MADE IN AUSTRALIA

R8 RADIO PANEL

USER'S MANUAL

A$15.00
INC GST

Ness R8 Radio Control Panel User's Manual

Revision
2

Security Products

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Australian Communications Authority
TELECOMMUNICATIONS COMPLIANCE

NESS R8
USER MANUAL
Revision 2, October 2002

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For product:
100–690 Ness R8 Control Panel

R8 user rev2 pmo091002

Specifications may change without notice.

CONTENTS

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

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

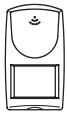
100-067
RK4
Radio Key

100-283
RPB Radio
Panic Button

100-056
RDB Radio
Door Bell

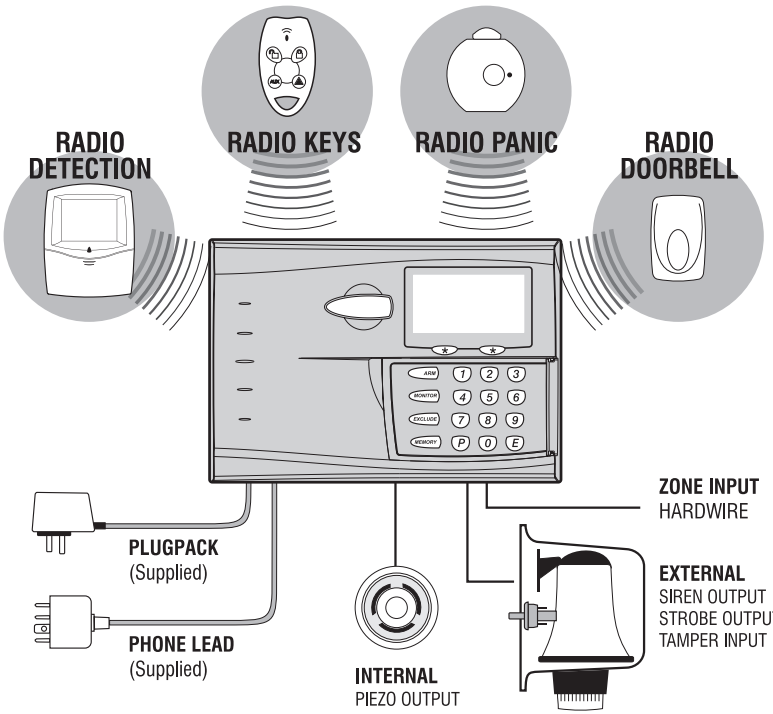
100-662
RR1 Radio
Reed Switch

100-691
R12
Radio PIR



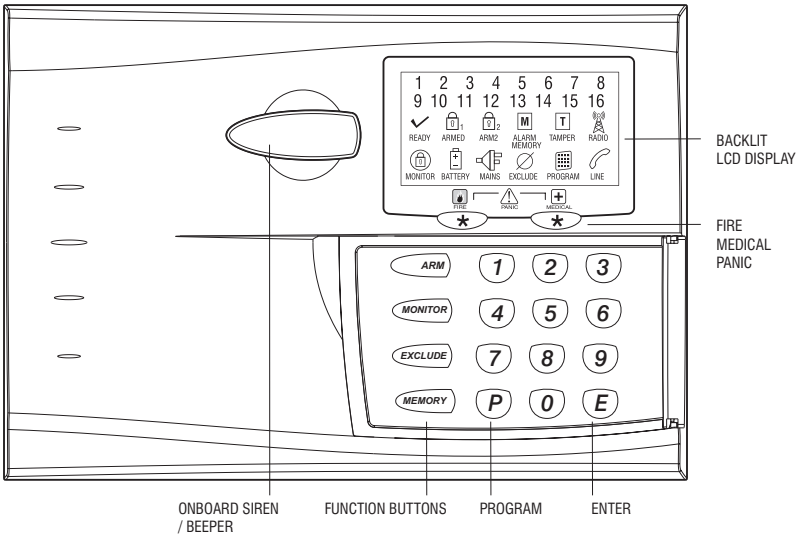
100-663
R15
Radio PIR

100-001
RKP
Radio Keypad



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 BEEPS (RAPID)	Low battery / AC Fail / Medical Alarm
	CONTINUOUS BEEPS	Alarm, Entry Delay, etc
Onboard Siren External Siren output	1 CHIRP*	Arm
	3 CHIRPS*	Disarm
Onboard Siren	DOORBELL TONES	The Doorbell has been pressed.
Onboard Siren External Siren output	SIREN BURST, (Low Volume)	Zone Auto Exclude warning
Onboard Siren Piezo output External Siren output	SIREN CONTINUOUS	Alarm condition
Strobe output	STROBE BURST	Panel Armed or Disarmed
	STROBE CONTINUOUS	Alarm condition

* Arm/disarm chirps must be enabled by your installer.

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	
1 ARMED	Disarmed	Armed	
MONITOR	Disarmed	Monitor Mode	
MAINS	Normal		Mains Power is off
BATTERY	Normal		The panel's backup battery is low
M ALARM MEMORY	Normal	Memory Mode selected	New alarms in memory
EXCLUDE	Normal		Zones are excluded
T 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.

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 such as external siren tamper, if used, 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.

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.

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

DOORBELL. The doorbell can be triggered using the optional Ness 100-056 Doorbell transmitter. The doorbell function has adjustable volume and selectable chime settings. The doorbell operates in any panel mode.

ALARMS, DEFINITION

Alarms may be caused by:

- A zone has been triggered while Armed
- A Tamper has been triggered
- A PANIC button has been triggered

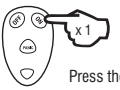
All of these may cause your sirens and strobe to operate. Various visual indications relevant to the alarm will be retained in the memory. If this occurs, Disarming your control panel will reset the alarm. The cause of the alarm can be identified by entering the Alarm Memory Mode as described on page 18.

RESETTING ALARMS

To stop the siren/s or to reset the strobe light if it is still flashing* (if installed), reset the panel using the keypad by entering a valid keypad code followed by the E button, or press the OFF button on a valid Radio Key.

To check the cause of the alarm, you can view the event memory as shown on page 18.

* In the event of an alarm, the strobe light will continue to flash until the panel is reset by the keypad or radio key, otherwise it will time out after 11 hours. (If mains power is disconnected, the panel will reset the strobe light output after 1 hour to conserve the backup battery).

OPERATION	KEYPAD	RADIO KEY
ARM The panel must be in a Disarmed state first.	ARM [User Code] E Shortcut method, (If enabled by your installer). ARM E	 Press the ON button once.
DISARM To Disarm and/or reset alarms.	[User Code] E	 Press the OFF button once.
MONITOR MODE The panel must be in a Disarmed state first.	MONITOR [User Code] E Shortcut method, (If enabled by your installer). MONITOR E	 Press ON button twice within 4 seconds.
PANIC	 **Both keys together** Keypad Panic must be enabled by your installer.	 Radio Key Panic will function only if enabled by your installer.
KEYPAD DURESS Keypad Duress should only used by arrangement with your monitoring station.	9 [User Code] E To Disarm and report a Duress Alarm, add the digit 9 before your User Code when Disarming. **This will function only if enabled by your installer.**	 Radio Key Duress will function only if enabled by your installer.
EXCLUDING ZONES Zones can be Excluded when the panel is disarmed.	EXCLUDE E ...then press [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.	MEMORY E ...then press MEMORY repeatedly to display the last 20 events. E To exit Memory mode	
DOORBELL		 100-056 Radio Door Bell.

Note:
The panel will ignore Monitor Mode arming if monitor zones have not been programmed by your installer.

ARMING

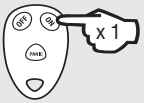
To Arm the system using the onboard keypad, press ARM followed by a valid user code, followed by the E key.

ARM + [User Code] + E

...or ARM + E

The Arming Shortcut is enabled by default, this allows arming without having to enter your user code. (The Arming Shortcut can be disabled by your installer).

To Arm the system using a Radio Key press the ON button.



If Siren Chirps have been enabled by your installer, the strobe light output will flash and the onboard siren will 'chirp' once to indicate successful arming.

The control panel must be armed to enable detection zones.

Arming the panel starts the exit delay timer. All zones are inactive during this time and become fully armed once the exit delay time expires. (End of exit delay is signalled by 3 beeps from the keypad beeper).

The factory default exit delay time is 60 seconds. This can be changed if necessary, see the programming section in this manual.

The panel must initially be in the disarmed state and not in Program, Monitor, Memory or Exclude modes.

Note: If the panel is already in alarm, you must first silence the alarm before you can arm.

At the end of the exit time, all zones should be **Sealed**. If any are **Unsealed**, the onboard siren and the external siren, (if installed), will sound a lower volume tone for 2 seconds as a warning that those zones have been automatically excluded. For maximum security, you should return, disarm the panel, check the premises and then Arm again. Continual warnings could mean that a detector is faulty and may have to be manually excluded.

If the auto-exclude option is disabled by your installer and a zone is unsealed at the end of exit time, the siren will sound for 5 minutes, (5 minutes is the factory default siren duration).

MONITOR MODE

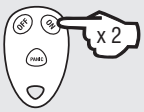
Ensure the R8 is disarmed before attempting to arm in Monitor Mode.

MONITOR + [User Code] + E

...or MONITOR + E

The Monitor Mode Shortcut is enabled by default, this allows arming of Monitor Mode without having to enter your user code.
(Monitor Mode Shortcut can be disabled by your installer).

To arm in Monitor Mode using a Radio Key, press the ON button twice within 4 seconds.



If Siren Chirps have been enabled by your installer, the strobe light output will flash and the onboard siren will 'chirp' once to indicate successful arming in Monitor Mode.

Monitor mode allows you to Arm selected zones while others are ignored. Typically, perimeter zones (doors and windows) can be monitored while you are at home.

Your installer must program which zones will be active in Monitor mode.

The panel must initially be in the disarmed state and not in Program, Monitor, Memory or Exclude modes.

Entry and Exit delay timers operate as normal in Monitor Mode.

If an alarm occurs while in Monitor mode, entering **[User Code]** E will silence the alarm. This will also Disarm the panel, so remember to enter monitor again if needed.

Using the optional Radio Keys you can enter Monitor Mode by pressing the ON button twice within 4 seconds.

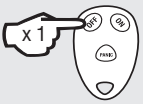
DISARMING

To Disarm the system using the onboard keypad, enter a valid user code, followed by the E key.

[User Code] + (E)

Sirens and strobe output, (if running), will be reset on disarming.

To Disarm the system using a Radio Key press the OFF button.



If Siren Chirps have been enabled by your installer, the strobe light output will flash and the onboard siren will 'chirp' three times to indicate successful disarming.

When you enter the protected premises through a delay zone, the keypad will sound continuous beeps as a reminder to disarm. The panel must be disarmed before the entry delay time expires, otherwise the alarm will sound.

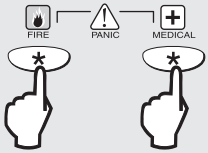
If using a Radio Key, you can disarm from outside the premises without having to enter any protected zones.

The factory default entry delay time is 20 seconds. This can be changed if necessary, see the programming section in this manual.

If you make a mistake in entering your code, press the E button and try again. Five incorrect code attempts will cause an alarm.

PANIC ALARM

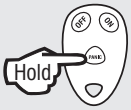
To generate a Keypad PANIC alarm using the keypad, press both * (star) keys together for 2 seconds.



Both keys together

The Keypad Panic function is enabled by default, and can be disabled by your installer.

To generate a PANIC alarm using a Radio Key, press the and hold the Radio Key PANIC button for at least 4 seconds.



The Radio Key Panic function will only function if enabled by your installer.

The keypad PANIC function sounds the onboard siren and the external siren outputs. The sirens will reset when the Siren Reset Time has expired, (factory default is 5 minutes).

A Panic report will be sent by dialler if your system is monitored by a Central Station. (If PANIC reports have been enabled by your installer).

PANIC cannot be used while the panel is in Program, Memory or Exclude mode.

Note: Your installer may have installed a separate PANIC button. To activate the panic alarm simply press that button.

DURESS ALARM

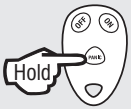
To generate a DURESS alarm using the keypad, add the digit '9' in front of your code when disarming.

9 + [User Code] + (E)

The Keypad Duress function is disabled by default, and must be enabled by your installer.

IMPORTANT NOTE: The R8 normally processes signals from the Radio Key Panic button as a PANIC alarm. The panel must be programmed by your installer to process this signal as a DURESS alarm.

If enabled by your installer, to generate a DURESS alarm using a Radio Key, press and hold the Radio Key PANIC button for at least 4 seconds.



The DURESS alarm can be used to send a silent alarm to the Central Station that you are being forced to disarm the panel against your will. That is; you are disarming under "duress."

To Disarm and send a DURESS alarm, prefix your User Code with the digit 9 when Disarming.

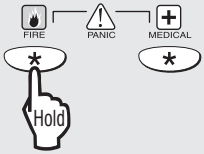
*** DURESS IS NORMALLY NOT ENABLED. TO ENABLE THE DURESS FUNCTION, CONSULT YOUR INSTALLER**

*** DURESS ALARMS CAN ONLY BE USED IF YOUR R8 PANEL IS MONITORED BY A CENTRAL STATION.**

*** THE DURESS ALARM DOES NOT SOUND ANY SIREN OUTPUTS AND CAN ONLY BE REPORTED BY DIALLER TO YOUR CENTRAL STATION.**

FIRE ALARM

To generate a FIRE alarm using the keypad, press and hold the FIRE key, (left hand star key), for at least 2 seconds.



The Keypad Fire alarm function is disabled by default, and must be enabled by your installer.

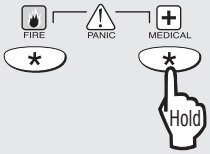
The FIRE Alarm cannot be generated by a Radio Key.

The FIRE alarm sounds the siren outputs using the Fire siren sound and the dialler reports a fire alarm.

Fire alarm reports to your central station are enabled by default and can be disabled by your installer.

MEDICAL ALARM

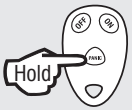
To generate a MEDICAL alarm using the keypad, press and hold the MEDICAL key, (right hand star key), for at least 2 seconds.



The Keypad Medical alarm function is disabled by default, and must be enabled by your installer.

IMPORTANT NOTE: The R8 normally processes signals from the Radio Key Panic button as a PANIC alarm. The panel must be programmed by your installer to process this signal as a MEDICAL alarm.

If enabled by your installer, to generate a MEDICAL alarm using a Radio Key, press and hold the Radio Key PANIC button for at least 4 seconds.



The primary purpose of this alarm is to report a MEDICAL alarm to your central station. The keypad beeper sounds 8 rapid beeps to indicate that the Medical alarm has been triggered.

Medical alarm reports to your central station are enabled by default and can be disabled by your installer.

DOORBELL

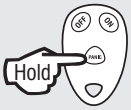
If a Ness Radio Doorbell has been installed, simply press the button once.

100-056 Radio Doorbell transmitter.

The doorbell tune is heard through the R8 onboard siren. The doorbell volume and the tune can be set by the user.

IMPORTANT NOTE: The R8 normally processes signals from the Radio Key Panic button as a PANIC alarm. The panel must be programmed by your installer to process this signal as a DOORBELL signal.

If enabled by your installer, to sound the Doorbell, press and hold the Radio Key PANIC button for at least 4 seconds.



100-664 Radio Key.

See pages 24 & 25 for doorbell volume and dorrbell tune programming.

EXCLUDING ZONES

To EXCLUDE zones, the R8 must be in the disarmed mode.

1. Press... EXCLUDE + [User Code] + E

   or... EXCLUDE + E

   ▶ The ∅ **EXCLUDE** icon will turn on.

2. Enter the zone number of the zone/s to be excluded, (1-8).
   [Zone No.] E [Zone No.] E ...etc
   The zone light of each Excluded zone will turn on.

3. Press... E to exit Exclude mode**.**

   ▶ The ∅ **EXCLUDE** icon will flash continuously until the panel is next disarmed.

If a detector becomes faulty and cannot be sealed when arming the panel, that zone can be Excluded so that it does not cause alarms.

When zones have been Excluded, the EXCLUDE icon flashes continuously while the panel is Disarmed and also when Armed.

Zones can only be excluded while the panel is disarmed.

Zone Exclude IS **not permanent**. Excluded zones are automatically INCLUDED next time the panel is disarmed.

Zones can be manually included by the same method as Excluding. Simply use the **[ZONE NUMBER]** E sequence to turn OFF the zone icons to be Included.

VIEWING MEMORY

1. Press... MEMORY + [User Code] + E

   or... MEMORY + E

   ▶ The M **MEMORY** icon will turn on.

2. Press... MEMORY *The most recent event will be displayed.*

   Press... MEMORY *The next most recent event will be displayed.*

   Press... MEMORY *...and so on (up to the last 20 events).*

3. Press... E to exit Memory mode.

The R8 control panel stores a comprehensive event memory including Arming, Disarming, Low Battery, Mains Fail and Alarms.

The memory is constantly upgraded and the last 20 events are always available for viewing.

This memory display can only be selected while the panel is in the Disarmed state.

TO CLEAR THE MEMORY ICON

The MEMORY icon on the LCD display flashes continuously when an alarm has occurred as a reminder to view the alarm memory.

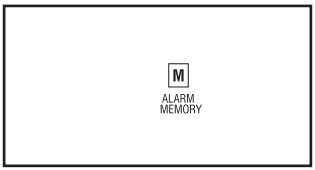
The MEMORY icon stops flashing after the memory is viewed as shown above.

The MEMORY icon is automatically cleared next time the panel is Armed and on entry to program mode.

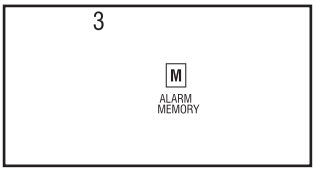
KEYPAD DISPLAY IN MEMORY REVIEW MODE

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(4th 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

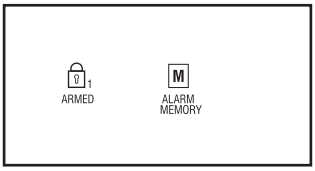
MEMORY REVIEW EXAMPLES



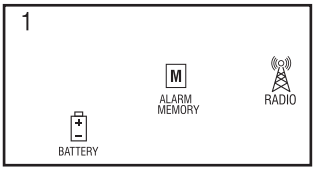
Panel was Disarmed.



Zone 3 alarm.



Panel was Armed.



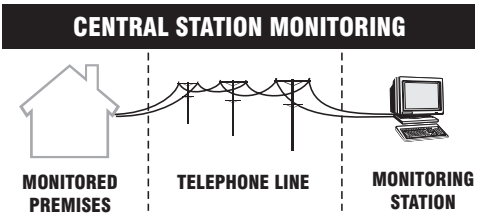
Low Battery from radio device 1.

CENTRAL STATION MONITORING

The R8 control panel has an on-board digital dialler which can send detailed alarm messages to a Central Monitoring Station.

The digital messages can include information about the zone or zones which caused the alarm, tamper alarms, low battery or mains failure reports, and it can also (by user number) identify the users who Arm and Disarm the system.

For further information about alarm monitoring, contact your Ness Select Dealer or Ness Security Products.



AUDIBLE FEEDBACK

♩♩♩ 3 BEEPS:
Valid command/user code.

♩ ⌐¬ 1 LONG BEEP:
Invalid command or user code, try again.

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.

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.

Remote Operation is disabled by default and must be enabled by your installer before it can be used.

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.

Various system options can be programmed by the user. These options can only be accessed from Program Mode.

User Codes or **Radio Keys** can be added or deleted. Up to 15 keypad user codes or 14 Radio Keys or a mixture of both can be programmed.

Entry and Exit timers can be changed if necessary, (between 1 and 99 seconds).

The **Doorbell Tune and Volume** can be programmed.

For all other programming changes, talk to your installer.

The panel will automatically exit Program Mode if no buttons are pressed for 4 minutes.

To ENTER Program Mode

(P) + [Master Code] + (E)

To EXIT Program Mode

(P) + (E)

The factory default Master Code is: **123**

PROGRAMMING OPTIONS TABLE

OPTION NUMBERS	DESCRIPTION	DEFAULT
P5E	DOORBELL VOLUME	Level 3
P6E	DOORBELL TUNE	Tune 3
P26E	ENTRY DELAY TIME	20 seconds
P28E	EXIT DELAY TIME	60 seconds

RADIO CODES		KEYPAD CODES		
		P11E	USER SLOT 1 MASTER KEYPAD CODE	123
P10E	2E	P12E	USER SLOT 2	
	3E	P13E	USER SLOT 3	
	4E	P14E	USER SLOT 4	
	5E	P15E	USER SLOT 5	
	6E	P16E	USER SLOT 6	
	7E	P17E	USER SLOT 7	
	8E	P18E	USER SLOT 8	
	9E	P19E	USER SLOT 9	
	10E	P20E	USER SLOT 10	
	11E	P21E	USER SLOT 11	
	12E	P22E	USER SLOT 12	
	13E	P23E	USER SLOT 13	
	14E	P24E	USER SLOT 14	
	15E	P25E	USER SLOT 15	

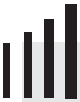
User Slots 2 to 15 can store either a Keypad Code or a Radio Key, not both. If a user Slot is programmed as a Radio Key using option P10E, then that slot is not available as a Keypad Code and vice versa.

TO PROGRAM A **RADIO DOORBELL**

	ACTION	NOTE
1	Program the Ness Radio Doorbell to an available User Slot.	See page 26. "To Program Radio Keys"
2	Program Extra Option 5E for that User Slot.	See page 27. "Extra Options For Radio Codes"

EXAMPLE: To program a Radio Doorbell to User Slot 15.

In Program Mode:
1. Press... **P10E 15E**
2. Press and hold the Radio Doorbell button for 8 seconds.
3. Press... **P25E 5E**



TO PROGRAM **DOORBELL VOLUME**

	ACTION	NOTE
1	Press... (P) + [Master Code] + (E)	Enters Program Mode. The PROGRAM icon will turn on.
2	Press... (P) + (5) + (E) The current doorbell tune will be played at the current volume level. The display will show a number between 1 & 4 to show the current volume level. (1=lowest, 4=highest). Factory default is 3.	P5E is the programming option number for Doorbell Volume.
3	Press... (1 - 4) + (E) Each time you select a level the current doorbell tune will play once at that volume.	E.g, Press 1E, 2E, 3E or 4E to select Lowest, Low, Medium or High volume.
4	Go to step 2 of any other programming option or press... (P) + (E) to exit program mode.	The PROGRAM icon will turn off when you exit program mode.

TO PROGRAM **DOORBELL TUNE**

	ACTION	NOTE
1	See step 1 of Doorbell Volume Programming, or if already in program mode, continue to step 2.	
2	Press... (P) + (6) + (E) The current doorbell tune will be played and the display will show the tune number from 1 to 9. The factory default tune is number 3.	P6E is the programming option number for Doorbell Tune.
3	Press... (1 - 9) + (E) *E.g, Press 1E through 9E to find the tune you prefer.*	**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
4	Go to step 2 of any other programming option or press... (P) + (E) to exit program mode.	The PROGRAM icon will turn off when you exit program mode.

See page 16 for Doorbell Operation.

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 Slots with the easy to use radio 'Learn' mode. A User Slot can hold either a keypad code or a radio key code, not both. User Code 1, (the master Code), is always a keypad code.

TO PROGRAM **RADIO KEYS**

	ACTION	NOTE
1	Press... (P) + [Master Code] + (E)	Enters Program Mode. The PROGRAM icon will turn on.
2	Press... (P) + (1) (0) + (E) Numbers 2 to 15 on the display will show which User Slots already contain Radio Keys, (if any).	P10E is the option number for programming Radio Keys.
3	Press... **(2 - 15)** + (E) The chosen User Slot number will be flashing. User Slots with Radio keys already programmed will be on steady.	Choose a User Slot to program a Radio Key. Enter a user slot number from 2 to 15 followed by the E button.
4	Press and hold the PANIC button for at least 8 seconds on the Radio Key to be programmed. If the Radio Key was successfully programmed, you will hear beep, beep + 3 beeps.	This transmits the 'Learn' message to the R8 panel. A long beep means the Radio Key is already programmed to another User Slot.
5	See Extra Options For Radio Codes on the next page to program the behaviour of the Radio Key's Panic button. Or skip to step 6 to leave the factory default. (Panic button triggers Panic Alarm).	
6	Go to step 2 of any other programming option or press... (P) + (E) to exit program mode.	The PROGRAM icon will turn off when you exit program mode.

TO DELETE **RADIO KEYS**

1	To delete a Radio Key, press P10E, select the User Slot to delete (2E-15E), then press P10E again. **EXAMPLE:** To delete the Radio key programmed on User Slot 2. Press... **P10E 2E P10E**	The panel must be in Program Mode.

HOW TO SEND THE LEARN MESSAGE - PORTABLE TRANSMITTERS

This table shows the method for sending the programming 'Learn' message for compatible ness transmitters.

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.

EXTRA OPTIONS FOR RADIO CODES

Each User Slot has five Extra Options which control the behaviour of Radio Keys and the Radio Doorbell transmitter.

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 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

1. Press: **P [User Slot option number 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.*
2. Press: **[1–5] E**
   • *This selects a new Extra Option.*

EXAMPLE

When programming a Radio Doorbell, the User Slot must be set for 'Doorbell' or the Panic alarm will be triggered when the doorbell is pressed.
In this example, a Radio Doorbell has been programmed to User Slot 15. To program the Extra Option for User Slot 15, in program mode, press: **P25E 5E**

1 2 3
4 5 6
7 8 9
P 0 E

TO PROGRAM **KEYPAD CODES**

	ACTION	NOTE
1	Press... (P) + [Master Code] + (E)	Enters Program Mode. The PROGRAM icon will turn on.
2	Press... (P) + [11-25] + (E) Enter the option number for the Keypad Code you are programming.	The existing code will be displayed one digit at a time.
3	Press... (NEW CODE) + (E) ♪ (NEW CODE) + (E) ♪♪♪ Enter the new code twice for verification. **EXAMPLE:** To program Keypad Code 2 to be 1234: Press... **P12E 1234E 1234E**	You will hear one beep on the first entry of the new code and three beeps when the code is verified. The new code will be displayed one digit at a time.
4	Go to step 2 of any other programming option or press... (P) + (E) to exit program mode.	The PROGRAM icon will turn off when you exit program mode.

TO DELETE **KEYPAD CODES**

1	To delete a Keypad Code, enter the MEMORY button in place of the code. **EXAMPLE:** To delete the Keypad Code 2: Press... **P12E MEMORY E**	The panel must be in Program Mode.

NOTES ON PROGRAMMING KEYPAD CODES

- Keypad 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 the recommended method of deleting user codes.
- 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.
- 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.
- Open/Close reports, (if enabled by your installer), are identified by user number if the control panel is central station monitored.
  Shortcut arming, (ARM + E, (if enabled), is identified to the central station as User 25.

TO PROGRAM **ENTRY DELAY TIME**

	ACTION	NOTE
1	Press... (P) + [Master Code] + (E)	Enters Program Mode. The PROGRAM icon will turn on.
2	Press... (P) + (2) (6) + (E) P26E is the option number for Entry Delay Time.	The existing time will be displayed one digit at a time. The factory default time is 20 seconds.
3	Press... (NEW TIME) + (E) Enter a new entry delay time from 1 to 99 seconds. **EXAMPLE:** To make the entry delay time 25 seconds: Press... **P26E 25E**	The new time will be displayed one digit at a time.
4	Go to step 2 of any other programming option or press... (P) + (E) to exit program mode.	The PROGRAM icon will turn off when you exit program mode.

TO PROGRAM **EXIT DELAY TIME**

	ACTION	NOTE
1	See step 1 of Entry Delay programming, or if already in program mode, continue to step 2.	When in Program Mode. The PROGRAM icon is on.
2	Press... (P) + (2) (8) + (E) P28E is the option number for Exit Delay Time.	The existing time will be displayed one digit at a time. The factory default time is 60 seconds.
3	Press... (NEW TIME) + (E) Enter a new exit delay time from 1 to 99 seconds. **EXAMPLE:** To make the exit delay time 50 seconds: Press... **P28E 50E**	The new time will be displayed one digit at a time.
4	Go to step 2 of any other programming option or press... (P) + (E) to exit program mode.	The PROGRAM icon will turn off when you exit program mode.

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 Nessensor™ vibration sensor for highly effective perimeter protection.

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.

MADE IN AUSTRALIA

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.

QUANTUM™ PET AWARE

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.

INSTALLATION RECORD

R8 RADIO PANEL

Date purchased:	Date installed:
Installation Company:	Telephone:
Monitoring Company:	Telephone:

DOORBELL VOLUME		ENTRY DELAY TIME	Sec
DOORBELL TUNE		EXIT DELAY TIME	Sec

ZONES	DEVICE Radio PIR, Radio Reed Switch, etc	DESCRIPTION Entrance, bedroom1, etc
Radio Zone 1		
Radio Zone 2		
Radio Zone 3		
Radio Zone 4		
Radio Zone 5		
Radio Zone 6		
Radio Zone 7		
Radio Zone 8		
Wired Zone 8		

USER SLOT	PERSON	KEYPAD CODE	RADIO CODE
1 (Master Code)		✓ The Master Code is always a Keypad Code	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			