



R8



INSTALLATION & PROGRAMMING MANUAL

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Ness R8 Radio Control Panel Installer's Manual

Revision
2



Ness Security Products Pty Ltd



Quality
Endorsed
Company
ISO9001
LIC.No. OEC2074
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*“Australia’s largest
designer and
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high quality
security products”*

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**NESS R8
INSTALLER MANUAL**
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100-690 Ness R8 Control Panel

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NESS SECURITY PRODUCTS
Australian Communications Authority
TELECOMMUNICATIONS COMPLIANCE

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INTRODUCTION

The Ness R8 is a new and unique fully self-contained radio control panel.

The panel has a built-in keypad for programming and user operation, a built-in piezo siren, built-in LCD display, built-in radio receiver, built-in battery backup and built-in dialler.

The R8 supports up to 8 Ness radio PIRs and up to 14 Ness Radio Keys. All Ness supervised and encrypted radio devices are supported. There is even a Doorbell feature with selectable tunes when used with the Ness Radio Doorbell transmitter.

In addition to radio devices, the R8 has 1 hardwired zone and 1 hardwired tamper input for connection of a wired detection device and external siren cover tamper switch.

The built-in piezo siren provides high volume audible warning. The R8 also has Siren, Piezo and Strobe outputs for additional hardwired noisemakers.

The R8 has a number of sophisticated power saving features designed to provide at least 48 hours service running on the backup battery alone. (This includes one full alarm condition with sirens, strobe and dialler).








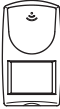

The built-in dialler uses Contact ID format for central station monitoring as well as audible monitoring to any telephone. The user can also dial into the system for remote arming and disarming over the telephone line.

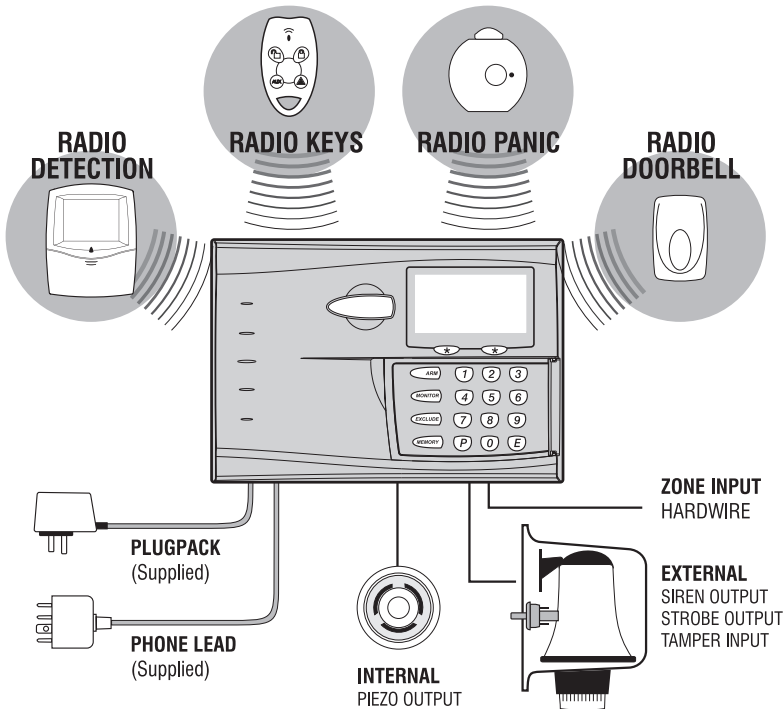
SPECIFICATIONS

Radio zones	8
Max. Radio Keys	14
Hardwired zones	1
Hardwired tamper zones	1
Radio compatibility	Ness supervised & encrypted radio devices
Dialler format	Contact ID & Audible Pulse
On board Keypad	Backlit, programming & user functions
LCD display	High contrast icon display
Plug pack	240V AC, output 17V AC @300mA
Quiescent current draw	10 mA (in power save mode if mains is off)
Built-in backup battery	12 volt 0.8 Amp/hour, sealed lead acid
Dynamic Battery Test	Every Hour and on arming/disarming
Fuses	2A resettable / sirens 2A resettable / Reset output, built-in piezo and strobe
Siren output	1 x 8 Ohm horn speaker
On board piezo siren	110 dB
Piezo output	12V DC 300mA max.
Strobe output	12V DC
Dimensions	210(w) x 145(h) x 40(d) mm

COMPATIBILITY

The Ness R8 supports all Ness radio devices as shown below. All late model Ness transmitters send encrypted transmissions to prevent eavesdropping and substitution. Ness fixed transmitters can send a regular supervision signal which the R8 monitors to ensure system security.

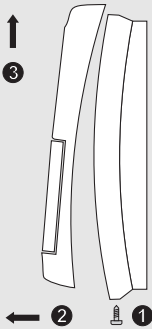
								
100-665 RK1 Pendant	100-664 RK3 Radio Key	100-067 RK4 Radio Key	100-283 RPB Radio Panic Button	100-056 RDB Radio Door Bell	100-662 RR1 Radio Reed Switch	100-691 R12 Radio PIR	100-663 R15 Radio PIR	100-001 RKP Radio Keypad



INSTALLATION

100-690 R8 PACKING LIST

- 1 R8 Control panel
- 1 Plug pack 17VAC 300mA
- 1 Battery 12V 0.8Ah
- 1 Telephone lead
- 1 External antenna
- 1 User manual
- 1 Installer manual
- 1 Zone list label
- 3 2K2 resistors



REMOVING THE FRONT HOUSING

INSTALLATION PROCEDURE

The location of the main panel housing should be in an area that is within the protected area of the premises. A linen closet or cupboard are good examples as these are generally located in the centre of the Premises.

1. Remove the front housing by first removing the bottom locking screw, (screw is not fitted for shipping), then unclip the bottom of the front housing and lift upwards.
2. Disconnect the 12 way wire loom from the main board on the front housing.
3. Unclip and remove the terminal board from the back housing and remove the battery. (The battery lead connects to the main board on the front housing. It is not plugged in for shipping). *The terminal board and battery must be removed to reveal all four mounting holes in the back housing.*
3. Mount the back housing to the wall using the 4 slotted mounting holes.
4. Replace the Terminal Board in the back housing and reconnect the 12 way wire loom to the main board.
5. Connect the plug pack wiring to the Terminal Board, (making sure that mains power is not turned on at this stage). Connect siren wires and external tamper inputs as required.
6. Replace the battery.

POWER UP PROCEDURE

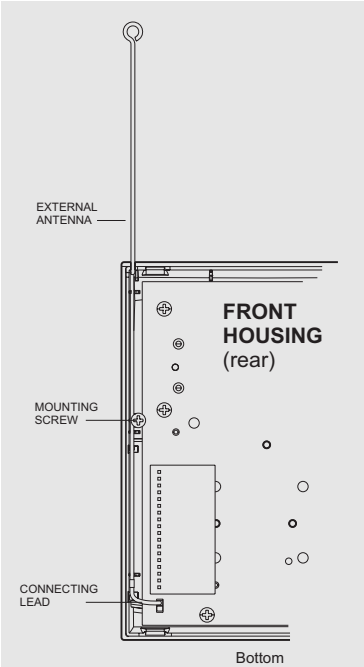
The power up procedure assumes that installation of the R8 is completed and the plug pack is wired.

7. Connect the battery lead to the BATTERY socket on the main board.
8. Turn on the plug pack.

Note 1: When power is applied, the R8 will enter Disarmed mode, unless it was in Armed or Monitor mode when previously running, in which case it will resume in the previous mode - UNLESS the box tamper or external tamper inputs are unsealed. (See note 2).

Note 2: To enter Installer Program Mode on initial power up, apply power with the internal tamper open, (lid open), or the external tamper open.

Note 3: The BATTERY icon will flash if the initial battery voltage is low and will turn off when the battery has reached full charge.



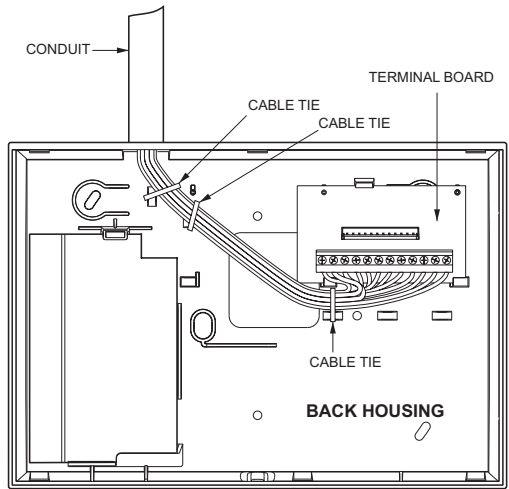
EXTERNAL ANTENNA

The external antenna, (supplied), can be fitted if required.

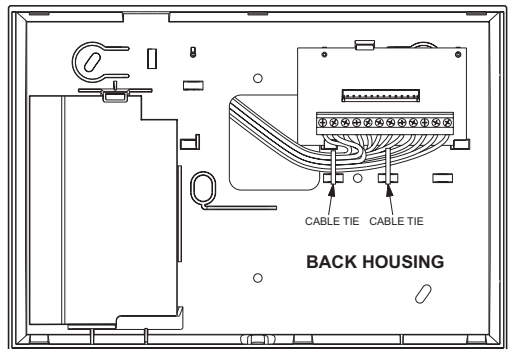
The sensitivity of the R8 radio receiver with or without the external antenna is subject to RF conditions specific to the site.

Tests have shown that most sites will perform well using the standard internal antenna.

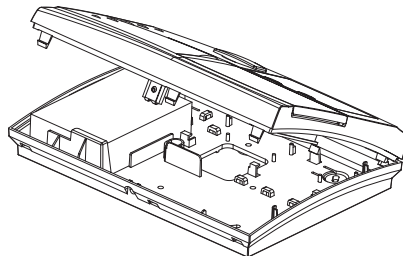
The external antenna can be fitted at the installer's discretion in cases where its reception pattern may better suit the local radio environment.



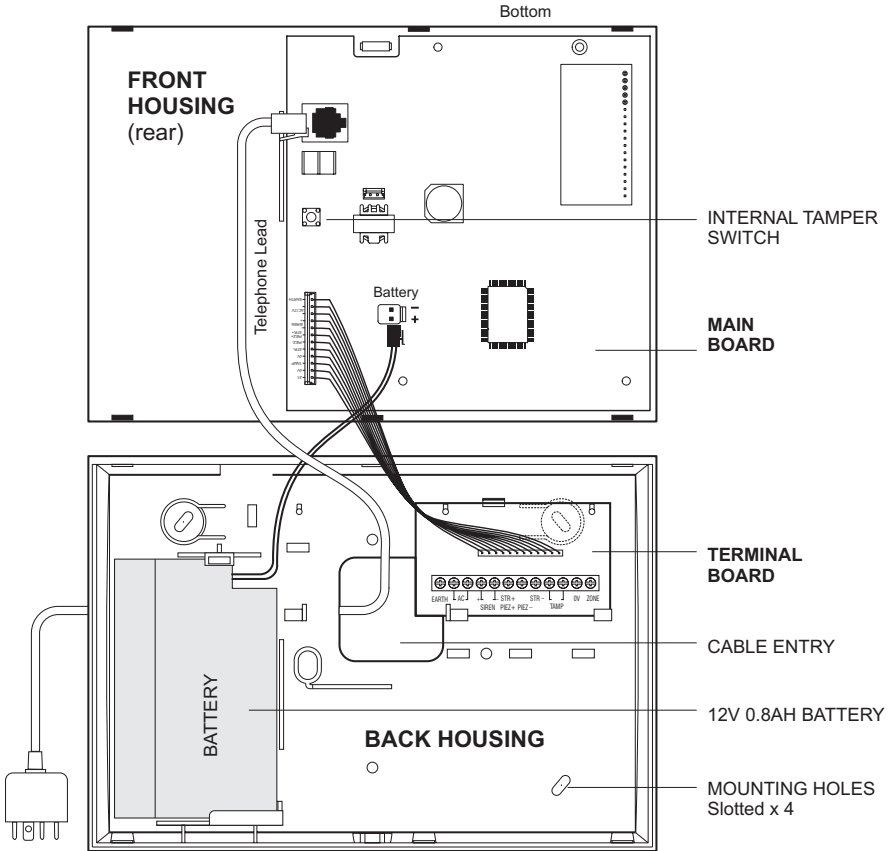
CABLE ENTRY VIA CONDUIT



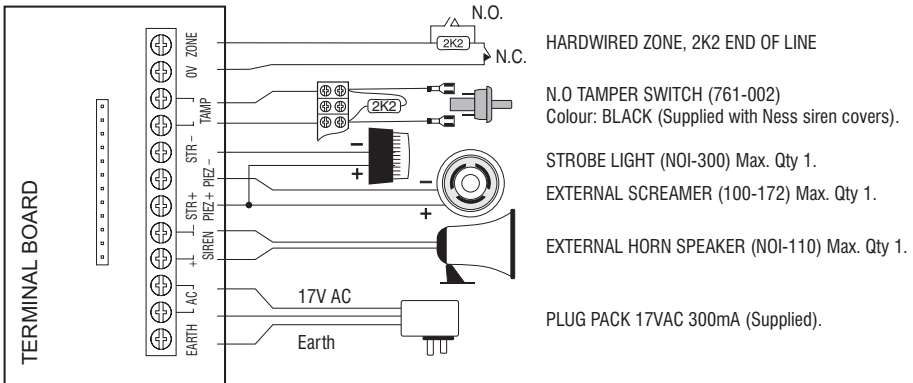
CABLE ENTRY VIA CAVITY WALL



CONNECTION DIAGRAM



WIRING



INPUTS

ZONE

Zone input for optional hardwired detection devices. Operates in series with any radio devices on zone 8. The input must be terminated with a 2K2 (2200 ohm) end of line (EOL) resistor even if unused.

TAMP

24hr input for connection of external tamper switches. This input operates in series with the internal tamper switch.

The input must be terminated with a 2K2 (2200 ohm) end of line (EOL) resistor even if unused.

AC / EARTH

AC power input and earth connection. Use the supplied 17V AC 300mA plug pack.

OUTPUTS

SIREN

Timed siren output for connection of maximum one (1) 8 Ohm horn speaker.

STR

Output for connection of 1 x NOI-300 Ness strobe light. As a power saving feature, the strobe output times out after 11 hours. If mains power is off, the output will time out after 1 hour.

PIEZ

Timed output for connection of maximum 1 x 12V screamer, (Ness Part No. NOI240, NOI 230, 100-238 or 100-172).

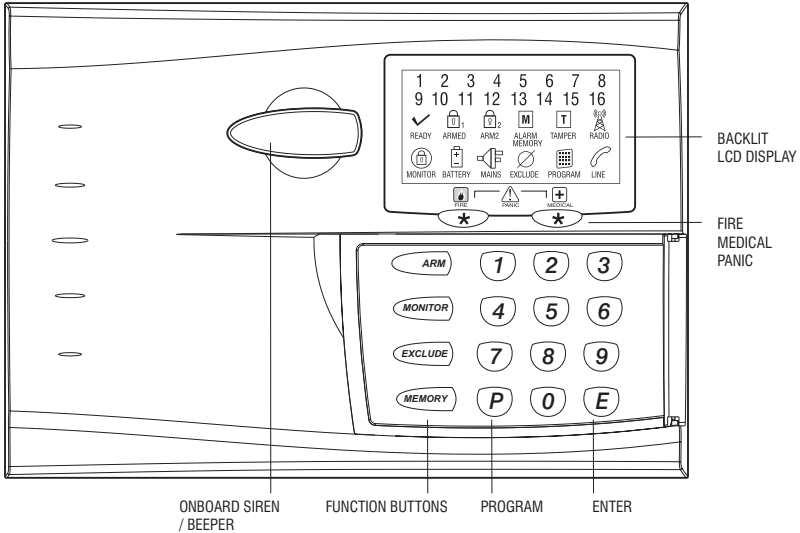
ONBOARD SIREN (BUILT-IN)

The onboard piezo siren is an integral part of the R8 electronics. It is used for keypad beeps, doorbell chime, arm/disarm chirps and internal siren on alarm. The internal Siren can be disabled by program option P60E 8E. When the Internal Siren function is disabled, the onboard siren still outputs keypad beeps and other audible features.

R8 KEYPAD

AUDIBLE & VISUAL FEEDBACK












The R8 onboard keypad provides the facility for user level and installer level programming and all user operation and emergency functions. The keys are soft-touch silicon rubber and are backlit for high visibility. Any keypress will turn on the backlighting for 4 minutes.



OUTPUT	OUTPUT TYPE	DESCRIPTION
Keypad beeper	🎵 SHORT BEEP	Keypad Acknowledge key press
	🎵🎵🎵 3 BEEPS (RAPID)	Keypad Valid entry, end of Exit Time
	🎵 - 🎵 LONG BEEP	Keypad Invalid entry
	🎵.8.🎵 8 BEEPS (RAPID)	Low battery / AC Fail / Medical Alarm
	🎵 → CONTINUOUS BEEPS	Alarm, Entry Delay, etc
Onboard Siren	1 CHIRP*	Arm
External Siren output	3 CHIRPS*	Disarm
Onboard Siren	DOORBELL TONES	The Doorbell has been pressed.
Onboard Siren	SIREN BURST,	Zone Auto Exclude warning
External Siren output	(Low Volume)	
Onboard Siren	SIREN CONTINUOUS	Alarm condition
Piezo output		
External Siren output		
Strobe output	STROBE BURST	Panel Armed or Disarmed
	STROBE CONTINUOUS	Alarm condition

* Arm/disarm chirps must be enabled.

KEYPAD DISPLAY IN OPERATING MODE

DISPLAY	OFF	● ON	⚡ FLASHING
ZONES 1-8	Zone is sealed	Zone is unsealed	Zone alarm
 READY	Not ready to arm - unsealed zones or system faults	Ready to Arm	
 ARMED	Disarmed	Armed	
 MONITOR	Disarmed	Monitor Mode	
 MAINS	Normal		Mains Power is off
 BATTERY	Normal		The panel's backup battery is low
 ALARM MEMORY	Normal	Memory Mode selected	New alarms in memory
 EXCLUDE	Normal		Zones are excluded
 TAMPER	Normal		Tamper alarm
 RADIO	Normal	Receiving radio signal	Indicates that a Radio Key or other radio device has a low battery*
 LINE	Normal	Dialler is on line	Phone line fault or failure to communicate
 PROGRAM	Normal	User Program Mode	Installer Program Mode

* Numeric display 1-15 will show which device is sending the Low Battery signal.

KEYPAD BEEPER NOTE:

If the onboard siren is disabled, (P60E 8E = on), keypad beeps are also disabled during an alarm condition. Keypad beeps will be reactivated on the next disarm.

USER TESTS

Test functions can be invoked by pressing and holding the specified keypad button, as follows. The Panel must be in Disarmed mode.

BUTTON	TEST PERFORMED
9	Dialler Listen-in. Press and hold keypad button '9' for 3 seconds to enable the Dialler Listen-in function. All dialler tones are output through the onboard siren. This allows the installer to hear dial tone, dialling tones, central station handshake and kiss-off tones. This test automatically turns off after 2 minutes.
E	Display Test. Press and hold keypad button 'E' for 1.5 seconds. Turns on all LCD icons while the button is pressed.

OPERATION

OPERATING MODES

The Ness R8 will operate in one of the following modes:

ARMED. The system is “On” and ready to detect intrusion.

DISARMED. The system is “Off”. This is the normal mode when the premises are occupied. Day Zones and 24 Hour Zones (if configured) are active.

DAY MODE. The system is Disarmed and a zone or zones have been setup to create an alarm when activated. Often used as a doorway alert in a shop. (See P53E Day Zones).

MONITOR MODE. Allows the system to be “partially” Armed. For example, in a house, to allow all perimeter zones, doors and windows, to be Monitored (armed) at night. (See P51E Monitor Zones).

24HR ZONES. Zones that have been setup to be active in any mode. Usually used for Tamper switches and Panic buttons. (See P52E 24hr Zones).












DOORBELL. The radio Doorbell operates in any panel mode. The doorbell can be triggered using the 100-056 Doorbell transmitter. (Most Ness transmitters can be programmed to operate the Doorbell function, see page 25, Extra Option for Radio Keys).

See page 21 for doorbell volume and selectable chimes settings.

KEYPAD DISPLAY IN MEMORY REVIEW MODE

EVENT	DISPLAY ICONS
Arm	ARMED
Disarm	blank
Auto Exclude Zone	EXCLUDE + 1..8
Mains Fail	MAINS
Panel Panic/Medical/Fire	EXCLUDE
Battery Fail	BATTERY
Line Fault	LINE
Dialler Call Fail	LINE
Zone Alarm	1..8
Tamper Panel/Siren	TAMPER
Tamper(4 th failed attempts)	TAMPER + PROGRAM
Radio Jamming	RADIO
Radio Substitution	RADIO
Pendant Low Battery	RADIO + BATTERY + 2..15
Pendant Panic/Medical	RADIO + EXCLUDE
Detector Tamper	RADIO + TAMPER + 1..8
Detector Low Battery	RADIO + BATTERY + 1..8
Detector Supervision Fail	RADIO + 1..N
Pendant Supervision Fail	RADIO + MONITOR + 1..8

OPERATION SUMMARY

OPERATION	KEYPAD	RADIO KEY
ARM The panel must be in a Disarmed state first.	 ARM [User Code] E ...or ARM E (Arming Shortcut must be ON, P62E 5E)	  x1
DISARM To Disarm and/or reset alarms.	[User Code] E	  x1
MONITOR MODE The panel must be in a Disarmed state first.	MONITOR [User Code] E ...or MONITOR E (Monitor Shortcut must be ON, P62E 3E)	  x2 Press ON button twice within 4 seconds.
PANIC	 Both keys together (Keypad Panic must be enabled, P62E 6E)	 Extra Options for the Panic button must be set for PANIC, (P12E-P25E 1E). This is the factory default.
KEYPAD DURESS	9 [User Code] E To Disarm and report a Duress Alarm, add the digit 9 before the User Code when Disarming. P75E 1E must be enabled to report the alarm.	 Extra Options for the Panic button must be set for DURESS, (P12E-P25E 2E).
EXCLUDING ZONES Zones can be Excluded when the panel is disarmed.	EXCLUDE [User Code] E [Zone No.] E [Zone No.] E ... Enter the zone numbers to be Excluded. E To exit Exclude mode	
VIEW MEMORY View Memory can be used when the panel is disarmed. If the Memory Shortcut is on, P62E 1E, just enter MEMORY + E.	MEMORY [User Code] E Press MEMORY repeatedly to display the last 20 events E To exit Memory mode	
DOORBELL		 x1 100-056 Radio Door Bell.

Note: The panel will ignore Monitor Mode arming if no monitor zones are selected at P51E.

ALARM TYPE DESCRIPTIONS

ALARM TYPE	DESCRIPTION
ALARM , Detector	A zone goes unsealed in a mode causing an alarm. Non-restoring detectors which have alarmed will send a Restore report on Disarming, if Restore reporting is enabled. Restoring detectors (e.g. a reed switch programmed with Restore) which have alarmed will report a Restore only when they are sealed, if Restore reporting is enabled.
TAMPER , Panel/Siren	Panel housing tamper switch and external siren housing tamper switch are wired to the same Tamper Input. When alarmed, will report a Restore only when sealed, if Restore reporting is enabled.
TAMPER , Keypad	Detect entry of consecutive invalid codes in Armed mode, alarm sirens on 4 th failed attempt.
TAMPER , Radio detector	Radio detector housing tamper switch activation. When alarmed, will report a Restore only when sealed, if Restore reporting is enabled.
PANIC , Keypad	Instant when both PANIC buttons pressed together, or (ii) delayed when either PANIC button is pressed and held for 1.5 seconds.
PANIC , Radio	Press and hold the device PANIC button for the required length of time.
DURESS , Keypad	Enter a valid code prefixed with a 9 . The response is the same as for a keypad Panic alarm, but no sirens or strobe are active.
DURESS , Radio	With a radio key programmed as Duress, press and hold the device PANIC button for the required length of time. No sirens or strobe are active.
MEDICAL , Keypad	Press and hold Right Hand keypad * (Star) key for 2 seconds. The keypad beeper will sound 8 warning beeps. The dialler reports a Medical alarm, (if enabled by P75E 2E).
MEDICAL , Key	With a radio key programmed as Medical, press and hold the device PANIC button for the required length of time.
FIRE , Keypad	Press and hold Left Hand keypad * (Star) key for 2 seconds. This triggers the fire siren sound and the dialler reports a Fire alarm, (if enabled by P75E 4E).
RADIO SUBSTITUTION	<p>1. CODE GRABBER</p> <p>A "code grabber" may be used to capture a transmitted user message and re-transmit a fixed copy of this message in an attempt to defeat the system. If two consecutive identical valid encrypted messages are received a minimum time apart, the alarm is raised.</p> <p>2. ENCRYPTION HACKING</p> <p>In this case an attempt is made to "crack" the encrypted, changing part of a message using multiple transmissions. If 20 messages are received with a valid ID but fail decryption, the alarm is raised. Arming and disarming resets this count.</p> <p>The dialler reports a radio jamming/radio substitution alarm.</p>
RADIO JAMMING	After accumulating a "no radio signal" reference level 10 minutes after power up, the system will raise a radio jamming alarm if 30 seconds of continuous in-band radio signal is detected.
DIALLER LINE FAULT	Indicates minimum telephone line DC voltage was not detected for a 2 minute period. If Telephone Line Monitor is enabled, flash the LCD LINE icon and beep keypad.

SYSTEM ALARM DESCRIPTIONS

System Alarm indication icons are active in all Operate modes. All system alarms sound beeper until the 'E' key is pressed. If the panel is armed, the beeper is sounded on disarm. While the alarm persists, the beeper is sounded on each disarm.

System alarms can be reported if the system is monitored by a central monitoring station .

ALARM TYPE	DESCRIPTION
LOW BATTERY Radio Key / Radio Panic / Radio Doorbell	Indicates a low battery condition. A low battery alarm occurs when the key operates. Flash the LCD BATTERY and RADIO icons after a transmission from device with low battery; turn them off when a transmission from a device without a low battery is received.
LOW BATTERY Radio PIR	Indicates a low battery condition. A low battery alarm occurs when the detector operates. Flash the LCD BATTERY, RADIO and zone number icons.
LOW BATTERY Control Panel	The control panel backup battery is periodically load tested. A low battery condition is cleared when the battery passes load test. Battery is tested once every 1 hour and on every disarm. Flash the LCD BATTERY icon.
RADIO SUPERVISION FAIL Radio PIR or Fixed Radio Panic Button	A radio supervisory message or other message has not been received from a detector for the programmed supervision period. Flash the LCD RADIO and zone number icons.
MAINS POWER FAIL	Indicates AC mains power to Panel is not connected or power is off. Flash the LCD MAINS icon.
FAIL TO COMMUNICATE	Indicates the dialler was not able to successfully contact the central monitoring station. Flash the LCD LINE icon.

All alarm types can be reported to the Central station. See page 48 for a full list of Contact ID reporting codes.



QUICK START PANEL PROGRAMMING

The Ness R8 is supplied pre-programmed with factory default values that should suit most installations.

The steps below will show you how to program the Master Code (User Code 1), and the Client Code and telephone number for central station monitoring.

1 To enter Installer Program Mode.

To enter Installer Program Mode on initial power up, apply power with the internal tamper open, (lid open), or the external tamper open. Or if you have powered up with all tampers sealed, see below.

Press **P 1 2 3 E**  ...then press **P 0 0 0 0 0 0 E** 

123 is the factory default Master Code.

This is User Program Mode. The PROGRAM icon is on steady.

000000 (six zeros) is the factory default Installer Code.

This is Installer Program Mode. The PROGRAM icon is flashing.

2 To program the Master Code.

Example, to program the Master Code to be 1234.

Press **P 1 1 E 1 2 3 4 E 1 2 3 4 E**

P11E is the option for the Master Code.

Enter the new Master Code followed by E.

Enter the new Master Code again followed by E.

3 To program the dialler Client Account Number.

Example Client Code is 9876.

Press **P 7 2 E 9 8 7 6 E**

P72E is the option for the Client Code.

Enter the new Client Account Number followed by E.

4 To program the central station telephone number.

Example telephone number is 1234 7890.

Press **P 7 0 E 1 2 3 4 7 8 9 0 E**

P70E is the option for Telephone Number 1.

Enter the new telephone number followed by E.

5 To exit Installer Program Mode.

Press **P** followed by **E**

The PROGRAM icon will turn off.

THE PANEL IS NOW PROGRAMMED AS FOLLOWS:

Master Code: **1234**, Dialler Client Account Number: **9876**, Central Station Telephone number 1: **1234 7890**.

Zone 1: **Delay**, Zone 2: **Handover**, Zones 3–8: **Instant**, Entry Delay Time: **20 seconds**, Exit Delay Time: **60 seconds**, Siren Reset Time: **5 minutes**.

The client code and telephone numbers are supplied by the central station.

QUICK START RADIO PROGRAMMING

As a radio system, the Ness R8 can be installed with a minimum of wiring. If an external siren or strobe light is not being used, the only essential wiring is connection of the plug pack.

The steps below will show you how to program one 100-663 or 100-691 Radio PIR and one 100-664 Radio Key.

1 To enter Installer Program Mode.

To enter Installer Program Mode on initial power up, apply power with the internal tamper open, (lid open), or the external tamper open. Or if you have powered up with all tampers sealed, see below.

Press **(P 1 2 3 E)** **PROGRAM** ...then press **(P 0 0 0 0 0 0 0 E)** **PROGRAM**

123 is the factory default Master Code. This is User Program Mode. The PROGRAM icon is on steady. 000000 (six zeros) is the factory default Installer Code. This is Installer Program Mode. The PROGRAM icon is flashing.

2 To program a Radio PIR.

Example, to program a Radio PIR on zone 1.

Press **(P 0 9 E)** ...then press **(1 E)**

P09E is the option for programming Radio Devices. 'Learn' mode for zone 1.



The RADIO icon will be on and the number 1 will be flashing.
The zone numbers for radio devices already programmed will be ON.

3 Insert the battery of the Radio PIR to be programmed.

Beep, beep + 3 beeps will be heard if the RADIO PIR was successfully 'learned'. Zone icon 1 will then be on steady.

4 To program a Radio Key.

Example, to program a Radio Key to user slot 2.

Press **(P 1 0 E)** ...then press **(2 E)**

P10E is the option for programming Radio Keys. 'Learn' mode for User 2.



The RADIO icon will be on and the number 2 will be flashing.
Numbers 2–15 show the status of the user slots. ON = Radio Keys programmed, OFF = blank, flashing = learn mode.

5 Press and hold the PANIC button for 8 seconds on the Radio Key to be programmed.

Beep, beep + 3 beeps will be heard if the RADIO KEY was successfully 'learned'. Number 2 will then be on steady. A long beep means the Radio Key is already programmed to another user slot. See page 24.

6 To exit Installer Program Mode

Press **(P)** followed by **(E)**

The PROGRAM icon will turn off.

This page is intentionally blank

USER PROGRAM MODE

User Program Mode allows the owner to program:

- All User Codes
- Entry and Exit times

Note: The panel will automatically drop out of User Program Mode to Operating Mode if no keypad buttons are pressed for 4 minutes.

INSTALLER PROGRAM MODE

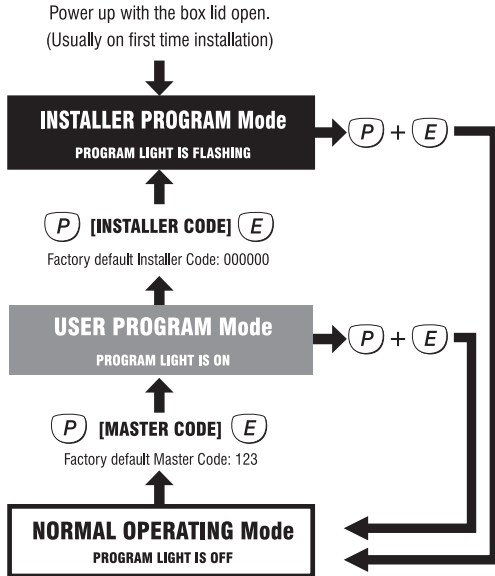
Installer Program Mode allows access to ALL program options.

Note: The panel will remain in Installer Program Mode indefinitely.

Factory default Master Code: 123

Factory default Installer Code: 00000

PROGRAM MODE LEVELS



HOW TO ENTER PROGRAM MODE

FROM POWER UP

1. Power-up with the internal box tamper or external tamper open. The R8 will then be in Installer Program Mode.

USING THE KEYPAD

The panel must be Disarmed.

1. Press **(P) [MASTER CODE] (E)**
The keypad will respond with 3 beeps 🎵🎵🎵
This is User Program Mode (PROGRAM light is ON).
2. Then press **(P) [INSTALLER CODE] (E)**
The keypad will respond with 3 beeps 🎵🎵🎵
This is Installer Program Mode (PROGRAM light is FLASHING).

HOW TO EXIT PROGRAM MODE

1. Press **(P)** then **(E)**
This is Operating Mode (PROGRAM light is OFF).

PROGRAMMING

P00E, P01E

VOICE DIALLING TELEPHONE NUMBERS 1 & 2

PROGRAM MODE LEVEL:

User, Installer, Remote by PC.

FACTORY DEFAULT:

Both Telephone Numbers = blank.

NOTES:

These program options can also be accessed by pressing P0E and P1E. The leading zero is not mandatory.

RELATED OPTIONS:

- P70E, P71E, Central Station Telephone Numbers 1 & 2, page 36.
- Ness Voice Dialling format, see page 47.
- Dialling Sequence, page 47.

These phone numbers are used to report alarms in Ness Voice Dialling format and can be programmed from User Program mode or Installer Program mode.

It is not necessary to program a reporting format. Ness Voice Dialling format is automatically selected when alarm reports are sent to the Voice Dialling telephone numbers.

Voice Dialling is disabled if Central Station telephone number/s are programmed at P70E or P71E.

PROGRAMMING SEQUENCE

1. Press: **P00E** or **P01E**
 - *The existing telephone number is displayed.*
 - *It is not necessary to wait for the display sequence to end. You can interrupt the display by entering the new telephone number.*
2. **[new telephone number] E**
The new telephone number is displayed.

EXAMPLE

To program Voice Dialling Phone No.1 to be 03 1234 1234:
Press: **P00E 0312341234E**

TO CLEAR A TELEPHONE NUMBER

To clear a telephone number, enter the MEMORY key in place of the telephone number. E.g, to clear Voice Dialling Phone No.2, press: **P01E MEMORY E**

GENERAL NOTE.

Program options P00E to P09E can also be accessed by pressing P0E to P9E. The leading zero is not necessary.

SPECIAL CHARACTERS

Special characters such as Pauses, star or hash characters can be included in a telephone number dialling sequence by using the keys in the table below.

SPECIAL CHARACTER	KEYPAD ENTRY	KEYPAD DISPLAYS
PAUSE (1.6sec)	ARM Key	10
* (Star)	MONITOR Key	11
# (Hash)	EXCLUDE Key	12

P05E

DOORBELL VOLUME

PROGRAM MODE LEVEL:

User, Installer, Remote by PC.

FACTORY DEFAULT:

3, (Volume level 3).

NOTES:

- The Doorbell sounds through the R8 onboard siren.

RELATED OPTIONS:

Doorbell Tune, P06E.

Selects the doorbell volume. Programmable range is volume level 1 (lowest) to 4 (highest).

PROGRAMMING SEQUENCE

1. Press: **P05E** - *Existing value is displayed.*
2. **[ENTER NEW VALUE] E** - *New value is displayed.*

EXAMPLE

To program Doorbell Volume to be Level 2:

Press: **P05E 2E**

P06E

DOORBELL TUNE

PROGRAM MODE LEVEL:

User, Installer, Remote by PC.

FACTORY DEFAULT:

3, (Ding Dong).

NOTES:

-

RELATED OPTIONS:

Doorbell Volume, P05E.

The R8 has nine built-in doorbell tunes to choose from. The doorbell is activated by the optional 100-056 Radio Doorbell transmitter. (Most Ness transmitters can be programmed to operate the Doorbell function, see page 25, Extra Option for Radio Keys).

PROGRAMMING SEQUENCE

1. Press: **P06E** - *Existing value is displayed.*
2. **[ENTER NEW VALUE] E** - *New value is displayed.*

EXAMPLE

To program Doorbell Tune to be Tune 1, Westminster:

Press: **P06E 1E**

AVAILABLE TUNES

- 1 Westminster
- 2 Westminster (4 notes only)
- 3 Ding Dong
- 4 Ding Dong Repetitive
- 5 Star Spangled Banner
- 6 Fur Elise
- 7 Home Sweet Home
- 8 Green Sleeves
- 9 Chime

PROGRAMMING

P08E

RADIO SIGNAL STRENGTH TEST

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

0, Radio Key test.

NOTES:

- The signal strength beeps will sound only the first time the radio device is activated. The signal strength and device number remains flashing on the display until E is pressed again or the ON button of a valid radio key is pressed.

The Radio Signal Strength Test can be used to test the radio signal from any Ness radio device. The strength of the radio signal received is displayed on the zone lights 1–9 and beeped by the keypad.

The higher the number displayed (and beeped) the stronger the signal received.

Use **P08E 0E** to test Radio Keys, (press Panic button). Note that in this mode, the R8 will respond to radio signals from any programmed radio device. To avoid confusion from multiple radio signals, this test is best performed while standing out of range of any programmed radio PIRs.

Use **P08E 1E–8E** to test the signal strength of a specific radio device on zones 1–8.

TO RESET THE TEST

The last signal strength tested remains flashing on the display. Press keypad E or Radio Key ON button to exit from the current test. The panel is then ready for another radio test.

To completely exit the Radio Signal Strength test, simply go to another programming option or exit Installer Program Mode, (P + E).

EXAMPLE: TO TEST THE SIGNAL STRENGTH OF A RADIO PIR ON ZONE 2.

1. Press: **P08E 2E** *Radio icon and numeric icon 2 is flashing - waiting for radio data.*
2. Trigger the radio device on zone 2.
3. The display will alternate flashing signal strength value and radio key/detector slot number.

E.g., The signal strength will be flashed on the display and the panel will beep signal strength value. Then the radio icon and detector/key number will be on steady.

EXAMPLE: TO TEST THE SIGNAL STRENGTH OF A RADIO KEY.

1. Press: **P08E 0E** *Radio icon is flashing - waiting for radio data.*
2. Press and hold the Panic button for 2 seconds on the Radio Key being tested.
3. The display will alternate flashing signal strength value and radio key slot number.

E.g., The signal strength will be flashed on the display and the panel will beep signal strength value. Then the radio icon and detector/key number will be on steady.

P09E

PROGRAM RADIO DEVICES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

No radio devices programmed.

NOTES:

-

RELATED OPTIONS:



100-663
Ness R15 Radio PIR



100-691
Ness R12 Radio PIR



100-662
Ness RR1 Radio Reed
Switch

The R8 has eight radio zones which can accept Ness radio devices such as radio PIRs, radio reed switches, radio smoke detectors.

Each of the eight radio zones will accept one radio device.

Radio devices are programmed with the easy to use radio 'learn' mode.

PROGRAMMING SEQUENCE

1. Press: **P09E**
 - The **RADIO** icon will turn on and zone numbers 1-8 will show which zones have radio devices programmed.
2. Press: **[zone number] E**
 - The selected zone number is flashing. The zone is in learn mode.
 - A long beep indicates that the radio device may already be programmed on another zone.
3. Connect the battery in the radio device.
 - Three beeps indicates device has been successfully programmed.

EXAMPLE 1

To program radio zone 1 with a Ness Radio PIR:

1. Press: **P09E 1E** Zone 1 will start flashing.
2. Connect the 9V battery to the Radio PIR.

TO DELETE A RADIO DEVICE

To delete an existing Radio Device, press P09E, select the zone number to delete [1E-8E], then press P09E again.

EXAMPLE. To delete the radio device programmed on zone 1:

Press: **P09E 1E P09E**

PROGRAMMING

P10E

PROGRAM RADIO KEYS

PROGRAM MODE LEVEL:

User, Installer, Remote by PC.

FACTORY DEFAULT:

No radio keys programmed.

NOTES:

RELATED OPTIONS:

- P11E-P25E, Program user codes.

- Extra Options For Radio Codes, page 25.

The R8 will accept up to 14 Ness Radio Keys to be used for remote control wireless Arming/Disarming and Panic functions.

Radio Keys are programmed to one of the 15 User Code slots with the easy to use radio 'Learn' mode. A User Code slot can be either a keypad code or a radio key code, not both. User Code 1 is always a keypad code.

PROGRAMMING SEQUENCE

1. Press: **P10E**
 - The **RADIO** icon will turn on and zone numbers 2-15 will show which user code slots have radio devices programmed.
2. Press: **[user number 2-15] E**
 - The selected user number is flashing. The user slot is in learn mode.
 - A long beep means the Radio Key may already be programmed to another user slot.
3. Press the required Radio Key button to send the "Learn" message. (See "How To Send The Learn Message").
 - Three beeps indicates the radio key has been successfully programmed.

EXAMPLE

To program a Radio Key to user slot 2:
Press **P10E 2E** then press and hold the PANIC button on the Radio Key.

TO DELETE A RADIO KEY

To delete an existing Radio Key, press P10E, select the user number to delete [2E-15E], then press P10E again.

EXAMPLE. To delete the Radio Key on user slot 2:

Press: **P10E 2E P10E**

HOW TO SEND THE LEARN MESSAGE:



100-665
RK1
Radio Pendant

Press button three times.



100-664
RK3
Radio Key

Press and hold PANIC for 8 seconds.



100-067
RK4
Radio Key

Press and hold PANIC for 8 seconds.



100-001
RKP
Radio Keypad

Insert the battery or consult the Radio Keypad manual.



100-283
RPB Radio
Panic Button

Press and hold for 8 seconds.



100-056
RDB
Radio Door Bell

Press and hold for 8 seconds.

FACTORY DEFAULT:

Extra Option 1E, Panic, is the factory default for all user slots.

NOTES:

When programming the Radio Doorbell (100-056), the Extra Option for that user slot must be 5E.

EXTRA OPTIONS FOR RADIO CODES

Each user code slot has five Extra Options which control the behaviour of Radio Keys and the Radio Doorbell transmitter when they are programmed to a user code slot on the R8.

The Extra Options are:

1E, Panic: The Panic Button will trigger the Panic alarm. (default).

2E, Duress: The Panic Button will trigger the Duress alarm.

3E, Medical: The Panic Button will trigger the Medical alarm.

4E, Ignore Panic: Disables Panic Button on radio keys.

5E, Doorbell: The Panic Button will sound the R8 doorbell feature.

Each user code slot is defaulted for Extra Option 1E, trigger Panic.

The Extra option for a user code slot can be programmed after a radio key has been programmed to that slot.

PROGRAMMING SEQUENCE FOR EXTRA OPTIONS

- Press: **P [user number option 12-25] E**
 - If a Radio Key is programmed to the user slot, the RADIO icon will be on. Icons 1–5 show which Extra Option is currently selected.
- Press: **[1–5] E**
 - This selects a new Extra Option.

EXAMPLE

A Radio Key is programmed to User Code slot 2. To change the Extra Option to "Ignore Panic", press P12E 4E.

USER CODE OPTIONS TABLE

USER CODE SLOT	DESCRIPTION	RADIO CODES		KEYPAD CODES	
		OPTION NOs		OPTION NOs	DEFAULT
User Code 1	Master Code	(Always a Keypad Code)		P11E	123
User Code 2		P10E	2E	P12E	
User Code 3			3E	P13E	
User Code 4			4E	P14E	
User Code 5			5E	P15E	
User Code 6			6E	P16E	
User Code 7			7E	P17E	
User Code 8			8E	P18E	
User Code 9			9E	P19E	
User Code 10			10E	P20E	
User Code 11			11E	P21E	
User Code 12			12E	P22E	
User Code 13			13E	P23E	
User Code 14			14E	P24E	
User Code 15			15E	P25E	

PROGRAMMING

P11E-P25E

PROGRAM KEYPAD CODES

PROGRAM MODE LEVEL:

User, Installer, Remote by PC.

FACTORY DEFAULT:

User Code 1: 123

Installer Code: 000000

All other codes: [blank]

Extra Option 1, all codes.

NOTES:

- User Codes can be 3 to 6 digits in length.
- Codes beginning with 0 (zero) can be programmed but they will not operate the panel - this is an alternative method for disabling user codes. The MEMORY E function is recommended for deleting user codes.
- User Code 1 (Master Code) can be changed but it can not be deleted. The MEMORY + E sequence simply reverts User Code 1 back to factory default of 123.
- All codes must be unique to each other. Codes are rejected if already used. Some codes that are similar to existing codes may also be rejected.
- To clear all codes (except the Installer Code), enter P97E 3E in Installer Program mode. See Page 45.
- Open/Close reports are identified by user number when the control panel is central station monitored. Shortcut arming, (ARM + E, (if enabled), is sent as User 25.

Options P11E-P25E allow the programming or deletion of the 15 keypad codes and also setup the Extra Options for user code slots programmed with a Radio Key.

PROGRAMMING SEQUENCE

1. Press: **P [user number option 11-25] E**
 - *The existing keypad code will be displayed out one digit at a time on the keypad.*
2. Press: **[new code] E [new code again] E**
 - *The new keypad code will be displayed on the keypad.*
 - *One beep will sound on the first entry of the new code, three beeps will sound on the successful second entry of the new code.*

EXAMPLE

To program user code 2 to be 1234:

1. Press: **P12E 1234E 1234E**

TO DELETE A CODE

To delete a User Code, enter the MEMORY key in place of the code. Example: To delete User Code 2: P12E MEMORY E

For a list of user option numbers, see the USER CODE OPTIONS TABLE on page 25.

- Open/Close reports, (if enabled by your installer), are identified by user number if the control panel is central station monitored.

RELATED OPTIONS:

P10E, Program Radio Keys

P26E

ENTRY DELAY TIME

PROGRAM MODE LEVEL:
User, Installer, Remote by PC.

FACTORY DEFAULT:
20 = 20 seconds.

NOTES:

- Programmable range is 1–99 seconds.
- To view the programmed value without making changes, press P26E.

The Entry Delay Time is the time given to Disarm the Panel on entry through an entry delay zone.

PROGRAMMING SEQUENCE

1. Press: **P26E**
The digits of the existing value will be displayed.
2. Press: **[new time] E**
The digits of the new value will be displayed.

EXAMPLE

To program the entry delay time to be 25 seconds: **P26E 25E**

P28E

EXIT DELAY TIME

PROGRAM MODE LEVEL:
User, Installer, Remote by PC.

FACTORY DEFAULT:
60 = 60 seconds.

NOTES:

- Programmable range is 1–99 seconds.
- To view the programmed value without making changes, press P28E.

The Exit Delay Time is the time given to secure and exit the premises after the R8 is Armed. All zones (except 24hr zones) are inactive during the Exit Delay time.

PROGRAMMING SEQUENCE

1. Press: **P28E**
The digits of the existing value will be displayed.
2. Press: **[new time] E**
The digits of the new value will be displayed.

EXAMPLE

To program the exit delay time to be 50 seconds: **P28E 50E**

P29E

SIREN RESET TIME

PROGRAM MODE LEVEL:
Installer, Remote by PC.

FACTORY DEFAULT:
5 = 5 minutes.

NOTES:

- Programmable range is 1–10 minutes.
- To view the programmed value without making changes, press P29E.

The Siren Reset Time sets the alarm duration of the Siren and Reset outputs.

PROGRAMMING SEQUENCE

1. Press: **P29E**
The digits of the existing value will be displayed.
2. Press: **[new time] E**
The digits of the new value will be displayed.

EXAMPLE

To program the siren reset time to be 4 minutes: **P29E 4E**

PROGRAMMING

P40E

INSTANT ZONES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

3–8 = ON, Zones 3–8 are instant.

NOTES:

- When a zone is selected as Instant, it is automatically deselected from Entry Delay or Handover.

Instant Zones operate only in the Armed state. Once armed at the expiry of exit time, Instant Zones will activate assigned outputs immediately when triggered.

PROGRAMMING SEQUENCE

1. Press: **P40E**
2. Press: **[1-8] E**
 - *This enables the zone for this option. To deselect a zone from this option, program it to be Entry Delay or Handover.*
 - *Zone light on indicates the option is enabled.*

P41E

ENTRY DELAY ZONES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1 = ON, Zone 1 is Delayed.

NOTES:

- When a zone is selected as Entry Delay, it is automatically deselected from Instant or Handover.

Entry Delay zones operate only in the Armed state. When Armed, at the expiry of exit time these zones will activate the Entry Delay Timer (P26E) when they are triggered. If the panel is not disarmed before the expiry of the Entry Delay Timer, the alarm outputs will be activated.

PROGRAMMING SEQUENCE

1. Press: **P42E**
2. Press: **[1-8] E** to enable each zone for this option.
 - *To deselect a zone from this option, program it to be Instant or Handover.*
 - *Zone light/s on indicates which option is enabled.*

P42E

HANDOVER ZONES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

2 = ON, Zone 2 is Handover.

NOTES:

- When a zone is selected as Handover, it is automatically deselected from Entry Delay or Instant.

Handover zones are delayed only if entry is made through an Entry Delay zone first. If a Handover zone is triggered first, the zone behaves as an instant zone. Normally, the “point of entry” zone should be Delay zone, with any other zones in the entry path programmed as Handover zones.

PROGRAMMING SEQUENCE

1. Press: **P42E**
2. Press: **[1-8] E** to enable each zone for this option.
 - *To deselect a zone from this option, program it to be Delayed or Instant.*
 - *Zone light/s on indicates which option/s are enabled.*

P44E

RESET LOCKOUT ZONES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1–8 = ON, All zones are Lockout zones.

NOTES:

- This option applies to the RESET output, the SIREN output always locks out.

RELATED OPTIONS:

P60E 4E, Tamper Reset Lockout.

All zones can be programmed to Lockout, i.e. cause the RESET OUTPUT to sound only once whilst the panel is armed.

The RESET OUTPUT is then locked out for that alarmed zone until entering a valid code has reset the panel.

PROGRAMMING SEQUENCE

1. Press: **P44E**
2. Press: **[1-8] E** to toggle each zone on or off.
Zone light/s on indicates which option/s are enabled.

P51E

MONITOR ZONES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1–8 = OFF, No Monitor zones.

RELATED OPTIONS:

P64E 1E, Brief Monitor alarm.

This option selects which zones will be armed in Monitor mode.

Monitor zones allow you to Arm selected zones while others are ignored. Typically used for perimeter zones such as windows and doors while you are at home. Example: Upstairs zones are Disarmed while downstairs zones are Armed in Monitor mode.

PROGRAMMING SEQUENCE

1. Press: **P51E**
2. Press: **[1-8] E** to toggle each zone on or off.
Zone light/s on indicates which option/s are enabled.

P52E

24HR ZONES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1–8 = OFF, No 24hr zones.

NOTES:

- The Tamper input is always a 24hr zone

24hr Zones operate at all times regardless of the mode of panel operation, i.e. Armed, Disarmed or Monitor. When alarmed, these zones will activate assigned outputs immediately. To reset a 24hr zone alarm, a valid user code must be entered.

Selecting a zone as 24hr will override any other zone type setting such as Instant, Delayed or Handover.

PROGRAMMING SEQUENCE

1. Press: **P52E**
2. Press: **[1-8] E** to enable each zone for this option.
 - *To deselect a zone from this option, program it to be Delayed, Instant or Handover.*
 - *Zone light/s on indicates which option/s are enabled.*

PROGRAMMING

P53E

DAY ZONES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1–8 = OFF, No Day zones.

NOTES:

Typical uses:

- Instant alert when a delivery door is opened.
- Doorway alert for a shop.

RELATED OPTIONS:

P64E 2E, Brief Day alarm.
Programs the behaviour of Day Zone alarms.

Day Zones operate when the panel is fully disarmed, i.e. when fully disarmed and Monitor mode is off. When alarmed, Day Zones will activate the assigned outputs instantly.

This option selects which zones will be Day Zones.

PROGRAMMING SEQUENCE

1. Press: **P53E**
2. Press: **[1-8] E** to enable each zone for this option.
 - *To deselect a zone from this option, program it to be Delayed, Instant or Handover.*
 - *Zone light/s on indicates which option/s are enabled.*

P60E, 1E-8E

MISCELLANEOUS OPTIONS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1E = ON

2E = not used

3E = not used

4E = ON

5E = not used

6E = ON

7E = OFF

8E = OFF

NOTES:

P60E 1E, ENTRY BEEPS

ON = Enables keypad beeps during Entry Delay.

OFF = No keypad beeps during Entry Delay.

(Default = ON).

P60E 2E Not used.

P60E 3E Not used.

P60E 4E TAMPER SIREN LOCKOUT.

OFF = Tamper alarms can trigger multiple alarms.

ON = Tamper Alarm lockout. The siren output sounds once and then locks out if multiple Tamper Alarms occur. The siren outputs become active again once the panel has been reset by a User Code.

(Default =ON).

P60E 5E Not used.

P60E 6E, AUTO EXCLUDE ZONES.

OFF = No AutoExclude, an unsealed zone will alarm at the end of exit delay.

ON= AutoExclude enabled. If the panel is armed with an unsealed zone, that zone will be Autoexcluded and the panel will give a 2 second Siren burst at the end of Exit Time to indicate that the panel is armed with a zone/s Auto Excluded. The 2 sec Siren burst can be disabled by option P62E 7E.

(Default =ON).

P60E 7E, KEYPAD BACKLIGHT BLANKING.

OFF = Keypad Backlighting is always on.

ON = Keypad Backlighting blanking enabled. The backlighting on the keypad can be programmed to blank after 4 minutes of no keypad use. Any action that causes a beep will restore the back lighting, or press E to manually restore backlighting.

(Default =OFF).

P60E 8E, DISABLE ONBOARD SIREN.

OFF = Onboard Siren enabled.

ON = Onboard Siren disabled.

When the onboard siren is disabled, keypad beeps are still active but are disabled during an alarm condition. Keypad beeps will be reactivated on the next disarm.

(Default =OFF).

PROGRAMMING SEQUENCE

1. Press: **P60E**
2. Press: **[1-8] E** to toggle each option on or off.
Zone light/s on indicates which option/s are enabled.

PROGRAMMING

P62E, 1E-5E

OPERATION SHORTCUTS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1E = ON

2E = ON

3E = ON

4E = not used

5E = ON

Some keypad operations can be programmed to operate with or without a User Code.

P62E 1E, MEMORY DISPLAY SHORTCUT

To enable or disable the View Memory shortcut.

OFF = Shortcut disabled, (MEMORY + USER CODE + E).

ON = Shortcut enabled, (MEMORY + E).

(Default =ON).

P62E 2E, ZONE EXCLUDE SHORTCUT

To enable or disable the Zone Exclude shortcut.

OFF = Shortcut disabled, (EXCLUDE + USER CODE + E).

ON = Shortcut enabled, (EXCLUDE + E).

(Default =ON).

P62E 3E, MONITOR MODE SHORTCUT

To enable or disable the Monitor Mode shortcut.

OFF = Shortcut disabled, (MONITOR + USER CODE + E).

ON = Shortcut enabled, (MONITOR + E).

(Default =ON).

P62E 4E Not used.

P62E 5E, ARMING SHORTCUT

To enable or disable the Arming shortcut.

OFF = Shortcut disabled, (ARM + USER CODE + E).

ON = Shortcut enabled, (ARM + E).

(Default =ON).

PROGRAMMING SEQUENCE

1. Press: **P62E**
2. Press: **[1-5] E** to toggle each option on or off.
Zone light/s on indicates which option/s are enabled.

P62E, 7E

SIREN BURST ON AUTO EXCLUDE

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

7=ON, Enabled.

RELATED OPTIONS:

P60E 6E, Auto Exclude Zones.

This option enables the 2 second siren burst at end of Exit Time which indicates a zone/s has been Auto Excluded.

The siren burst is a low volume output from the onboard siren and the external siren.

PROGRAMMING SEQUENCE

1. Press: **P62E**
2. Press: **7E** to toggle the option on or off.
Zone light on indicates the option is enabled.

P64E, 1E-8E

MISCELLANEOUS OPTIONS 2

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1E = OFF

2E = ON

3E = not used

4E = OFF

5E = not used

6E = ON

7E = OFF

8E = OFF

PROGRAMMING SEQUENCE

1. Press: **P64E**

2. Press: **[1-8] E** to toggle each option on or off.

Zone light/s on indicates which option/s are enabled.

P64E 1E, BRIEF MONITOR ALARM

This option programs the behaviour of alarms in Monitor Mode.

OFF = NORMAL MONITOR ALARMS. Outputs are on for the Siren Reset Time and dialler reporting is enabled.

ON = BRIEF MONITOR ALARM. Outputs are on for 2 seconds, internal piezo at half volume, strobe. There is no dialler report, no external piezo and no external siren.

(Default = OFF).

P64E 2E, BRIEF DAY ALARM

This option programs the behaviour of Day Zone alarms.

OFF = NORMAL DAY ALARMS. Siren & Reset output will be on while a Day Zone is unsealed.

ON = BRIEF DAY ALARM. Outputs are on for 2 seconds, internal piezo at half volume, strobe. There is no dialler report, no external piezo and no external siren.

(Default = ON).

P64E 3E, Not used.

P64E 4E, SIREN CHIRPS, ARM/DISARM

When this option is enabled, the external siren output and the onboard siren will 'chirp' on arm/disarm by radio key. The strobe output always flashes on arm/disarm by radio key, independent of this program option.

1 chirp = arming, 3 chirps = disarming.

OFF = Siren chirps disabled.

ON = Siren chirps enabled.

(Default = OFF).

P64E 5E, Not used.

P64E 6E, KEYPAD PANIC ALARM

Keypad Panic can be triggered by pressing both star keys together. The dialler reports a Panic alarm, (if enabled by P75E 3E).

OFF = NO KEYPAD PANIC.

ON = KEYPAD PANIC IS ENABLED.

(Default = ON).

P64E 7E, FIRE ALARM

The Fire Alarm can be triggered by pressing the FIRE key for at least 2 seconds, (left hand STAR key). This triggers the fire siren sound and the dialler reports a Fire alarm, (if enabled by P75E 4E).

OFF = No Keypad Fire Alarm.

ON = Keypad Fire Alarm is enabled.

(Default = OFF).

P64E 8E, MEDICAL ALARM

The Medical Alarm can be triggered by pressing the MEDICAL key for at least 2 seconds, (right hand STAR key). The keypad beeper will sound 8 warning beeps. The dialler reports a Medical alarm, (if enabled by P75E 2E).

OFF = No Keypad Fire Alarm.

ON = Keypad Fire Alarm is enabled.

(Default = OFF).

PROGRAMMING

P65E, 1E-2E

RADIO JAMMING

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1E = OFF

2E = ON

NOTES:

Radio Jamming and Radio Substitution alarms, if enabled, are reported to the central station and displayed by the RADIO icon on the LCD display.

P65E 1E, RADIO JAMMING ALARM

The R8 will raise a radio jamming alarm if 30 seconds of continuous in-band radio signal is detected.

Note - The R8 needs to be powered up for a minimum of 10 minutes to obtain a "no radio signal" reference level before it is able to detect a radio jamming signal.

OFF = Radio Jamming Alarm disabled.

ON = Radio Jamming Alarm enabled.

(Default = OFF).

P65E 2E, RADIO SUBSTITUTION ALARM

The Radio Substitution alarm helps protect against:

1. Code Grabber. A "code grabber" may be used to capture a transmitted user message and re-transmit a fixed copy of this message in an attempt to defeat the system. If 2 consecutive identical valid encrypted messages are received a minimum time apart, the alarm is raised.
2. Encryption Hacking In this case an attempt is made to "crack" the encrypted, changing part of a message using multiple transmissions. If 20 messages are received with a valid ID but fail decryption, the alarm is raised. Arming and disarming resets this count.

OFF = Radio Substitution Alarm disabled.

ON = Radio Substitution Alarm enabled.

(Default = ON).

PROGRAMMING SEQUENCE

1. Press: **P65E**
2. Press: **[1-2] E** to toggle each option on or off.
Zone light/s on indicates which option/s are enabled.

P67E

RADIO SUPERVISION TIME

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

24 = 24 hours

NOTES:

RELATED OPTIONS:

P88E 6E, Report Supervision Alarms.

The SUPERVISION TIME is the time allowed between radio transmissions received by the R8 from any Supervised Radio Detector.

The SUPERVISION TIME setting is from 1 to 168 hours. Supervision is disabled by setting time of 0 (zero).

PROGRAMMING SEQUENCE

1. Press: **P67E**
The digits of the existing value will be displayed.
2. Press: **[new time] E**
The digits of the new value will be displayed.

EXAMPLE

To program Radio Supervision Time to be 6 hours: **P67E 6E**

P68E, 4E

RADIO KEY ARMING WARNING

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

4=OFF, Disabled.

NOTES:

Setting this option on allows an external siren chirp warning if there is an unsealed zone when the panel is armed by a Radio Key, otherwise only internal beeper warning is given.

OFF = Radio Key Arming Warning disabled.

ON = Radio Key Arming Warning enabled.

(Default = OFF).

PROGRAMMING SEQUENCE

1. Press: **P68E**
2. Press: **4E** to toggle the option on or off.
Zone light on indicates the option is enabled.

PROGRAMMING

P70E, P71E

CENTRAL STATION TELEPHONE NUMBERS 1 & 2

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

Both Telephone Numbers = blank.

NOTES:

- If P70E or P71E is programmed (non-blank), then Ness Voice Dialling format is disabled, (P00E, P01E).

RELATED OPTIONS:

- P00E, P01E, Ness Voice Dialling Format Telephone Numbers 1 & 2, page 20.
- P86E 1E, Disable Dialler, page 41.
- Dialling Sequence, page 47.

The telephone numbers programmed at P70E-P71E are used to report alarms to a central station in Contact ID format.

It is not necessary to program a reporting format. Contact ID format is automatically selected when alarm reports are sent to the Central Station telephone numbers.

PROGRAMMING SEQUENCE

1. Press: **P70E** or **P71E**
 - *The existing telephone number is displayed.*
 - *It is not necessary to wait for the display sequence to end. You can interrupt the display by entering the new telephone number.*
2. **[new telephone number] E**
The new telephone number is displayed.

EXAMPLE

To program Central Station Telephone No.1 to be 03 1234 1234:

Press: **P70E 0312341234E**

TO CLEAR A TELEPHONE NUMBER

To clear a telephone number, enter the MEMORY key in place of the telephone number. E.g, to clear Central Station Telephone Number 1 press: **P70E MEMORY E**

SPECIAL CHARACTERS

Special characters such as Pauses, star or hash characters can be included in a telephone number dialling sequence by using the keys in the table below.

<u>SPECIAL CHARACTER</u>	<u>KEYPAD KEY</u>	<u>KEYPAD DISPLAY</u>
PAUSE (1.6sec)	ARM	10
* (Star)	MONITOR	11
# (Hash)	EXCLUDE	12

P72E

CLIENT ACCOUNT NUMBER

PROGRAM MODE LEVEL:
Installer, Remote by PC.

FACTORY DEFAULT:
0000

The 4 digit Client Account Number identifies the panel to the central station when reporting alarms in Contact ID format. The number can be entered, (and reported), in Decimal or Hex.

PROGRAMMING SEQUENCE

1. Press: **P72E**
The digits of the existing value will be displayed.
2. Press: **[new account number] E**
The digits of the new value will be displayed.

EXAMPLE

To program the Account Number to be 1234: **P72E 1234E**

ACCOUNT NUMBER DIGITS

The Client Account Number is normal entered in Decimal using keypad digits 0-9.

If HEX digits are required, use this table when programming.

HEX DIGIT	KEYPAD KEY	KEYPAD DISPLAY
B	* (Star, left or right)	11
C	ARM	12
D	MONITOR	13
E	EXCLUDE	14
F	MEMORY	15

P74E

REPORT ZONE ALARMS

PROGRAM MODE LEVEL:
Installer, Remote by PC.

FACTORY DEFAULT:
1-8 = ON, All zones report Alarms.

RELATED OPTIONS:
P76E, Report Zone Restorals.

This option selects the zones which will report alarms by dialler.

PROGRAMMING SEQUENCE

1. Press: **P74E**
2. Press: **[1-8] E** to toggle each zone on or off.
Zone light/s on indicates which option/s are enabled.

P75E

REPORT MISCELLANEOUS ALARMS

See page 38.

P76E

REPORT ZONE RESTORALS

PROGRAM MODE LEVEL:
Installer, Remote by PC.

FACTORY DEFAULT:
1-8 = ON, All zones report Restorals.

RELATED OPTIONS:
P74E, Report Zone Alarms.
P82E 1E – 4E, Sending Restorals.

This option selects the zones which will report Restorals by dialler.

PROGRAMMING SEQUENCE

1. Press: **P76E**
2. Press: **[1-8] E** to toggle each zone on or off.
Zone light/s on indicates which option/s are enabled.

PROGRAMMING

P75E

REPORT MISCELLANEOUS ALARMS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

This option selects the non-zone events which will report alarms by dialler.

FACTORY DEFAULT:

1E = OFF

2E = ON

3E = ON

4E = ON

5E = ON

6E = not used

7E = ON

8E = OFF

P75E, 1E, REPORT DURESS ALARM

OFF = Duress Alarm reporting is disabled.

ON = Duress Alarm reporting is enabled.

(Default = OFF).

P75E, 2E, REPORT MEDICAL ALARM

OFF = Medical Alarm reporting is disabled.

ON = Medical Alarm reporting is enabled.

(Default = ON).

P75E, 3E, REPORT PANIC ALARM

This option applies to keypad panic and radio key panic.

OFF = Panic Alarms reporting is disabled.

ON = Panic Alarms reporting is enabled.

(Default = ON).

P75E, 4E, REPORT FIRE ALARM

OFF = Fire Alarm reporting is disabled.

ON = Fire Alarm reporting is enabled.

(Default = ON).

P75E, 5E, REPORT TAMPER ALARM

This option applies to panel tamper and external tamper.

OFF = Tamper Alarm reporting is disabled.

ON = Tamper Alarm reporting is enabled.

(Default = ON).

P75E, 6E, Not used.

P75E, 7E, REPORT KEYPAD TAMPER ALARM

Reports entry of consecutive invalid codes in Armed mode, alarm on 4th failed attempt.

OFF = Keypad Tamper Alarm reporting is disabled.

ON = Keypad Tamper Alarm reporting is enabled.

(Default = ON).

P75E, 8E, REPORT EXIT FROM INSTALLER MODE

OFF = Exit From Installer Mode reporting is disabled.

ON = Exit From Installer Mode reporting is enabled.

(Default = OFF).

PROGRAMMING SEQUENCE

1. Press: **P75E**
2. Press: **[1-8] E** to toggle each zone on or off.
Zone light/s on indicates which option/s are enabled.

P77E

REPORT MISCELLANEOUS RESTORALS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1-8 = ON, All Miscellaneous Alarms report Restorals.

RELATED OPTIONS:

P75E, Report Miscellaneous Alarms.

This option selects the miscellaneous alarms which will report Restorals by dialler.

See P75E, page 38, for a list of Miscellaneous Alarms.

PROGRAMMING SEQUENCE

1. Press: **P77E**
2. Press: **[1-8] E** to toggle each zone on or off.
Zone light/s on indicates which option/s is enabled.

P78E

REPORT MULTIPLE ZONE ALARMS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1-8 = ON, All zones report Multiple Zone Alarms.

RELATED OPTIONS:

P74E, Report Zone Alarms.

Zones selected to Report Multiple Zone Alarms will report each time the zone alarms. The number of reports is a maximum of 15.

Zones not selected will report only once, until reset by an opening or a valid code.

PROGRAMMING SEQUENCE

1. Press: **P78E**
2. Press: **[1-8] E** to toggle each zone on or off.
Zone light/s on indicates which option/s is enabled.

P82E

RESTORAL REPORTING OPTIONS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

4E = ON, Send Restoral on Disarm always.

RELATED OPTIONS:

P74E, Report Zone Alarms.

This option selects when the dialler sends Zone Restoral Reports. Only one of the following options may be selected.

Restoral reporting options also apply to 24hr zones.

P82E 1E: Send Restoral immediately when resealed.

P82E 2E: Send Restoral after siren time & resealed.

P82E 3E: Send Restoral on Disarm & resealed.

P82E 4E: Send Restoral on Disarm always.

PROGRAMMING SEQUENCE

1. Press: **P82E**
2. Press: **[1-4] E** to toggle each option on or off.
Zone light/s on indicates which option is enabled.

PROGRAMMING

P83E

TEST CALL INTERVAL

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

168 = 168hrs (7 days).

NOTES:

To disable Test Reports, program the test call interval to 0 (zero) hours.

RELATED OPTIONS:

P84E, Time Before Next Test Call.

This option sets the time between Test Calls to the Central Station.

Programmable from 0–255 hours. Enter a value between 0 and 255.

A value of 0 (zero) disables test calls.

PROGRAMMING SEQUENCE

1. Press: **P83E**
The digits of the existing value will be displayed.
2. Press: **[new test call interval] E**
The digits of the new value will be displayed.

P84E

TIME BEFORE NEXT TEST CALL

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

0 = 0hrs (Immediate on exit from installer program mode).

NOTES:

- The Time Before Next Test Call is constantly updated. When viewed, the current value will be displayed (not the initially entered value).

RELATED OPTIONS:

P83E, Test Call Interval.

This option sets the time before the next test call and is used to set the preferred time for Test Calls.

Programmable from 0–255 hours. Enter a value between 0 and 255.

A value of 0 (zero) triggers the next test call immediately on exit from Installer program Mode.

PROGRAMMING SEQUENCE

1. Press: **P84E**
The digits of the existing value will be displayed.
2. Press: **[new time before next test call] E**
The digits of the current value will be displayed.

PROGRAMMING EXAMPLE

To set the time before the first test call.

E.g., If you are programming the panel at 5pm and you want test calls to be sent at 1am. Enter **P84E 8E**. (5pm + 8hrs = 1am).

P83E and P84E timers start on exit from Installer program Mode.

DAYS/HOURS TABLE

DAYS	HOURS
1	24
2	48
3	72
4	96
5	120
6	144
7	168
8	192
9	216
10	240

P85E

DIALLING METHOD

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

ON, Automatic Pulse or DTMF.

NOTES:

Turning ON one of the options will turn OFF any other.

The dial format is determined by the detected Dial Tone. By default, if no dial tone is detected after looping the line then the dialler will attempt to dial regardless alternating between PULSE (Decadic) first and then DTMF dialling.

P85E 1E: Automatic (PULSE or DTMF determined by the detected dial tone).

P85E 2E: Pulse Dialling always.

P85E 3E: DTMF Dialling always.

PROGRAMMING SEQUENCE

1. Press: **P85E**
2. Press: **[1-3] E** to turn an option on.
Zone light/s on indicates which option is enabled.

P86E, 1E

DISABLE DIALLER

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

OFF, Dialler is enabled.

NOTES:

The dialler can also be disabled by deleting all telephone numbers.

This option disables the dialler even if telephone numbers and other dialler options are programmed.

Up download or remote telephone access remain enabled.

This option is useful for temporary disabling of the dialler without affecting other dialler options.

OFF = The dialler is enabled. (The dialler will still remain disabled if no telephone numbers are programmed.)

ON = The dialler is disabled.

PROGRAMMING SEQUENCE

1. Press: **P86E**
2. Press: **1E** to turn the option on or off.
Zone light/s on indicates the option is enabled.

P87E, 2E

CHECK FOR DIAL TONE

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

ON, Check for dial tone.

NOTES:

The dialler normally dials only if a dial tone is detected or it can be forced to dial without a dial tone. Allows use on PABXs with non-standard dial tones.

OFF = Does not check for dial tone.

ON = Check for dial tone, hang up on busy tone.

PROGRAMMING SEQUENCE

1. Press: **P87E**
2. Press: **2E** to turn the option on or off.
Zone light/s on indicates the option is enabled.

PROGRAMMING

P88E, 1E

ENABLE OPEN/CLOSE REPORTS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

OFF, Open/Close reports disabled.

NOTES:

Enables or disables sending of Open/Close reports.

OFF = Open/Close reports disabled.

ON = Open/Close reports enabled.

PROGRAMMING SEQUENCE

1. Press: **P88E**
2. Press: **1E** to turn the option on or off.
Zone light/s on indicates the option is enabled.

P88E, 5E

ALARM CANCEL REPORT

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

ON, Cancel Report enabled.

NOTES:

- This option is used to indicate to the Central Station that an alarm has been reset by a valid user.
- Usually used in cases where Open/Close reports are normally selected OFF.

A Cancel Report is sent when a Zone or Miscellaneous Alarm has been reset (by a valid User Code or Radio Key disarming).

If enabled, a cancel report will be sent after alarm, (Contact ID code 406), even if Open/Close reports are disabled.

OFF = Cancel Report disabled.

ON = Cancel Report enabled.

PROGRAMMING SEQUENCE

1. Press: **P88E**
2. Press: **5E** to turn the option on or off.
Zone light/s on indicates the option is enabled.

P88E, 6E

REPORT SUPERVISION ALARMS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

OFF, Report Supervision Alarms disabled.

RELATED OPTIONS:

P67E, Radio Supervision Time.

This option enables the dialler reporting of Radio Supervision alarms.

OFF = Report Supervision Alarms disabled.

ON = Report Supervision Alarms enabled.

PROGRAMMING SEQUENCE

1. Press: **P88E**
2. Press: **6E** to turn the option on or off.
Zone light/s on indicates the option is enabled.

P89E, 5E

TELEPHONE LINE MONITOR

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

OFF, Telephone Line Monitor disabled.

NOTES:

When enabled the panel will test the telephone line every 20 seconds. If the telephone line is not found, the keypad LINE icon will commence flashing. If the line fault continues for 2 minutes then the keypad beeps a warning.

OFF = Telephone Line Monitor disabled.

ON = Telephone Line Monitor enabled.

PROGRAMMING SEQUENCE

1. Press: **P89E**
2. Press: **5E** to turn the option on or off.
Zone light/s on indicates the option is enabled.

P90E

UP/DOWNLOAD OPTIONS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1E = OFF

2E = not used

3E = OFF

4E = OFF

NOTES:

Option P90E 1E, Remote Access applies only to upload/download by computer and modem.

If P90E 1E is disabled, remote Arm/Disarm is still available if options P90E 3E and/or 4E are on and P91E is not zero.

These options enable remote upload/download features.

P90E, 1E, REMOTE ACCESS

When selected on, this option allows the panel to be remotely upload/downloaded by a remote computer.

OFF = Remote Access is disabled.

ON = Remote Access is enabled.

(Default = OFF).

P90E, 2E, Not used.

P90E, 3E, REMOTE ARMING

Allows the remote Arming of the control panel using a standard DTMF telephone or mobile phone.

OFF = Remote Arming is disabled.

ON = Remote Arming is enabled.

(Default = OFF).

P90E, 4E, REMOTE DISARMING

Allows the remote Disarming of the control panel using a standard DTMF telephone or mobile phone.

OFF = Remote Disarming is disabled.

ON = Remote Disarming is enabled.

(Default = OFF).

PROGRAMMING SEQUENCE

1. Press: **P90E**
2. Press: **[1-4] E** to toggle each zone on or off.
Zone light/s on indicates which option/s are enabled.

PROGRAMMING

P91E

REQUIRED RINGS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

1 = 1 double-ring.

NOTES:

Sets the number of double-rings before an incoming call is answered. This is used for Remote Access.

Programmable from 1 to 16 rings. Enter a value between 1 and 16.

PROGRAMMING SEQUENCE

1. Press: **P91E**
The digits of the existing value will be displayed.
2. Press: **[required rings] E**
The digits of the new value will be displayed.

P96E

CLEAR MEMORY

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

[not applicable]

This option erases the Event Memory as well as memory locations where events and time stamps are stored for uploading status.

PROGRAMMING SEQUENCE

1. Press: **P96E**
The Event Memory is erased.

P97E 1E

FACTORY DEFAULT PANEL OPTIONS

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

[not applicable]

This option erases all program options and restores the factory default values. The exceptions are Radio Zones and User Codes, see P97E2E, and P97E3E.

PROGRAMMING SEQUENCE

1. Press: **P97E**
2. Press: **1E**
Factory defaults are restored..

P97E 2E

FACTORY DEFAULT RADIO ZONES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

[not applicable]

This option erases all Radio Zones programmed by option P09E.

PROGRAMMING SEQUENCE

1. Press: **P97E**
2. Press: **2E**
Factory defaults are restored..

P97E 3E

FACTORY DEFAULT USER CODES

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

[not applicable]

This option erases all Keypad Codes and Radio Key codes.

PROGRAMMING SEQUENCE

1. Press: **P97E**
2. Press: **3E**
Factory defaults are restored..

PROGRAMMING

P99E

PROGRAM THE INSTALLER CODE

PROGRAM MODE LEVEL:

Installer, Remote by PC.

FACTORY DEFAULT:

000000

NOTES:

- The Installer code cannot begin with the digit 0 (zero).
- The Installer code can be changed but it cannot be deleted. Any attempt to delete the installer code will make it revert back to the factory default of 000000.

Programs the installer code. This code can be 3 to 6 digits long. The factory default installer code is 000000.

PROGRAMMING SEQUENCE

1. Press: **P 99 E**
 - *The existing installer code will be displayed.*
2. Press: **[new installer code] E [new installer code again] E**
 - *The new installer code will be displayed.*
 - *One beep will sound on the first entry of the new code, three beeps will sound on the second entry of the new code if the code was successfully programmed.*

DIALLING SEQUENCE

The dialler follows the re-dial procedure shown until the message is successfully reported. The dialler cycles around the Panel telephone numbers, skipping numbers not programmed. If P70E or P71E are programmed, then the Voice Dialling numbers, P00E and P01E are ignored.

A successful report is defined as a report which has been “kissed-off” by the Central Station or by a hash (#) tone in the case of Audible Format dialling to a private number.

1. Dial Central Station Ph No. 1, (P70E) and report alarms in Contact ID format. ...If not kissed off...
2. Dial Central Station Ph No. 2, (P71E) and report alarms in Contact ID format.
3. If P70E and P71E are blank, dial Voice Dialling Ph No. 1, (P00E) and report alarms in Ness Voice Dialling format. ...If not kissed off...
4. If P70E and P71E are blank, dial Voice Dialling Ph No. 2, (P01E) and report alarms in Ness Voice Dialling format.
4. Accumulate maximum of 15 failed attempts.
5. Attempt to dial unsuccessful numbers a second time after 30 seconds, a total of 10 attempts.
6. Wait 5 minutes then subsequent attempts are 1 hour apart.
7. A maximum of 15 dial attempts for the same event
8. New events re-start the sequence at 1.

No more than 20 dial events will be reported between each disarming of the panel.

MESSAGE QUEUE

The panel places event reports in a queue. Multiple simultaneous reports or reports previously unsuccessfully dialled will be included in the current call.

The oldest report on the queue is sent first. If the queue is full (8 messages), a new report will overwrite the oldest report.

THE CURRENT DIALLER QUEUE IS CANCELLED AND THE DIALLER BUFFER IS ERASED ON ENTRY TO INSTALLER PROGRAM MODE.

AUDIBLE MONITORING



Voice Dialling format is disabled if a Central Station telephone number is programmed at P70E or P71E.

NESS VOICE DIALLING

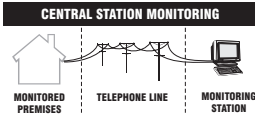
The dialler sends alarm reports to a private telephone, (mobile telephone or fixed telephone), using Voice Dialling Telephone numbers 1 and 2, (P00E, P01E). See page 20.

If P00E or P01E are programmed with a telephone phone number, then alarms will be sent to that phone number/s in Ness Voice Dialling format.

The word 'ALARM' is repeated until the # DTMF key on the telephone is pressed or 30 seconds expires. If the # key is not pressed, the number will be redialled.

The person receiving the call can then acknowledge, (“kiss-off”), the alarm by pressing the [#] key on their telephone.

DIALLER OPERATION



CENTRAL STATION MONITORING

The dialler sends alarm reports to a central station using Central Station Telephone numbers 1 and 2, (P70E & P71E, Page 36).

It is not necessary to program a reporting format. Alarm reports are automatically sent in Contact ID format to the telephone numbers programmed at P70E and/or P71E.

Events are reported to the central station using the Contact ID format as follows:

SSSS 18 Q XYZ GG CCC E

SSSS18 = Client Account Number + Contact ID identifier.

Q = Event qualifier (1 = New Event, 3 = Restore).

XYZ = Event code.

GG = Group Number (always 00).

CCC = Qualifier (0-9) + User ID (uu) / Zone ID (zz), or Unique Code (030-099)

E = Checksum.

RESTORAL REPORTS

Restores are always sent for the following alarms when the device alarm condition is physically removed:

- 137 Siren box tamper
- 302 Panel low battery
- 383 Tamper (Detector)
- 381 Radio device supervision poll fail

Restores are always sent for the following alarms on disarming when a valid code is entered, (if Restores are enabled):

- 101 Radio Key Medical alarm
- 120 Panic alarm
- 121 Duress alarm
- 130 Burglary alarm
- 133 24 hour alarm
- 355 Radio jamming alarm

REPORT NAME	CONTACT ID CODE			REPORTED IN VOICE FORMAT
	Q	XYZ	CCC	
Zone Alarm	q	130	0zz	Yes
Zone 24 Hour Alarm	q	133	0zz	Yes
Keypad Panic	q	120	032	Yes
Keypad/Radio Key Duress	q	121	1uu	Yes
Keypad Medical	q	100	033	Yes
Keypad Fire	q	110	034	Yes
Radio Key Panic	q	120	1uu	Yes
Radio Key Medical	q	101	1uu	Yes
Radio Detector Supervision	q	381	4zz	
Radio Panic Button Supervision	q	381	1uu	
Radio Jamming or Substitution	q	355	060	
Panel/Siren Tamper	q	137	040	Yes
Keypad Tamper	q	137	042	Yes
Radio Sensor Tamper	q	383	3zz	Yes
Mains Fail	q	301	050	
Panel Battery Low	q	302	052	
Radio Detector Battery Low	q	384	3zz	
Open/Disarm	1	401	0uu	
Close/Arm	3	401	0uu	
Shorcut Arm (ARM + E)	3	401	025	
Cancel/Disarm	1	406	0uu	
Zone Manual Exclude	q	573	0zz	
Zone Auto Exclude	q	380	0zz	
Exit Install mode	1	306	035	
Test Report	1	602	063	

RELATED OPTIONS:

P91E, Required rings.


P90E 3E, Remote arming.

P90E 4E, Remote disarming.


NOTES

If the R8 does not receive remote commands for periods longer than 60 seconds it will assume that the call is finished and it will hang up.

AUDIBLE FEEDBACK

 3 BEEPS:

Valid command/user code.

 1 LONG BEEP:

Invalid command or user code, try again.

SUMMARY OF TELEPHONE COMMANDS

0 PREPARE TO RECEIVE COMMANDS.

[User Code] **#** VERIFIES THE USER.

1 **#** ARM.

2 **#** DISARM.

***** **#** HANG UP.

REMOTE TELEPHONE ARM/DISARM

The R8 can be armed and disarmed remotely using a standard fixed or mobile telephone.

To maintain panel security, remote operations can only be activated after entering a valid user code.

To operate the R8 by telephone, you need a DTMF capable telephone, a valid User Code and you must know the Telephone number of the line to which the R8 is connected.

Program options P90E 3E and/or 4E must be on to enable remote arming and/or disarming. Option P91E, required rings to answer, must be a value other than zero.

SEQUENCE OF OPERATION.

1. Phone the R8 telephone number and listen for the required number of double rings and then hang up.
2. Call the number again within 60 seconds.
3. The R8 will answer the second call immediately, sound a beep for 2 seconds then, after a pause, it will sound a lower frequency tone. The R8 is now ready to receive telephone commands.
4. Press the **0** button on the telephone. This tells the R8 that telephone commands will follow.
5. Now enter a valid User Code followed by the **#** button.
The R8 will respond with 3 beeps if it recognises the code or 1 long beep to signal the code was invalid and to try again.
6. Enter the command to arm or disarm the panel.
See: Summary Of Telephone Commands.
7. Press ***** **#** to finish. This tells the R8 to hang up. Also hang up your telephone.

NESS ACCESSORIES



100-021
Quantum



100-226
Quantum
Plus



100-210
Quantum
Dual



100-048
Quantum 360

MOTION DETECTORS

Ness manufactures a range of high quality and efficient motion detectors - including passive infra-red detectors, dual technology / microwave and infra-red devices as well as ceiling mounted 360° detectors.

All Ness detectors are designed using the most modern technology and techniques that ensure superior reliability and performance.

QUANTUM - 15m passive infra-red detector with selectable pulse count; suitable for domestic and commercial installations. *PetAware model available.*

QUANTUM PLUS - 15m passive infra-red detector with selectable pulse count, temperature compensation and downward looking 'creep' zones.

QUANTUM DUAL - 15m combination microwave and passive infra-red detector. This combination of detection technologies virtually eliminates the possibility of unwanted alarms but faithfully detects humans. *PetAware model available.*

QUANTUM 360 - Ceiling mounted 360° passive infra-red detector with selectable pulse count and sensitivity. Provides 8 metre coverage mounted at standard 2.4 metre ceiling height.

PET AWARE DETECTORS

The Ness Quantum™ Pet Aware PIR, Pet Aware Radio PIR and the Pet Aware DUAL are able to discriminate between household pets and unwanted human intruders, allowing you to secure your home with your pets indoors.



SIRENS

The range of warning devices includes horn speakers, polytough siren covers, internal 'screamers' and satellite sirens with their own battery backup.



CCTV

The Ness range of Closed Circuit TV equipment includes Dome cameras, B/W or Colour cameras, Miniature hidden cameras, Monitors - even digital video recorders and remote telephone video systems.



SWITCHES

A variety of switches are available for protecting doors and windows. The line-up includes surface and flush mount reed switches, emergency buttons, roller door reed switches and the unique Nessor™ vibration sensor for highly effective perimeter protection.

NESS RADIO PRODUCTS

RADIO ACCESSORIES

Ask your installer about the range of Ness radio devices for the optional extra convenience of wireless remote control and wireless detection.

Operating your Ness security system can be as convenient as opening your car door. The Ness Radio Key™ provides the benefits of separate ON, OFF and PANIC buttons in a slim, waterproof remote control.

* Ness radio products require a Ness Radio Interface (100-200) to be fitted to the control panel.



NESS RK3 RADIO KEY

Fully waterproof, ultra slim 3 button Radio Key for remote control of the control panel.

With separate buttons for ON (Arm), OFF (Disarm) and PANIC functions. Includes long life lithium battery.



NESS RK1 RADIO KEY PENDANT

Fully waterproof pendant style transmitter can be used as a portable wireless Panic button.

Supplied with a neckchain as well as wristwatch straps. Ideal for use as a medical alarm for the elderly or infirm.

(Central Station Monitoring is especially recommended when used for medical alarm purposes). Includes long life lithium battery.



NESS RR1 RADIO REED SWITCH

Ness Radio Reed Switch for wireless door and window protection. Includes long life lithium battery.



NESS RKP RADIO KEYPAD

A unique fully portable radio keypad. The Ness Radio Keypad provides totally wireless Arming/Disarming of the Ness D16, D16 & D24 control panels.

Also operates Monitor mode and Panic when used with the Ness D16, D24 panels.

The Ness radio Keypad is suitable for use as a portable keypad or for adding an extra keypad in areas where it is not possible to install wires.



Ness R12 Radio PIR

NESS RADIO PIRS

Ness Radio R15 PIR (Passive Infrared) and Ness R12 Radio PIR for wireless motion detection.

Can be used in combination with Ness hardwired detectors in areas where it is not possible to install wires. Includes long life lithium battery.



Ness R15 Radio PIR & Ness Pet Aware Radio PIR

The Ness Radio PIR Pet Aware model detects humans but is immune to household pets. Allows you to protect your home with your pets inside.



NESS RDB RADIO DOORBELL

The Ness Radio Doorbell requires almost no installation. Long life lithium battery powered, simply screw it to the wall.

The doorbell chime is heard through the R8 panel onboard siren. Choose from one of 9 doorbell tunes built-in to the R8 panel.



NESS R8 OPTIONS SUMMARY

OPTION No.	DESCRIPTION	DEFAULT	PAGE	
P00E	Voice Dialling Format Tel. No. 1	none	20	
P01E	Voice Dialling Format Tel. No. 2	none		
P05E	Doorbell Volume	3	21	
P06E	Doorbell Tune	3		
P08E	Radio Signal Strength Test	0E, Radio Key test	22	
P09E	Program Radio Devices	none	23	
P10E	Program Radio Keys	none	24	
P11E	Program Master Code (Keypad Code 1)	123	26	
P12E-P25E	Program Keypad Codes 2-15	none		
P26E	Entry Delay Time	20 sec	27	
P28E	Exit Delay Time	60 sec		
P29E	Siren Reset Time	5 min		
P40E	Instant Zones	Zones 3-8	28	
P41E	Entry Delay Zones	Zone 1		
P42E	Handover Zones	Zone 2		
P44E	Reset Lockout Zones	All zones	29	
P51E	Monitor Zones	No zones		
P52E	24hr Zones	No zones		
P53E	Day Zones	No zones	30	
P60E	1E	Entry beeps	ON	31
	2E	[not used]	OFF	
	3E	[not used]	OFF	
	4E	Tamper Siren Lockout	ON	
	5E	[not used]	OFF	
	6E	Auto Exclude Zones	ON	
	7E	Keypad Backlight Blanking	OFF	
	8E	Disable onboard siren	OFF	



OPTION No.	DESCRIPTION	DEFAULT	PAGE	
P62E	1E	Memory Display Shortcut	ON	32
	2E	Zone Exclude Shortcut	ON	
	3E	Monitor Mode Shortcut	ON	
	4E	[not used]	OFF	
	5E	Arming Shortcut	ON	
P62E	7E	Siren Burst On Auto Exclude	ON	32
P64E	1E	Brief Monitor Alarm	OFF	33
	2E	Brief Day Alarm	ON	
	4E	Siren chirps Arm/Disarm	OFF	
	6E	Keypad Panic Alarm	ON	
	7E	Fire Alarm	OFF	
	8E	Medical Alarm	OFF	
P65E	1E	Radio Jamming Alarm	OFF	34
	2E	Radio Substitution Alarm	ON	
P67E		Radio Supervision Time	24 hrs	35
P68E	4E	Radio Key Arming Warning	OFF	35
P70E		Central Station Telephone. No. 1	none	36
P71E		Central Station Telephone. No. 2	none	
P72E		Client Account No.	0000	37
P74E		Report Zone Alarms 1-8	All zones	37
P75E		[see next page] Report Misc. Alarms		37
P76E		Report Zone Restorals 1-8	All zones	

These options are available in USER PROGRAM MODE.

ALL options are available in INSTALLER PROGRAM MODE.



OPTION No.	DESCRIPTION	DEFAULT	PAGE	
P75E Report misc. ALARMS	1E	Report Duress Alarm	OFF	38
	2E	Report Medical Alarm	ON	
	3E	Report Panic Alarm	ON	
	4E	Report Fire Alarm	ON	
	5E	Report Tamper Alarm	ON	
	6E	[not used]	OFF	
	7E	Report Keypad Tamper Alarm	ON	
	8E	Report Exit From Installer Mode	OFF	
P76E	[see previous page] Report Zone Restorals		37	
P77E	Report Misc. Restorals (see P75E for full list)	All ON	39	
P78E	Report Multiple Zone Alarms 1-8	All OFF	39	
P82E RESTORAL REPORTING OPTIONS	1E	Send Restoral Immediately when Resealed	OFF	39
	2E	Send Restoral After Siren Time & Resealed	OFF	
	3E	Send Restoral on Disarm & Resealed	OFF	
	4E	Send Restoral on Disarm always	ON	
P83E	Test Call Interval	168 hrs	40	
P84E	Time Before Next Test Call	0 hrs		
P85E DIALLING METHOD	1E	Auto, Pulse or DTMF depending on dial tone	ON	41
	2E	Pulse Dialling always	OFF	
	3E	DTMF Dialling always	OFF	
P86E	1E	Disable Dialler	OFF	41
P87E	2E	Check For Dial Tone		41
P88E	1E	Open/Close Reports	OFF	42
	5E	Alarm Cancel Report	ON	
	6E	Report Supervision Alarms	OFF	
P89E	5E	Telephone Line Monitor	OFF	43



OPTION No.	DESCRIPTION	DEFAULT	PAGE
P90E	1E Remote Access	OFF	43
UPLOAD/ DOWNLOAD OPTIONS	2E [not used]	OFF	
	3E Remote Arming	OFF	
	4E Remote Disarming	OFF	
P91E	Required Rings to answer incoming calls	1	44
P96E	Clear Event Memory		45
P97E	1E Factory Default Panel Options		
	2E Factory Default Radio Zones		
	3E Factory Default User Codes		
P99E	Program Installer Code	000000	46

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