

Alert Version **8**
8 Zone Control **8**

Arrowhead
Alarm Products Ltd

Installation & Programming Guide

Proudly Designed and Manufactured in New Zealand

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To the best of our knowledge the information contained in this manual is correct at the time of printing. Arrowhead Alarm Products Ltd reserve the right to make changes to the features and specifications at any time without notice in the course of product development.

Designed & Manufactured in New Zealand to Meet NZS:4301/93

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INTRODUCTION

This Arrowhead Alert Version V8 alarm control panel has been designed to provide the most requested features for both the installer & the end-user. These features include ease of installation, ease of programming and user friendly operation all in a package which is reliable, functional and attractive.

Utilising many years of experience in the security industry and implementing valuable feedback, we are proud to provide you with a new generation of alarm controller. The Alert V8 is a New Zealand designed and built product which brings you the quality and features which you deserve at an affordable price. In addition to the advanced design, only the highest quality components have been used in the production of this Alert panel to ensure the highest degree of reliability.

This manual will guide you through the installation and programming of your Alert alarm panel. For additional information regarding the operation instructions and options, please refer to the enclosed "Alert User's Guide".

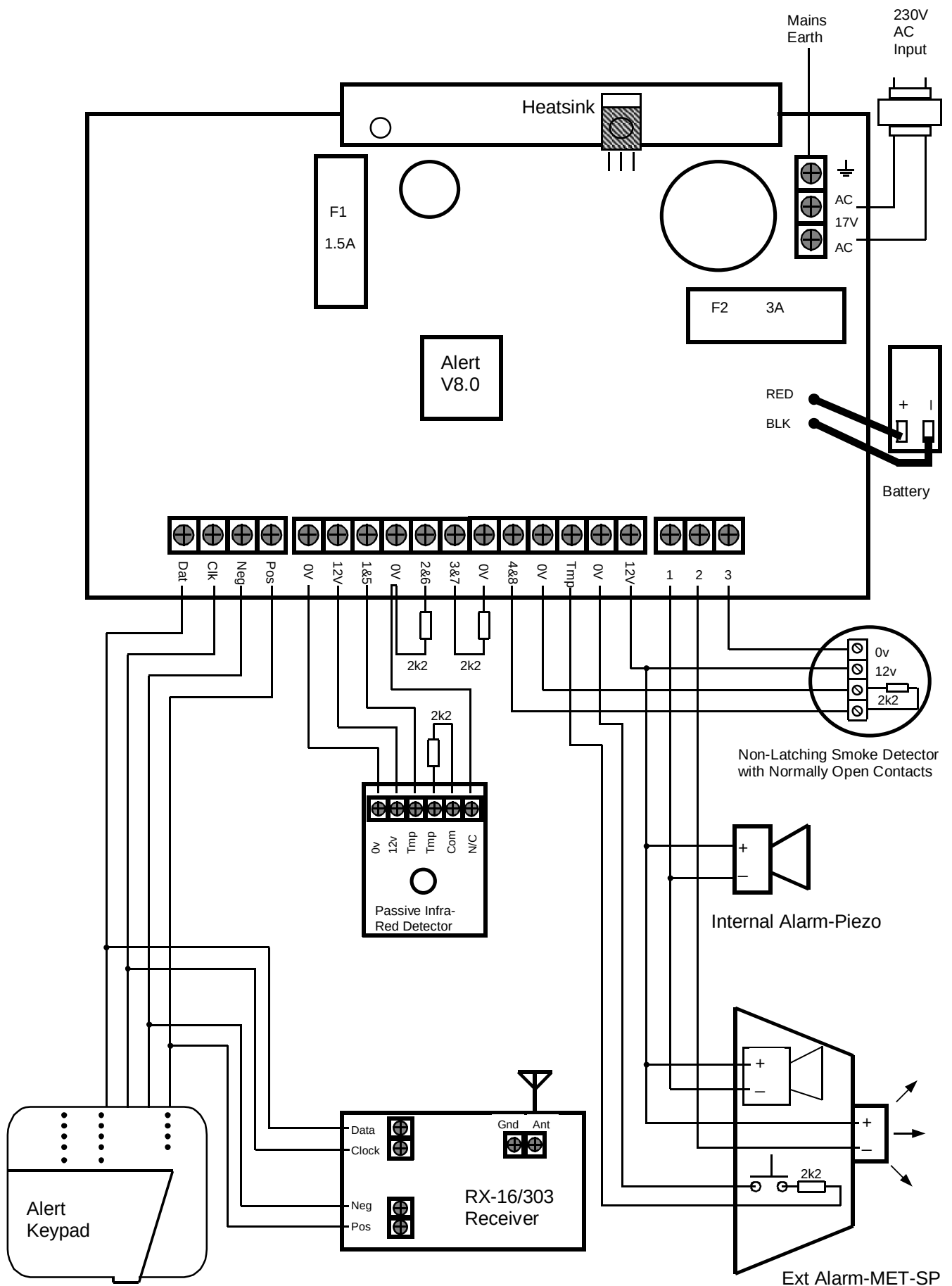
PACKAGE CONTENTS

This Arrowhead Alert package should contain the following items;

- 1 x Alert controller PCB
- 1 x Alert new generation backlit keypad
- 1 x Alert keypad zone list
- 1 x Alert Users Guide
- 1 x Alert cabinet & lid
- 1 x 17 volt 1.4a Telepermitted mains transformer
- 1 x Cabinet hardware accessory pack including,
 - 1 x Alert installation & programming guide
 - 1 x Spare 1.5a fuse
 - 1 x Cabinet tamper switch
 - 1 x Cabinet tamper bracket
 - 1 x Tamper switch wire set
 - 2 x Cabinet lid screws
 - 8 x 2k2 (red, red, red) end of line resistors
 - 6 x 4k7 (yellow, purple, red) end of line resistors
 - 6 x 8k2 (grey, red, red) end of line resistors

If any of these items are missing from this package, please contact the Arrowhead branch where you placed your order.

CONNECTION DIAGRAM



INPUTS

The Alert V8 has 5 separate programmable monitored analogue inputs,

- 4 x Programmable, multi-state detection inputs
- 1 x Programmable tamper circuit

Each input must be terminated with the appropriate value or combination of end-of-line resistors, even if the input is unused.

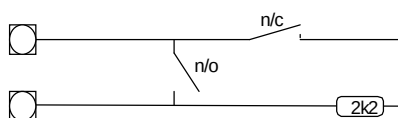
ZONE INPUTS - Each of the 4 zone inputs can be assigned one of the following configuration options;

- Type 1(4Z) Single-End-of-Line (EOL) zone with no tamper (4 zones).
- Type 2(8Z) Double-End-of-Line (EOL) zones with open/short circuit tamper per input (8 zones) .

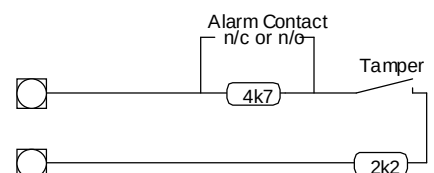
The following table shows end-of-line resistor configurations.

Zone Type	Low Zone Resistor	Hi Zone Resistor	Tamper End-of-line
4Z (No Tamper)	2k2	-	-
8Z (with 8 Tamper)	4k7	8k2	2k2

Type 4Z - 4 Zones, no tamper

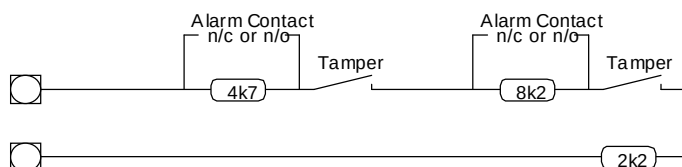


Type 8Z - 4 Zones with tamper



Type 8Z - 8 Zones with tamper

Option 1



NOTE:

The **Single EOL** option requires only **one 2K2** resistor per input.

The **Dual EOL** option needs **one 2K2** per input to **seal the zone tamper** and a **4K7** plus an **8K2** for the **two zones (Low & High)**. The default setting for Dual EOL is the alarm contact shorts out the Resistor (4K7 or 8K2).

INPUTS cont.

TAMPER - A 24Hr tamper circuit is available for monitoring tamper status of detectors, junction boxes, cabinets and satellite sirens etc. This Tamper circuit is programmable with 2 options (P170E1E) either normally closed loop or 2k2 EOL supervision (the default is normally closed loop). The tamper circuit must be terminated with an end-of-line resistor if 2k2 EOL supervision is selected. The activation events and outputs for this tamper circuit are mapped in the same manner as for detection zones 1-8.

In addition to the Analogue monitoring inputs, you will find the following system inputs on your Alert V8 control PCB;

AC - Connect the two low voltage wires (no polarity) from the transformer to the terminals marked AC on the Alert PCB. The Alert includes a mains transformer rated at 1.4 amps at 17 volts.

EARTH - Always connect the mains earth to the appropriate terminal on the mains terminal block in the control box cabinet. Also connect a lead from this earth point to the terminal marked with the Earth symbol (next to the AC terminals) on the Alert PCB.

BATTERY - Connect a sealed lead acid rechargeable 12V d.c. battery to these red and black battery leads. Be careful to observe correct polarity as damage may occur from incorrect connection. The minimum recommended battery capacity is 7 amp hours. Battery charge current at these terminals is limited to 350mA maximum. The battery connection is fuse protected by fuse F2 (3A). To test the battery, disconnect the AC supply for about 60 seconds. The system Led will flash after about 5-10 seconds of removing the AC supply. The battery voltage is checked every 5 seconds. After the 60 seconds re-connect the AC supply and view the event memory (Press the "Memory" button). Refer to the "View Memory " chart on page 9 to see if the battery failed during the test.

OUTPUTS

12 VOLT OUTPUTS - There are two 12 volt dc outputs available on the Alert PCB. These 12 volt outputs are all regulated and fuse protected. These outputs are marked 12v and 0v, and are supplied by fuses F1. A maximum total load of 1 amp may be drawn from these terminals.

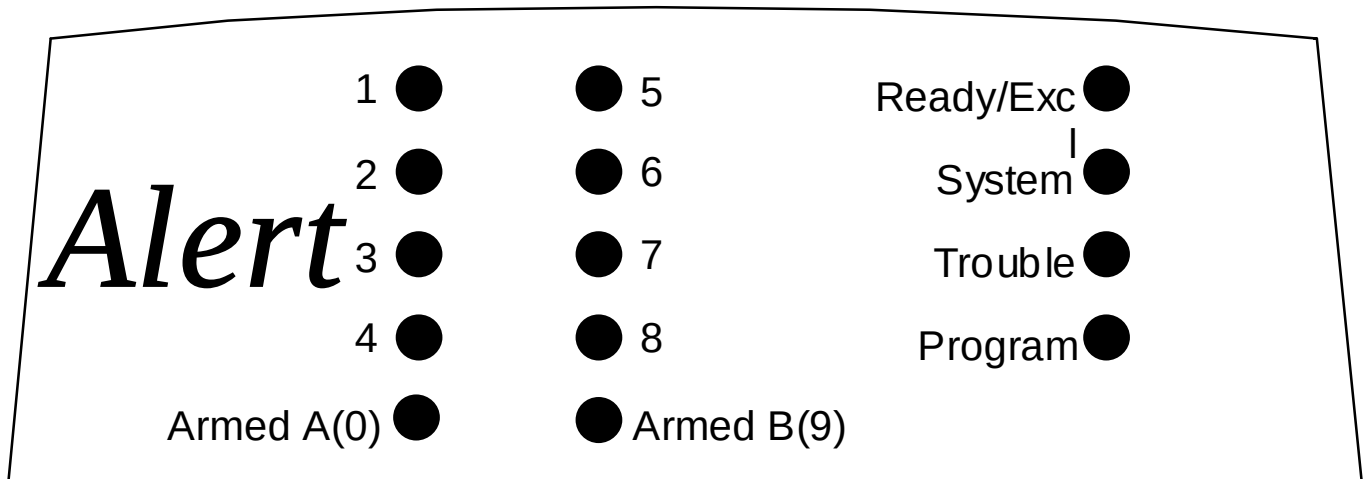
OUTPUTS 1 & 2 - These fully programmable, high current, open collector (high-going-low) type FET outputs are capable of switching up to **1.5A @ 12V d.c.** These 2 outputs are set as switched outputs, providing power for 12v sirens or piezos.

OUTPUTS 3 - This is a low current, open collector (high-going-low) type output capable of switching no more than **100mA**. Like Outputs 1 & 2 it is fully programmable.

NOTE: - *Connecting devices which draw current in excess of 100mA to output 3 will cause permanent damage to the Alert controller.*

KEYPAD PORT - The terminals marked *POS, NEG, CLOCK, & DATA* make up the communications port which the keypads and other intelligent field devices use to talk to the Alert controller. The terminals are connected to corresponding terminals on the remote devices. The keypad 12v output I(*POS,NEG*) is also protected by fuse F1.

ALERT KEYPAD



Standard Alert LED Keypad Window Layout

When the Alert is displaying codes and address values in program mode it may be necessary to display the 9 and 0 digits. As there are no Zone indicators for 0 and 9 the "A" and "B" indicators are used.

ie. When displaying values in program mode
"A" = 0 and "B" = 9

LIGHT INDICATION ä â	OFF	ON STEADY	FLASHING
READY\EXCLUDE	Zone Unsealed	All Zones Sealed	A Zone is Excluded
SYSTEM	Normal	System Alarm Reset	New System Alarm
TROUBLE	Normal	Trouble Alarm Active	New Trouble Alarm
PROGRAM	Run Mode	Client Program Mode	Installer Program Mode or Control Function Active
READY\EXCLUDE & PROGRAM	-	Exclude Mode Active (Zones can be excluded)	-
ZONES 1-8	Zone Secure	Zone Violated	Zone in Alarm
Armed A	Partition A Disarmed	Partition A Armed	Partition A Monitor Mode
Armed B	Partition B Disarmed	Partition B Armed	Partition B Monitor Mode

VIEW MEMORY MODE

EVENT TYPE \ INDICATION	DEVICE	INDICATOR	STATUS
ACTIVATION	Zones 1-8	LED's 1-8	On Steady
EXCLUDE	Zones 1-8	READY/EXCL LED's 1-8	On Steady On Steady
DETECTOR TAMPER (SHORT CIRCUIT)	Zones 1-4	TROUBLE LED's 1-4	Flashing On Steady
DETECTOR TAMPER (OPEN CIRCUIT)	Zones 5-8	TROUBLE LED's 5-8	Flashing On Steady
CABINET TAMPER	Cabinet or Satellite Siren	TROUBLE	Flashing
LOW BATTERY	Controller Battery	SYSTEM LED 1	On Steady On Steady
MAINS FAILURE	Controller Mains Supply	SYSTEM LED 2	On Steady On Steady
RADIO ZONE LOW BATTERY	Radio PIR Zone 1-8	LED's 1-8	Flashing
PENDANT LOW BATTERY	Radio Key User 1-8	TROUBLE LED's 1-8	On Steady Flashing
PANIC	Keypad Panic	SYSTEM	Flashing
PENDANT PANIC	Radio Key User 1-8	SYSTEM LED 1-8	Flashing Flashing
ARMED A	Area A is Armed	AREA A	On Steady
ARMED B	Area B is Armed	AREA B	On Steady
MONITOR MODE A	Area A Monitor Mode ON	AREA A	Flashing
MONITOR MODE B	Area B Monitor Mode ON	AREA B	Flashing
DURESS ALARM	Duress Alarm	TROUBLE AREA A & B	On Steady Flashing
SUPERVISED RADIO ALARM	Supervised Radio Passive Infra-Red	SYSTEM TROUBLE LED 1-8	On Steady Flashing Flashing

KEYPAD INSTALLATION

INSTALLATION

Separate the two keypad halves by **carefully** inserting a small screwdriver into the release slots on the bottom edge of the keypad front half and applying a gentle pressure. This will release the bottom edge of the housing enough for you to unclip the top.

Screw the base to the wall using the mounting holes provided. These holes will match the standard single switch plate spacing. Ensure the base is mounted right side up. It is marked with the word "TOP" to aid orientation. When fixing the base to the wall make sure the top of the screw heads will not touch or short out the underside of the PCB when the top half of the keypad is reinstalled. Bring the cables through the centre of the base.

Connect the 4 wires to the terminal block on the rear of the keypad PCB making sure to match the cables up with the terminals as marked on the control panel's keypad port.

Once the cables have been terminated and the required address allocated (see section below) clip the front half of the keypad onto the base by first engaging the clips at the top edge and then close the front down and clip it in at the bottom. Now stick the zone list provided to the inside of the hinged lid.

WIRING

The Alert keypad connects to the Alert Controller via a 4 wire security cable. A maximum of 8 LED keypads can be connected, each wired in parallel.

The maximum recommended cable using standard 0.2mm security cable is 50m. Cable runs exceeding this distance may require 0.5mm cable. Always use good quality cable. Some installations may require CAT5 data cable to ensure data integrity in noisy sites.

KEYPAD ADDRESS ASSIGNMENT

Keypad Address	Address Links		
#	A	B	C
1			
2	X		
3		X	
4	X	X	
5			X
6	X		X
7		X	X
8	X	X	X

Each of the 8 possible LED keypads which are able to be connected to your Alert panel must be addressed individually to avoid BUS conflicts when multiple users are operating different keypads simultaneously. As default, each keypad comes addressed as #1 with all links intact. Use the table to the left to determine which links to cut to assign the correct address to the keypads you are installing.

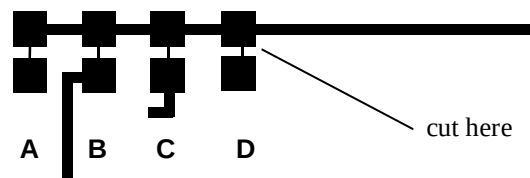
eg. To assign a keypad as address #2, you must cut link A only. To assign a keypad as address #4, you must cut link A&B.

Link D is used to modify the keypad "Panic" button operation. When the link is intact, the "Panic" button must be held down for 2 seconds to cause an alarm. If link D is cut the "Panic" button is instant.

When cutting address links it is important to make a clean cut between the link blocks as shown below. Links can be restored by soldering across the effected pads.

IMPORTANT NOTE: KEYPAD ADDRESS CHANGES ARE ONLY RECOGNISED AT POWER-UP. ALL CHANGES SHOULD BE MADE IN THE POWERED DOWN STATE AND THEN ON POWER-UP THE NEW KEYPAD ADDRESS WILL BE RECOGNISED BY THE PANEL.

X denotes link is cut



KEYPAD FUNCTIONS

The Alert LED Keypad consists of; an 18 button, backlit silicone rubber keypad, 14 LED indicators and an internal piezo buzzer housed in a modern white plastic housing. The plastic housing has a hinged front lid to cover and protect the rubber buttons when not in use. All the electronics are contained on a single circuit board inside the housing.

Because the keypads communicate with the controller using data, the cable run from panel to keypads is secure against tampering. For this reason there is no tamper switch on the keypad assembly. Access to the keypad electronics will not disarm the panel.

BUTTONS

The 18 silicone rubber buttons are used for the following functions.

In normal operating mode the numeric keys are used for entering Access Codes. In Program Mode the numeric keys are used for entering options & new values.

The buttons with text labels are used as function buttons and select the options indicated by the text and normally precede other button presses, e.g. to enter Exclude Mode press <**EXCLUDE**> and the numeric key corresponding to the zone number you wish to be excluded.

The **PROGRAM** Key is used to prefix option selections in the program modes e.g.<**PROGRAM**> 4 <**ENTER**> selects User Code 4. The **PROGRAM** key is also used prior to a Master Code to enter user program mode from normal operating mode.

The **ENTER** Key is used to enter access or program codes. It is normally used at the end of a button sequence.

The **CONTROL** button, if enabled, is used to isolate Day zone audible Alarms if temporarily not required.

LED INDICATORS

The LED indicators are used to display system conditions including Zone status, Battery state, Tamper etc. Please refer to the LED tables on pages 8 & 9 for a full explanation of the conditional displays.

INSTALLING RX-16 RADIO RECEIVER

The Alert V8 is fully high level compatible with the new RX-16 radio receiver. The addition of this receiver will add wireless capability to your system in the form of wireless PIR detectors, Wireless Radiokey transmitters and wireless reed switch transmitters. The RX-16 receiver connects to the same communications port as the keypads and can be installed, either inside the cabinet, or if preferred, may be installed at a remote location. The RX-16 is available in 3 frequencies, 303.875mhz, 433.92mhz or 27mhz.

The RX-16 receiver requires 4 cores and can successfully be run in 0.2mm unscreened cable over a distance of up to 100metres. Like the keypads the RX-16 has 12v connections labelled *POS* and *NEG* which are wired to the 12v supply and CLK and DATA terminals for connection to the communications bus.

The green LED fitted to the RX-16 receiver will indicate when the unit is in "Learn" mode (Flashing - see P601E) or when it is receiving an actual radio transmission (On Steady)

PROGRAMMING YOUR ALERT

HOW TO PROGRAM

The programming sequence always follows this pattern;

<PROGRAM> - <1,2 or 3 digit address> - **<ENTER>**
3 short beeps if OK - 1 long beep if error
The leds will display current value or status
Enter the new value or option
<New Value> - **<ENTER>**
3 short beeps if OK - 1 long beep if error

Throughout this manual you will see program instructions expressed as
P 10 E 5 E as an example.

In this example the <P> represents the **PROGRAM** key and <E> represents the **ENTER** key.

ACCESS TO PROGRAMMING ON POWER UP (INSTALLER MODE)

When power is applied to the controller for the first time, with the panel tamper input open, the panel will inhibit tamper alarms and ready the panel to enter INSTALLER PROGRAM Mode (unless the Installer Lock-out option P170E2E has previously been enabled). At this point you can go to any keypad which is connected to the panel and press "PROGRAM" "ENTER" which will automatically put that keypad into full Program mode.(NOTE:Only one keypad can be in Program mode at any time)

ACCESS TO INSTALLER PROGRAM MODE FROM RUN MODE

Before you can enter Installer program mode, the panel must not be set or in monitor mode.

Press **<PROGRAM>** - <Code 11(Installer Code)> - **<ENTER>**
Program light will Flash
Note: Default Installer Code (Code 11) is 000000.

You are now in Installer Program Mode. Any program addresses may be viewed or changed in this mode.

ACCESS TO CLIENT PROGRAM MODE FROM RUN MODE

Press **<PROGRAM>** - <User Code> - **<ENTER>**
Program light On Steady
Note: Default User Code (P1) is 123.

You are now in Client Program Mode. Only User Codes 1-10 can be viewed or changed in this mode. Codes may be denied access to Client mode, allowed access to change their code only or allowed access to view & change all user codes.

RESETTING BACK TO FACTORY DEFAULT SETTINGS (From Install Mode Only)

This address allows you to reset the panel back to the factory defaults (Reset to defaults).

e.g.To reset All System defaults including User Codes (P620 E)

Press **<PROGRAM>** - 620 - **<ENTER>**
3 beeps - Program light flashing

After the system configuration has been reset back to defaults, all values, options & Codes will be set to the values shown in the Program Option Summary as defaults. These value & option selections have been chosen as the most common set-up for the majority of systems.

TO EXIT PROGRAM MODES

To exit program modes when you have finished programming:

Press <**PROGRAM**> - <**ENTER**>
Program light goes out

The panel is now back in Run Mode, any program changes you have made will have replaced previous values and be in effect.

Note: During programming Tamperers and 24 hour alarms are disabled which allows quiet access to the panel, detectors and satellite siren units etc. On exiting program mode, all inputs are scanned and if any tamperers or 24Hr alarms are present an activation will occur.

Note: Where there are multiple options at one address, options 0 & 9 have been reserved. Entering a 0 at the address will turn all options off whereas entering a 9 will turn all options on.

PROGRAMMING USER CODES

USER CODES - (P1E to P10E) & (P11E)

There are 11 codes available in the Alert, 10 user codes and 1 install code. The user codes are located in addresses 1-10. As default, Code 1 has Master Code permissions and must be used to enter Client program mode. The Installer code is stored at address 11 and is used to access *Installer* Program mode.

Codes 1-10 may be varied in length from 1 to 6 digits. Code 11 must be 3-6 digits.

To program a User Code you must first be in client or installer program mode, then select the address from 1-10. (If there is already a code programmed at this address, it will be flashed back to you) Now enter the code then press the **ENTER** key.

eg. P 1 E 1234 E
3 beeps - program light On Steady or flashing

In this example we have set Code 1 (Master Code) to be 1234.

eg. P 5 E 567 E
3 beeps - program light On Steady or flashing

In this example we have set code 5 to be 567

To replace a code simply enter the new code in the same address as the old code. This will overwrite the previous code but maintain the user permissions as mapped to that user number.

To clear or delete a code simply enter the EXCLUDE button at the address where the old code is stored.

eg. P 3 E <EXCLUDE> E
3 beeps - Program light On Steady or flashing

When flashing back codes and values Zone indicators 1-8 are used to indicate digits 1-8. The digit 0 is indicated by the "A" light and 9 is indicated by the "B" light.

USER CODE OPTIONS

USER CODE PERMISSIONS (Code Options) - P21E-P30E

- Option 1 - Code has Area A permissions
- Option 2 - Code has Area B permissions
- Option 3 - Code can Arm Area
- Option 4 - Code can Disarm Area
- Option 5 - Code can turn Monitor on
- Option 6 - Code can turn Monitor off
- Option 7 - Code can Program their own code
- Option 8 - Code can Program Other Codes

NOTE: Options 3,4, 5 & 6 are used in conjunction with options 1 & 2 whereby options 3,4, 5 & 6 determine the functions and options 1 & 2 determine the area of operation.

INSTALLER CODE - P11E

This code is used to enter full Installer Program mode (Program light flashing). The default installer code is 000000. To change this code enter your new installer code at the P11E address. The new code will be flashed back to you automatically. The Program code may vary from 3-6 digits in length

PROGRAMMING OUTPUT OPTIONS

(NOTE: ALL OF THE FOLLOWING OUTPUT PROGRAMMING ADDRESSES REFER TO OUTPUTS 1-4 BUT ONLY OUTPUTS 1-3 ARE FITTED ON THE NON-DIALER VERSION OF THE PANEL)

OUTPUT OPTIONS A- P31E-P34E

This block of addresses (P31E - P34E) are used to map output modifiers to each of the outputs available on the Alert.

P31E	1E	Invert output #1 - Default off
	2E	Flash output #1 - Default off
	3E	Single pulse to output #1 - Default off
	4E	Lockout output #1 once reset - Default off
	5E	Spare
	6E	Spare
	7E	Output flashes on a 24 hour zone alarm - Default off
	8E	Day zones linked to pulse timer - Default off

- Option 1 **Invert Output** - This option is used to invert the normal state of the output. The Alert uses open collector type transistor switches and the default state of all outputs is off or high. When in alarm the transistor switch is turned on and the output is switched low. The invert option reverses this function.
- Option 2 **Flash Output** - This option causes the output to turn on and off at a rate set by the pulse timer for this output (P231E) when in alarm and is normally used to flash a lamp during an activation.
- Option 3 **Single Pulse to Output** - This option, when applied, produces a single pulse at the output during an alarm (the pulse time is the value programmed at the output pulse timer address, P231E).
- Option 4 **Lockout Once Reset** - This option is used to limit the output to one operation per arming period.
- Option 5 **Spare**
- Option 6 **Spare**
- Option 7 **Flash 24 hour alarm** - If a 24 hour zone activates the alarm this option will cause the output to flash at a rate equal to the value set for the pulse timer (P231E).
- Option 8 **Day Zones Linked to Pulse Timer** - Day Zones programmed to this output will pulse at the pulse timer rate (P231E) for the duration of the day zone to output timer (P221E)

P32E - P34E As per P31E above for Outputs 2-4

PROGRAMMING OUTPUT OPTIONS cont.

OUTPUT OPTIONS B - P41E - P44E

In this block of addresses P41E relates to output #1, P42E relates to output #2 etc

P41E	1E	Pendant Panic to Output #1
	2E	Keypad Panic to Output #1
	3E	Cabinet Tamper to Output #1
	4E	Zone Tamper to Output #1
	5E	Duress Alarm to Output #1
	6E	Mains Fail to Output #1
	7E	Battery Low to Output #1
	8E	Spare

- Option 1 **Pendant Panic to Output** - This option is used to map the operation of the Radio Pendant panic button to an output i.e. when the Panic button is pressed any output with this option enabled will turn on.
- Option 2 **Keypad Panic to Output** - This option is used to map the Keypad Panic Button to an output. Keypad Panics are generated when a user presses the Panic Button at the keypad.
- Option 3 **Cabinet Tamper to Output** - This option is used to map activations of the common Tamper Input to an output. This common tamper input is normally used to monitor the panel cabinet and satellite tamper switches.
- Option 4 **Zone Tamper to Output** - Where dual end-of-line resistors are being used to provide individual zone tamper, this address is used to map the Zone Tamper to an output.
- Option 5 **Duress Alarm to Output** - This option will map the Duress Alarm to an output. Programming of the Duress Digit is at address P240E.
- Option 6 **Mails Fail To Output** - A mains failure will be indicated at this output when option 6 is enabled at this address. The Alarm Reset Timer must be set to "0" when this option is used.
- Option 7 **Low Battery** - A battery Low condition will be indicated at this output when option 7 is enabled at this address. The alarm reset timer must be set to "0" when this option is used.
- Option 8 - **Spare**

P42E - P44E As per P41E above for Outputs 2-4

MAPPING ZONE ALARMS TO OUTPUTS

ZONE ALARM MAPPING TO OUTPUTS - P51E - P54E

When a zone is in alarm (during the ARMED state only) this block of addresses allows individual zones to be mapped to selected outputs. The default setting is that zones 1-8 will turn on all outputs 1-4 when in alarm.

P51E	Zone Alarms to Output #1. Options=Zones 1-8 (Default=1-8)
P52E	Zone Alarms to Output #2. Options=Zones 1-8 (Default=1-8)
P53E	Zone Alarms to Output #3. Options=Zones 1-8 (Default=1-8)
P54E	Zone Alarms to Output #4. Options=Zones 1-8 (Default=1-8)

MAPPING MONITOR ZONE ALARMS TO OUTPUTS

MONITOR ZONE ALARM MAPPING TO OUTPUTS - P61E - P64E

When a Monitor Mode zone is in alarm (during the MONITOR state only) this block of addresses allows individual zones to be mapped to selected outputs. The default setting is that zones 1-8 will turn on output 2 only when a monitor mode alarm occurs.

P61E	Monitor Mode Zone Alarms to Output #1. Options=Zones 1-8 (Default=None)
P62E	Monitor Mode Zone Alarms to Output #2. Options=Zones 1-8 (Default=1-8)
P63E	Monitor Mode Zone Alarms to Output #3. Options=Zones 1-8 (Default=None)
P64E	Monitor Mode Zone Alarms to Output #4. Options=Zones 1-8 Default=None)

MAPPING 24 HOUR ZONE ALARMS TO OUTPUT

24 HOUR ZONE ALARM MAPPING TO OUTPUTS - P71E - P74E

When a 24 Hour zone is in alarm this block of addresses allows individual zones to be mapped to selected outputs. The default setting is that zones 1-8 will turn on output 2 only when a 24 Hour alarm occurs.

P71E	24 Hour Zone Alarms to Output #1. Options=Zones 1-8 (Default=None)
P72E	24 Hour Zone Alarms to Output #2. Options=Zones 1-8 (Default=1-8)
P73E	24 Hour Zone Alarms to Output #3. Options=Zones 1-8 (Default=None)
P74E	24 Hour Zone Alarms to Output #4. Options=Zones 1-8 Default=None)

MAPPING DAY ZONES TO OUTPUTS

DAY ZONES TO OUTPUTS - P81E - P84E

When a Day zone is unsealed this block of addresses allows individual zones to be mapped to selected outputs. The default setting is that no Day zones are mapped to any of the 4 outputs.

P81E	Day Zone to Output #1. Options=Zones 1-8 (Default=None)
P82E	Day Zone to Output #2. Options=Zones 1-8 (Default=None)
P83E	Day Zone to Output #3. Options=Zones 1-8 (Default=None)
P84E	Day Zone to Output #4. Options=Zones 1-8 Default=None)

MAPPING RADIO KEYS TO OUTPUTS

RADIO KEY(PENDANT) MAPPING TO OUTPUTS - P91E - P94E

When a Radio Key is to be used to operate a garage door or similar function this block of addresses allows individual Radio Keys to be mapped to selected outputs. The default setting is that none of the 8 Radio Keys are mapped to any outputs.

P91E	Radio Key to Output #1. Options=Pendant 1-8 (Default=None)
P92E	Radio Key to Output #2. Options=Pendant 1-8 (Default=None)
P93E	Radio Key to Output #3. Options=Pendant 1-8 (Default=None)
P94E	Radio Key to Output #4. Options=Pendant 1-8 Default=None)

PARTITION "A" OPTIONS

PARTITION "A" OPTIONS - P100E

This address allows modification of how Partition "A" arming, monitor and control keys work at the keypad.

P100E	1E	"ARM" button required before code to set
	2E	"MONITOR" button required before code to turn on Monitor Mode
	3E	"CODE" required to arm
	4E	"ARM" button can disarm system during exit delay
	5E	"MONITOR" button can disarm Monitor Mode at any time
	6E	"CONTROL" function disables day zones
	7E	No Exit Beeps to keypads in Monitor Mode
	8E	Spare

- Option 1 **"ARM" button required before code to set** - This option determines if the "ARM" button must be pressed before a code is entered to set Area "A". If a keypad is assigned to both Partitions, this option should be set to allow individual arming of each area. This option disables the Arm button from disarming during the exit delay.
- Option 2 **"MONITOR" button required before code to set** - This option determines if the "MONITOR" button must be pressed before a code is entered to set Area "A" Monitor Mode. If a keypad is assigned to both Partitions, this option should be set to allow individual arming of Monitor Mode for each area.
- Option 3 **"CODE" required to set** - If this option is set, the "ARM" button is disabled and the panel requires a code to arm as well as disarm.
- Option 4 **"ARM" button can disarm during exit delay** - If this option is on then the "arm" button can disarm Partition "A" during the exit delay time with a single press of the button. If the option is off then the alarm can only be unset by a valid code, even during the exit delay time.
- Option 5 **"MONITOR" button can disarm Monitor Mode** - This option allows the "Monitor" button to disarm monitor mode at any time (including when Monitor Mode is fully set). If the option is off then Monitor Mode can only be unset by a valid code. This feature is only valid for keypad addresses 1 & 4 (4 being the default address for the monitor key station)
- Option 6 **"CONTROL" function disables day zones** - This option will disable the day zone monitoring when "Control" is on. It is used to stop day zone beeps from occurring at the keypad or an output when not needed. When the "Control" function is On the Program LED will Flash.
- Option 7 **No Exit Beeps to keypads in Monitor Mode** - This option stops the exit beeps from occurring at all keypads when Monitor Mode is set. Normally used for silent night arming.
- Option 8 **Spare**

PARTITION "A" OUTPUT OPTIONS

PARTITION "A" OUTPUT OPTIONS - P101E - P104E

This block of addresses sets a number of output options which are specific and unique to the operation of partition or Area "A". Activity in Areas "B" will have no direct effect on the options set at these addresses.

P101E	1E	Arm/Disarm status to output #1
	2E	Pendant chirps for Arm/Disarm to output #1
	3E	Pendant chirps for Monitor Mode On/Off to output #1
	4E	Pulse on Arming to output #1
	5E	Pulse on Disarming to output #1
	6E	Spare
	7E	Spare
	8E	Spare

- Option 1 **Arm/Disarm indication to output #1** - This option will turn output #1 on when Area "A" is armed and turn output #1 off when Area "A" is disarmed. This change of state occurs at the start of the exit delay and when the Area is disarmed. Output reset time should be set to zero.
- Option 2 **Pendant Chirps for Arm/Disarm to output #1** - This option will map two short pulses (Chirps) to output #1 when Area "A" is armed via a radio key (Pendant) and four short pulses to output #1 when Area "A" is disarmed again. (The length of the pulses is set by the pulse timer P231E).
- Option 3 **Pendant Chirps for Monitor Mode On/Off to output #1** - This option will map two short pulses (Chirps) to output #1 when Area "A" Monitor Mode is set via a radio key (Pendant) and four short pulses to output #1 when Area "A" Monitor Mode is unset again. (The length of the pulses is set by the pulse timer P231E).
- Option 4 **Pulse on Arming to output #1** - This option will map a pulse to Output #1 each time Area "A" is armed. (The length of the pulse is set by the pulse timer P231E).
- Option 5 **Pulse on Disarming to output #1** - This option will map a pulse to Output #1 each time Area "A" is disarmed. (The length of the pulse is set by the pulse timer P231E).
- Option 6 **Spare**
- Option 7 **Spare**
- Option 8 **Spare**

Note: P102E through P104E are as above but applied to outputs 2-4

PARTITION "B" OPTIONS

PARTITION "B" OPTIONS - P110E

This address allows modification of how Partition "B" arming, monitor and control keys work at the keypad.

P110E	1E	"ARM" button required before code to set
	2E	"MONITOR" button required before code to turn on Monitor Mode
	3E	"CODE" required to arm
	4E	"ARM" button can disarm system during exit delay
	5E	"MONITOR" button can disarm Monitor Mode at any time
	6E	"CONTROL" function disables day zones
	7E	No Exit Beeps to keypads in Monitor Mode
	8E	Spare

- Option 1 **"ARM" button required before code to set** - This option determines if the "ARM" button must be pressed before a code is entered to set Area "A". If a keypad is assigned to both Partitions, this option should be set to allow individual arming of each area. This option disables the Arm button from disarming during the exit delay.
- Option 2 **"MONITOR" button required before code to set** - This option determines if the "MONITOR" button must be pressed before a code is entered to set Area "A" Monitor Mode. If a keypad is assigned to both Partitions, this option should be set to allow individual arming of Monitor Mode for each area.
- Option 3 **"CODE" required to set** - If this option is set, the "ARM" button is disabled and the panel requires a code to arm as well as disarm.
- Option 4 **"ARM" button can disarm during exit delay** - If this option is on then the "arm" button can disarm Partition "A" during the exit delay time with a single press of the button. If the option is off then the alarm can only be unset by a valid code, even during the exit delay time.
- Option 5 **"MONITOR" button can disarm Monitor Mode** - This option allows the "Monitor" button to disarm monitor mode at any time (including when Monitor Mode is fully set). If the option is off then Monitor Mode can only be unset by a valid code. This feature is only valid for keypad addresses 1 & 4 (4

being the default address for the monitor key station)

- Option 6 **“CONTROL” function disables day zones** - This option will disable the day zone monitoring when “Control” is on. It is used to stop day zone beeps from occurring at the keypad or an output when not needed. When the “Control” function is On the Program LED will Flash.
- Option 7 **No Exit Beeps to keypads in Monitor Mode** - This option stops the exit beeps from occurring at all keypads when Monitor Mode is set. Normally used for silent night arming.
- Option 8 **Spare**

PARTITION “B” OUTPUT OPTIONS

PARTITION “B” OUTPUT OPTIONS - P111E - P114E

This block of addresses sets a number of output options which are specific and unique to the operation of partition or Area "B". Activity in Areas "A" will have no direct effect on the options set at these addresses.

P111E	1E	Arm/Disarm status to output #1
	2E	Pendant chirps for Arm/Disarm to output #1
	3E	Pendant chirps for Monitor Mode On/Off to output #1
	4E	Pulse on Arming to output #1
	5E	Pulse on Disarming to output #1
	6E	Spare
	7E	Spare
	8E	Spare

- Option 1 **Arm/Disarm indication to output #1** - This option will turn output #1 on when Area "B" is armed and turn output #1 off when Area "B" is disarmed. This change of state occurs at the start of the exit delay and when the Area is disarmed. Output reset time should be set to zero.
- Option 2 **Pendant Chirps for Arm/Disarm to output #1** - This option will map two short pulses (Chirps) to output #1 when Area "B" is armed via a radio key (Pendant) and four short pulses to output #1 when Area "B" is disarmed again. (The length of the pulses is set by the pulse timer P231E).
- Option 3 **Pendant Chirps for Monitor Mode On/Off to output #1** - This option will map two short pulses (Chirps) to output #1 when Area "B" Monitor Mode is set via a radio key (Pendant) and four short pulses to output #1 when Area "B" Monitor Mode is unset again. (The length of the pulses is set by the pulse timer P231E).
- Option 4 **Pulse on Arming to output #1** - This option will map a pulse to Output #1 each time Area "B" is armed. (The length of the pulse is set by the pulse timer P231E).
- Option 5 **Pulse on Disarming to output #1** - This option will map a pulse to Output #1 each time Area "B" is disarmed. (The length of the pulse is set by the pulse timer P231E).
- Option 6 **Spare**
- Option 7 **Spare**
- Option 8 **Spare**

Note: P112E through P114E are as above but applied to outputs 2-4

PROGRAMMING ZONE DOUBLING

SINGLE OR DUAL ZONE INPUT (4 or 8 zones) - P120E

P120E	1-4E	Single or dual zone input - This option is used to define the Alert as a 4 or 8 zone panel where options 1-4 represent zone inputs 1-4. If a zone is optioned on at this address it means that zone has been assigned "Zone Doubling" whereby the one zone input is used for both a low (1-4) and a high (5-8) zone. When zone doubling is used, zone 1 input is used for zones 1 & 5, zone 2 input is used for zones 2 & 6, zone 3 input is used for zones 3 & 7 and zone 4 input is used for zones 4 & 8 . Zone doubling is assigned on a zone-by-zone basis. Enabling zone doubling automatically enables tamper monitoring for the input.
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PROGRAMMING ZONE OPTIONS

PROGRAMMING ZONE OPTIONS- P121E-P134E

This block of addresses (P121E - P134E) are used to select the desired functions for Zones 1-8

P121E Partition "A" Zones Zones 1-8. (Default = All 8 zones)
(This option allows programming of which zones will be assigned to Partition A. If a zone is in Both A & B then it becomes common to both Areas)

P122E Partition "B" Zones Zones 1-8. (Default = No zones)
(This option allows programming of which zones will be assigned to Partition B. If a zone is in Both A & B then it becomes common to both Areas)

P123E Zone is NC or NO Zones 1-8. (Default = All Zones NC, Normally Closed)
(This option only applies to a zone that has been doubled e.g. P120E 1E doubling zone 1 input turning zone 5 on. In this example, the panel is looking to see a normally closed relay contact across the low (4K7) and high (8K2) resistors in the sealed state. By turning the LED off for zone 1, the panel is now looking for a Normally Open (NO) contact on the low zone (4K7).)

P124E Radio Zone Input Zones 1-8. (Default = No zones)
(This option allows programming of which zones will be radio zones. If a zone is a radio zone, the panel ignores the state of the hardwired input for that zone). If the zone input has been set to Zone doubling, the tampers are still active even if both the low & high zones are set for Radio operation.

P125E Manually excludable Zone Zones 1-8. (Default = All 8 zones)
 (This option allows programming of which zones can be manually excluded prior to Arming. If a zone has this option turned off, then that zone cannot be excluded manually). Zones are excluded during the disarm state and normal zones which are excluded become re-included once the alarm has been set then unset. 24 hour zones, however remain excluded until manually re-included again. Every time the alarm is set or unset with zones excluded, the keypad will respond with a long beep instead of the normal 3 short beeps to indicate that excludes are present. When excluding zones, the READY\EXCL & PROGRAM leds are on to indicate that you have entered exclude mode. After excluding zones the READY\EXCL led will flash when all zones are sealed to indicate that zones are excluded.

P126E Auto-excludable Zone Zones 1-8. (Default = All 8 zones)
(This option allows programming of which zones can be automatically excluded at the end of the exit delay if unsealed at that time. If a zone has this option turned off, then that zone will not auto-exclude and will go into alarm if not sealed)

P127E Handover Zone Zones 1-8. (Default = No zones)
This option allows programming of which zones will be handover zones. If a zone is a handover zone then its entry delay time will apply provided a non-handover zone is triggered before the handover zone. If no other entry delays are active when the handover zone is triggered, the zone will activate immediately)

P128E Two Trigger Zone

Zones 1-8. (Default = No zones)

(This option allows programming of which zones will require two triggers before they activate. To cause an activation a two trigger zone must alarm twice within the 2 trigger time period, P239E, or 2 two trigger zones can alarm once each within the two trigger time period before the alarm is generated. If a two trigger zone is unsealed and remains unsealed for a period longer than the two trigger time period, an alarm will also be generated)

P129E Monitor Mode Zone

Zones 1-8. (Default = Zone 1 & 2)

(This option allows programming of which zones can be assigned as Monitor Mode Zones. Only zones programmed at this address will be active when monitor mode is armed)

P130E 24 Hour Zone

Zones 1-8. (Default = No zones)

(This option allows programming of which zones can be assigned as 24 Hour Zones. Only zones programmed at this address will be active at all times. If a 24 hour zone has an entry delay assigned to it, the entry delay acts as an abort timer e.g. the zone must be in alarm longer than the entry delay time before the alarm is activated. If the zone is sealed before the entry delay expires, no alarm is generated)

P131E Lockout Zone

Zones 1-8. (Default = No zones)

(This option allows programming of which zones can be assigned as Lockout Zones. A Lockout Zone will only cause the alarm output to sound once during an armed period. If the lockout function is not programmed then the zone can cause the audible alarms to sound on every zone alarm)

P132E Day Zone when Disarmed

Zones 1-8. (Default = No zones)

(This option allows programming of which zones can be assigned as Day Zones. A Day Zone can be used as a door minder in a shop to warn when a customer has entered the premises. A day zone has the day zone function when the alarm is disarmed, but becomes a normal security zone when armed). Day zones can be temporarily disabled with the "Control" button if programmed to do so.

P133E Permanent Day Zone

Zones 1-8. (Default = No zones)

This option allows programming of which zones can be assigned as Permanent Day Zones. A Permanent Day Zone can be used as a door minder in a shop to warn when a customer has entered the premises. A Permanent day zone will never cause an activation when the alarm is armed). Day zones can be temporarily disabled with the "Control" button if programmed to do so.

P134E Can Arm if not Sealed

Zones 1-8. (Default = No zones)

This option allows programming of which zones can be unsealed and still allow the panel to arm. Option 4 at P170E must be on before this address has any effect. This option allows setting of the panel if low security areas are not sealed at the time of arming)

PROGRAMMING ENTRY DELAYS

P201E	Zone 1 Entry Delay Time - 0-99 Seconds (Default = 20 Sec)
P202E	Zone 2 Entry Delay Time - 0-99 Seconds (Default = 0 Sec)
P203E	Zone 3 Entry Delay Time - 0-99 Seconds (Default = 0 Sec)
P204E	Zone 4 Entry Delay Time - 0-99 Seconds (Default = 0 Sec)
P205E	Zone 5 Entry Delay Time - 0-99 Seconds (Default = 0 Sec)
P206E	Zone 6 Entry Delay Time - 0-99 Seconds (Default = 0 Sec)
P207E	Zone 7 Entry Delay Time - 0-99 Seconds (Default = 0 Sec)
P208E	Zone 8 Entry Delay Time - 0-99 Seconds (Default = 0 Sec)

PROGRAMMING EXIT DELAYS

P209E	Partition "A" Exit Delay Time - 0-99 Seconds (Default = 20 Sec)
P210E	Partition "B" Exit Delay Time - 0-99 Seconds (Default = 20 Sec)

PROGRAMMING TWO TRIGGER TIMER

P239E	Two Trigger Timer - 0-99 Seconds (Default = 60 Sec)
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DAY MODE TO KEYPAD BUZZER TIMER

These addresses can be programmed to have a value from 0 to 99 but the value is in 1/10 of a second increments. This means the default of 20 at addresses P219E & P220E is equal to 2 seconds. This gives a much greater control on the duration of the day zone beep to the keypad.

P219E **Area "A" Day Mode to Keypad Buzzer Timer - 0-99** (Default = 20 1/10th sec)
P220E **Area "B" Day Mode to Keypad Buzzer Timer - 0-99** (Default = 20 1/10th sec)

OUTPUT TIMING OPTIONS

OUTPUT RESET TIME-P301E-P304E (0-600 Seconds)

The output reset time is how long an output will stay on following an alarm condition.

P301E **Output 1 Alarm Reset Time -** (Default = 600 Sec)
P302E **Output 2 Alarm Reset Time -** (Default = 600 Sec)
P303E **Output 3 Alarm Reset Time -** (Default = 600 Sec)
P304E **Output 4 Alarm Reset Time -** (Default = 600 Sec)

OUTPUT DELAY ON TIME-P211E-P214E (0-600 Seconds)

The output delay ON time is how long an output will be delayed before turning on following an alarm condition.

P211E **Output 1 Delay On Time -** (Default = 0 Sec)
P212E **Output 2 Delay On Time -** (Default = 0 Sec)
P213E **Output 3 Delay On Time -** (Default = 0 Sec)
P214E **Output 4 Delay On Time -** (Default = 0 Sec)

OUTPUT DAY MODE TIME-P221E-P224E (0-99 1/10th Second)

The output day mode timer is how long an output will turn on following a day zone unsealing. The Day Mode Timer is in 1/10th Sec intervals eg 20=2 Seconds

P221E **Output 1 Day Mode Time -** (Default = 20)
P222E **Output 2 Day Mode Time -** (Default = 20)
P223E **Output 3 Day Mode Time -** (Default = 20)
P224E **Output 4 Day Mode Time -** (Default = 20)

OUTPUT PULSE TIMER-P231E-P234E (0-99 1/10th Second)

The output pulse timer is how long an output will turn on when the pulse timer is used. The Pulse Timer is in 1/10th Sec intervals eg 20=2 Seconds

P231E **Output 1 Pulse Timer -** (Default = 20)
P232E **Output 2 Pulse Timer -** (Default = 20)
P233E **Output 3 Pulse Timer -** (Default = 20)
P234E **Output 4 Pulse Timer -** (Default = 20)

RADIO ZONE CODE LOAD

To load a radio device as a zone input on the panel, press the appropriate address number (eg P604E for Zone 4). The keypad buzzer will beep once a second to indicate learn mode has been initiated and the Led on the RX-16 board will flash. The radio device you wish to load must transmit a signal within 30 seconds of entering learning mode otherwise the panel will time out and no code will be loaded. If a valid code is received within the 30 seconds the keypad will give 3 short beeps and exit learn mode. To remove a loaded radio code at a single address only, enter in the code load address as above eg P604E, then without operating the transmitter and before the 30 second timer expires press the "Enter" button. This will remove the code loaded against this address (in this case radio zone 4).

P601E	Load Radio Code for Zone 1
P602E	Load Radio Code for Zone 2
P603E	Load Radio Code for Zone 3
P604E	Load Radio Code for Zone 4
P605E	Load Radio Code for Zone 5
P606E	Load Radio Code for Zone 6
P607E	Load Radio Code for Zone 7
P608E	Load Radio Code for Zone 8

RADIO ZONE DETECTOR OPTIONS

RADIO ZONE DETECTOR OPTIONS- P141E-P148E

This block of addresses (P141E - P148E) are used to select the type of detector to be used on the radio zone input and allow functions such as battery low, tamper and normal alarm to be correctly recognized. To make the radio zone work you must also tell the zone input that it is a radio zone (P124E-zones 1-8).

P141E-Zone 1 Options	1E	Ness Battery Low
	2E	Ness Radio Reed Switch
	3E	Crow Battery Low
	4E	Crow Radio Reed Switch
	5E	Visonic Radio PIR
	6E	Electronics Line Radio PIR
	7E	Crow Supervised Detectors
	8E	Spare

- Option 1 **Ness Battery Low** - If a Ness radio pendant or PIR is used on the Alert radio zone input, setting this bit allows the panel to correctly recognize the battery low signal from Ness devices.
- Option 2 **Ness Radio Reed Switch** - If a Ness radio reed switch is used on the Alert radio zone input, setting this bit allows the panel to correctly recognize the battery low signal from the Ness device. This bit also recognizes the open and closed signals from the reed switch so the zone Led can follow the correct state of the reed switch (ie open or closed)
- Option 3 **Crow Battery Low** - If a Crow radio pendant or PIR is used on the Alert radio zone input, setting this bit allows the panel to correctly recognize the battery low signal from Crow devices.
- Option 4 **Crow Radio Reed Switch** - If a Crow radio reed switch is used on the Alert radio zone input, setting this bit allows the panel to correctly recognize the battery low signal from the Crow device. This bit also recognizes the open and closed signals from the reed switch so the zone Led can follow the correct state of the reed switch (ie open or closed)
- Option 5 **Visonic Radio PIR** - If a Visonic radio PIR is used on the Alert radio zone input, setting this bit allows the panel to correctly recognize the alarm, tamper & battery low signal from the Visonic device.

- Option 6 **Electronics Line Radio PIR-** If an Electronics Line radio PIR is used on the Alert radio zone input, setting this bit allows the panel to correctly recognize the alarm, tamper & battery low signal from the EL device.
- Option 7 **Crow Supervised Devices-** If a Supervised Crow radio PIR or smoke detector is used on the Alert radio zone input, setting this bit allows the panel to correctly recognize the alarm, tamper & battery low signal from Crow supervised devices. The Crow supervised devices automatically transmit a supervision signal every 5 minutes. If the panel does not see at least one supervision signal from each device connected to the Alert within a 20 minute period, an alarm is generated. The alarm will cause the System Led to flash and the alarm will go into memory for displaying at a later time.
- Option 8 **Spare**

Note: P142E through P148E are as above but applied to zones 2-8

RADIO PENDANT CODE LOAD

To load a radio pendant on the panel, press the appropriate address number (e.g. P614E for Pendant 4). The keypad buzzer will beep once a second to indicate learn mode has been initiated and the Led on the RX-16 board will flash. The radio pendant you wish to load must transmit a signal within 30 seconds of entering learning mode otherwise the panel will time out and no code will be loaded. If a valid code is received within the 30 seconds the keypad will give 3 short beeps and exit learn mode. To remove a loaded radio pendant at a single address only, enter in the code load address as above eg P614E, then without operating the transmitter and before the 30 second timer expires press the "Enter" button. This will remove the code loaded against this address (in this case radio pendant 4).

P611E	Load Radio Pendant # 1
P612E	Load Radio Pendant # 2
P613E	Load Radio Pendant # 3
P614E	Load Radio Pendant # 4
P615E	Load Radio Pendant # 5
P616E	Load Radio Pendant # 6
P617E	Load Radio Pendant # 7
P618E	Load Radio Pendant # 8

RADIO PENDANT OPTIONS "A"

RADIO PENDANT OPTIONS "A"- P151E-P158E

This block of addresses (P151E - P158E) are used to select the operational settings for each of the 8 radio pendants. Functions such as arm only, disarm only or both can be selected for each pendant independently.

P151E-Pendant #1 Options	1E	Assigned to Partition "A"
	2E	Assigned to Partition "B"
	3E	Pendant can Arm the system
	4E	Pendant can Disarm the system
	5E	Pendant can turn Monitor Mode On
	6E	Pendant can turn Monitor Mode Off
	7E	Spare
	8E	Pendant is disabled if panel is in alarm

- Option 1 **Assigned to Partition "A"** - This option assigns the pendant to partition "A". The pendant must be assigned to at least one partition to allow it to perform arm/disarm functions. The pendant can be assigned to both partitions if required.
- Option 2 **Assigned to Partition "B"** - This option assigns the pendant to partition "B". The pendant must be assigned to at least one partition to allow it to perform arm/disarm functions. The pendant can be assigned to both partitions if required.
- Option 3 **Pendant can Arm** - This option assigns the Arm function to a pendant. The partition/s it will arm has to be selected at options 1 & 2.

- Option 4 **Pendant can Disarm** - This option assigns the Disarm function to a pendant. The partition/s it will disarm has to be selected at options 1 & 2.
- Option 5 **Pendant can turn Monitor Mode On** - This option assigns the Monitor Mode Arm function to a pendant. The partition/s it will arm has to be selected at options 1 & 2. If Monitor Mode arming is to be used for this pendant then Options 2 & 3 should be turned off.
- Option 6 **Pendant can turn Monitor Mode Off** - This option assigns the Monitor Mode Disarm function to a pendant. The partition/s it will disarm has to be selected at options 1 & 2. If Monitor Mode disarming is to be used for this pendant then Options 2 & 3 should be turned off.
- Option 7 **Spare**
- Option 8 **Pendant Disabled if panel is in Alarm** - This option stops the pendant from working while the panel is in alarm. This feature should only be set if you feel that a pendant with disarming functions could be prone to misuse in an alarm condition.

Note: P152E through P158E are as above but applied to pendants 2-8

RADIO PENDANT OPTIONS “B”

RADIO PENDANT OPTIONS “B”- P161E-P168E

This block of addresses (P161E - P168E) are used to select output control and Panic options for each of the 8 radio pendants. To prevent confusion, if a pendant is set to control an output or provide instant Panic, then you should turn off any Arm or Disarm options at addresses P151E-P158E.

P161E-Pendant #1 Options	1E	Turn output ON
	2E	Turn output OFF
	3E	Spare
	4E	Spare
	5E	Spare
	6E	Immediate Panic Alarm
	7E	Delayed Panic Alarm (1.5 Seconds)
	8E	Ness Battery Low

- Option 1 **Turn Output On** - This option allows the pendant to turn an output on. The output the pendant will turn On is programmed at address P91E-P94E. If the output reset time is set to Latched operation (set to “0”) then you must also program Option 2 to the pendant to allow for turning the output Off.
- Option 2 **Turn Output Off** - This option allows the pendant to turn an output off. The output the pendant will turn Off is programmed at address P91E-P94E. For this option to work, option 1 above must also be assigned to the pendant to allow the pendant to first turn the output on before it can turn it off.
- Option 3 **Spare**
- Option 4 **Spare**
- Option 5 **Spare**
- Option 6 **Immediate Panic Alarm** - If this option is on, pressing the pendant button will produce a pendant panic alarm.
- Option 7 **Delayed Panic Alarm**- If this option is on, the pendant button must be pressed continuously 1.5 seconds or longer to produce a pendant panic alarm.
- Option 8 **Ness Battery Low** - If using a Ness pendant with battery low reporting, this option must be turned on to allow the battery low signal to be recognized properly.,

Note: P152E through P158E are as above but applied to pendants 2-8

KEYPAD PARTITION OPTIONS

A keypad must be assigned to a Partition before it can control the Partition (ie to allow Arm/Disarm facilities).

P171E **Keypads Assigned to Partition “A”** - Option Keypad 1-8

P172E **Keypads Assigned to Partition “B”** - Option keypad 1-8

KEYPADS WITH PANIC BUTTON ENABLED

The panic button on all keypads can be set to an instant operation or a 2 second delayed operation (see page 10). As well as the keypad options, the panel can enable or disable the panic button at each of the potential 8 keypad. This option may be useful where a keypad has to be installed in a public area.

P173E **Keypads with the Panic Button Enabled** - Option keypad 1-8

MISCELLANEOUS PANEL OPTIONS

This address (P170E) is used to select optional miscellaneous panel functions.

P170E	1E	Panel Tamper NC or EOL
	2E	Installer Lockout
	3E	Disable Mains Fail Test
	4E	Arm only if Sealed
	5E	No audible keypad beep on supervised radio fault
	6E	Spare
	7E	Spare
	8E	Spare

- Option 1 **Panel Tamper NC or EOL** - The Tamper input on the Alert control board (Tmp) requires sealing to clear the panel tamper alarm. If option 1 is on the panel must see a 2k2 resistor (EOL) across the Tmp & 0V terminals to ensure the tamper is sealed. If this option is turned off the a simple short circuit (NC) is all that is required to seal the panel tamper.
- Option 2 **Installer Lockout** - Normally, if the panel is unset and powered up with the panel tamper open (in alarm) then the panel will allow access to installer program mode by pressing the “Program” then “enter” buttons at any keypad connected to the system. If this option is on, the panel will not allow access to program mode and the only valid method of accessing program mode is via the installer code.
- Option 3 **Disable Mains Fail Test** - If the panel must be run off a DC supply but the supply is too low to be wired into the AC terminals then this option completely disables the mains fail monitoring so the panel will not give a continuous system alarm.
- Option 4 **Arm only if Sealed** - If this option is on then the panel can only be armed if all zones are sealed (excluding those zones which can be ignored at address P134E)
- Option 5 **No audible keypad beep on supervised radio fault** - If a supervised radio detector fails to send a test signal within a 20 minute period, an alarm will be generated in the form of the system LED on the keypad will flash. If this option is off then all keypad buzzers will also sound continuously to warn of the problem. If this option is on, the buzzers will not sound on a supervised alarm but the system LED will still flash.
- Option 6 **Spare**
- Option 7 **Spare**
- Option 8 **Spare**

DURESS DIGIT

This address (P240E) is used to program the duress digit. The duress digit is a number from 1-9 ("0" means the duress function is disabled) .To create a duress alarm the duress digit must be entered before a valid user code (eg If the code was "123" and the duress number was "4", then entering a code of "4123" "Enter" would create a duress alarm).

P240E Duress Digit - Value 1-9 (Default = 0, Disabled)

RESTORE FACTORY DEFAULTS

This address (P620E) is used to return the panel back to factory default settings.

P620E Restore Factory Defaults

CLEAR ALARM MEMORY BUFFER

This address (P621E) is used to clear the panels alarm memory buffer.

P621E Clear Alarm Memory Buffer

WALK TEST MODE

This address (P622E) is used to enable walk-test mode while in installer program mode. By pressing P622E at the keypad, the keypad buzzer will beep at 1 second intervals to indicate walk-test mode is active. By walking past all of the detectors connected to the system and activating them, the associated zone light will latch up at the keypad to allow verification that all zones are working properly. By pressing the "Program" or "Enter" buttons, walk-test mode can be terminated and normal programming resumed.

P622E Walk-test Mode

ALERT PROGRAM SUMMARY GUIDE

The following program summary is an abbreviated version of all the Alert program addresses. This is intended as a quick guide to finding a program address. The program addresses are in numerical order with page references beside them so you can get more detailed information if required.

Programming User Codes

P1E	User Code # 1 - Default = 123	Page 13
P2E	User Code # 2	Page 13
P3E	User Code # 3	Page 13
P4E	User Code # 4	Page 13
P5E	User Code # 5	Page 13
P6E	User Code # 6	Page 13
P7E	User Code # 7	Page 13
P8E	User Code # 8	Page 13
P9E	User Code # 9	Page 13
P10E	User Code # 10	Page 13
P11E	Installer Code. Code # 11 - Installer Code (Default = 000000)	Page 13

User Code Options

P21E	User Options Code # 1 (Default 1-8)	P21E-P30E Options	Page 14
P22E	User Options Code # 2 (Default 1-6)	1 = Assigned to Area "A"	Page 14
P23E	User Options Code # 3 (Default 1-6)	2 = Assigned to Area "B"	Page 14
P24E	User Options Code # 4 (Default 1-6)	3 = Code can Arm Area	Page 14
P25E	User Options Code # 5 (Default 1-6)	4 = Code can Disarm Area	Page 14
P26E	User Options Code # 6 (Default 1-6)	5 = Code can arm Monitor Mode	Page 14
P27E	User Options Code # 7 (Default 1-6)	6 = Code can disarm Monitor Mode	Page 14
P28E	User Options Code # 8 (Default 1-6)	7 = User can Change their Code	Page 14
P29E	User Options Code # 9 (Default 1-6)	8 = User can Change Codes 1-10	Page 14
P30E	User Options Code # 10 (Default 1-6)		Page 14

Programming Output Options "A"

P31E	Options for Output # 1 (Default None)	P31E-P34E Options	Page 14
P32E	Options for Output # 2 (Default None)	1 = Invert Output	Page 14
P33E	Options for Output # 3 (Default None)	2 = Flash Output	Page 14
P34E	Options for Output # 4 (Default None)	3 = Single Pulse to Output	Page 14
		4 = Lockout Output	
		5 = Spare	
		6 = Spare	
		7 = Output Flashes on 24 Hour Alarm	
		8 = Day zones linked to Pulse Timer	

Programming Output Options "B"

P41E	Options for Output # 1 (Default 1-4)	P41E-P44E Options	Page 15
P42E	Options for Output # 2 (Default 1-4)	1 = Pendant Panic to Output	Page 15
P43E	Options for Output # 3 (Default 1-4)	2 = Keypad Panic to Output	Page 15
P44E	Options for Output # 4 (Default 1-4)	3 = Cabinet Tamper to Output	Page 15
		4 = Zone Tamper to output	
		5 = Duress Alarm to Output	
		6 = Mains Fail to Output	
		7 = Battery Low to output	
		8 = Spare	

Mapping Zone Alarms To Outputs

P51E	Normal Zone Alarms 1-8 to Output # 1 (Default= All Zones)	Page 15
P52E	Normal Zone Alarms 1-8 to Output # 2 (Default= All Zones)	Page 15
P53E	Normal Zone Alarms 1-8 to Output # 3 (Default= All Zones)	Page 15
P54E	Normal Zone Alarms 1-8 to Output # 4 (Default= All Zones)	Page 15

Mapping Monitor Zone Alarms To Outputs

P61E	Monitor Mode Zone Alarms 1-8 to Output # 1 (Default= None)	Page 16
P62E	Monitor Mode Zone Alarms 1-8 to Output # 2 (Default= All Zones)	Page 16
P63E	Monitor Mode Zone Alarms 1-8 to Output # 3 (Default= None)	Page 16
P64E	Monitor Mode Zone Alarms 1-8 to Output # 4 (Default= None)	Page 16

Mapping 24 Hour Zone Alarms To Outputs

P71E	24 Hour Zone Alarms 1-8 to Output # 1 (Default= None)	Page 16
P72E	24 Hour Zone Alarms 1-8 to Output # 2 (Default= All Zones)	Page 16
P73E	24 Hour Zone Alarms 1-8 to Output # 3 (Default= None)	Page 16
P74E	24 Hour Zone Alarms 1-8 to Output # 4 (Default= None)	Page 16

Mapping Day Zones To Outputs

P81E	Day Zones 1-8 to Output # 1 (Default= None)	Page 16
P82E	Day Zones 1-8 to Output # 2 (Default= None)	Page 16
P83E	Day Zones 1-8 to Output # 3 (Default= None)	Page 16
P84E	Day Zones 1-8 to Output # 4 (Default= None)	Page 16

Mapping Radio Keys To Outputs

P91E	Radio Key 1-8 to Output # 1 (Default= None)	Page 16
P92E	Radio Key 1-8 to Output # 2 (Default= None)	Page 16
P93E	Radio Key 1-8 to Output # 3 (Default= None)	Page 16
P94E	Radio Key 1-8 to Output # 4 (Default= None)	Page 16

Partition "A" Options

P100E	Partition "A" Options (Default= 4 & 5)	P100E Options	Page 17
		1 = Arm Button Required Before Code to Set	
		2 = Monitor Button Required Before Code to Set Monitor Mode	
		3 = Code required to Set	
		4 = Arm Button can disarm during Exit Delay	
		5 = Monitor Button can disarm Monitor Mode at any time	
		6 = Control Function disables day Zones	
		7 = No Exit beeps to Keypads in Monitor Mode	
		8 = Spare	

Partition "A" Output Options

P101E	Area "A" Opt. O/P # 1 (Default= None)	P101E-P104E Options	Page 17
P102E	Area "A" Opt. O/P # 2 (Default= None)	1 = Arm/Disarm Status to Output	Page 17
P103E	Area "A" Opt. O/P # 3 (Default= None)	2 = Pendant Chirps on Arm/Disarm	Page 17
P104E	Area "A" Opt. O/P # 4 (Default= None)	3 = Pendant Chirps on Monitor Mode Arm/Disarm	Page 17
		4 = Pulse on Arming to Output	
		5 = Pulse on Disarming to Output	
		6 = Spare	
		7 = Spare	
		8 = Spare	

Partition "B" Options

P110E	Partition "B" Options (Default= 4 & 5)	P110E Options	Page 18
		1 = Arm Button Required Before Code to Set	
		2 = Monitor Button Required Before Code to Set Monitor Mode	
		3 = Code required to Set	
		4 = Arm Button can disarm during Exit Delay	
		5 = Monitor Button can disarm Monitor Mode at any time	
		6 = Control Function disables day Zones	
		7 = No Exit beeps to Keypads in Monitor Mode	
		8 = Spare	

Partition “B” Output Options

P111E	Area “B” Opt. O/P # 1 (Default= None)	P111E-P114E Options	Page 19
P112E	Area “B” Opt. O/P # 2 (Default= None)	1 = Arm/Disarm Status to Output	Page 19
P113E	Area “B” Opt. O/P # 3 (Default= None)	2 = Pendant Chirps on Arm/Disarm	Page 19
P114E	Area “B” Opt. O/P # 4 (Default= None)	3 = Pendant Chirps on Monitor Mode Arm/Disarm	Page 19
		4 = Pulse on Arming to Output	
		5 = Pulse on Disarming to Output	
		6 = Spare	
		7 = Spare	
		8 = Spare	

Programming Zone Doubling

P120E	Zone Doubling - Value 1-4 (Default = All Off, ie set as a 4 zone panel only)	Page 20
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Programming Zone Options

P121E	Partition “A” Zones	Zones 1-8 (Default = All zones)	Page 20
P122E	Partition “B” Zones	Zones 1-8 (Default = No zones)	Page 20
P123E	Zone is NC or NO	Zones 1-8 (Default = All zones are NC)	Page 20
P124E	Radio Zone Input	Zones 1-8 (Default = No zones)	Page 20
P125E	Manually excludable Zone	Zones 1-8 (Default = All zones)	Page 20
P126E	Auto-excludable Zone	Zones 1-8 (Default = All zones)	Page 20
P127E	Handover Zone	Zones 1-8 (Default = No zones)	Page 20
P128E	Two Trigger Zone	Zones 1-8 (Default = No zones)	Page 20
P129E	Monitor Mode Zone	Zones 1-8 (Default = Zone 1,2)	Page 20
P130E	24 Hour Zone	Zones 1-8 (Default = No zones)	Page 20
P131E	Lockout Zone	Zones 1-8 (Default = No zones)	Page 20
P132E	Day Zone	Zones 1-8 (Default = No zones)	Page 20
P133E	Permanent Day Zone	Zones 1-8 (Default = No zones)	Page 20
P134E	Can Arm if not Sealed	Zones 1-8 (Default = No zones)	Page 20

Radio Zone Detector Options

P141E	Options for Zone # 1 (Default= None)	P141E-P148E Options	Page 23
P142E	Options for Zone # 2 (Default= None)	1 = Ness Battery Low	Page 23
P143E	Options for Zone # 3 (Default= None)	2 = Ness Radio Reed Switch	Page 23
P144E	Options for Zone # 4 (Default= None)	3 = Crow Battery low	Page 23
P145E	Options for Zone # 5 (Default= None)	4 = Crow Radio Reed Switch	Page 23
P146E	Options for Zone # 6 (Default= None)	5 = Visonic Radio PIR	Page 23
P147E	Options for Zone # 7 (Default= None)	6 = Electronics Line Radio PIR	Page 23
P148E	Options for Zone # 8 (Default= None)	7 = Crow Supervised Detectors	Page 23
		8 = Spare	Page 23

Radio Pendant Options “A”

P151E	Radio Key # 1 Opt (Default= 1,2,3,4&8)	P151E-P158E Options	Page 24
P152E	Radio Key # 2 Opt (Default= 1,2,3,4&8)	1 = Assigned to Area “A”	Page 24
P153E	Radio Key # 3 Opt (Default= 1,2,3,4&8)	2 = Assigned to Area “B”	Page 24
P154E	Radio Key # 4 Opt (Default= 1,2,3,4&8)	3 = Can Arm Area	Page 24
P155E	Radio Key # 5 Opt (Default= 1,2,3,4&8)	4 = Can Disarm Area	Page 24
P156E	Radio Key # 6 Opt (Default= 1,2,3,4&8)	5 = Can arm Monitor Mode	Page 24
P157E	Radio Key # 7 Opt (Default= 1,2,3,4&8)	6 = Can disarm Monitor Mode	Page 24
P158E	Radio Key # 8 Opt (Default= 1,2,3,4&8)	7 = Spare	Page 24
		8 = Disabled if Panel is in Alarm	

Radio Pendant Options “B”

P161E	Radio Key # 1 Options (Default= None)	P161E-P168E Options	Page 25
P162E	Radio Key # 2 Options (Default= None)	1 = Pendant Can Turn Output On	Page 25
P163E	Radio Key # 3 Options (Default= None)	2 = Pendant Can Turn Output Off	Page 25
P164E	Radio Key # 4 Options (Default= None)	3 = Spare	Page 25
P165E	Radio Key # 5 Options (Default= None)	4 = Spare	Page 25
P166E	Radio Key # 6 Options (Default= None)	5 = Spare	Page 25
P167E	Radio Key # 7 Options (Default= None)	6 = Causes Immediate Panic	Page 25
P168E	Radio Key # 8 Options (Default= None)	7 = Causes Delayed Panic (1.5 Sec)	Page 25
		8 = Ness Battery Low	

Miscellaneous Panel Options

P170E	Miscellaneous Panel Options (Default= 5)	P170E Options	Page 26
		1 = Panel Tamper NC or EOL	
		2 = Installer Lockout	
		3 = Disable Mains Fail Test	
		4 = Arm only if Sealed	
		5 = No audible keypad beep on supervised radio fault	
		6 = Spare	
		7 = Spare	
		8 = Spare	

Keypad Partition Options

P171E	Keypads Assigned To Partition “A” - Value Keypad 1-8 (Default= All Keypads)	Page 26
P172E	Keypads Assigned To Partition “B” - Value Keypad 1-8 (Default= No Keypads)	Page 26

Keypads with Panic Button Enabled

P173E	Keypads with Panic Button Enabled - Value Keypad 1-8 (Default= All Keypads)	Page 26
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Programming Entry/Exit Delays

P201E	Zone 1 Entry Delay Time - Value 0-99 Seconds (Default = 20 Sec)	Page 21
P202E	Zone 2 Entry Delay Time - Value 0-99 Seconds (Default = 0 Sec)	Page 21
P203E	Zone 3 Entry Delay Time - Value 0-99 Seconds (Default = 0 Sec)	Page 21
P204E	Zone 4 Entry Delay Time - Value 0-99 Seconds (Default = 0 Sec)	Page 21
P205E	Zone 5 Entry Delay Time - Value 0-99 Seconds (Default = 0 Sec)	Page 21
P206E	Zone 6 Entry Delay Time - Value 0-99 Seconds (Default = 0 Sec)	Page 21
P207E	Zone 7 Entry Delay Time - Value 0-99 Seconds (Default = 0 Sec)	Page 21
P208E	Zone 8 Entry Delay Time - Value 0-99 Seconds (Default = 0 Sec)	Page 21
P209E	Partition “A” Exit Delay Time - Value 0-99 Seconds (Default = 20 Sec)	Page 21
P210E	Partition “B” Exit Delay Time - Value 0-99 Seconds (Default = 20 Sec)	Page 21

Output Delay ON time

P211E	Output 1 Delay ON Time - Value 0-99 Seconds (Default = 0 Sec)	Page 22
P212E	Output 2 Delay ON Time - Value 0-99 Seconds (Default = 0 Sec)	Page 22
P213E	Output 3 Delay ON Time - Value 0-99 Seconds (Default = 0 Sec)	Page 22
P214E	Output 4 Delay ON Time - Value 0-99 Seconds (Default = 0 Sec)	Page 22

Day Mode to Keypad Buzzer Timer

P219E	Partition “A” Day Mode to KP Buzzer Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22
P220E	Partition “B” Day Mode to KP Buzzer Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22

Output Day Mode Time

P221E	Output 1 Day Mode ON Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22
P222E	Output 2 Day Mode ON Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22
P223E	Output 3 Day Mode ON Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22
P224E	Output 4 Day Mode ON Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22

Output Pulse Time

P231E	Output 1 Pulse Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22
P232E	Output 2 Pulse Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22
P233E	Output 3 Pulse Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22
P234E	Output 4 Pulse Time - Value 0-99 1/10 Seconds (Default ; 20 =2 Sec)	Page 22

Two Trigger Timer

P239E	Two Trigger Timer - Value 0-99 Seconds (Default = 60 Sec)	Page 21
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Duress Digit

P240E	Duress Digit - Value 1-9 (Default = 0 Duress Function Disabled)	Page 27
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Output Reset Time

P301E	Output 1 Reset Time - Value 0-9999 Seconds (Default = 600 Sec)	Page 22
P302E	Output 2 Reset Time - Value 0-9999 Seconds (Default = 600 Sec)	Page 22
P303E	Output 3 Reset Time - Value 0-9999 Seconds (Default = 600 Sec)	Page 22
P304E	Output 4 Reset Time - Value 0-9999 Seconds (Default = 600 Sec)	Page 22

Radio Zone Code Loading

P601E	Load Radio Code for Zone # 1	Page 23
P602E	Load Radio Code for Zone # 2	Page 23
P603E	Load Radio Code for Zone # 3	Page 23
P604E	Load Radio Code for Zone # 4	Page 23
P605E	Load Radio Code for Zone # 5	Page 23
P606E	Load Radio Code for Zone # 6	Page 23
P607E	Load Radio Code for Zone # 7	Page 23
P608E	Load Radio Code for Zone # 8	Page 23

Radio Pendant Code Loading

P611E	Load Radio Pendant Code # 1	Page 24
P612E	Load Radio Pendant Code # 2	Page 24
P613E	Load Radio Pendant Code # 3	Page 24
P614E	Load Radio Pendant Code # 4	Page 24
P615E	Load Radio Pendant Code # 5	Page 24
P616E	Load Radio Pendant Code # 6	Page 24
P617E	Load Radio Pendant Code # 7	Page 24
P618E	Load Radio Pendant Code # 8	Page 24

Restore Factory Defaults

P620E	Restore Panel to Factory Defaults	Page 27
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Clear Alarm Memory Buffer

P621E	Clear Alarm Memory Buffer	Page 27
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Walk-Test Mode

P622E	Walk-Test Mode	Page 27
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