GardTec

RISCO GROUP

Gardtec 595
Control Panel

Engineer's Reference Guide

CONTENTS

1 INTRODUCTION

The GardTec 595 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.

Note: 595 Control Panel an only be programmed using LCD KEYPAD.

Default Master User Code	**BS / EN2 5678**	**EN3 005678**
Default Engineer Code	**BS / EN2 1234**	**EN3 001234**

Note: For EN3 installations, User Codes and Engineer Codes *MUST* be six digits in length.

The Engineer code may be 'Locked' into the system during engineer programming. 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 RESETTING FACTORY DEFAULTS

Several reset to factory default routines are available to the engineer at system power-up 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 *ESSENTIAL* that a 4 6 Yes No Reset is done to all new systems before commencement of programming.**

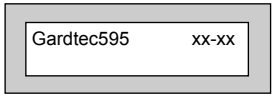
d) Pressing **5, 5, YES, NO** during initial power up will revert all system settings to factory defaults and will also set the comms options up for GardTec Remote. ie Modem On; No Return. **For commissioning systems for use with GardTec Remote, use this option.**

Reset of the factory defaults and entering Engineer Mode:-

Note: It is *ESSENTIAL* that a 4 6 Yes No reset is done to all new systems before commencement of programming.

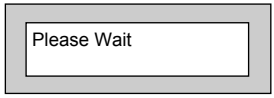
1) Remove all power from the system for at least ten seconds

2) Apply mains power to the control panel.
The display will show, for example:-
(Display will differ dependant on panel version)

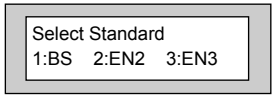


3) Whilst this display is showing (the first five seconds) press the keys shown in a, b or c for the reset required. **(E.g. 4 6 Yes No)**.

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

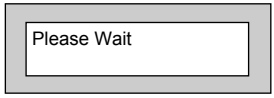


4) The display will then show:-

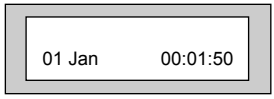


Selecting 1:BS - Panel may be programmed to comply with the old BS4737 Standards. DD243 requirements will still apply.
Selecting 2:EN2 - Panel may be programmed to comply with EN50131-1 for Grade 2 Systems. DD243 requirements will still apply.
Selecting 3:EN3 - Panel may be programmed to comply with EN50131-1 for Grade 2 Systems. DD243 requirements will still apply

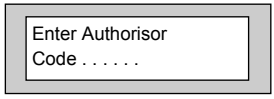
5) Select **2:EN2**.The display will then show:-
This may show for several minutes.



The display will then show:-

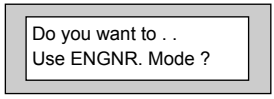


6) Enter Engineer code.
(1234 default EN2). The display will show:-



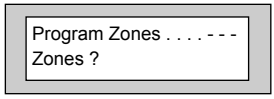
***Note:** User Codes and Engineer Codes **MUST** be six digits in length for EN3 installations. (See Page 2).*

7) Enter the Authorisor code. The Authorisor code is the Master User, **(default 5678 EN2)**.
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.*

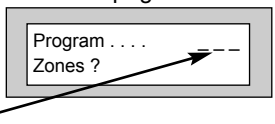
8) Press Yes. The display will show:-



3 PROGRAMMING

Moving Around

Enter Engineer mode as described on page 3.
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 Pages 7 & 8 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

Program Zones

Zone Types
Zone Descriptors
Zone Wiring
Zone Attributes
(Test/Part/Cleaner/Chime/Walk/Sec/Per)
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

Headers & Options

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
Keypad Alert 3 Keys
Number of Keypads
Keypad Backlight Mode
ACE / Prox

Digicom

Type or Test
Vo-Comm
Start Delay / Part
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 / Bells Only
Testable / Non-Testable
Duress Off *(To conform with EN standards, Duress is defaulted to Off and cannot be changed)*

PGM2 / PGM3 / Timers

PGM2/3 Operating Mode
Timer 1 On Time
Timer 1 Off Time
Timer 2 On Time
Timer 2 Off Time
Timer 3 On Time
Timer 3 Off Time

Headers & Options

Reset / Mains

Mains Fail Delay
Alarm 1 Reset (Area 1)
Alarm 2 Reset (Area 2)
Alarm 3 Reset (Area 3)
Tamper Reset
Alarm Restore On/Off
Abort Time

Sounder Levels

Chime Level
Entry/Exit Level
Key Beep Level

PGM1 / XP / Custom

PGM1 O/P
Expander 1 O/P 1 - 4
Expander 2 O/P 1 - 4
Expander 3 O/P 1 - 4
Expander 4 O/P 1 - 4
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

Headers & Options

Service

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

Custom Screens

LCD Status Display
(To conform with EN standards, LCD Status is defaulted to Off and cannot be changed)
LED Status Display
Custom Display On/Off
Program Text

Diagnostics / Log

List Event Log
Change List Diagnostics
PSU Diagnostics
NovActive Diagnostics
PSU Test Time
Aux Volts
Battery Volts On Charge
Battery Volts Off Charge

Headers & Options

Alarm Confirm

Window Time
On Entry
Sounder Mode
Reset Mode
Secondary Time
ET Mode
Bell Mode
Strobe Mode
Start Delay
ACE Battery Monitor
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 the display is expecting a numeric input).

If you are confident in programming the GardTec 595 Control Panel please use the headers and options above to continue or alternatively use the appropriate menu numbers. (See Pages 7 & 8).

Otherwise

Please continue with the next section for a Step by Step Guide to programming the GardTec 595 Control Panel.

Only the major options will be covered in this Step by Step Guide. After completing the guide 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.

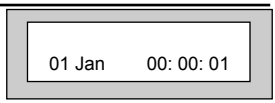
Menu	Jumps to
1	PGM 2/3 Output
6	PA Mode
8	Chime Level
9	Entry Exit Level
10	Exit Sounder Mode
11	Final Set Delay
12	Full Set Setting Time / Setting Mode
13	Part 1 Set Setting Time / Setting Mode
14	Part 2 Set Setting Time / Setting Mode
15	Part 3 Set Setting Time / Setting Mode
20	Alert 1 Keys Mode / On Off
21	Alert 2 Keys Mode / On Off
22	No. of Keypads / Multi On Off / K/Switch
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	Digi Delay / Part Alarm Digi
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	Service Timer On Off
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 EOL
73	ID map (expansion type ZEX/ID first)
75	ZEX1 Wiring
76	ZEX2 Wiring
77	ZEX3 Wiring
78	ZEX4 Wiring
79	Program Zone Wiring
83	Expander 1 O/P1 Mode
84	Timer 2 On Time
86	Timer 2 Off Time
88	Timer 3 On Time
90	Timer 3 Off Time
93	Custom Display
94	Custom Text
97	List Event Log
101	Alarm A2 Reset
102	Alarm A3 Reset
107	Bell Ring A2 / Bell Ring A3
109	Bell Delay A2
110	Bell Delay A3
111	F-Exit Time A2
112	P1-Exit Time A2
113	P2-Exit A2
114	P3-Exit A2
115	F-Exit A3
116	P1-Exit A3
117	P2-Exit A3
118	P3-Exit A3
129	Walk / Bypass
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

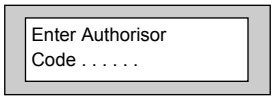
Menu	Jumps to
163	ACE Battery Monitor On Off
164	Strobe Timer
165	Strobe Trigger
166	Custom 1 OP Mode
167	Custom 2 OP Mode
168	Custom 3 OP Mode
169	Custom 4 OP Mode
170	Custom 5 OP Mode
171	Custom 6 OP Mode
172	Custom 7 OP Mode
173	Custom 8 OP Mode
174	Comms Restore On Off

Programming Zones

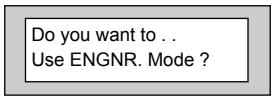
1) With the display showing:-



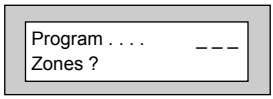
2) Enter the Engineer code **(1234 default EN2)**
The display will show:-



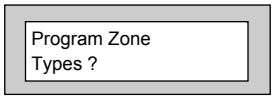
3) Enter the Authorisor code. The Authorisor code is the Master User, **(default 5678 EN2)**.
The display will show:-



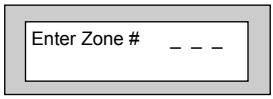
4) Press YES. The display will show:-
This is Engineer Mode



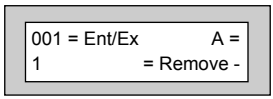
5) Press Yes. The display will show:-



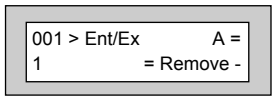
6) Press Yes. The display will show:-



7) Enter the zone number you wish to program e.g 1 followed by Yes. The display will show, for example:-



8) Press No. The display will show:-



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.

ET

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

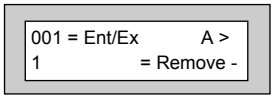
When used, will act as an Fault input to the control panel when an internal fault has been detected within the PIR.

Mask

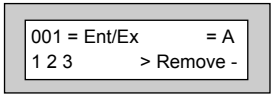
When used, will act as an input to the control panel if the detector has been blocked or covered.

***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:-



11) All Zones are Area 1 by default. Use the 1, 2 & 3 keys to add or remove the zone to other Areas. When you are satisfied press Yes. The display will show for example:-



We will now be changing the Zone Tag 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).

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.

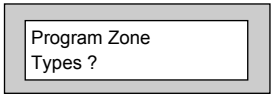
Bias Key Zone is a Keyswitch Zone for a Bias (momentary) type Keyswitch.

Remove+ Zone may be Removed by end user.

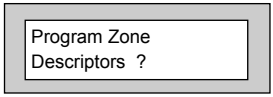
12) Press No until the setting you require is displayed then press Yes.

13) The display will show the next zone to program. You should repeat from Step 8 until you have programmed all the zones.

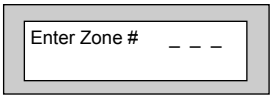
14) When all required Zones have been programmed press 0 (zero) key **twice**. The display will show:-



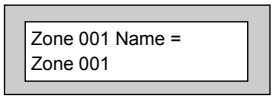
15) Press No. The display will show:-



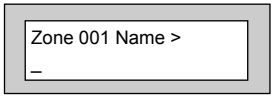
16) Press Yes. The display will show:-



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



18) Press No. The display will show:-



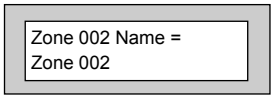
19) You should now program the Descriptor you require using the template below for the key allocation in a similar way that you you would type a text message on a mobile telephone.

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

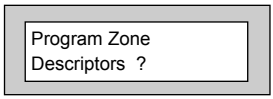
Continue until the line is complete.

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

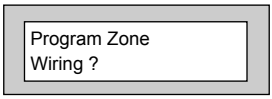
20) As you enter the last character the display will move on to the next Zone. For example:-



21) Repeat from Step 18 until all the Descriptors you require have been programmed. Then press 0 (zero) key **twice**.
The display will show:-

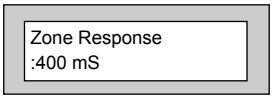


22) Press No. The display will show:-



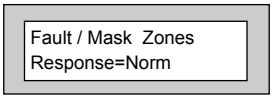
23) Press Yes. The display will show:-

***Note**: Zone Response time is defaulted to 400ms and may not be changed.*



24) Press Yes. The display will show:-

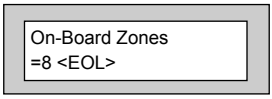
***Note:** Fault /Mask response time may be programmed as a global parameter and may be reprogrammed from 2 to 14 seconds. (increments of 2 seconds).*



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.

25) Press No until the settings you require are displayed. Then press Yes. The display will show:-



<u>Wiring Modes available are</u>:-

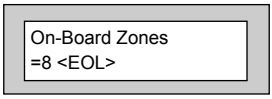
8 (2 Wire) Two wires are used for the zone and a global tamper is used. **(Version / Grade dependant - Cannot be used in Grade 3 installations)**.

(EOL) Two wires are used in conjunction with two resistors to give End Of Line wiring, this is the most secure wiring format.

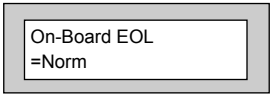
For information on how to wire the various wiring modes please refer to the back of this manual (Pages 104 - 111) or refer to the Quick Start Guide that is supplied with the control panel.

If selecting **8(EOL**) follow steps 26 - 28. If selecting **8(2 Wire)** jump to step 29.

26) With the display showing:-
Press Yes.



27) The display will show:-



Three wiring options are available under 8 (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.*

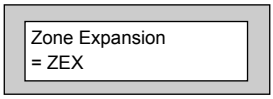
ELF1: ELF1 wiring is used for detectors that have a relay output (a pair of terminals) for Fault or Mask..

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. Please see the back of this manual (Pages 104 - 111) or refer to the 595 Quick Start Instructions.*

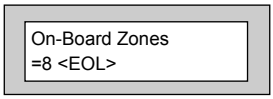
Note: *The installer should check what output type the detector are, noting that all the detectors should be of the same type with regards to the Fault / Mask output.*

28) Press No until the setting you require is displayed, then press Yes. The display will show:-
(Jump to step 33).

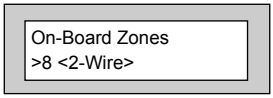


If 8(2 Wire) wiring option is required. (Version dependant).

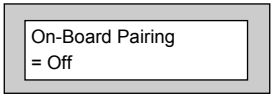
29) With the display showing:-
Press No until **8(2 Wire)** is displayed.



30) The display will show:-



31) Press Yes. The display will show:-



Zone Pairing.

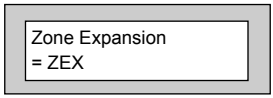
If the 8(2 Wire) wiring mode is used then a zone must be used to monitor for Masking and Fault. This is achieved by selecting Zone Pairing as on. Zone Pairing cannot be used in ELF1 or ELF2 wiring modes.

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.

Alarm Zone	**Pared Zone for Mask / Fault**
Zone 1	Zone 2
Zone 3	Zone 4
Zone 5	Zone 6
Zone 7	Zone 8
etc...	

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.

32) Press No until the setting you require is displayed. Then press Yes. The display will show:-



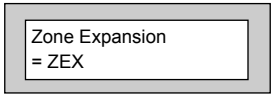
Options available are:-

ZEX = Standard GardTec **Z**one **EX**panders. *(Are all defaulted to EOL with the same options that are available for the on-board zones).*

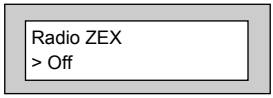
ID = ID Expander card using ID Biscuits.

Please refer to page 97 for programming ID Expanders.

33) With the display showing:- Press Yes.



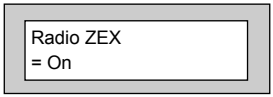
34) The display will show:-



35) If you are not using Radio Detectors press Yes and jump to Step 37.

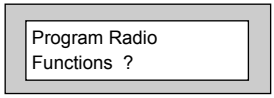
Otherwise

Press No until the display shows:-

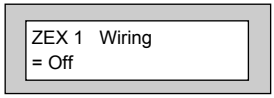


Comprehensive instructions on how to setup and program the Radio Expansion are given in the document Hybrid Wireless Set-Up & Programming Guide document number PR5588 supplied with the Radio Receiver.

36) Press Yes. The display will show:-



37) Press No. The display will show:-



Options available are.

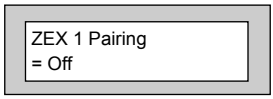
Off Expander Card is turned Off

4 (4 Wire) Expander will give 4 zones + 4 tamper zones

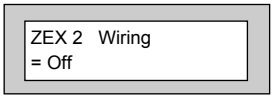
8 (EOL) Two wires are used in conjunction with two resistors to give End Of Line wiring. Expander will give 8 End Of Line zones. This is the most secure wiring format.

8 (2 Wire) Two wires are used for the zone and a global tamper is used. **(Grade dependant - Cannot be used in Grade 3 installations)**.

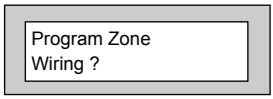
38) Press No until the required setting is displayed then press Yes. The display will show:-



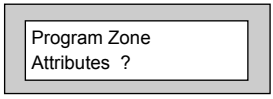
39) Press No until the required setting is displayed then press Yes. The display will show:-



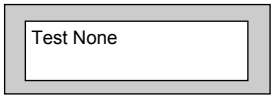
40) Repeat from Step 39 until all the ZEX Expanders you require have been programmed. The display will show:-



41) Press No. The display will show:-



42) Press Yes. The display will show:-

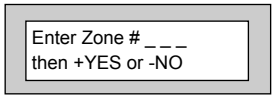


Any 12Hr type zone(s) may be placed on Test. A Zone on Test will never trigger an alarm or send a central station signal. If the Zone(s) fails the Test when the system is Set the display will show Test Fail when the user Un-Sets the system. After 20 successful Sets and Un-Sets the Zone(s) will be taken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

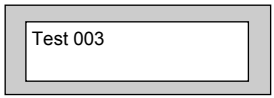
43) If you do not wish to put a Zone(s) on Test press Yes and jump to Step 48.

Otherwise

44) Press No. The display will show:-



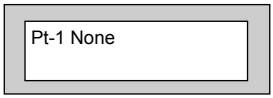
45) Enter the Zone number you wish to place on test followed by Yes.
The display will show for example:-



46) To add more Zone(s) to the test repeat from Step 44.

47) When you have finished adding Zones to Test press Yes.

48) The display will show:-

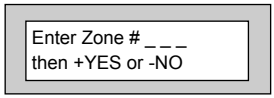


Three Part Sets are available on the GardTec 595 control panel. Zones added to the PT-1 (Part 1) screen will be Removed (Omitted) when the system is Part 1 Set. Zones added to the PT-2 (Part 2) screen will be Removed (Omitted) when Part Set 2 is used. When Part Set 3 is used Parts 1 & 2 are combined and Removed (Omitted).

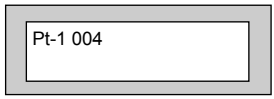
49) If you do not wish to enter PT-1 Zone press Yes and jump to Step 54.

Otherwise

50) Press No. The display will show:-



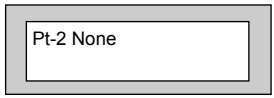
51) Enter the Zone number you require for PT-1 followed by Yes.
The display will show for example:-



52) To add more Zones to PT-1 repeat from Step 50.

53) When you have finished adding Zones to PT-1 press Yes.

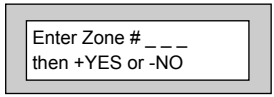
54) The display will show:-



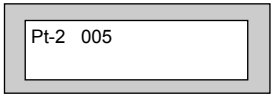
55) If you do not wish to enter PT-2 Zones press Yes and jump to Step 60.

Otherwise

56) Press No. The display will show:-



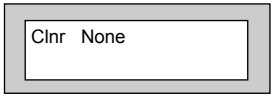
57) Enter the Zone number you require for PT-2 followed by Yes.
The display will show, for example:-



58) To add more Zones to PT-2 repeat from Step 56.

59) When you have finished adding Zones to PT-2 press Yes.

60) The display will show:-



Zones entered as Cleaner will be Removed (Omitted) when a Part Set 0 is performed and the added to the Part 0 set system when a Cleaner level code is entered.

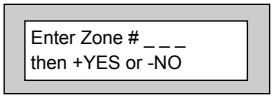
Or

When a system is Full Set and a Cleaner level code is entered the Cleaner zones will be removed (Omitted).

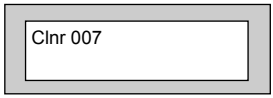
61) If you do not wish to enter Clnr Zones press Yes and jump to Step 66.

Otherwise

62) Press No. The display will show:-



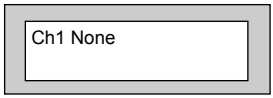
63) Enter the Zone number you require for Clnr followed by Yes.
The display will show, for example:-



64) To add more Zones to Clnr repeat from Step 62.

65) When you have finished adding Zones to Clnr press Yes.

66) The display will show:-



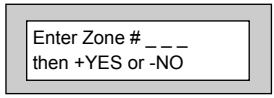
Two Chime suites are available on the GardTec 595 control panel so for example you would have the Front Door on Zone 1 programmed into Ch1 and the Rear Door on say Zone 6 programmed into Ch2. When the system is Unset opening the Front Door will produce a Chime. Opening the Rear Door will produce a different Chime.

It should be noted that Chime must be programmed as On from the user mode. Please refer to the User Manual for details.

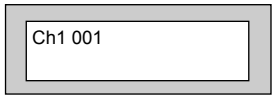
67) If you do not wish to enter Ch1 Zone press Yes and jump to Step 72.

Otherwise

68) Press No. The display will show:-



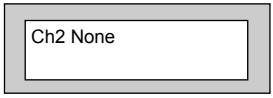
69) Enter the Zone number you require for Ch1 followed by Yes.
The display will show for example:-



70) To add more Zones to Ch1 repeat from Step 68.

71) When you have finished adding Zones to Ch-1 press Yes.

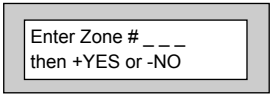
72) The display will show:-



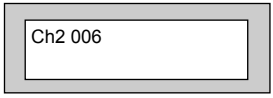
73) If you do not wish to enter CH-2 Zones press Yes and jump to Step 78.

Otherwise

74) Press No. The display will show:-



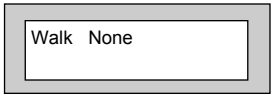
75) Enter the Zone number you require for Ch2 followed by Yes.
The display will show for example:-



76) To add more Zones to Ch2 repeat from Step 74.

77) When you have finished adding Zones to Ch2 press Yes

78) The display will show:-

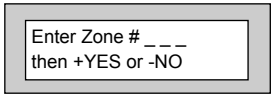


Zone programmed as Walk will have to be Walk Tested before the system will start to Set. The Option 'Walk' must also be programmed to On in the Zone E/E Mode section.

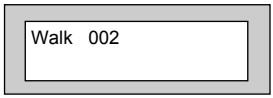
79) If you do not wish to enter Walk Zones press Yes and jump to Step 84.

Otherwise

80) Press No. The display will show:-

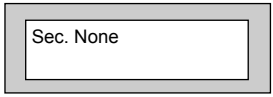


81) Enter the Zone number you require for Walk followed by Yes.
The display will show for example:-



82) To add more Zones to Walk repeat from Step 80.

83) When you have finished adding Zones to Walk press Yes. The display will show:-

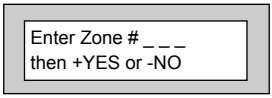


Secondary Zones:
Zones programmed as secondary will not active any sounders or comms until a normal zone activates.
This will then trigger a confirmed signal and activate the sounders as programmed.

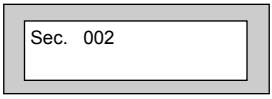
84) If you do not wish to enter Sec. Zones press Yes and jump to Step 89.

Otherwise

85) Press No. The display will show:-

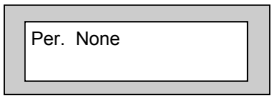


86) Enter the Zone number you require for Sec. followed by Yes.
The display will show for example:-



87) To add more Zones to Sec. repeat from Step 85.

88) When you have finished adding Zones to Sec. press Yes. The display will show:-

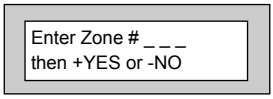


Perimeter Zone:
Zones programmed as perimeter will activate the alarm as normal but will also activate a comms channel programmed as perimeter.

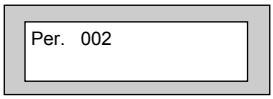
89) If you do not wish to enter Per. Zones press Yes and jump to Step 94.

Otherwise

90) Press No. The display will show:-

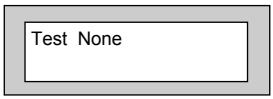


91) Enter the Zone number you require for Per. followed by Yes.
The display will show for example:-

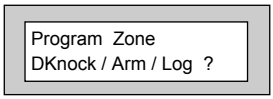


92) To add more Zones to Per. repeat from Step 90.

93) When you have finished adding Zones to Per. press Yes. The display will show, for example:-



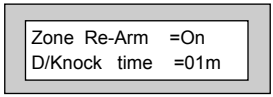
94) Press 0 (zero), then No. The display will show:-



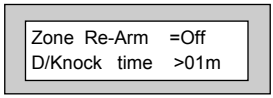
DKnock/Arm/Log:
Zones on double knock are required to activate within the double knock time window or stay active for fifteen seconds to generate an alarm condition.

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.

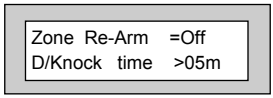
95) Press Yes. The display will show:-



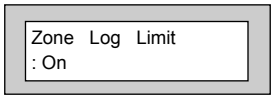
96) Press No to change the setting, followed by Yes
The display will show:-



97) Press No. Enter the Time required for the double knock time window, e.g. 5. The display will show:-

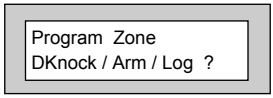


98) Press Yes. The display will show:-

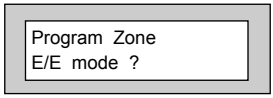


Note: *Zone Log Limit is defaulted to On and may not be changed. Only five activations from any one zone will be recorded in the log during any set period.*

99) Press Yes. The display will return to:-

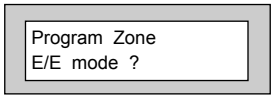


100) At this point you may press No to move to the next option. The display will show:-

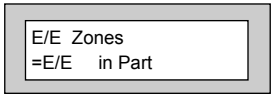


Or press 0 (zero) repeatedly to exit.

101) With the display showing:-
Press Yes.



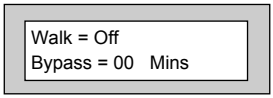
102) The display will show:-



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.*

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



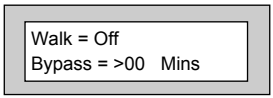
Available Options for Forced Walk Test are.

All Sets. All Area/Part sets will require the zones allocated in the walk test options to be tested.

Full Only. In Part-Set Walk Test is not required.

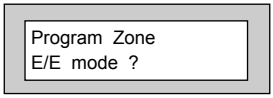
Off. Forced Walk Test is disabled.

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

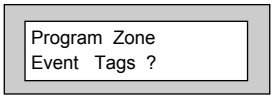


Note:
Bypass*. Is programmed in ten minute increments.* ***(If the system is Unset and Set within this bypass time, the forced Walk Test is not required)****.*

105) Press No to enter your required time, followed by Yes.The display will show:-



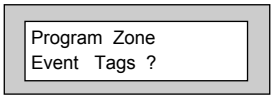
106) At this point you may press No to move to the next option. The display will show:-



Or press 0 (zero) repeatedly to exit.

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.



The Zone Type would be programmed as 'Fault'.

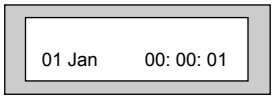
Program the Zone Descriptor as External PSU.

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.

This concludes the Step by Step instruction for the Zone Programming.

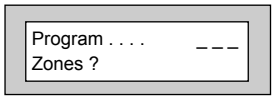
107) When you have finished programming zones, press 0 (zero) until the display shows:-



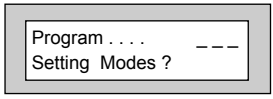
Programming Setting Modes

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.

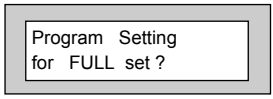
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



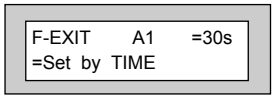
2) Press No. The display will show:-



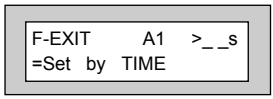
3) Press Yes. The display will show:-



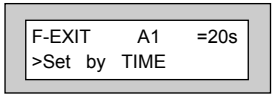
4) Press Yes. The display will show:-
(A1 indicates Area 1).



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



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



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

Options available for Setting Modes are.

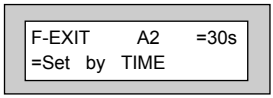
Set By Time The system will Set after the Time shown in the Exit Time.

Set By ET The system will set when the Exit Terminator Button outside the premises is pushed. (This option will require a Zone to be programmed as Exit Terminator).

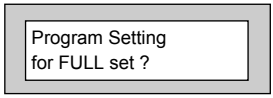
Set By E/E Once the user has started to Set the system, the Exit Tones will continue until the Final Exit Door is opened then closed. This option will require a Door Contact.

Set By Time+E/E Once the user has started to Set the system, the system will Set on either the Time expiring or the door opening and closing. This option may require a Door Contact.

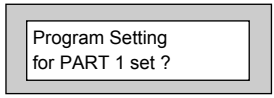
8) When the Setting Mode you require is displayed, press Yes. The display will show:-



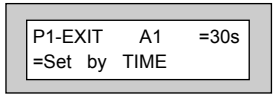
9) Repeat for all Areas. After Area 3 the display will show:-



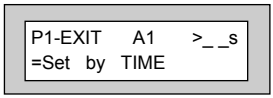
10) Press No. The display will show:-



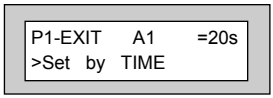
11) Press Yes. The display will show:-



12) Press No **twice**. The display will show:-

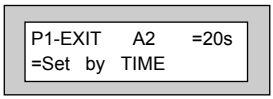


13) Enter the time you require as the Exit Time (in seconds), followed by Yes.
The display will show, for example:-

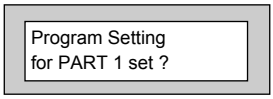


14) Use the No key to scroll through the Setting Modes.

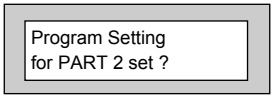
15) When the Setting Mode you require is displayed press Yes. The display will show:-



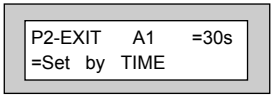
16) Repeat for all Areas. After Area 3 the display will show:-



17) Press No. The display will show:-

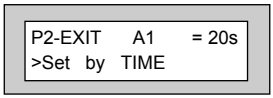


18) Press Yes. The display will show:-



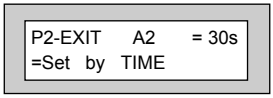
19) Press No **twice**.

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

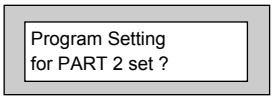


21) Use the No key to scroll through the Setting Modes.

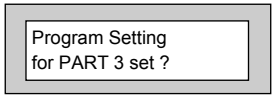
22) When the Setting Mode you Require is displayed press Yes. The display will show:-



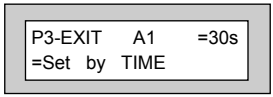
23) Repeat for all Areas. After Area 3 the display will show:-



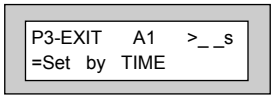
24) Press No. The display will show:-



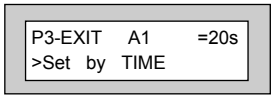
25) Press Yes. The display will show:-



26) Press No **twice**. The display will show:-

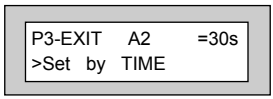


27) Enter the time you require as the Exit Time (in seconds) followed by Yes.
The display will show, for example:-

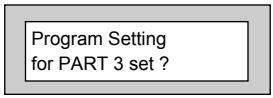


28) Use the No key to scroll through the Setting Modes.

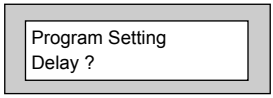
29) When the Setting Mode you require is displayed press Yes. The display will show:-



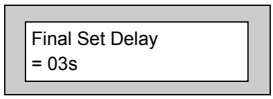
30) Repeat for all Areas. After Area 3 the display will show:-



31) Press No. The display will show:-

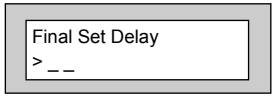


32) Press Yes. The display will show:-

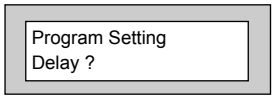


The Final Set Delay is a period of Time in Seconds after the expiry of the Exit Time and is intended to allow any PIRs for example that are on the Exit Route to settle before the system finally Sets. The majority of PIRs will settle within the Default Time of 3 seconds but some may need a Final Setting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

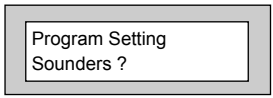
33) Press No **twice**. The display will show:-



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

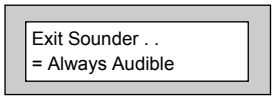


35) Press No. The display will show:-



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.

36) Press Yes.The display will show:-



37) Press the No key to scroll through the options

Options available for Setting Sounders are.

Always Audible Exit Sounder will be audible for all Part Sets

Silent If Part 1 Exit Sounder will be silent during a Part 1 Set

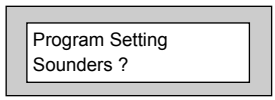
Silent If Part 2 Exit Sounder will be silent during a Part 2 Set

Silent If Part 3 Exit Sounder will be silent during a Part 3 Set

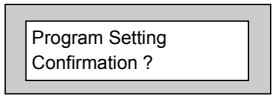
Always Silent Exit Sounder will be silent during ANY Part Set

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.

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

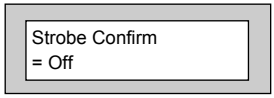


39) Press No. The display will show:-



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

40) Press Yes. The display will show:-



41) Press the No key to scroll through the options.

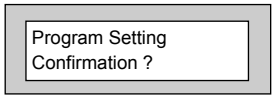
Available options for Strobe Confirm are.

Off Strobe Confirm is turned Off

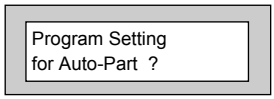
Full-Set The Strobe will Confirm only on a Full Set

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

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



43) Press No. The display will show:-



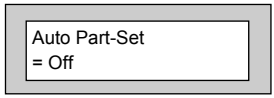
Auto Part Set allows the system to decide if the Setting should be Full Set or Part 1 Set. In order to use this option the Setting Mode for Full Set MUST be Time+E/E and a Door Contact must be fitted to the door.

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

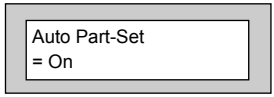
If the system does not see the door open and close during a setting procedure the system will Part 1 Set.

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.

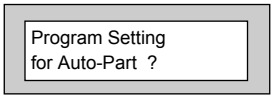
44) Press Yes. The display will show:-



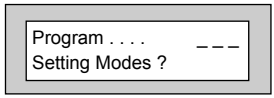
45) To change this press No **twice**.
The display will show:-



46) Press Yes. The display will show:-

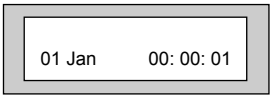


47) This concludes the programming for Setting Modes. Press 0 (zero) to return to:-



Or

Press 0 (zero) until the display shows:-



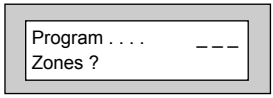
Programming Entry Times

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.

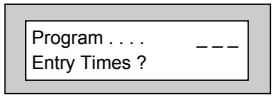
Note: **Entry Time 1** is defaulted to 30 seconds but maybe changed to a maximum of 45 seconds. **(EN2 / 3 Only)**.

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

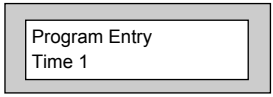
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



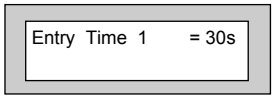
2) Press No **twice**. The display will show:-



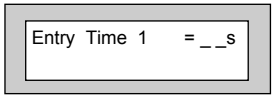
3) Press Yes. The display will show:-



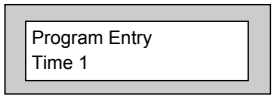
4) Press Yes. The display will show:-



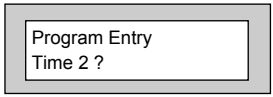
5) Press No **twice**. The display will show:-



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

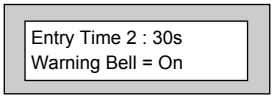


7) Press No. The display will show:-



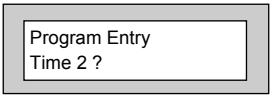
8) Press Yes. The display will show:-

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

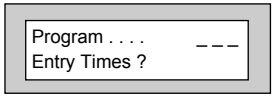


Warning Bell. *Default is set to On but may be changed to Off. If Warning Bell is On, then Bells will operate during Entry Time 2, after the theoretical expiry of Entry Time 1 has been reached. If set to Off, the bells will activate only when both Entry Time 1 and 2 have expired.*

9) Press No to change the setting followed by Yes
The display will show:-

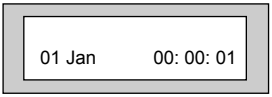


10) This concludes the programming for Entry Times. Press 0 (zero) to return to:-



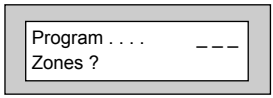
Or

Press 0 (zero) until the display shows:-

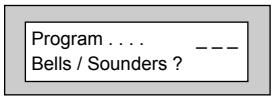


Programming Bells / Sounders

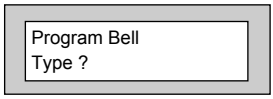
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



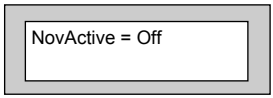
2) Press No **three times**. The display will show:-



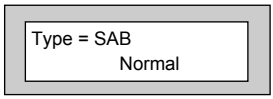
3) Press Yes. The display will show:-



4) Press Yes. The display will show:-



5) This option should remain Off unless you are using a NovActive Bell Box
Press Yes. The display will show:-



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.

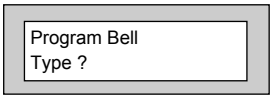
The majority of Bells sold in the UK are SAB. You should only change the Bell Type if you are sure the Bell Type you have is SCB.

The other option on this screen may be programmed as

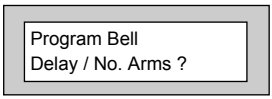
Normal Normal UK trigger for the UK

Irish A 4k7 resistor is required in the tamper return line at the bellbox this option is only required for the Irish Republic.

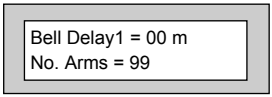
6) Press Yes. The display will show:-



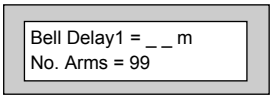
7) Press No. The display will show:-



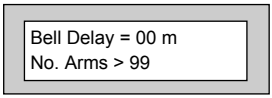
8) Press Yes. The display will show:-
(Delay 1 indicates Area 1).



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



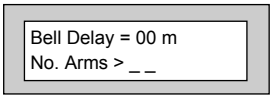
10) Enter the number of minutes you require for the Bell Delay followed by Yes.
The display will show:-



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 alarm has been activated. Bell Delay used to be a Police requirement, but is now not often used in the UK.

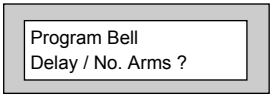
11) Press No.The display will show:-



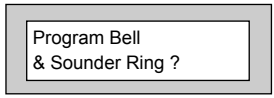
Number of Arms is the number of times the bell is capable of sounding during a Set period. It is normal to set this option to 3 or 4, If left at 99 the number of Arms is infinite.

12) Enter the required Number of Arms followed by Yes.

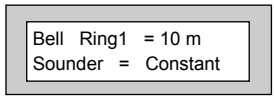
13) Repeat Delay programming for all 3 Areas.
The display will show:-



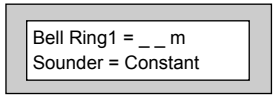
14) Press No. The display will show:-



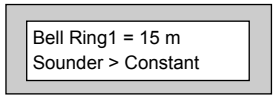
15) Press Yes. The display will show:-
(Ring 1 indicates Area 1).



16) Press No **twice**. The display will show:-



17) Enter the Bell Ring Time you require(in minutes) followed by Yes. The display will show:-



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

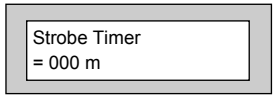
The term Sounder refers to the Internal Speakers fitted to the system and also the speaker(s) fitted to the RKPs

Options available for Sounder are.

Constant Will continue after the Bell Time has elapsed.

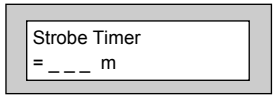
Timed Will Time out with the Bell Time

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



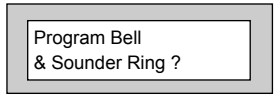
The Strobe light will normally continue after the Bell Time has elapsed. You may Time the Strobe if required. To do so.

19) Press No **twice**. The display will show:-



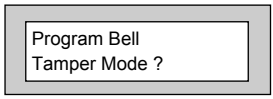
20) Enter the time required (in minutes) followed by Yes.

21) Repeat Bell Ring for all 3 Areas.
The display will show:-

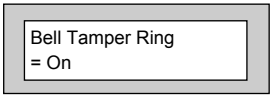


Note: *Strobe Timer is defaulted to 0 minutes but is programmable to a maximum of 120 minutes.*

22) Press No. The display will show:-

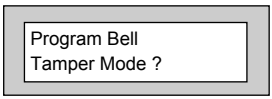


23) Press Yes. The display will show:-

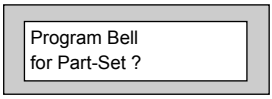


With the Bell Tamper Ring On tampering the Bell Box will also trigger the Bell Output from the control panel. With Bell Tamper Ring Off, the Bell Trigger from the panel is not activated.

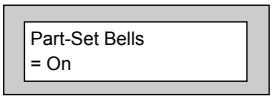
24) Press No until your required setting is displayed, then press Yes. The display will show:-



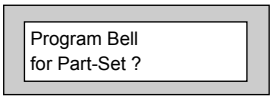
25) Press No. The display will show:-



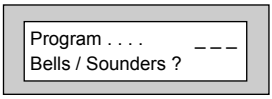
26) Press Yes. The display will show:-



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

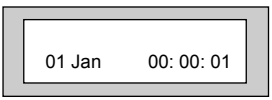


28) This concludes the programming for Bells & Sounders. Press 0 (zero) to return to:-



Or

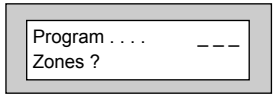
Press 0 (zero) until the display shows:-



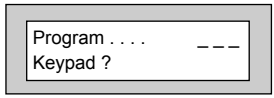
Programming Keypad

Up to 8 RKPs (Remote Keypads) may be fitted to the GardTec 595 control panel on a 6 wire connection. If more than four keypad are to be used, then 'Mult' (Program Keypad) has to be selected to ON. For information on how to wire the keypad please refer to the back of this manual (Pages 104 - 111) or refer to the Quick Start Guide that is supplied with the control panel.

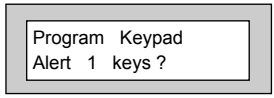
1) Enter into Engineer Mode.
To do this follow Steps 1 to 4 on page 9
With the display showing:-



2) Press No **four times**. The display will show:-

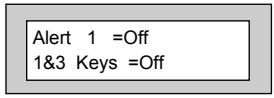


3) Press Yes. The display will show:-

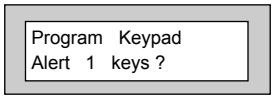


Alert 1 Keys refers to Keys 1&3 pressed together.

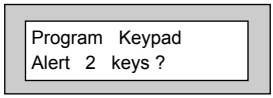
4) Press Yes. The display will show:-



5) Press the No Key to scroll through the settings for Alert 1 **(Alert 1, 1& 3 Keys)**.
When the settings you require are displayed press Yes. The display will show:-



6) Press No. The display will show:-

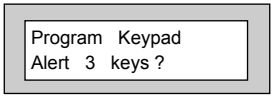


7) Repeat for the remaining Alerts 2 and 3.

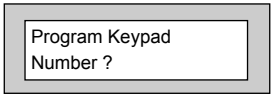
Alert 2 Keys refer to Keys 7&9 pressed together.
Alert 3 Keys refer to the two recess Keys pressed together.

Note: Alert Keys 3 (Recess Keys, Keypad Part No 01152PA) should only be programmed as Panic.

8) With the display showing:-
Press No.

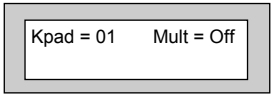


9) The display will show:-



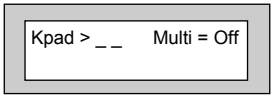
This option is used to program the Number of Keypads you have on the system. It should be noted the there are 4 jumpers in the RKP to ident them, for example the jumper on RKP 1 should be placed in the A1 position and on RKP 2 it should be placed in A2 position and so on.

10) Press Yes. The display will show:-

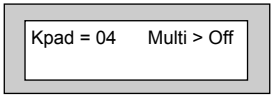


The Multi option is only used when more than 4 RKPs are fitted to the system. You may only program up to 4 RKPs, if for example you have 8 RKPs you would program the system for 4 and turn the Multi option On. You would then have 2 RKPs with the jumper in the A1 position, 2 RKPs with the jumper in the A2 position and so on.

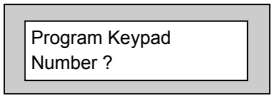
11) Press No **twice**. The display will show:-



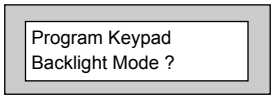
12) Enter the number of RKPs fitted (1 to 4 see note above). Followed by Yes.
The display will show for example:-



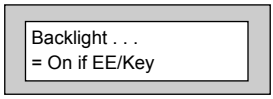
13) Press No until the required setting is displayed for the Multi option (see note above). Then press Yes. The display will show:-



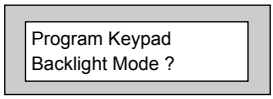
14) Press No. The display will show:-



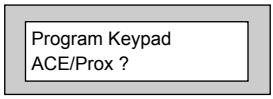
15) Press Yes. The display will show:-



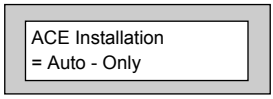
16) Press No until the setting you require is displayed then press Yes. The display will show:-



17) Press No. The display will show:-



18) Press Yes. The display will show:-

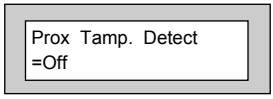


Options available are.

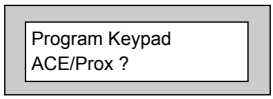
Auto Only — ACE units will be auto recognised when programming them onto the system.

Auto/Manual — The system will ask 'Is this Code For ACE' when programming codes onto the system.

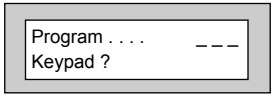
19) Press No until the required setting is displayed then press Yes. The display will show:-



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

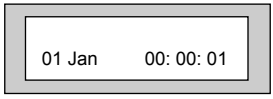


21) This concludes the programming for Keypad. Press 0 (zero) to return to:-



Or

Press 0 (zero) until the display show:-



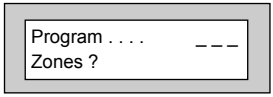
Programming Digicom / STU Adaptor / Vo-Comm - Off/On

Within this section we will program the Digicom and Modem. The Digi or DigiModem is an integral part of the main PCB. Only the main functions will be covered within this Step by Step Guide.

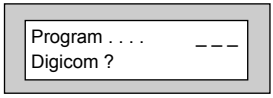
Digicom Type Mod+F/F
Modem Mode No Return

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

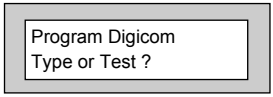
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



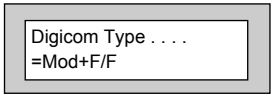
2) Press No **five times**. The display will show:-



3) Press Yes. The display will show:-



4) Press Yes. The display will show, for example:-



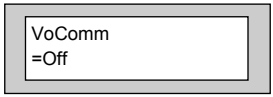
Note: *To enable the STU adaptor the Digicom type needs to be set to one of the following:-*

Digicom Types available are.

Mod+F/F	Modem enabled and Ademco Fast Format Central Station protocol enabled.
Mod+PID	Modem enabled and Point ID Central Station protocol enabled.
Mod+SIA	Modem enabled and SIA Central Station protocol enabled.

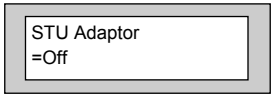
For programming details on PID (Point ID Protocol) and SIA please refer to page 91.

5) Press No until the required option is displayed.
Then press Yes. The display will show:-

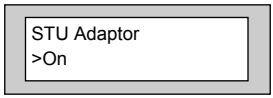


Note: *If* ***On*** *is selected, the Vo-Comm menu will now appear in the USER mode. Please refer to 595 User Guide (PR5524) for further programming information.*

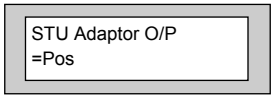
6) Press No until the required option is displayed.
Then press Yes. The display will show:-



7) Press No **twice** to turn the STU adaptor On.
The display will show:-



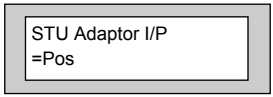
8) Press Yes. The display will show:-
Press No until the required option is displayed.
Then press Yes.



Note: Pos:- *STU Adaptor Ch. O/Ps & Pin 11 (ATS) are + 5V active.*

Neg:- *STU Adaptor Ch. O/Ps & Pin 11 (ATS) are 0V active.*

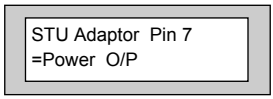
9) The display will show:-
Press No until the required option is displayed.
Then press Yes.



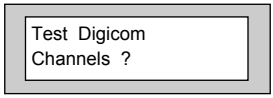
Note: Pos:- *RC Reset (Pin 6), FTC (Pin 7), LF (Pin 15) are +5V active.*

Neg:- *RC Reset (Pin 6), FTC (Pin 7), LF (Pin 15) are 0V active.*

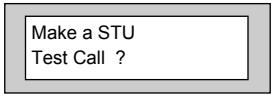
10) The display will show:-
Leave as default when connecting to a STU.



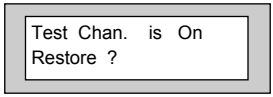
11) Press Yes. The display will show:-
Testing the channels should be conducted after the STU has been configured and enabled.



12) Press Yes. The display will show:-



13) Press Yes. The display will show:-



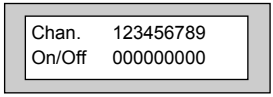
Note: *An extra channel* ***(channel 9)*** *is available and will be shown when programming channels or testing channels.* ***This will only be displayed if the STU has been selected to ON****.*

Note: *STU Adaptor will work in parallel with normal comms device. E.g. MOD+xxx.*

When programming as MOD+PID or MOD+SIA then programming for both the Digi channels and the triggers will be available.

Remote Reset from the STU input (pin 6) can reset the Control Panel provided that the STU Adaptor option is ON and Remote Reset is ON.

14) Press Yes. The display will show:-

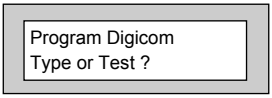


Pressing the appropriate button will test the relevant channel. E.g. 3. That channel is now active showing that a signal is being transmitted.

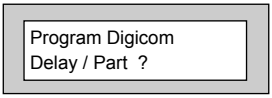
Pressing 3 again will reset that channel.
Testing is now complete.

---

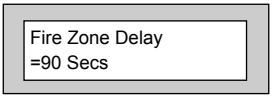
15) To escape press **0**. The display will show:-



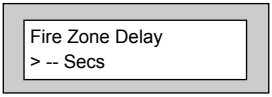
16) Press No. The display will show:-



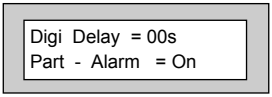
17) Press Yes. The display will show:-



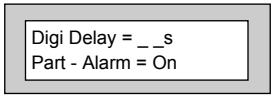
18) Press No **twice**. The display will show:-



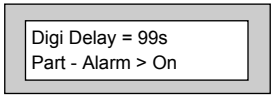
19) Enter the number of seconds you require for the Fire Zone Delay, followed by Yes.
The display will show:-



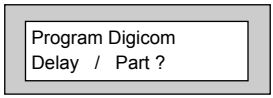
20) Press No **twice**. The display will show:-



21) Enter the number of seconds you require for the Digi Delay in Part Set followed by Yes. The display will show, for example:-



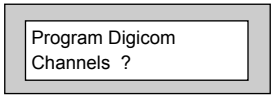
22) Press No until the required setting is displayed, then press Yes. The display will show:-



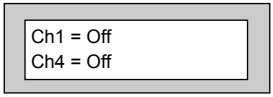
With Digi Delay programmed, the alarm transmission to Central Station will be delayed for the number of seconds programmed.

With Part Alarm programmed to Off there will be no transmission of Alarm, Alarm B or Alarm Abort if the system is Part Set.

23) Press No. The display will show:-



24) Press Yes. The display will show:-



When programming Digicom Channels Channel 1 is normally Fire, Channel 2 is normally PA, 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.

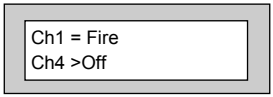
Alarm Abort
Zone Exclude
Alarm B (Confirmed)

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. Jam. (Radio)
Any Fault
Any Mask
Power Fail Latch
Area 1 to 3 variations of the above will also be displayed.

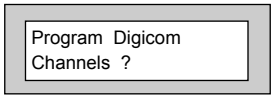
25) Press No until the required setting is displayed.

26) Press Yes. The display will show, for example:-

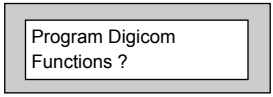


27) Press No until the required setting is displayed.

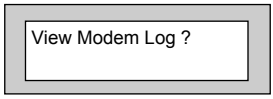
28) Press Yes and repeat as above for the remaining channels 4 - 9 followed by Yes. The display will show:-



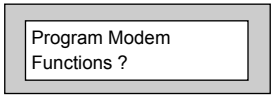
29) Press No. The display will show:-



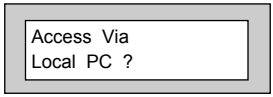
30) Press Yes. The display will show:-



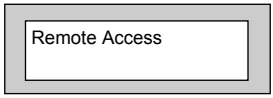
31) Press No. The display will show:-



32) Press Yes. The display will show:-

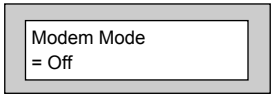


33) Press Yes if you require connection to a local PC. The display will show:-



Otherwise

34) Press No. The display will show:-



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.

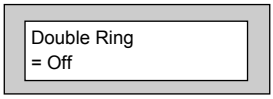
Return #1 Only The panel will ring back the PC on the #1 number programmed into the panel.

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.

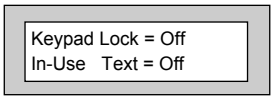
Off Modem Functions are disabled.

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



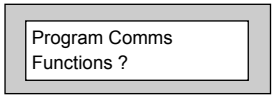
This option may be used when when the panel is on a shared line and GardTec Remote is also used.

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

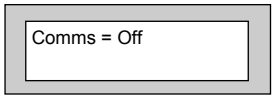


You may continue to program other Modem options if required. For the purpose of this Step by Step Guide.

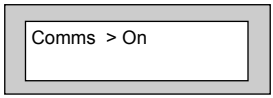
37) Press 0 (zero). The display will show:-



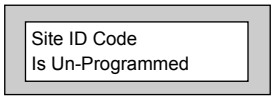
38) Press Yes. The display will show:-



39) Press No **twice**. The display will show:-

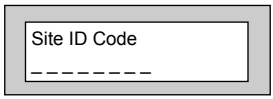


40) Press Yes. The display will show, for example:-

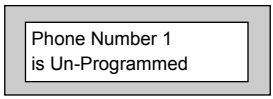


In the UK the Site ID Code is normally a four digit number, your Central Station may have supplied you with a six digit number. If this is so, please use the last four digits.

41) Press No. The display will show:-

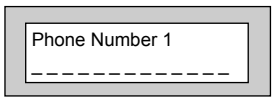


42) Enter your Site ID Code followed by Yes.
The display will show:-

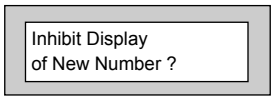


We will be entering two Phone Numbers. If your Central Station has only supplied you with one Phone Number, please use the same one twice.

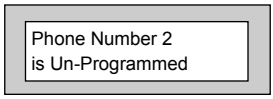
43) Press No. The display will show:-



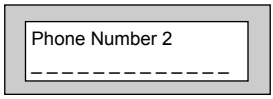
44) Enter Phone Number one followed by Yes.
The display will show:-



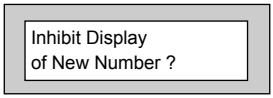
45) Press Yes. The display will show:-



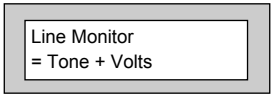
46) Press No. The display will show:-



47) Enter Phone Number 2 followed by Yes. The display will show:-



48) 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.

Settings available for Line Monitor are.

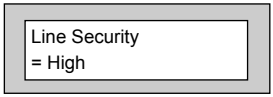
Tone + Volts The Line Monitor will check the Dial Tone and the Line Voltage **This setting should be used when the control panel is connected to a dedicated telephone line.**

Off Line Monitor is turned Off

Dial Tone The Line Monitor will only monitor the Dial Tone. **This setting 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).**

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

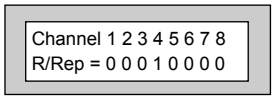


Settings available for Line Security are:-

High The Line Voltage is monitored at a High Level. **This setting should be used on dedicated lines only.**

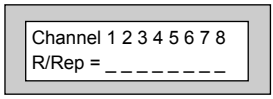
Low The Line Voltage is monitored at a Low Level. **This setting should be used when the control panel is sharing the line with other telephone equipment.**

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

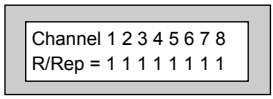


This option determines what Digi Channels will send a Restore Signal to Central Station when the system is Reset. Most Central Stations will require a Restore Report for all channels.

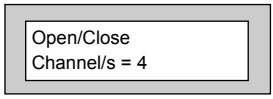
51) Press No. The display will show:-



52) Enter **eight** ones so the display shows:-



53) Press Yes. The display will show:-

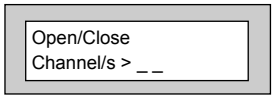


Channel 4 normally needs an inversion of the signal that is sent to Central Station. By having 4 as the setting for this option channel 4 will be inverted. If you have reports from the Central Station that the Open/Close channels are the wrong way around proceed as follows to remove the inversion on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

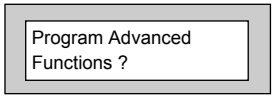
54) If you do not need to change this option, press Yes and jump to Step 56.

Or

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



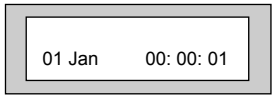
55) Press 0 followed by Yes. The display will show:-



Note: For EN requirements, a Test Call ***MUST*** be sent to the Central Station once every 24 Hrs. This can be found under advanced function, under Test Call Time.

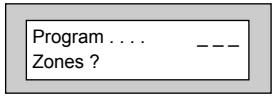
You may continue to program other Advanced options if required. For the purpose of this Step by Step Guide.

56) Press 0 (zero) **five** times. The Display will show:-

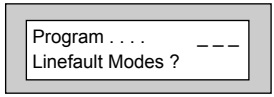


Programming Linefault Modes

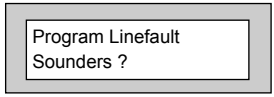
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



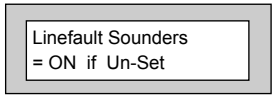
2) Press No **six times**. The display will show:-



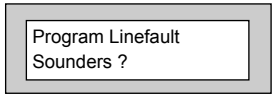
3) Press Yes. The display will show:-



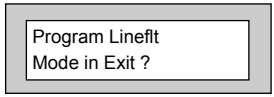
4) Press Yes. The display will show:-



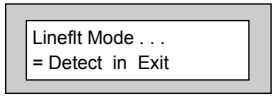
5) Press No until the required setting is displayed then press Yes. The display will show:-



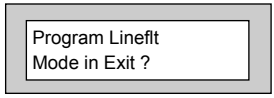
6) Press No. The display will show:-



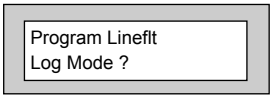
7) Press Yes. The display will show:-



8) Press No until the display shows the required setting then press Yes. The display will show:-

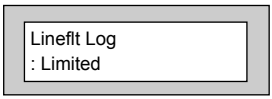


9) Press No. The display will show:-

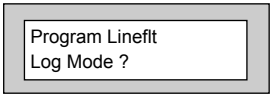


10) Press Yes. The display will show:-

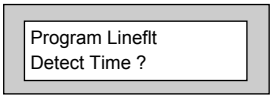
Note: *Line Fault is defaulted to Limited and may not be changed. This limit is set to 3 events.*



11) Press Yes. The display will show:-



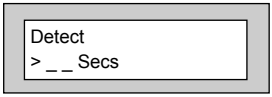
12) Press No. The display will show:-



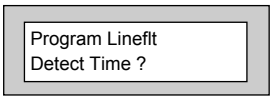
13) Press Yes. The display will show:-

With Detect programmed as 00 Linefault detection is instant or it may be delayed if required.

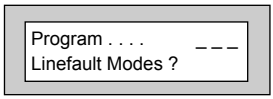
14) Press No twice. The display will show:-



15) Enter the time you require (in seconds) followed by Yes. The display will show:-

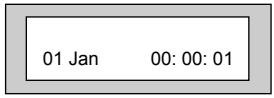


16) This concludes the programming for Linefault Sounders. Press 0 (zero) to return to:-



Or

Press 0 (zero) until the display shows:-

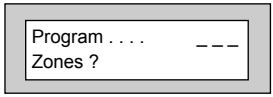


Programming Panic / Duress

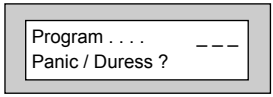
Note: Duress is defaulted to Off and cannot be changed. Duress 7 is now no longer available.

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

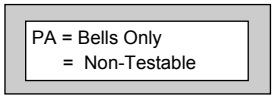
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



2) Press No **seven times**. The display will show:-



3) Press Yes. The display will show:-

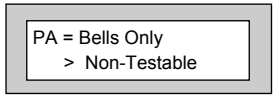


It should be noted that with PA = Bells Only no PA signals will be sent to Central Station.

Available setting for PA are

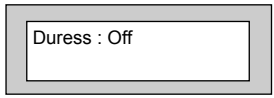
Bells Only	Activating a Panic will only sound the Bells.
Bells Always	Activating a Panic will Sound the Bells and send a signal to Central Station provided that a Digi Channel is programmed as Panic.
Silent Always	Activating a Panic will only send a signal to Central Station providing that a Digi Channel has been programmed as Panic.
Bells if LFlt	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:-

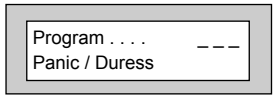


5) Press No until the required setting is displayed then press Yes. The display will show:-

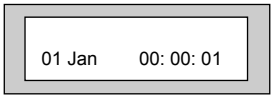
Note: *Duress is defaulted to Off and may not be changed.*



6) Press Yes. The display will show:-



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



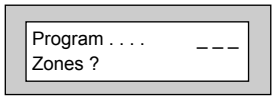
Programming PGM2 / 3 / Timers

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

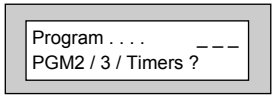
PGM3 Refers to the Strobe terminal, if this is not used for the Strobe (for example if a NovActive Bell Box is used) it may be re-programmed for other uses.

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.

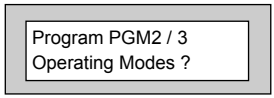
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



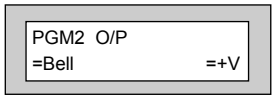
2) Press No **eight times**. The display will show:-



3) Press Yes. The display will show:-



4) Press Yes. The display will show:-



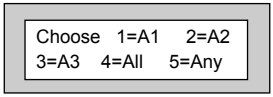
Options available for PGM2 / 3 are.

Bell	
Alert	
Any-Fire	
Any-Panic	
Alarm	(Unconfirmed)
AlarmB	(Confirmed)
Alm Abort	(Alarm Abort)
O/C Cleaner	
Cleaner Set	
Gen.Tamper	
Zone-24Hr	
Part-Set	

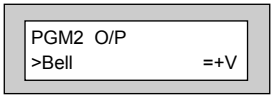
cont-
Strobe
Latch Any
Any Set
Power-Fail
Power OK
Const. LoBat (Radio Low Battery)
Radio Lost (Lost Radio Detector etc)
Const. Jamm. (Radio Signal Jamming)
Any Fault
Any Mask
Watchdog
Mains-Fail
Any-Digi
Status
Perimeter
Zon Exclude
Custom 1- 8
Off
Timed 1 - 3
Any-Closed
Pulse Off
Pulse On
After Alarm
Walktest
Pulse Set
Int. Sounder
E/E

Area variants of the above will also be displayed.

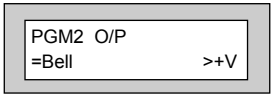
5) Press No. The display will show:-
Choose from one of the options displayed. E.g. If 5 is selected PGM2 will operate when ANY detector is triggered.



6) The display will show:-

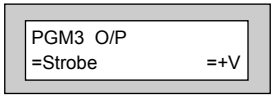


7) Press No until the required setting is displayed, then press Yes. The display will show, for example:-

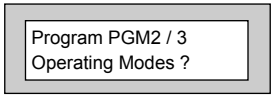


With the PGM2 programmed as Bell the output will operate with the Bell when this is set as +V. With this set as -V the output will be inverted e.g On, turning Off with the Bell.

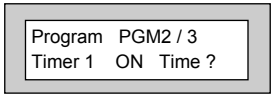
8) Press No until the required setting is displayed. Then press Yes. The display will show:-



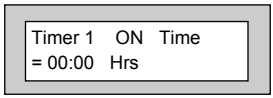
9) Repeat steps 5 - 8 for PGM3 O/P. The display will show:-



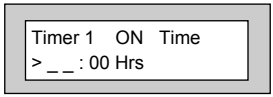
10) Press No. The display will show:-



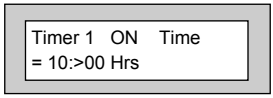
11) Press Yes. The display will show:-



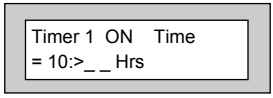
12) Press No **twice**. The display will will show:-



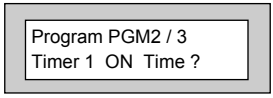
13) Enter the On Time hours, followed by Yes. The display will show:-



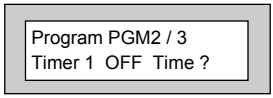
14) Press No. The display will show:-



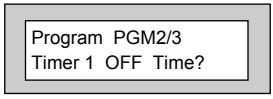
15) Enter the On Time minutes, followed by Yes. The display will show:-



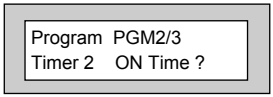
16) Press No. The display will show:- Repeat for Timer 1 OFF Time.



17) Press Yes. The display will show:-



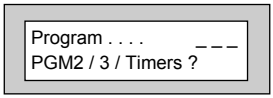
18) Press No. The display will show:-



19) Repeat the sequence for Timers 2 & 3 On & Off Times.

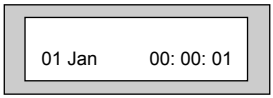
20) This concludes the programming for PGM2/3/Timers.

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



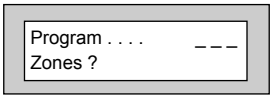
or

Press 0 (zero) until the display shows:-

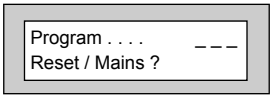


Programming Reset Modes

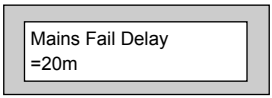
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



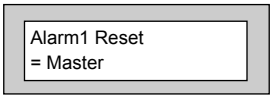
2) Press No **nine times**. The display will show:-



3) Press Yes. The display will show:-

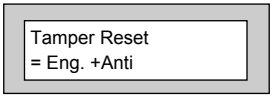


4) Press No **twice**, then enter the Mains Fail Delay time you require.Then press Yes.
The display will show:-
This is Area 1 Reset Mode. Repeat for all Areas used.

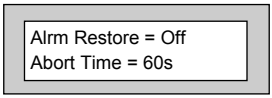


Note: *Default is set at 20 minutes. Will delay the display and the necessity to reset a mains fault for the time programmed.*

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

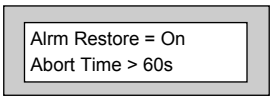


6) Press No until the required setting is displayed, then press Yes. The display will show:-

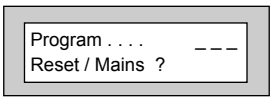


When Alarm Restore is turned On, the Digi channels programmed with Restore On will be Restored when the system is unset, rather than when the system is Reset.

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

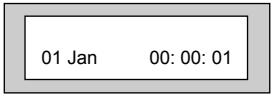


8) Press No until the required abort time is set followed by Yes. (0-180 seconds in increments of 20 seconds). The display will show:-



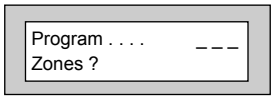
9) This concludes the programming for Reset Modes.

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

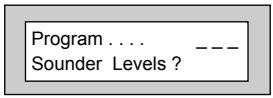


Programming Sounder Levels

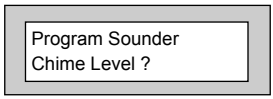
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



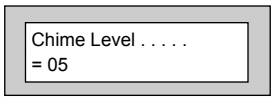
2) Press No **ten times**. The display will show:-



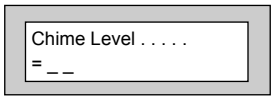
3) Press Yes. The display will show:-



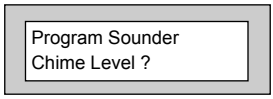
4) Press Yes. The display will show:-



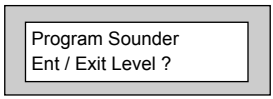
5) Press No **twice**. The display will show:-



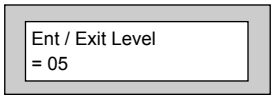
6) Enter a value 1 to 9 (1=Low 9=High) followed by Yes. The display will show:-



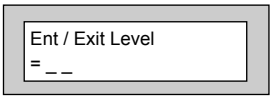
7) Press No. The display will show:-



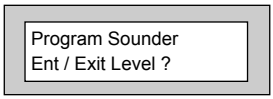
8) Press Yes. The display will show:-



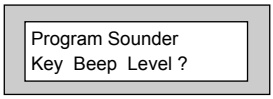
9) Press No **twice**. The display will show:-



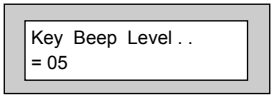
10) Enter a value 1 to 9 (1= Low 9 = High) followed by Yes. The display will show:-



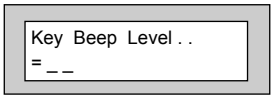
11) Press No. The display will show:-



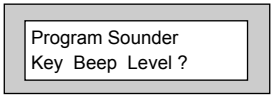
12) Press Yes. The display will show:-



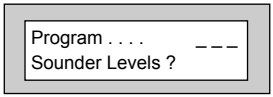
13) Press No **twice**. The display will show:-



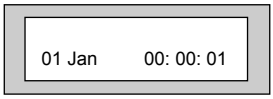
14) Enter a value 1 to 9 (1 = Low 9 = High) followed by Yes. The display will show:-



15) This concludes the program Sounder Levels press 0 (zero) to move back to:-



16) Then Press 0 until the display shows:-

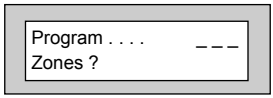


Programming PGM1 / Xp / Custom

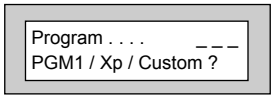
PGM1 is located on the control panel PCB.

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.

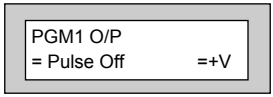
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



2) Press No **eleven times**. The display will show:-

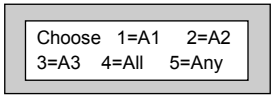


3) Press Yes. The display will show:-

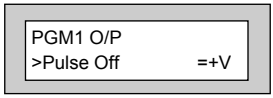


The options available for PGM1 are shown on page 59.

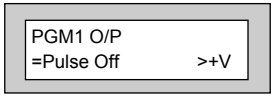
4) Press No. the display will show:-
Choose from one of the options displayed. E.g. If 5 is selected PGM1 will operate when ANY detector is triggered.



5) The display will show:-

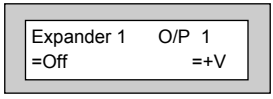


6) Press No until the required setting is displayed then press Yes. The display will show:-

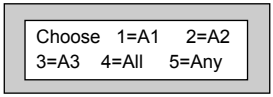


With the PGM1 programmed as Bell, the output will operate with the Bell when this is set as +V. With this set as -V the output will be inverted, e.g On, turning Off with the Bell.

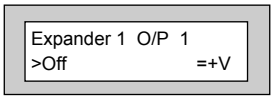
7) Press No until the required setting is displayed then press Yes. The display will show:-



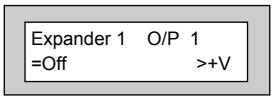
8) Press No. the display will show:-
Choose from one of the options displayed.



9) The display will show:-



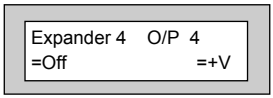
10) Press No until the required setting is displayed then press Yes. The display will show:-



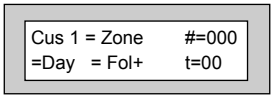
With Expander 1 programmed as Bell, the output will operate with the Bell when this is set as +V. With this set as -V the output will be inverted, e.g On, turning Off with the Bell.

11) Repeat the sequence for Expanders O/P 2 - 4 if required.

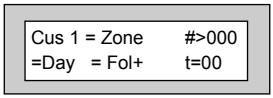
12) With the display showing:-
Press Yes.



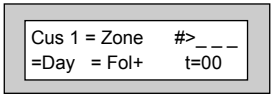
13) The display will show:-
Press No to change the Cus 1 to Zone, Code or Group as required to follow. Press Yes.



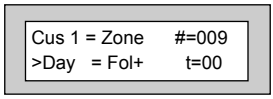
14) The display will show:-



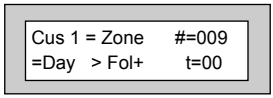
15) Press No. The display will show:-



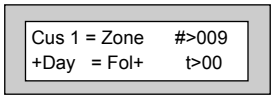
16) Enter the Zone Number or Customer Number that you wish the output to follow. Then press Yes. The display will show for example:-



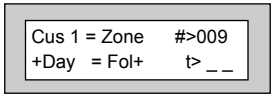
17) Press No to select when you want the output to operate, followed by Yes. The display will show:-



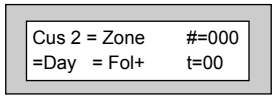
18) Press No until the mode you require is displayed, then press Yes. The display will show:-



19) Press No. The display will show:-

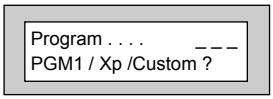


20) Enter the time required, followed by Yes. The display will show:-

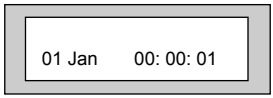


The t = 00 setting only applies to Fol+ Fol- Pul+ Pul-

21) Repeat Steps 13 to 21 until all the Custom Outputs you require have been programmed. When you have programmed Custom 8 the display will show:-

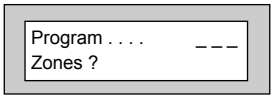


22) Press 0 (zero) until the display shows:-

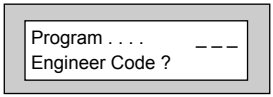


Programming Engineer Code

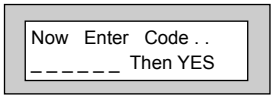
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



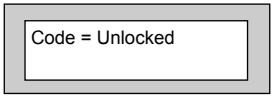
2) Press No **twelve times**. The display will show:-



3) Press Yes. The display will show:-

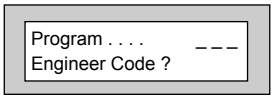


4) Enter your New Engineer Code (4, 5 or six digits) followed by Yes. The display will show:-

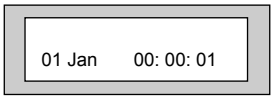


Be careful if you lock your code in. If the code is forgotten you may have to return the control panel to the factory to have it unlocked, this will be a chargeable service.

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



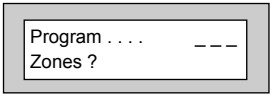
6) This concludes the Program Engineer Code.
Press 0 (zero) until the display shows:-



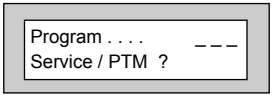
Programming Service

Within this section you will program the Service Timer. 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.

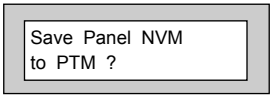
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



2) Press No **thirteen times**. The display will show:-



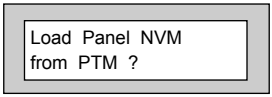
3) Press Yes. The display will show:-



4) Press Yes if you require to save to PTM.

Otherwise

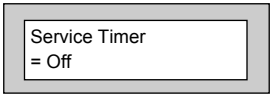
5) Press No. The display will show:-



6) Press Yes if you require to load from the PTM.

Otherwise

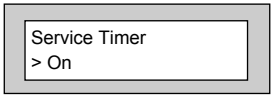
7) Press No. The display will show:-



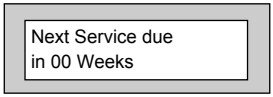
Note: To transfer data to and from the PTM a cable (part number - 04-091) will be required. (See fig 15, page 110).

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

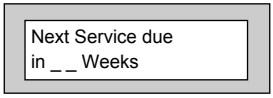
8) Press No **twice**. The display will show:-



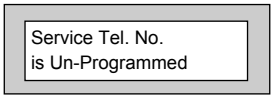
9) Press Yes. The display will show:-



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

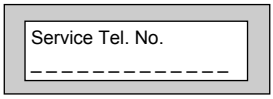


11) Enter the number of weeks you require to the next service, then press Yes.
The display will show:-

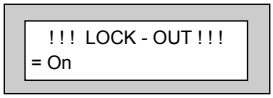


Note: The system will start to warn the end user that the Service is due two weeks before the time expires.

12) Press No. The display will show:-



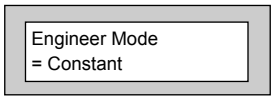
13) Enter the Telephone Number you wish your customer to dial for service, followed by Yes.
The display will show:-



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.

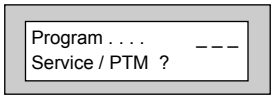
14) Press No until the required setting is displayed then press Yes. The display will show:-



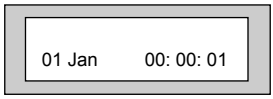
With Engineer Mode programmed as Constant the panel will remain in Engineer Mode until the Engineer exits.

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:-

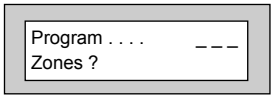


16) This concludes the Program Service. Press 0 (zero) until the display shows:-

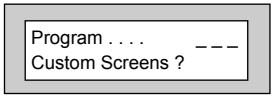


Programming Custom Screens

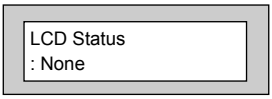
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



2) Press No **fourteen times**. The display will show:-

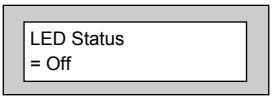


3) Press Yes. The display will show:-



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.*

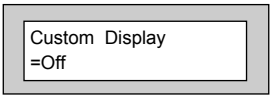
4) Press Yes. The display will show:-



The LED Status refers to the LED in the G-Tag 'E' or 'I' reader. Choose from:-

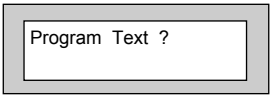
Off	The reader LED will only show for ten seconds after a Set / Unset
On	The reader LED will always be active.

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



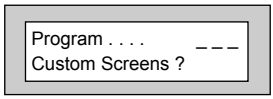
Note: *If set to On, the custom text will be displayed when the system is Un-Set. This is only applicable if the Control Panel has been programmed to BS standard.*

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



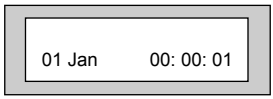
Press 0 three times to return to the date/time display (EN standard)
Or
If you wish to change the Custom Display (BS only), press Yes then No. You may now enter up to 32 characters. (Refer to the character map on page 12).

7) As you press Yes for the last character the display will change to:-



This concludes the Custom Screens.

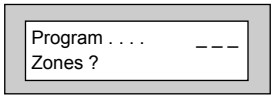
Press 0 (zero) **twice** to return to:-



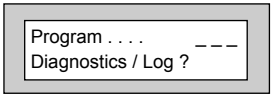
Programming Diagnostics / Log

The GardTec 595 control panel has some limited diagnostic features available to the engineer.
To access these proceed as follows.

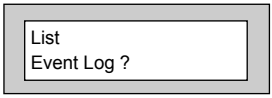
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



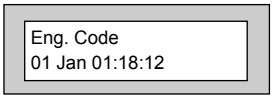
2) Press No **fifteen times**. The display will show:-



3) Press Yes. The display will show:-



4) Press Yes if you wish to view the Event Log
The display will show, for example:-

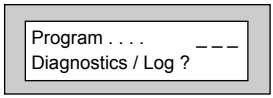


This is the last event in the Log

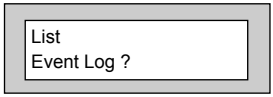
Use the No key to move backward in the Log

Use the Yes key to move forward in the Log

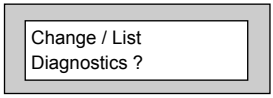
5) When you have finished viewing the Log press 0 (zero). The display will show:-



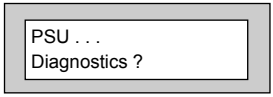
6) Press Yes. The display will show:-



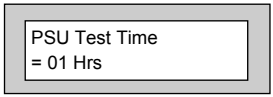
7) Press No. The display will show:-



8) Press Yes. The display will show:-

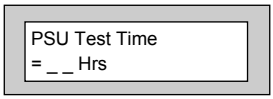


9) Press Yes. The display will show:-

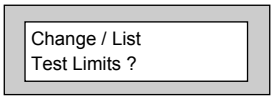


A PSU/Battery test will be carried out at the time interval set here and each time you leave Engineer Mode. This may be turned Off by setting the Time interval to 0 (zero).

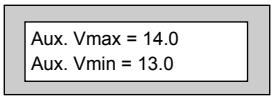
10) Press No **twice**. The display will show:-



11) Enter the time you require (in hours) followed by Yes. The display will show:-

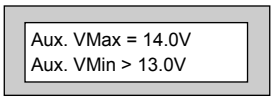


12) Press Yes. The display will show:-

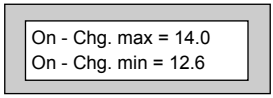


In this example any voltage over 14V or below 13V will create a warning when the PSU test is performed by the system.

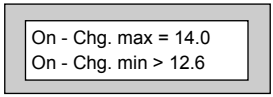
13) To change these limits. Press No until the required setting for V.Max is displayed, then press Yes. The display will show, for example:-



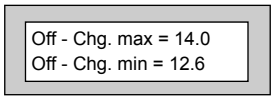
14) Press No until the setting required for V.Min is displayed, then press Yes.
The display will show:-



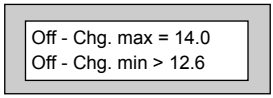
15) Press No until the required setting for On-Charge Volts max (Battery) is displayed, then press Yes.
The display will show:-



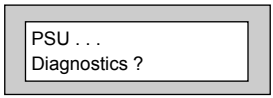
16) Press No until the required setting for On-Charge Volts min (Battery) is displayed then press Yes.
The display will show:-



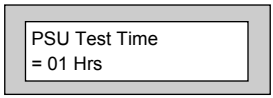
17) Press No until the required setting for Off-Charge Volts max (Battery) is displayed, then press Yes.
The display will show:-



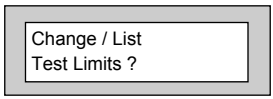
18) Press No until the required setting for Off-Charge Volts min (Battery) is displayed, then press Yes.
The display will show:-



19) Press Yes. The display will show:-

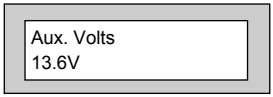


20) Press Yes. The display will show:-

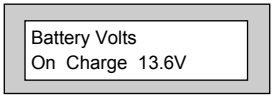


The readings given from this point on are intended as Indicator Only and should be confirmed with a calibrated Test Meter.

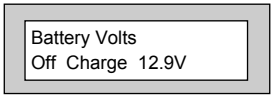
21) Press No. The display will show, for example:-



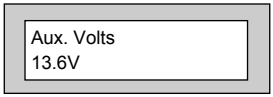
22) Press Yes. The display will show, for example:-



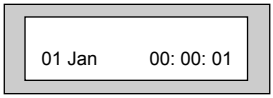
23) Press Yes. The display will show, for example:-
The backlight will dim at this point.



24) Press Yes. The display will show, for example:-



25) This concludes the Program Diagnostics.
Press 0 (zero) until the display shows:-



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 un-confirmed.
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 un-confirmed.
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 has 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.
See A.1 DD243 Portable ACE used for setting and unsetting.

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.

Comms Restore
With Comms Restore turned on any outstanding alarm channels will be restored at the end of the Confirm Time Window.
This feature is mandatory for DD243

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 (un-confirmed) 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.

Output Option (Status)
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	Output On for 3 seconds Output Off for 1s until system reset.

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	System Set
Event 2	Entry Door Unlocked Confirmed Alarms Disabled
Event 3	Open Entry Door (entry time starts)
Event 4	Entry Time Expires (inc Entry Time 2) Unconfirmed Alarm Transmitted
Event 5	Any subsequent zones triggered No Confirmed Signals Transmitted

Or

Event 1	System Set
Event 2	Entry Door Forced Open (entry time starts)
Event 3	Entry Time Expires (inc Entry Time 2) Unconfirmed Alarm Transmitted
Event 4	non entry/access Zone Triggered
Event 5	Second non entry.access Zone Triggered Confirmed Transmitted

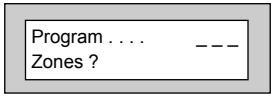
To achieve the above
Confirm on entry = On
ET Mode = Door Lock
Door Lock Zone programmed as ET

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

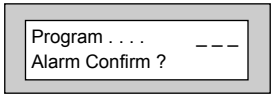
Event 1	System Set
Event 2	Entry Door Opened (entry time starts) Confirmed Alarms Disabled
Event 3	Entry Time Expires (inc Entry Time 2) Unconfirmed Alarm Transmitted
Event 4	Any subsequent zones triggered No Confirmed Signals Transmitted

To achieve the above
Confirmed on entry = Off

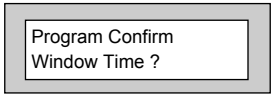
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



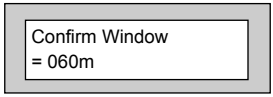
2) Press No **sixteen times**. The display will show:-



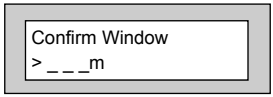
3) Press Yes. The display will show:-



4) Press Yes. The display will show:-



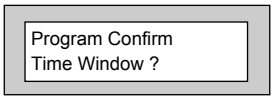
5) Press No **twice**. The display will show:-



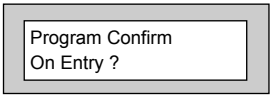
6) Enter the time you require, followed by Yes.

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

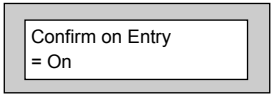
7) The display will show:-



8) Press No. The display will show:-

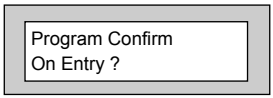


9) Press Yes. The display will show:-

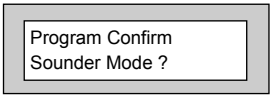


Confirm on Entry may be On only if you are using an ACE device to Unset the system.

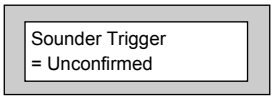
10) Press No until the required setting is displayed, then press Yes. The display will show:-



11) Press No. The display will show:-

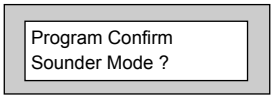


12) Press Yes. The display will show:-

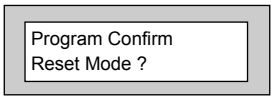


The term Sounder relates to the system speaker(s)

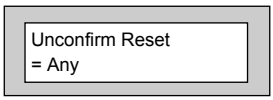
13) Press No until the required setting is displayed, then press Yes. The display will show:-



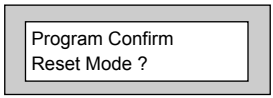
14) Press No. The display will show:-



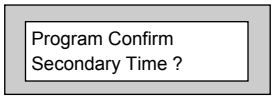
15) Press Yes. The display will show:-



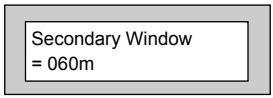
16) Press No until the required setting is displayed, then press Yes. The display will show:-



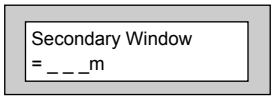
17) Press No. The display will show:-



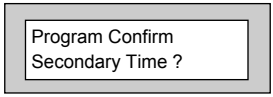
18) Press Yes. The display will show:-



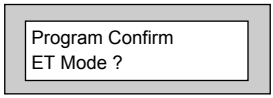
19) Press No **twice**. The display will show:-



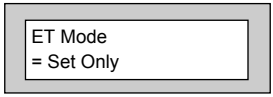
20) Enter the time required then press Yes. The display will show:-



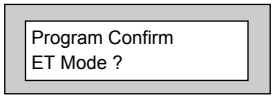
21) Press No. The display will show:-



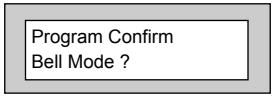
22) Press Yes. The display will show:-



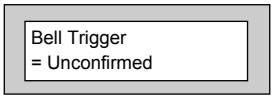
23) Press No until the required setting is displayed, then press Yes. The display will show:-



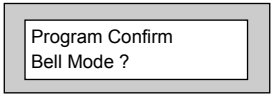
24) Press No. The display will show:-



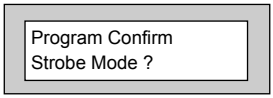
25) Press Yes. The display will show:-



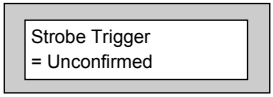
26) Press No until the required setting is displayed, then press Yes. The display will show:-



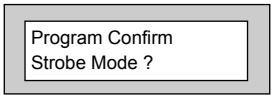
27) Press No. The display will show:-



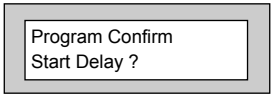
28) Press Yes. The display will show:-



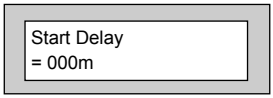
29) Press No until the required setting is displayed, then press Yes. The display will show:-



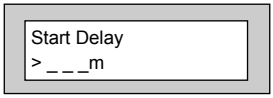
30) Press No. The display will show:-



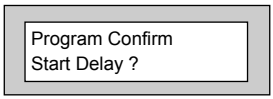
31) Press Yes. The display will show:-



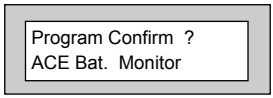
32) Press No **twice**. The display will show:-



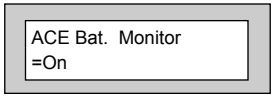
33) Enter the time required, followed by Yes. The display will show:-



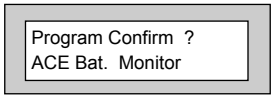
34) Press No. The display will show:-



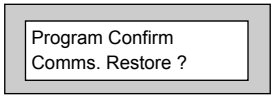
35) Press Yes. The display will show:-



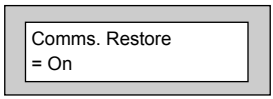
36) Press No until the required setting is displayed, then press Yes. The display will show:-



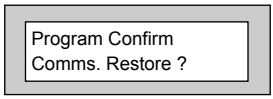
37) Press No. The display will show:-



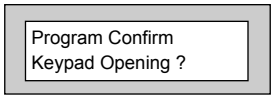
38) Press Yes. The display will show:-



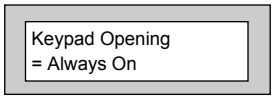
39) Press No until the required setting is displayed, then press Yes. The display will show:-



40) Press No. The display will show:-



41) Press Yes. The display will show:-

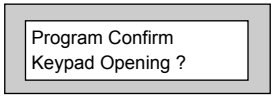


Options available are:

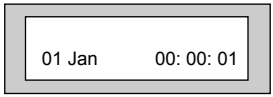
Always On	Keypad(s) are always On
*Off in E/E	Keypad(s) not available during Entry/Exit. ACE must be used.
*Off in E/E/Alm	Keypads not available during Entry/Exit or if E/E has gone through to an alarm

*One of these options will be required by your inspectorate.

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



43) This concludes the Program Alarm Confirm Press 0 (zero) **three times** to return to:-



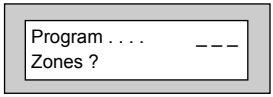
NovActive Description & Programming

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.

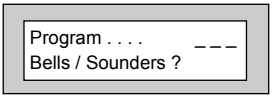
To program the NovActive sounder(s) please follow the instructions below.

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

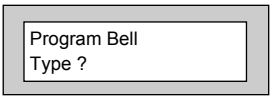
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



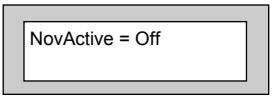
2) Press No **three times**. The display will show:-



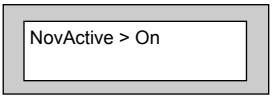
3) Press Yes. The display will show:-



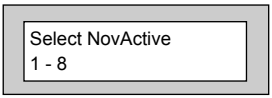
4) Press Yes. The display will show:-



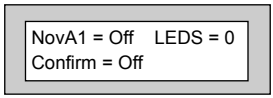
5) Press No **twice**. The display will show:-



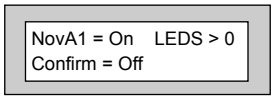
6) Press Yes. The display will show:-



7) Press the number of the NovActive you wish to program. The display will show:-

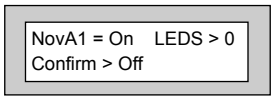


8) Press No **twice** to turn NovActive 1 On. Then press Yes. The display will show:-

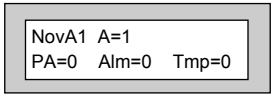


To program the LED pattern press No until the setting required is displayed.
Choose from.
0 = Alternating LEDs
1 = 1 Static LED
2 = 2 Pulsing LEDs
3 = No LEDs

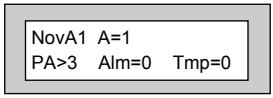
9) When you are happy with your selection press Yes. The display will show:-



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

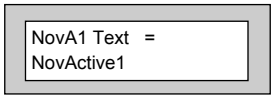


10) Press the No key to select which Area(s) the NovaActive will respond to. Then press Yes The display will show:-

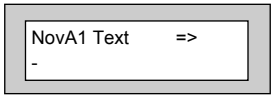


11) To programme the sound, press No until the required setting is displayed, then press Yes.

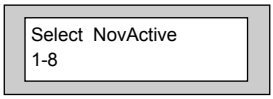
12) Repeat for Alm, Tmp until the required settings are displayed.Then press Yes. The display will show:-



13) Press No. The display will show:-



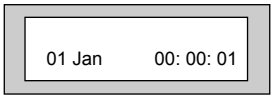
14) Enter the text required. *E.g. Front Wall Bell*. Then press Yes. The display will show:-



***Note**: See Page 12 for entering text instructions.*

You should now repeat until all the NovaActives on the system have been programmed.

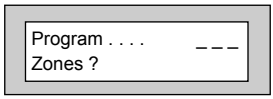
15) When you have finished programming all the NovaActives press 0 until the display shows:-



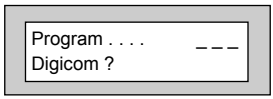
Programming Point ID & SIA Protocol

For the purpose of programming PID / SIA, it is assumed that the STU Adaptor has been left in the OFF state.

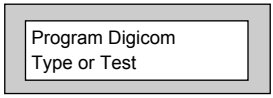
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



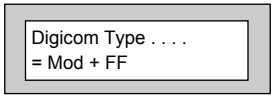
2) Press No **five times**. The display will show:-



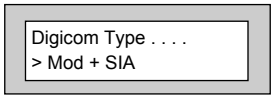
3) Press Yes. The display will show:-



4) Press Yes. The display will show:-

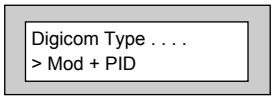


5) Press No until the display shows:-

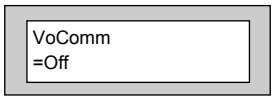


Or:-

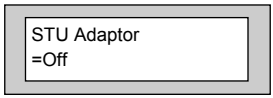
As required.



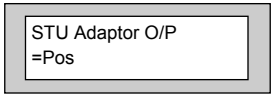
6) Press Yes. The display will show:-



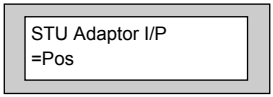
7) Press No until the setting you require is displayed.
Then press Yes. The display will show:-



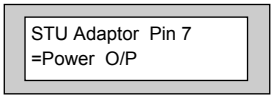
8) Press Yes. The display will show:-



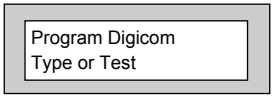
9) Press Yes. The display will show:-



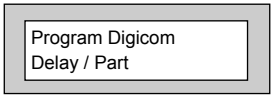
10) Press Yes. The display will show:-



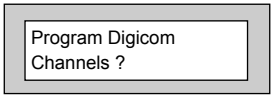
11) Press Yes. The display will show:-



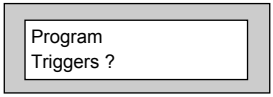
12) Press No. The display will show:-



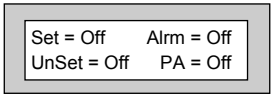
13) Press No. The display will show:



14) Press Yes. The display will show:-

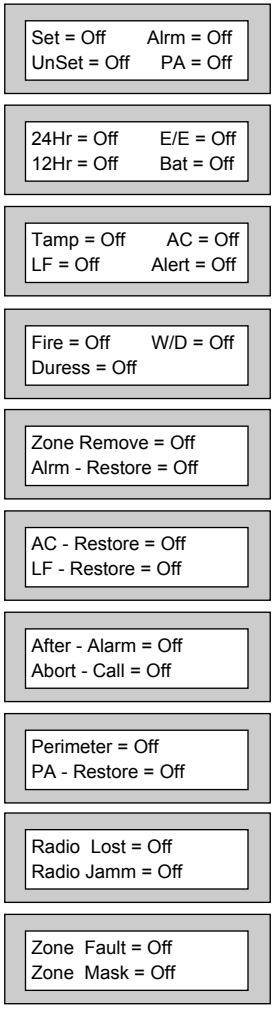


15) Press Yes. The display will show:-

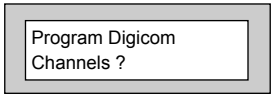


You MUST turn On the Triggers you require.

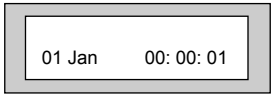
16) Use the Yes & No keys to accept or change the options on the following screens:-



17) Press Yes. The display will show:-



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

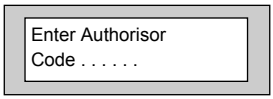


Engineer Reset

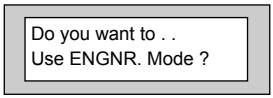
If the system is programmed as Engineer Reset the system will need to be Reset by the Engineer Code. Please follow the procedure below to effect the Reset.

1) If the system is still set, unset it via a valid User Code.

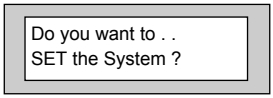
2) Enter the Engineer Code. The display will show:-



3) Enter a valid User Code. The display will show:-



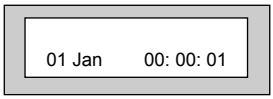
4) Press No. The display will show:-



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:-



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

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)

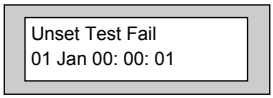
FLT if Off A fault tone will be generated when the system is Unset and a Linefault is detected (may not be silenced by User Code).

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).

Clearing 'Test Fail' Indication

If the display shows:-

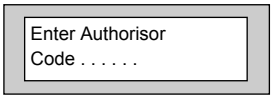


The system has a zone On Test that has failed when the system was Set.

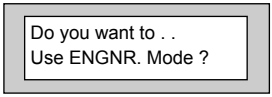
Please note: we recommend that the Test Attribute is only used on 12Hr type zones.

To clear the display proceed as follows.

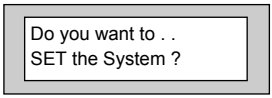
1) Enter the Engineer Code. The display will show:-



2) Enter a valid User Code. The display will show:-



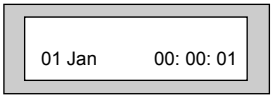
3) Press No. The display will show:-



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:-



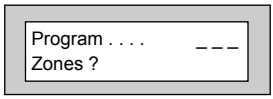
Programming ID Biscuits

One ID Expander Card may be fitted to the GardTec 595 control panel (please refer to the back of this manual or the Quick Start Guide supplied with the panel for wiring details). The ID Expander Card will take up to 30 industry standard ID Biscuits (Biscuits numbers1 to 30).

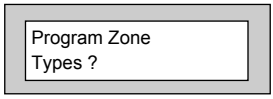
No other form of Zone Expansion is possible when ID is being used.

To program the biscuits proceed as follows.

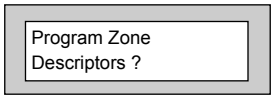
1) Enter into Engineer Mode
To do this follow Steps 1 to 4 on page 9
With the display showing:-



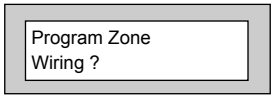
2) Press Yes. The display will show:-



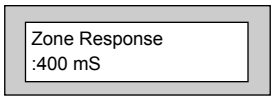
3) Press No. The display will show:-



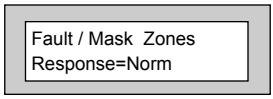
4) Press No. The display will show:-



5) Press Yes. The display will show:-
***Note**: Zone Response time is defaulted to 400ms and may not be changed.*



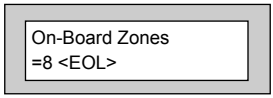
6) Press Yes. The display will show:-
***Note:** Fault /Mask response time may be programmed as a global parameter and may be reprogrammed from 2 to 14 seconds. (increments of 2 seconds).*



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.

7) Press No until the settings you require are displayed. Then press Yes. The display will show:-



Wiring Modes available are:-

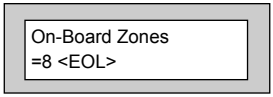
8 (2 Wire) Two wires are used for the zone and a global tamper is used. **(Version dependant)**.

(EOL) Two wires are used in conjunction with two resistors to give End Of Line wiring, this is the most secure wiring format.

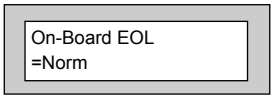
For information on how to wire the various wiring modes please refer to the back of this manual (Pages 104 - 111) or refer to the Quick Start Guide that is supplied with the control panel.

If selecting **8(EOL**) follow steps 8 - 10. If selecting **8(2 Wire)** jump to step 11.

8) With the display showing:-
Press Yes.



9) The display will show:-



Three wiring options are available under 8 (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.*

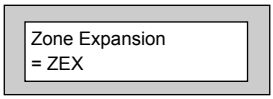
ELF1: ELF1 wiring is used for detectors that have a relay output (a pair of terminals) for Fault or Mask..

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. Please see the back of this manual (Pages 104 - 111) or refer to the 595 Quick Start Instructions.*

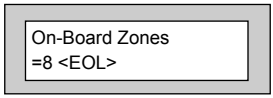
Note: *The installer should check what output type the detector are, noting that all the detectors should be of the same type with regards to the Fault / Mask output.*

10) Press No until the setting you require is displayed then press Yes. The display will show:-
(Jump to step 15).

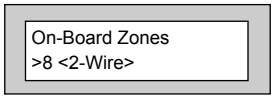


If 8(2 Wire) wiring option is required. (Version dependant).

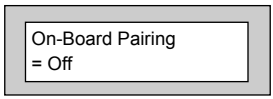
11) With the display showing:-
Press No until **8(2 Wire)** is displayed.



12) The display will show:-



13) Press Yes. The display will show:-



Zone Pairing.

If the 8(2 Wire) wiring mode is used then a zone must be used to monitor for Masking and Fault. This is achieved by selecting Zone Pairing as on. Zone Pairing cannot be used in ELF1 or ELF2 wiring modes.

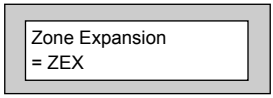
When using Zone Pairing each zone will have a corresponding paired zone that will be used for Masking and Fault signals. This is done by using the Odd numbered zones for the normal alarm detection and the Even numbered zones for Masking and Fault Detection. For example.

Alarm Zone	**Pared Zone for Mask / Fault**
Zone 1	Zone 2
Zone 3	Zone 4
Zone 5	Zone 6
Zone 7	Zone 8
etc...	

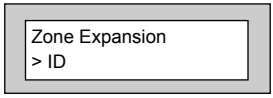
Please note that half the zones on the system would be lost for processing the Mask and Fault signals and it would be more prudent to use the ELF1 or ELF2 modes as described previously.

---

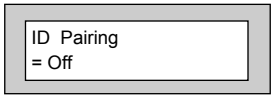
14) Press No until the setting you require is displayed.
Then press Yes. The display will show:-



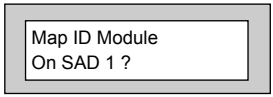
15) Press No **twice**. The display will show:-



16) Press Yes. The display will show:-



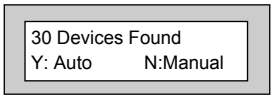
17) Press No until the setting you require is displayed. Then press Yes. The display will show:-



At this stage the ID should be wired up and all ID Biscuits connected. The Tamper on the Module should also be closed.

18) Press Yes.

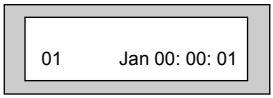
19) The system will now detect all connected Biscuits. The display will show for example:-



20) Press Yes for Auto

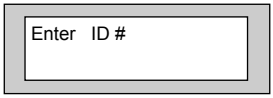
21) All detected Biscuits are now active.

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

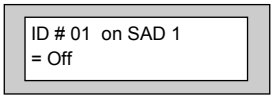


Note: If the number of devices found does not correspond to the number fitted, check the wiring and re-map. If after checking, devices found still does not correspond, press No.

23) The display will show:-



24) Enter 1 then press Yes. The display will show:-



If the zone has not been found, the display will show Off. If the zone has been found, the display will show the zone number.

Press Yes to continue to the next device number.

Specifications

Power Input	230V a/c ±10% @ 50Hz
Max Loop Resistance	2K (not with E.O.L.)
Loop Delay Time	400mS
FUSES	
Mains Supply Fuse	20mm 125mA Anti-Surge (315mA, 2A PSU)
Battery Fuse	20mm 2A Anti-Surge
Aux Fuse	20mm 1A Quick Blow (2A for 2A PSU)
Keypad Fuse	20mm 250mA Quick Blow
Battery Fuse - Lead	20mm 2A Anti-Surge
Low Voltage Output	13.8V dc Regulated
Maximum Output Current	
Plastic	1A* *(See Power Supply Rating)*
Small Metal	1.2A*
Large Metal	2A*
Battery Sizes	12V 1A2, 2A, 3A, 7A (17A large metal)
Construction	3mm Polycarbonate or Metal
Complies with	EN50131-1 PD6662 2004 CE tested
Conforms with	EMC Directive 89/336/EEC & LVD Directive 73/23/EEC
Number of Zones (Standard)	8 (2 Wire), 8 (EOL)
Expansion Type	2 Radio Expanders may be fitted or 1 ID
Number of Keypads	4 Normal - 8 Multi
Zone Descriptors	32 Characters
Max No of Users	31 + Engineer
Default Codes	Eng 1234, User 5678 (BS / EN2)
Code Length	4, 5 or 6 digits

User Names	9 Characters
Custom Screen	32 Characters
Non-Volatile Memory	Yes
Quiescent Currents Control Panel plus Keypad	150mA@12V d.c
Log Size	250 Event Log 31 Event Modem Log
Time & Date	Log & Display

Power Supply Rating

It should be noted that the ***Plastic GardTec 595 Control Panel*** 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 Plastic 595 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.

Note: A GardTec 595 Plastic Control Panel can be configured as a Grade 3 system. In this case the maximum standby battery capacity is 2.7Ah which determines a PD6662 rated supply of 225mA. Therefore an external supply would have to be used to power the non CIE parts of the system.

Note: For a Grade 3 system where the standby battery current is sufficient for 12Hr standby, the system must be capable of reporting mains fail to the ARC.

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 above).

Wiring Diagrams

Remote Keypads

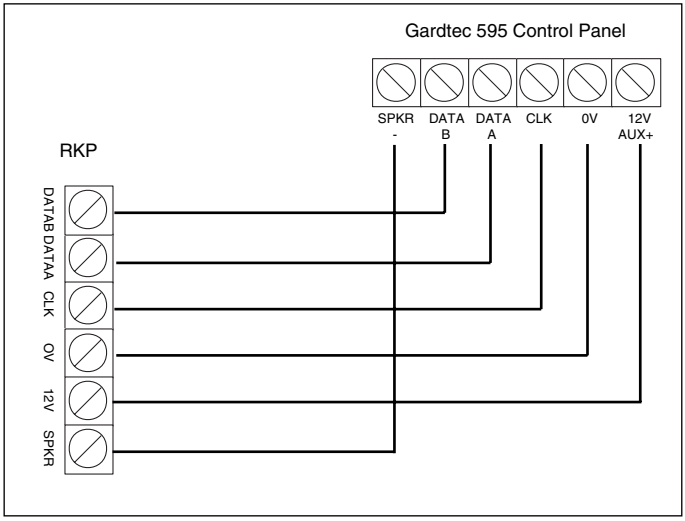
Up to eight remote keypads may be fitted to the Gardtec *595* control panel.

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

Note: Each keypad has address jumpers labled A1 to A4. Please select the correct address for each keypad before the system is powered up. If more than four keypads are to be used, then 'Mult' (Program Keypad) has to be selected to ON.

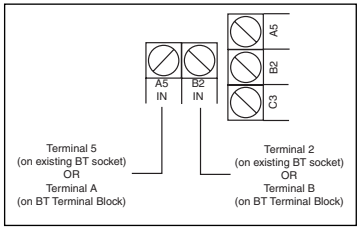
Note: Contour keypads may be fitted with ACE or Prox and an additional jumper labled NVM 31 keyfobs or G-Tag Prox Tags may be programmed on to individual user codes. With the NVM jumper in place the ACE/Prox memory will be cleared when power is applied therefore this jumper should be removed on completion of the installation.

Fig 1. RKP Connection



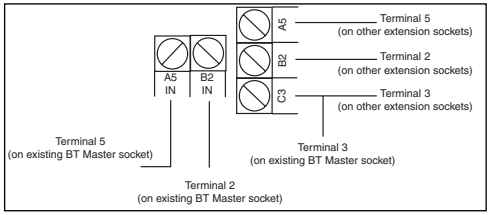
Telephone Connections

Fig 2.



Standard Telephone Connection

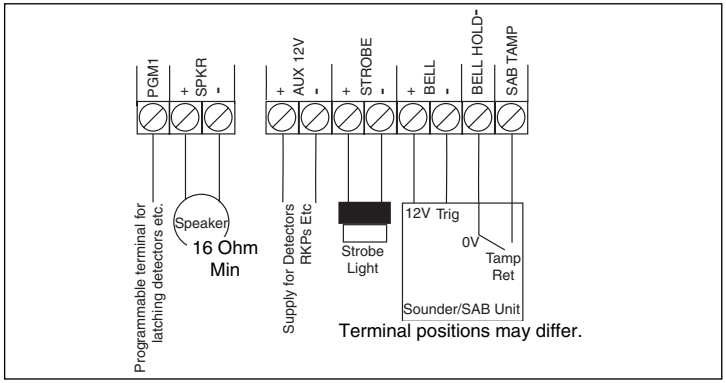
Fig 3.



Serial Telephone Connection (dependant on model)

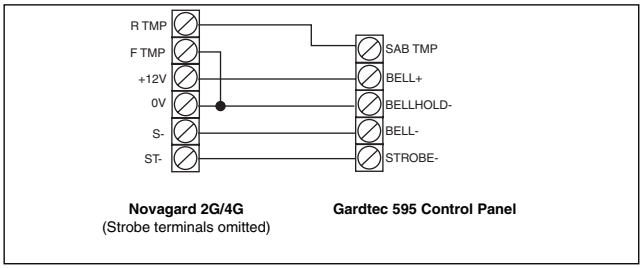
Control Panel Output Connections

Fig 4.



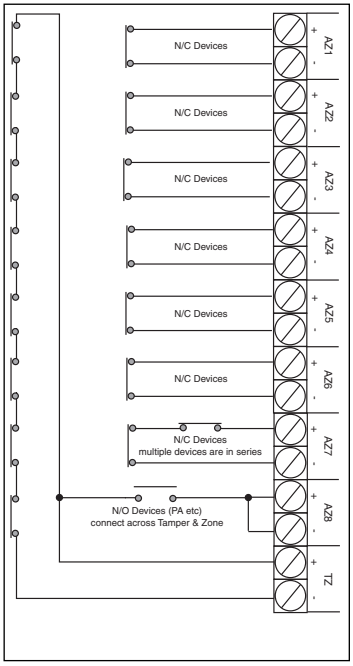
Typical Novagard 2G/4G Connections

Fig 5.



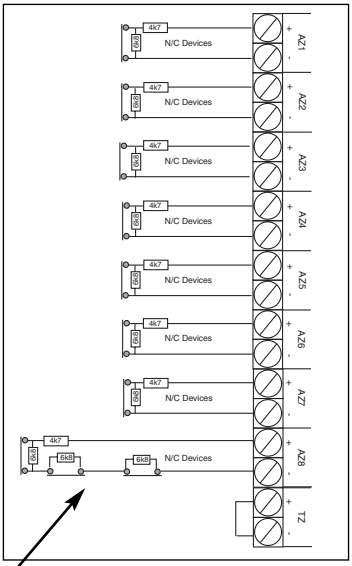
Control Panel Input (Zone) Connections

Fig 6.



Standard (2 Wire) Zone Wiring

Fig 7.



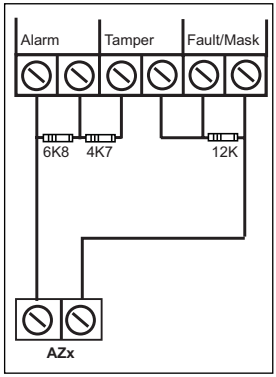
End Of Line Zone Wiring

Multiple units can only be used with BS Standard. If using EN2/3, one unit per zone.

Typical Wiring Modes

Where Anti-Mask detectors are used, one of the wiring modes below may be utilised.

Fig 8.

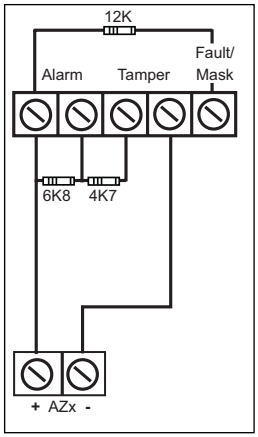


ELF1 wiring is used for detectors that have a relay output (a pair of terminals) for Fault or Mask.

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

Typical ELF1 (End of Line Format 1) Wiring.

Fig 9.



ELF2 wiring is used for detectors that have a transistor output (a single terminal) for Fault or Mask.

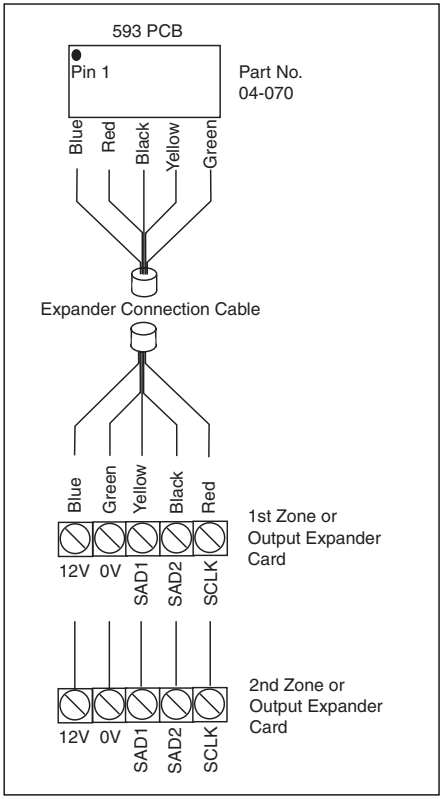
Note: For ELF2 wiring format the 12K resistor must be linked to the positive side of the zone terminals.

Typical ELF2 (End of Line Format 2) Wiring.

Zone/Output/ID Expander Card Connections

Up to four zone expander cards (or one ID Expander card) and four output expanders may be fitted to the Gardtec *595*. These are all fitted to a common expander bus via a serial connection lead (part No. 04-070) this lead is fitted to the plug on the rear of the control panel PCB and the cards wired as shown below.

Fig 10.



Notes:
Remove power from panel before connecting Expander Cards.

Zone Expansion Types (ZEX or ID) are programmed via option 72

Zone Expander Cards are programmed via options 75 & 76.

Ensure ident jumper on Zone Expander is in position 1 to 4 as required.

Zones numbers on Expander No.1 start at 21(e.g AZ1 on expander 1 = zone 21).

Zones numbers on Expander No.2 start at 31(e.g AZ1 on expander 2 = zone 31).

Zones numbers on Expander No.3 start at 41(e.g AZ1 on expander 3 = zone 41).

Zones numbers on Expander No.4 start at 51(e.g AZ1 on expander 4 = zone 51).

If ID zones are used the first zone on the ID card is Zone 21

For Output Expanders ensure ident jumper is in required position (1 - 4).

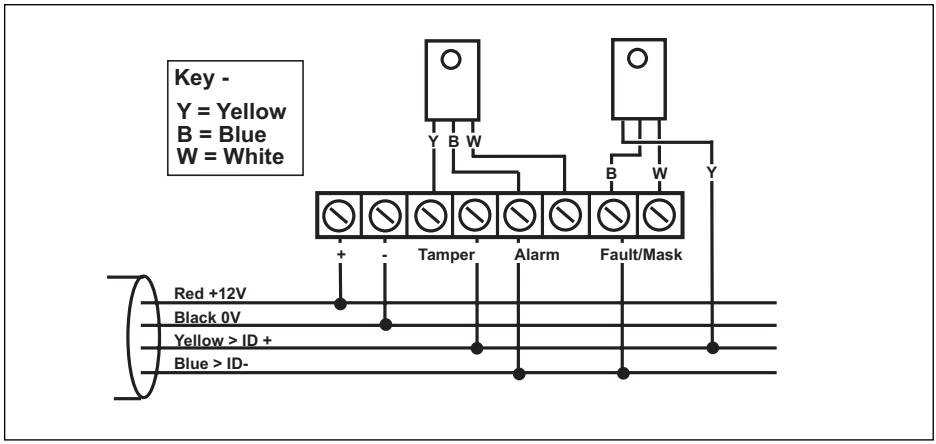
Output Expanders are programmed via option 83 and may be programmed only via a LCD RKP.

ID Expander Detector Wiring

One ID Expander Card may be fitted to the Gardtec 595 control panel giving 8 panel zones plus up to 30 ID zones using industry standard ID Biscuits or ID Detectors. ID zones numbers are 21 through to 50.

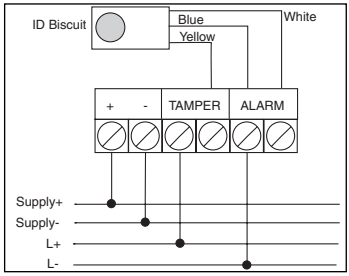
Typical wiring for ID Biscuits is shown below.

Fig 11.



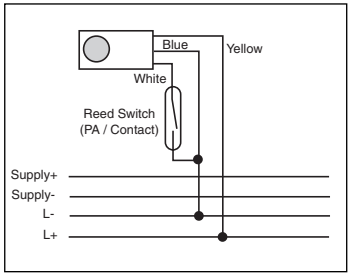
Note: For ID pairing, biscuit numbers MUST be in sequence...
Example: PIR1 = Biscuits 1& 2, PIR2 = Biscuits 3 & 4 etc...

Fig 12.



Detector Using Wired Biscuit

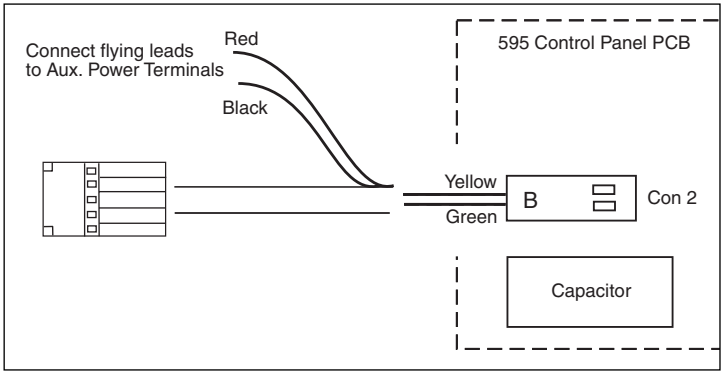
Fig 13.



PA Using Wired Biscuit

GardTec 595 / STU Connection Details

Fig 14



Connection details

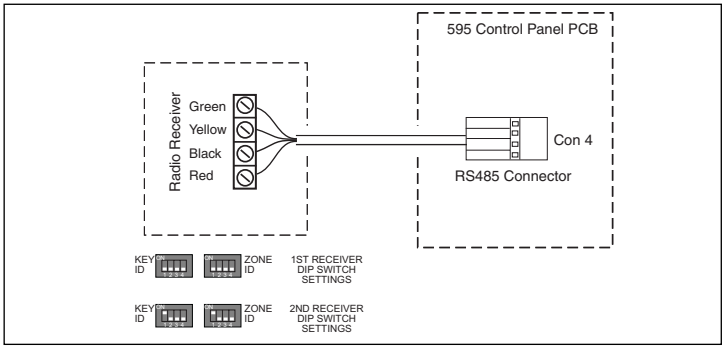
Connect the flying leads to the Aux. Power Terminals.

Plug **B** connects to the two pins **(Con 2)** located on the ***UNDERSIDE*** of the 595 PCB. The GREEN wire should be nearest to the blue capacitor on the 595 PCB.

The remaining five pin socket will connect to the blue modem connector on the **STU** board.

Radio Expander Wiring & Switch Settings

Fig 15.

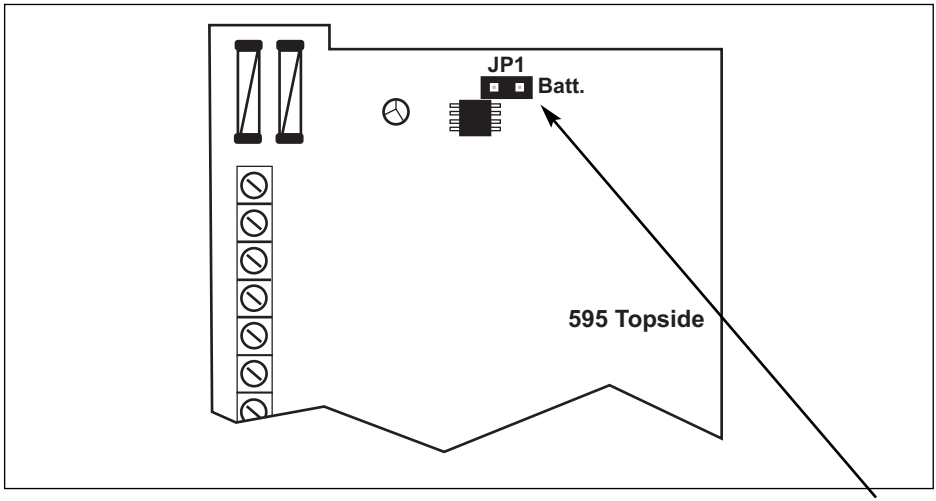


Connect cable between **Con 4** on the 595 PCB and the Radio Receiver.

Each receiver has two banks of switches marked as Key ID and Zone ID.
For **Receiver 1**, all the switches must be in the **OFF** position.
For **Receiver 2**, switch 1 on the **Key ID** and the **Zone ID** banks must be in the ON position.**Note: Move switches before applying power to the Receiver.**

Battery Jumper

Fig 16.



If powering up the Control Panel with battery only, connect battery and short out **JP1** for approx. 5 seconds. Key pad and Control Panel will then become active.

Notes

Notes

GardTec
RISCO GROUP

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