entry = Off

#### **Programming Alarm Confirm**

1)	Enter into Engineer Mode
	To do this follow Steps 1 to 4 on page 18
	With the display showing:-

Press No sixteen times. The display will show:-

-	
Program	
Zones ?	

Program Alarm Confi	
------------------------	--

Program Confirm Window Time ?

Confirm Window = 060m

Confirm	Window	
>n	า	

Press Yes. The display will show:-

5) Press No twice. The display will show:-

6) Enter the time you require followed by Yes.

The time **MUST** be between 30 & 60 minutes

Unconfirm Reset = Any ?

- 7) The display will show:-Program Confirm Window Time ? Press No. The display will show:-8) Program Confirm On Entry ? 9) Press Yes. The display will show:-Confirm on Entry = On Confirm on Entry may be On only if you are using an ACE device to Unset the system. 10) Press No until the required setting is displayed then press Yes. The display will show:-Program Confirm On Entry ? Press No. The display will show:-Program Confirm 11) Sounder Mode ? Press Yes. The display will show:-Sounder Trigger 12) = Unconfirmed The term Sounder relates to the system speaker(s) Press No until the required setting is displayed 13) Program Confirm then press Yes. The display will show:-Sounder Mode ? 14) Press No. The display will show:-Program Confirm Reset Mode ?
- 15) Press Yes. The display will show:-

16) Press No until the required setting is displayed Program Confirm then press Yes. The display will show:-Reset Mode ? Program Confirm Press No. The Display will show:-17) Secondary Time ? 18) Press Yes. The display will show:-Secondary Window = 060m 19) Press No twice. The display will show:-Secondary Window \_\_\_m 20) Enter the time required then press Yes. Program Confirm The display will show:-Secondary Time ? Program Confirm 21) Press No. The display will show:-ET Mode ? ET Mode 22) Press Yes. The display will show:-= Set Only 23) Press No until the required setting is displayed Program Confirm then press Yes. The display will show:-ET Mode ? 24) Press No. The display will show:-Program Confirm

Bell Mode ?

25)	Press Yes. The display will show:-	Bell Trigger = Unconfirmed
26)	Press No until the required setting is displayed then press Yes. The display will show:-	Program Confirm Bell Mode ?
27)	Press No. The display will show:-	Program Confirm Strobe Mode ?
28)	Press Yes. The display will show:-	Strobe Trigger = Unconfirmed
29)	Press No until the required setting is displayed then press Yes. The display will show:-	Program Confirm Strobe Mode ?
30)	Press No. The display will show:-	Program Confirm Start Delay ?
31)	Press Yes. The display will show:-	Start Delay = 000m
32)	Press No <b>twice</b> . The display will show:-	Start Delay <pre>&gt;m</pre>
33)	Enter the time required followed by Yes. The display will show:-	Program Confirm Start Delay ?

34)	Press No	o. The di	splay will show:-	Program Confirm Comms. Restore ?
35)	Press Ye	es. The c	lisplay will show:-	Comms. Restore = On
36)			e required setting is displayed The display will show:-	Program Confirm Comms. Restore ?
37)	Press No	o. The di	splay will show:-	Program Confirm Keypad Opening ?
38)	Press Ye	es. The c	lisplay will show:-	Keypad Opening = Always On
Always	On	=	Keypad is always active.	
Off in E	Entry	=	Keypad is disabled during Entry Time.	
Of in E	nt/Alm	=	Keypad is disabled during Entry time or if Entry Time goes through into Alarm.	

39) Press No until the required setting is displayed then press Yes. The display will show:-

Program Confirm Keypad Opening ?

40) This concludes the Program Diagnostics Press 0 (zero) **three times** to return to:-

01Jan	00: 00: 01

## **NovActive Description & Programming**

NovActive utilises a four core bus to the NovActive sounders that are fitted to the system. This allows each individual Bell to to programmed and also gives access to unique Diagnostic Features that allow the individual NovActive sounders to be diagnosed from either the control panel or via GardTec Remote PC Software. GardTec Remote may be used from either a remote location via a Modem or on-site via a GardTec Modem Patch Lead.

To program the NovActive sounder(s) please follow the instructions below.

Wiring of the NovActive should be carried out in conjunction with the instructions supplied with the unit.

- Enter into Engineer Mode
   To do this follow Steps 1 to 4 on page 18
   With the display showing:
- 2) Press No three times. The display will show:-
- 3) Press Yes. The display will show:-
- 4) Press Yes. The display will show:-
- 5) Press No twice. The display will show:-
- 6) Press Yes. The display will show:-

Program . . . . \_ \_ \_ \_ Zones ?

Program Bells / Sounders ?	
-------------------------------	--

Program Bell Type ?

NovActive = Off

NovActive > On

Select NovActive

1 - 8

- 7) Press the number of the NovActive you wish to program. The display will show:-
- Press No twice to turn NovActive 1 On. Then press Yes. The display will show:-

To program the LED pattern press No until the setting required is displayed. Choose from. 0 = Alternating LEDs 1 = 1 Static LED 2 = 2 Pulsing LEDs 3 = No LEDs

 When you are happy with your selection press Yes. The display will show:-

> To program the Setting Confirmation press No until the required setting is displayed then press Yes. The display will show:-

- 10) To programme the sound, press No until the required setting is displayed, then press Yes. The display will show, for example:-
- 11) Repeat for Alm, Tmp until the required settings are displayed. Then press Yes. The display will show:-
- 12) Press No. The display will show:-

Enter the text required. *E.g. Front Wall Bell*. Then press Yes. The display will show: *Note: See Page 10 for entering text instructions.* You should now repeat until all the NovActives on the system have been programmed.

14) When you have finished programming all the NovActives press 0 until the display shows:-

Page 90

NovA1 = Off LEDS = 0 Confirm = Off

NovA1 = On LEDS > 0 Confirm = Off

NovA1 = On LEDS > 0 Confirm > Off

NovA1 A= PA=0 Alm=0 Tmp=0

NovA1	A=		
PA=3	Alm>0	Tmp=0	

NovA1 Text =	
NovActive	
	1
-	_
NovA1 Text =>	
-	
	1
	7
Select NovActive	
1-8	

01 Jan	00: 00: 01
UTSan	00.00.01

# Programming Point ID & SIA Protocols

1)	Enter into Engineer Mode To do this follow Steps 1 to 4 on page 18 With the display showing:-	Program Zones ?
2)	Press No five times. The display will show:-	Program Digicom ?
3)	Press Yes. The display will show:-	Program Digicom Type or Test
4)	Press Yes. The display will show, for example:-	Digicom Type = Mod + FF
5)	Press No until the display shows:- Or:-	Digicom Type = Mod + PID
	As required	Digicom Type = Mod + SIA
6)	Press Yes. The display will show:-	VoComm =Off
7)	Press No until the setting you require is displayed. Then press Yes. The display will show:-	Program Digicom Type or Test
8)	Press No. The display will show:-	Program Digicom Delay / Part ?
9)	Press No. The display will show:-	Program Digicom Channels ?
10)	Press Yes. The display will show:-	Program Triggers ?

11) Press Yes the display will show:-

#### You MUST turn On the Triggers you require.

12) Use the Yes & No keys to accept or change the options on the following screens:-

•	Set = Off Alrm = Off UnSet = Off PA = Off
	24Hr = Off E/E = Off 12Hr = Off Bat = Off
	Tamp = OffAC = OffLF = OffAlert = Off
	Fire = Off W/D = Off Duress = Off
	Zone Remove = Off Alrm - Restore = Off
	AC - Restore = Off LF - Restore = Off
	After - Alarm = Off Abort - Call = Off
	Perimeter = Off PA - Restore = Off
	Radio Lost = Off Radio Jamm = Off
	Zone Fault = Off Zone Mask = Off
	Program Digicom Channels ?

Set = Off

UnSet = Off

Alrm = Off

PA = Off

13) Press Yes. The display will show:-

14) Press 0 (zero) three times. The display will show:-

01 Jan 00: 00: 01

# Linefault Sounders Description

The Linefault Sounder option determines how the system sounders (speakers) will react when a Linefault is detected. Below are the options available and a description of each option.

On if Set	Linefault Sounders will operate when the system is Set and a Linefault is detected (may be silenced by User Code).
On if Unset	Linefault Sounders will operate when the system is Unset and a Linefault is detected. (may be silenced by User Code)
FLT if Off	A fault tone will be generated when the system is Unset and a Linefault is detected (may not be silenced by User Code).
Beep if Off	A periodic beep will be generated when the system is Unset and a Linefault is detected (may not be silenced by User Code).
Always On	Linefault Sounders are always On (Set or Unset) (may not be silenced by User Code).

## **Engineer Reset**

If the system is programmed as Engineer Reset the system will need to be Reset by the Engineer Code. Please follow the procedure below to effect the Reset.

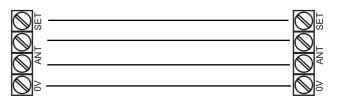
1)	If the system is still set, unset it via a valid User Code	
2)	Enter the Engineer Code. The display will show:-	Enter Authorisor Code
3)	Enter a valid User Code. The display will show:-	Do you want to Use ENGNR. Mode ?
4)	Press No. The display will show:-	Do you want to SET the System ?
5)	Press Yes. The system will start to Set.	
6)	Enter the Engineer Code again. This will Abort the Setting.	
7)	The System is now Reset. The display will show for example:-	01 Jan 00: 00: 01

Details of User Code Reset and Anti-Code Reset are given in the User Manual.

# Wiring Proximity 'E' and 'I' Readers



**RKP** Terminals



Single 'E' Reader up to 7.5m

'E' Reader	Wiring
------------	--------

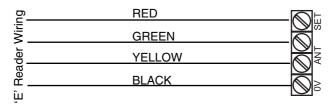
**RKP** Terminals

p.	RED	
Wirir.	BLUE	
der	YELLOW	
Reader	BLACK	
μĴ		<sup>©</sup> ⊘

#### Single 'E' Reader 7.5m to 15m

'E' Reader Wiring

**RKP** Terminals



Details on wiring multiple Readers are provided with the Reader.

# **Clearing 'Test Fail' Indication**

If the display shows:-

The system has a zone On Test that has failed when the system was Set.

Please note: we recommend that the Test Attribute is only used on 12Hr type zones.

To clear the display proceed as follows.

- 1) Enter the Engineer Code. The display will show:-
- 2) Enter a valid User Code. The display will show:-
- 3) Press No. The display will show:-
- 4) Press Yes. The system will start to Set.
- 5) Allow the system to fully Set.
- 6) Enter the Engineer Code again to Unset the system. The display will show:-

Unset Test Fail		
01 Jan 00: 00: 01		

Enter Authorisor Code . . . . .

> Do you want to . . Use ENGNR. Mode ?

Do you want to . . SET the System ?

01 Jan	00: 00: 01
--------	------------

# **5** SPECIFICATIONS

#### **Power Input**

Max Loop Resistance

Loop Delay Time

FUSES Mains Supply Fuse Battery Fuse Aux Fuse Keypad Fuse Battery Fuse - Lead

Low Voltage Output

**Battery Sizes** 

Construction

**Complies with** 

**Conforms with** 

Number of Zones (Standard)

**Expansion Type** 

Number of Keypads

**Zone Descriptors** 

Max No of Users

Default Codes

Code Length

**User Names** 

230V a/c ±10% @ 50Hz

2K (not with E.O.L.)

400mS

20mm125mA Anti-Surge20mm2A Anti-Surge20mm1A Quick Blow20mm250mA Quick Blow20mm2A Anti-Surge

13.8V dc Regulated

12V 1A2, 2A, 3A, 7A

3mm Polycarbonate

EN50131-1 PD6662 2004

CE tested EMC Directive 89/336/EEC & LVD Directive 73/23/EEC

8 (2 Wire), 9(EOL), 8+8 (EOL)

1 Radio Expander may be fitted

4 Normal

16 Characters (last 3 omitted with tamper)

15 + Engineer

Eng 1234, User 5678

4, 5 or 6 digits

9 Characters

CPX Engineer's Reference Guide	
Custom Screen	32 Characters
Maximum Output Current	1A* (See Power Supply Rating)
Log Size	250 Event Log 31 Event Modem Log
Time & Date	Log & Display
Non-Volatile Memory	Yes
Quiescent Currents Control Panel plus Keypad	150mA@12V d.c

# \*Power Supply Rating

It should be noted that the eurösec CPX has 1 Amp available for the full system. However, for the purpose of compliance to EN and PD6662 standard, the capacities of the power supply have to be specified differently.

For a Grade 2 system you have 72 hours to charge the battery. With the CPX Control Panel, 90mA is available for battery charging. This defines a theoretical maximum standby battery capacity of 8.0Ah and a maximum of 666mA available for system power. If a smaller capacity battery is used then the rating has to be reduced accordingly. For example: If a 7Ah battery is used it will recharge in 72 Hrs and will theoretically provide 910mA (1000-90mA) for the system. However, the supply rating for that system under PD6662 is still 7.0Ah/12hrs = 583mA. Sounders, detectors and other auxiliary items should be included when calculating current drawn by the system.

Any damage caused through overloading the Control Panel Supply will not be covered by the warranty

We recommend that additional power supplies are used to supply detectors on long cable runs.

#### AUX 12V Terminals

This pair of terminals supply the + and - supply for the detectors. 1A is available from these terminals (see power supply rating above).

#### **Strobe Terminals**

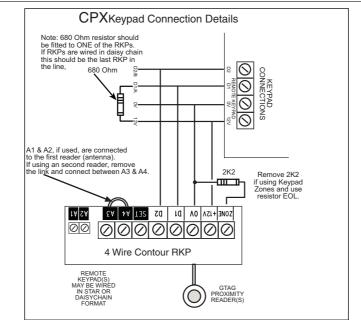
This pair of terminals are the output for the Strobe. The negative terminal is switched during an alarm period. A maximum of 600mA may be drawn from these terminals (see power supply rating above).

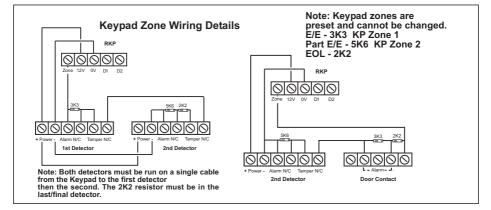
#### **Bell Terminals**

This pair of terminals are the output for the Bell or external sounder. The negative terminal is switched

during an alarm period. A maximum of 1A may be drawn from these terminals (see power supply rating on previous page).

# 6 4 Wire Contour RKP Wiring Information





**Note:** All keypads on the same system MUST be of the same type. i.e. All four wire or all six.

**Note:** All Keypads MUST be connected before powering up the Control Panel.

Notes

Notes		



5INEW021PR C