NESS D·24
DIALLER SECURITY ALARM PANEL

ALARM CONTROL PANEL AND DIALLER

MADE IN AUSTRALIA

USER'S MANUAL

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Quality System

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Australian Communications Authority
TELECOMMUNICATIONS COMPLIANCE

D24 USER MANUAL
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CONTENTS

NESS D24 FEATURES

- Powerful multizone commercial security

- 24 fully programmable zones

- Supports 8 Radio Devices (Radio PIRs, Radio Reeds etc)

- Supports 8 Radio Keys

- Contact ID Dialler Format

- Ness Audible Dialler Format

- Separate 24 Hour Tamper input

- Single or Double Trigger Zones

- Remote LCD Keypads (Max 3)

- Fully programmable via the system Keypad - Eliminates the need for expensive programmers or Proms.

- Inbuilt Vibration Sensor Analyser

- All programming data is permanently stored in a non-volatile EEprom memory

- True Dynamic Battery Test every time the Panel is Armed / Disarmed and every hour

- Area Partitionable (3 Areas). Any Zone can be programmed to any area, as well as common areas

- Comes complete with an AC plug pack and supports a 12V 7Ah battery to maintain system security under all power supply conditions

- Two separate Monitor Modes (Home Mode)

- Outputs are separately fused with Automatic Reset Fuses

- Day Mode and Door Chime feature.

- 30 Event Memory

- All inputs and outputs are heavily protected against lightning and high voltage supply transients. An earth terminal is provided for extra protection

- 30 User Codes

- Programmable Inputs to activate selectable Outputs (Output Mapping)

- Manufactured with the latest SMD Technology

- Ultra-Modern and Impact resistant Housing

- Forced Arming Feature

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24

| ARM | ZONE | TAMPER | SYSTEM | POWER | FIRE | MEMORY |
| MONITOR | AREA 1 | AREA 2 | AREA 3 | EXCLUDE | PROGRAM | TEST |

BACKLIT LCD ICON DISPLAY

PANIC BUTTON (Press & Hold)

PROGRAM BUTTON   ENTER BUTTON
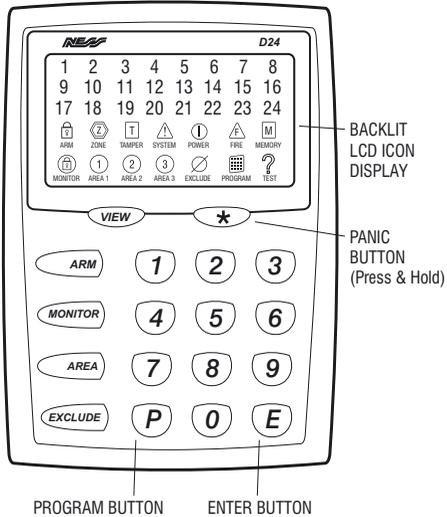
KEYPAD DISPLAY TEST:
Press and hold E button.

KEYPAD DISPLAY TABLE

	OFF	ON	Flashing FAST	Flashing SLOW
1-24 ZONES	Zone sealed	Zone unsealed	Zone Alarms present (in Armed or Monitor Mode)	
🔒 ARM	Panel is Disarmed	Panel is Armed		
Ⓩ ZONE		Displaying Zone Status		
T TAMPER	Normal	Displaying individual Tamper Alarms	Tamper Alarms present	
⚠ SYSTEM	Normal	Displaying individual System Alarms	System Alarms present	
ⓘ POWER	Normal	Displaying individual Power Alarms	Power Alarms present	
⚠ FIRE	Normal	Fire warning (If enabled)	Fire alarm (If enabled)	
M MEMORY	Normal	Memory Mode or View key pressed	New alarm in Memory	
🔒 MONITOR				Panel is in Monitor Mode
① AREA 1		Area 1 Armed		Area 1 Monitor
② AREA 2		Area 2 Armed		Area 2 Monitor
③ AREA 3		Area 3 Armed		
⊘ EXCLUDE		Exclude Mode		Zone or other alarm Excluded
▦ PROGRAM	Normal	User Program Mode		
⌇ TEST	Normal	Siren Test		

To view
TAMPER
alarms
VIEW (2) (E)

TAMPER ALARMS
1 External Tamper
2 Control Panel Tamper
3 Zone input Tamper
5 Radio Interface Tamper

To view
SYSTEM
alarms
VIEW (3) (E)

SYSTEM ALARMS
1 Keyswitch Panic
2 Dialler line fault
3 Keypad connection fault
4 Control Panel fault
5 Duress alarm
6 Panic alarm
7 Medical alarm
8 User Code alarm
9 Access to Installer Program mode

To view
POWER
alarms
VIEW (4) (E)

POWER ALARMS
1 Mains power failure
2 Backup Battery low
3 DC supply failed
4 Zone reference supply failed
9 Radio Device battery low
  (1-8 shows which device has low battery)
0 Radio Key battery low
  (1-8 shows which device has low battery)

To view
MEMORY
VIEW (E)

MEMORY DISPLAY
MEMORY icon flashes to indicate
that Memory contains new events.
Memory can be viewed at any time.

1. Press VIEW (E)

2. |M| Memory icon turns on
   Keypad icons will display the
   most recent event as per the
   Keypad Display Table

3. Step through the Memory
   display by pressing the
   VIEW button. At each step,
   the keypad icons display the
   history of Arming, Disarming
   and alarm events.

   Press (E) to cancel the
   Memory display at any time

OPERATION

ARMING AND DISARMING

The Ness D24 micro computer based 24 zone **control panel** is the heart of your security system to which all your detection devices connect.

Each **Zone** of the panel can be connected to one or more detection devices to protect separate rooms of your premises.

Detection devices may be connected to the D24 control system directly by cabling or with **optional wireless** (Radio) devices.

The most common type of detection devices are **Passive Infra-Red Motion Detectors** (or **P.I.R**'s for short) and Reed Switches for doors and windows.

OPERATING MODES

The Ness D24 will operate in one of the following modes:

ARMED: The system is "On" and ready to detect intrusion. 24 Hour Zones (if configured) are still active. Area Partitioning means the panel can be split into three separate "Areas" which can be Armed and Disarmed independently of each other.

DISARMED: The system is "Off". This is the normal mode when the premises are occupied. Day Zones and 24 Hour Zones (if configured) are still 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.

ARMING THE SYSTEM

If the D24 has not been programmed for Area operation, this method will Arm the entire system.

Press... ⟨ **ARM** ⟩ *(If Two Button Keypad Operation is disabled. This is the factory default.)*

...or ⟨ **ARM** ⟩ ⟨ **E** ⟩ *(If Two Button Keypad Operation is enabled.)*

...or ⟨ **ARM** ⟩ **[CODE]** ⟨ **E** ⟩ *(If Shortcut Arming is disabled.)*

Three beeps will sound ♩♩♩ *and the ARM icon will turn ON* 🔒 ARM

Leave the premises within the Exit Delay Time. At the end of Exit Delay Time, 1 beep will sound ♩

The control panel must be Armed prior to vacating the premises in order to detect intruders. Ensure that the panel is not in Program, Memory or Exclude modes.

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

SIREN WARNING:

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

AUTO EXCLUDE:

If the auto-exclude option is disabled, the siren will sound for the duration of reset time if a zone is Unsealed at the end of exit time.

DISARMING THE SYSTEM

If the D24 has not been programmed for Area operation, this method will Disarm the entire system.

Press... **[CODE]** ⟨ **E** ⟩

Three beeps will sound ♩♩♩ *and the ARM icon will turn OFF* 🔒 ARM

Disarm the panel during the Entry Delay Time to prevent unwanted "Alarm on entry".
An error beep when attempting to Disarm may indicate:
    Incorrect Code
    or the panel is already Disarmed
    or the panel is in Exclude mode

AREA OPERATION

AREA OPERATION, DEFINITION

Area Operation allows the 24 zones to be split into three Areas. The panel then effectively operates as three separate systems sharing only the siren outputs and dialler. The three Areas can either share one keypad or operate from multiple keypads.

USER CODES - OPERATION

Areas can be operated by users holding Area Codes or Administrator Codes.

AREA CODES are User Codes which are programmed to operate one Area only.
ADMINISTRATOR CODES are User Codes which can operate any Area.

COMMON AREA - OPERATION

The Common Area refers to a zone or zones that have been assigned to more than one Area. The Common Area is used in cases where the requirement is for a zone/s to automatically Arm or Disarm depending on the state of the overlapping Areas.

The Common Area behaves as follows:
When *all* Areas are Armed, the Common Area automatically Arms
When *any* Area has Disarmed, the Common Area automatically Disarms

EXAMPLE: COMMON AREA OPERATION

Area 1 is Armed

Common Area remains Disarmed

Area 2 is Armed

Common Area remains Disarmed

Area 3 is Armed

Common Area automatically Arms

All Areas are Armed

Area 2 Disarms

Common Area automatically Disarms

Area 3 Disarms ...(and so on)

The Common Area remains Disarmed until all Areas are again Armed.
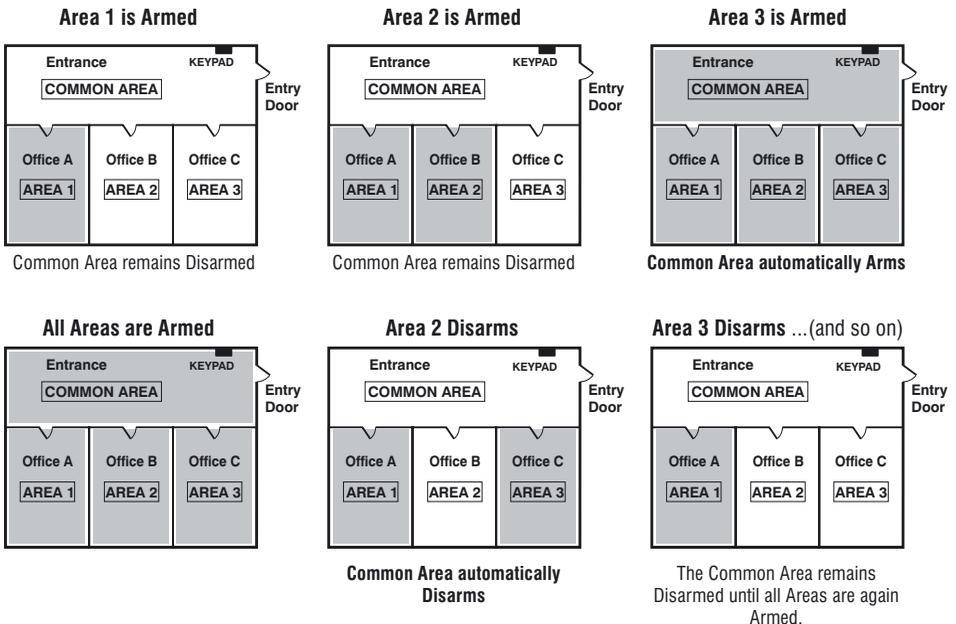
TO ARM YOUR AREA

Most users of the panel should be assigned Area Codes. An Area Code allows you to Arm and Disarm only the Area which has been assigned to that code. This makes Area operation as simple as possible with the least number of keystrokes.

Press...   (**ARM**) **[CODE]** (*E*)

Three beeps will sound ♪♪♪ *and your AREA icon will turn ON* ① *or* ② *or* ③
AREA 1   AREA 2   AREA 3

Leave the Area within the Exit Delay Time. At the end of Exit Delay Time, 1 beep will sound ♪

> ⓘ **SHORTCUT** ARMING IS **NOT** ALLOWED FOR **AREA CODE ARMING**.

TO DISARM YOUR AREA

To Disarm the Area assigned to your code, simply enter your code followed by E.

Press...   **[CODE]** (*E*)

Three beeps will sound ♪♪♪ *and the respective AREA icon will turn OFF* ① *or* ② *or* ③
AREA 1   AREA 2   AREA 3

TO ARM AREAS USING AN ADMINISTRATOR CODE

Using an Administrator Code to Arm selected Areas.

Press... (**AREA**) *1, 2 or 3* (**E**) (**ARM**) **[CODE]** (**E**) *

...or to Arm multiple Areas at once

(**AREA**) (**1**) (**E**) *and/or* (**2**) (**E**) *and/or* (**3**) (**E**) (**ARM**) **[CODE]** (**E**)

Three beeps will sound ♩♩♩ and the selected AREA icon/s will turn ON ①_{AREA 1} *or* ②_{AREA 2} *or* ③_{AREA 3}

Leave the Area within the Exit Delay Time. At the end of Exit Delay Time, 1 beep will sound ♩

> ⓘ
> **SHORTCUT** ARMING *IS* ALLOWED FOR **ADMINISTRATOR CODE ARMING.**
>
> **When Shortcut Arming is enabled:**
> Two Button Keypad Operation is enabled: **[CODE]** is not needed.
> Two Button Keypad Operation is disabled: **[CODE] + E** is not needed.

TO DISARM AREAS USING AN ADMINISTRATOR CODE

Using an Administrator Code to Disarm selected Areas.

Press... (**AREA**) *1, 2 or 3* (**E**) **[CODE]** (**E**)

...or to Disarm multiple Areas at once

(**AREA**) (**1**) (**E**) *and/or* (**2**) (**E**) *and/or* (**3**) (**E**) **[CODE]** (**E**)

Three beeps will sound ♩♩♩ and the selected AREA icon/s will turn OFF ①_{AREA 1} *or* ②_{AREA 2} *or* ③_{AREA 3}

...or a shortcut to Disarm all Areas

Press... **[CODE]** (**E**)

Three beeps will sound ♩♩♩ and all AREA icons will turn OFF ①_{AREA 1} *or* ②_{AREA 2} *or* ③_{AREA 3}

ARMING MONITOR MODE

Monitor mode allows you to Arm selected zones while others are ignored. Typically used to monitor perimeter zones (doors and windows) while you are at home.

Your system may be programmed to give the choice of Arming two different Monitor areas (Dual Monitor mode), otherwise there is one Monitor area (Single Monitor mode).

ALARM TYPES IN MONITOR MODE

Monitor mode alarms can be programmed to trigger a number of different combinations of siren, strobe, dialler and other alarms.

The most common configuration (which is also the factory default) triggers the keypad sonalert (beeper) as well as a siren burst.

ZONES MUST BE SEALED

Make sure that all zones in the Monitor area are sealed before Arming Monitor mode.

EXIT DELAY

The Exit Delay time applies to Monitor mode.

ARMING SINGLE MONITOR MODE

Press... (MONITOR)

...or (MONITOR) (E)

...or (MONITOR) [CODE] (E)

ARMING DUAL MONITOR MODE

Press... (MONITOR) (1) *...or* (MONITOR) (2)

...or (MONITOR) (1) (E)

...or (MONITOR) (2) (E)

PANIC ALARM

The keypad panic function may have been programmed to be either:

Audible: Activates siren or buzzers
or **Silent:** If your system is monitored by a Central Station, sends a Panic report by dialler. (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.

Keypad Panic alarm is number **6** in the ⚠ SYSTEM view.

Press...   (★)   *(Press and hold for at least 1 second)*

...or   (★) (E)   *(If Two Button Keypad Operation is enabled)*

DURESS ALARM

A DURESS alarm can be triggered to alert the Central Monitoring Station that you are being forced to Disarm the panel against your will.

To Disarm and simultaneously send a DURESS alarm, prefix your User Code with the "Duress Digit" when Disarming.

The factory default Duress Digit is 9. (It can be any number from 0~9).

By default, DURESS alarms do not sound any audible alarms unless programmed to do so by your installer.

Duress alarm is number **5** in the ⚠ SYSTEM view.

Disarm by pressing... **[Duress Digit] [CODE]** (E)

The panel Disarms as normal and the Duress report is sent to the Central Monitoring Station.

ⓘ   **• IF DURESS ALARM IS USED, AVOID USER CODES THAT BEGIN WITH THE SAME NUMBER AS A DURESS DIGIT.**

• DURESS ALARM CAN ONLY USED IF YOUR SYSTEM IS MONITORED BY A CENTRAL STATION.

MEDICAL ALARM

Your system may have been setup with a Medical Alarm. This type of alarm can be used to summon assistance for the elderly or infirm who are living alone. A Medical Alarm is most effective if the system is monitored by a Central Monitoring Station.

Medical Alarms can be used in two ways:

1. INSTANT MEDICAL ALARM: Immediately sound the sirens and send a Medical Alarm report to the Central Monitoring Station. (In this case, the Medical Alarm Delay is set at zero hours).

2. INACTIVITY MEDICAL ALARM: The Medical Alarm is reported if the Medical Alarm button is NOT pressed within the pre-programmed *Medical Alarm Delay.* (In this case, the Medical Alarm Delay is set between 1 and 24 hours).

INSTANT MEDICAL ALARM

OPERATION

1. If the Medical Alarm Delay is not being used, simply press the designated Medical Alarm button.

2. If the Medical Alarm Delay *is* being used, an instant Medical Alarm can be sent by pressing the button twice within 12 seconds. On the first press, the keypad/s will beep once per second during the 12 second period. On the second press, the keypad/s will beep fast to indicate that the Medical Alarm has been reported.

INACTIVITY MEDICAL ALARM

OPERATION

The Inactivity Medical Alarm can be used to summon assistance if a person has become incapacitated and is not able to press their Medical Alarm button.

For example, if the Medical Alarm Delay is set for 24 hours, the Medical Alarm will be triggered if the button is not pressed every 24 hours. (Effectively, it is an, "I'm OK", button).

When 20 minutes of the Medical Alarm Delay time remains, and the Medical Alarm button has *not* been pressed, the keypad/s will beep for 10 seconds as a reminder.

As a final warning that the Medical Alarm delay is due to expire, the keypad/s will beep continuously during the final 10 minutes.

MEDICAL ALARM BUTTON

The Medical Alarm button can be setup to take the place of the keypad Panic button or it may be a separate button. This must be determined by your installer.

Medical alarm is number **7** in the ⚠️ SYSTEM view.

FIRE ALARM

Your system may have smoke detectors connected to 24 hour Fire inputs. If Fire inputs are enabled, the alarm indication is by the Fire icon on the keypad.

Fire inputs may be programmed to sound sirens or report alarms, (if your system is monitored by a Central Monitoring Station), or other actions as setup by your installer.

⚠️ FIRE

VIEW

The VIEW menu can be used at any time to display the status of Zone, Tamper, System and Power inputs.

The status of these inputs can be displayed "live" as it happens, or as a previous event in Memory mode.

TO VIEW A CURRENT ALARM:

For example, if the [T] TAMPER icon is flashing indicating that a Tamper alarm is present.

Press... VIEW , the MEMORY and Tamper icons will be on and a number will indicate which TAMPER alarm is present.

TO VIEW THE STATUS OF ALL ALARMS:

Press... VIEW **[Repeat presses]**

Repeated presses of the VIEW button will cycle viewing of Zone, Tamper, System, Power and Memory sub-menus.

Or, each sub-menu can be directly viewed by pressing VIEW **[1–6]**.

DEFAULT VIEW

The display always shows the zone menu by default.

It will automatically revert back to the ZONE menu after eight seconds if left in any other view menu.

TO VIEW ZONES [Z] ZONE

Press... VIEW 1

The zone indicators 1–24 will show the state of the 24 zones and possibly one or more other icons flashing to indicate other alarms.

TO VIEW TAMPERS [T] TAMPER

Press... VIEW 2

Zone indicators will show the state of the four Tamper inputs:

TAMPER 1: External Tamper.
TAMPER 2: Control Panel Tamper.
TAMPER 3: Zone Input Tamper.
TAMPER 5: Radio Interface Tamper.

TO VIEW SYSTEM ⚠ SYSTEM

Press... VIEW 3

Zone indicators will show the state of the eight System inputs:

SYSTEM 1: Keyswitch Panic
SYSTEM 2: Dialler line fault
SYSTEM 3: Keypad connection fault
SYSTEM 4: Control panel fault
SYSTEM 5: Duress Alarm
SYSTEM 6: Panic Alarm
SYSTEM 7: Medical Alarm
SYSTEM 8: User Code Alarm
SYSTEM 9: Access to Installer Program mode

TO VIEW POWER Ⓘ POWER

Press... VIEW 4

Zone indicators will show the state of the six Power alarms:

POWER 1: Mains power failure
POWER 2: Control panel backup battery is low
POWER 3: DC supply failure
POWER 4: Zone reference power failure
POWER 9: Radio device battery low. (Zone indicators 1–8 will show which device)
POWER 0: Radio Key battery low. (Zone indicators 1–8 will show which Radio Key)

HOW TO VIEW MEMORY

1. When the ⟦M⟧ MEMORY icon is flashing to indicate there is a new alarm in memory, pressing ⟨VIEW⟩ will display an icon, (for example, Zone, Tamper, System etc), and a number to indicate the type of alarm.

2. In normal idle mode, (system is disarmed with the ⟦Z⟧ZONE icon displayed), the memory history can be displayed in sequence.

To view the Memory History, *Press...* ⟨VIEW⟩ ⟨E⟩ , the ⟦M⟧ MEMORY icon will turn on.

Then press... ⟨VIEW⟩ [Repeat presses]. At each step, the keypad icons will display past events. The Zone, Tamper, System and Power icons will indicate what type of events are being displayed.

Memory is displayed backwards from most recent event to the end of memory. The past 50 events are stored.

Press ⟨E⟩ to exit the Memory menu.

MEMORY MODE
EVENTS INDICATED BY KEYPAD ICONS:

ICON	EVENT
M MEMORY	Events are from memory
Z ZONE and **1~24** [flashing]	Zone alarms
T TAMPER and **1~5**	Tamper alarms
⚠ SYSTEM and **1~8**	System alarms
① POWER and **1~0**	Power alarms
F FIRE and **1~24** [flashing]	Fire Zone alarm
ARM	Arm
Z ZONE	Disarm
MONITOR [slow flash]	Monitor Mode
① AREA 1	Area 1 Arm
② AREA 2	Area 2 Arm
③ AREA 3	Area 3 Arm
① AREA 1 [slow flash]	Area 1 Monitor Mode
② AREA 2 [slow flash]	Area 2 Monitor Mode

Also see Keypad Display Table, page 6

MEMORY VIEWING EXAMPLES

Examples of how to view Memory and the types
of events that might be shown.

Panel is Disarmed
(All zones are sealed).

Press... *VIEW*   *E*
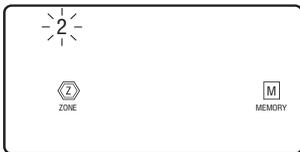
Most recent event:
- Zone 2 alarm.

Press... *VIEW*

Next most recent event:
- Panel was Armed.

Press... *VIEW*
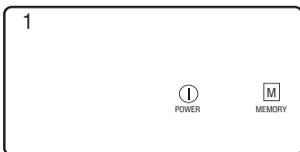
Next most recent event:
- Mains power failure.

Press... *VIEW*

...etc...Up to 50 events in memory.

Press *E* to exit Memory mode.

Zones and other inputs can be Excluded so that it does not generate alarms. EXCLUDE is a method of temporarily disabling an input.

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

Zones can only be Excluded when 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. In Exclude mode, simply use the **[NUMBER]** (E) sequence to turn OFF the zone lights to be Included.

TO ENTER EXCLUDE MODE

Press... $(EXCLUDE)$ **[CODE]** (E)

...or $(EXCLUDE)$ (E) *(If Shortcut Exclude is enabled)*

TO EXCLUDE ZONES

$(\varnothing_{EXCLUDE}$ and $\boxed{Z}_{ZONE}$ will be on)$ Press... **[ZONE NUMBER]** (E) **[ZONE NUMBER]** (E) *...etc*
The selected Zone numbers will turn on.

TO EXCLUDE TAMPER ALARMS

Press... $(EXCLUDE)$ (2) (E) $(\varnothing_{EXCLUDE}$ and $\boxed{T}_{TAMPER}$ will be on)$ **[TAMPER NUMBER]** (E) *...etc*
The selected Tamper numbers will turn on.

TO EXCLUDE SYSTEM ALARMS

Press... $(EXCLUDE)$ (3) (E) $(\varnothing_{EXCLUDE}$ and $\triangle_{SYSTEM}$ will be on)$ **[SYSTEM NUMBER]** (E) *...etc*
The selected System numbers will turn on.

TO EXCLUDE POWER ALARMS

Press... $(EXCLUDE)$ (4) (E) $(\varnothing_{EXCLUDE}$ and $\bigcirc_{POWER}$ will be on)$ **[POWER NUMBER]** (E) *...etc*
The selected Power numbers will turn on.

TO EXIT EXCLUDE MODE

Press... $(EXCLUDE)$ (E) $(\varnothing_{EXCLUDE}$ will flash while Disarmed and Armed)$

This is an option that helps avoid the situation of a zone sensor going faulty or being disconnected without it being noticed.

When Automatic Zone Test is enabled by your installer, a count is kept of the number of times the panel is Armed and Disarmed. Any zone which has failed to detect anything over the past

20 Armings is recorded and the $\overset{?}{\underset{\text{TEST}}{}}$ indicator also lights up.

To find out which zones have been dormant:

Press... VIEW 7

...or VIEW 7 E

(If Two Button Keypad Operation is enabled)

The zone indicators show which zones need to be checked. To do this, walk test the zones in question. The zone indicators which were on should now be flashing. Any which are still on and not flashing need to be checked by a service person.

To exit View test:

Press... VIEW E

Test Mode allows the user to manually test all audible and visual outputs without alarming the panel.

Press... **[CODE]** E *The $\overset{?}{\underset{\text{TEST}}{}}$ icon will turn on.*

Press the keys below to operate each output. Press the same key to turn the output off. Pressing any other key will test that output and cancel the current output.

Press... E *To exit Test Mode.*

KEY	INDICATOR	OUTPUT
1	1	SIREN A, Tone 1
2	2	SIREN B, Tone 1
3	3	RESET (internal screamer)
4	4	STROBE
5	5	AUX 1
6	6	AUX 2
7	7	KEYPAD BEEPS
8	1	SIREN A, Tone 2
9	2	SIREN B, Tone 2

OPTION	OPTION No	FACTORY DEFAULT	RANGE	PROGRAMMED
User Code 1 (Master Code)	**P1E**		3 to 6 digits	
User Code 2	**P2E**		3 to 6 digits	
User Code 3	**P3E**		3 to 6 digits	
User Code 4	**P4E**		3 to 6 digits	
User Code 5	**P5E**		3 to 6 digits	
User Code 6	**P6E**		3 to 6 digits	
User Code 7	**P7E**		3 to 6 digits	
User Code 8	**P8E**		3 to 6 digits	
User Code 9	**P9E**		3 to 6 digits	
User Code 10	**P10E**		3 to 6 digits	
User Code 11	**P11E**		3 to 6 digits	
User Code 12	**P12E**		3 to 6 digits	
User Code 13	**P13E**		3 to 6 digits	
User Code 14	**P14E**		3 to 6 digits	
User Code 15	**P15E**		3 to 6 digits	
User Code 16	**P16E**		3 to 6 digits	
User Code 17	**P017E**		3 to 6 digits	
User Code 18	**P018E**		3 to 6 digits	
User Code 19	**P019E**		3 to 6 digits	
User Code 20	**P020E**		3 to 6 digits	
User Code 21	**P021E**		3 to 6 digits	
User Code 22	**P022E**		3 to 6 digits	
User Code 23	**P023E**		3 to 6 digits	
User Code 24	**P024E**		3 to 6 digits	
User Code 25	**P025E**		3 to 6 digits	
User Code 26	**P026E**		3 to 6 digits	
User Code 27	**P027E**		3 to 6 digits	
User Code 28	**P028E**		3 to 6 digits	
User Code 29	**P029E**		3 to 6 digits	
User Code 30	**P030E**		3 to 6 digits	
Entry Delay Time	**P17E**	20 seconds	1 to 99 sec	
Exit Delay Time	**P18E**	60 seconds	1 to 99 sec	

PROGRAM MODE

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

    User Codes 1 to 30
    Entry Delay Time
    Exit Delay Time

For all other programming changes, talk to your installer.

The panel will automatically exit User Program Mode is no buttons are pressed within a one minute period.

TO ENTER PROGRAM MODE:

Press... (P) [MASTER CODE] (E)

TO EXIT PROGRAM MODE:

Press... (P) then (E)

(i) **[NN]** = The Option Number of the code being programming

PROGRAMMING USER CODES

User codes are the P.I.N. codes used to operate various panel functions, especially Arming and Disarming. There are 30 User Codes and each can be 3 to 6 digits long.

User Code 1 is always the MASTER CODE. User Codes 2 to 30 can be programmed to any of these types:

    ORDINARY
    DISABLED
    ADMINISTRATOR
    AREA

When programming codes, the User Code type is displayed by the icons: [ARM] (1) (2) (3) AREA 1 AREA 2 AREA 3

If User Code 1 was used to enter Program Mode, the digits of any existing codes will be displayed when programming a User Code.

ORDINARY CODE

An Ordinary Code is for systems configured without Areas. Allows full access to the panel except for entry to Program Mode.

To Program an Ordinary Code:

(P) [NN] (E) [CODE] (E) [CODE] (E)

The [ARM] (1) (2) (3) AREA 1 AREA 2 AREA 3 *icons will be ON.*

DISABLED CODE

Any Code except the Master Code can be taken out of service by programming its first digit to be zero.

To Disable a Code:

(P) [NN] (E) (0) [CODE] (E) (0) [CODE] (E)

The [ARM] (1) (2) (3) AREA 1 AREA 2 AREA 3 *icons will be ON.*

ADMINISTRATOR CODE

An Administrator Code is able to Arm and Disarm all Areas of a Partitioned system, but it is not allowed entry to Program Mode. Programming is the same as an Ordinary Code.

To Program an Administrator Code:

Ⓟ [NN] Ⓔ [CODE] Ⓔ [CODE] Ⓔ

The 🔒ARM ①AREA 1 ②AREA 2 ③AREA 3 *icons will be ON.*

AREA CODE

An Area Code is a code which only has access to the Area assigned to that code.

The user does not need special instructions for Arming and Disarming.

ARM [CODE] E Arms *only* the assigned Area.
[CODE] E Disarms *only* the assigned Area.

See page 11 for details.

To Program an Area Code assigned to AREA1:

Ⓟ [NN] Ⓔ ① Ⓔ [CODE] Ⓔ [CODE] Ⓔ

The ①AREA 1 *icon will be ON.*

To Program an Area Code assigned to AREA2:

Ⓟ [NN] Ⓔ ② Ⓔ [CODE] Ⓔ [CODE] Ⓔ

The ②AREA 2 *icon will be ON.*

To Program an Area Code assigned to AREA3:

Ⓟ [NN] Ⓔ ③ Ⓔ [CODE] Ⓔ [CODE] Ⓔ

The ③AREA 3 *icon will be ON.*

MASTER CODE

A Master Code is able to Arm and Disarm all Areas of a Partitioned system and is allowed entry to Program Mode.

User Code 1 is always a Master Code, but all other codes can be programmed as Master Codes.

To Program a Master Code:

Ⓟ [NN] Ⓔ ⓪ Ⓔ [CODE] Ⓔ [CODE] Ⓔ

The 🔒ARM ①AREA 1 ②AREA 2 ③AREA 3 *icons will be FLASHING.*

PROGRAMMING TIMERS

ENTRY DELAY TIME

Entry Delay Time applies to Delay Zones and gives you time to enter the premises and Disarm without causing an alarm.

When a Delay zone is triggered, the panel will go into alarm state if it is not Disarmed within the Entry Delay time.

The Entry Delay Time can be programmed in the range of 1 to 99 seconds.

To Program Entry Delay Time:

(P) (1) (7) (E) [1~99] (E)

Example: Programming the Entry Delay Time to be 35 seconds.

1. *Press...* (P) (1) (7) (E)

2. *The existing Entry Delay Time is displayed*

3. *Press...* (3) (5) (E) *Enters the new time*

EXIT DELAY TIME

On Arming the panel, Exit Delay Time gives you time to leave the premises without causing an alarm.

Exit Delay Time applies to all zones (except 24 hour zones).

The Exit Delay Time can be programmed in the range of 1 to 99 seconds.

To Program Exit Delay Time:

(P) (1) (8) (E) [1~99] (E)

Example: Programming the Exit Delay Time to be 90 seconds.

1. *Press...* (P) (1) (8) (E)

2. *The existing Exit Delay Time is displayed*

3. *Press...* (9) (0) (E) *Enters the new time*

MADE IN
AUSTRALIA

| 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.

NESS WIRELESS 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 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 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 RADIO PIRS

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

Ness R12 Radio PIR

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

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 R15 Radio PIR &
Ness R15PET Pet
Aware Radio PIR

QUANTUM
PET AWARE™

MADE IN
AUSTRALIA

NESS RR1 RADIO REED SWITCH

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

D ◆ 24
DIALLER SECURITY ALARM PANEL

NESS D24
ALARM CONTROL PANEL

Date purchased:	Date installed:
Installation Company:	
Telephone:	

Monitoring Company:
Telephone:

ZONE LIST	DEVICE TYPE	DESCRIPTION
Zone 1		
Zone 2		
Zone 3		
Zone 4		
Zone 5		
Zone 6		
Zone 7		
Zone 8		
Zone 9		
Zone 10		
Zone 11		
Zone 12		
Zone 13		
Zone 14		
Zone 15		
Zone 16		
Zone 17		
Zone 18		
Zone 19		
Zone 20		
Zone 21		
Zone 22		
Zone 23		
Zone 24		

NOTES

OPERATION SUMMARY

To **ARM**:   (ARM)

                        ...or (ARM) (E)

                        ...or (ARM) [CODE] (E)

To **DISARM** or reset alarms: [CODE] (E)

To Arm **MONITOR** mode: (MONITOR)

                        ...or (MONITOR) (E)

                        ...or (MONITOR) [CODE] (E)

To exit MONITOR mode: [CODE] (E)

To **EXCLUDE** zones: (EXCLUDE) [CODE] (E)

                        ...or (EXCLUDE) (E)

then: [ZONE NUMBER] (E) [ZONE NUMBER] (E) (Up to 24 zones)

To exit EXCLUDE mode: (EXCLUDE) (E)

PANIC alarm: (*) Press and hold for 1 second

                        ...or (*) (E)

VIEW menu: (VIEW) [Repeat presses]

                        Cycles viewing of (Z) [T] (!) (I) [M] menus
                                          ZONE TAMPER SYSTEM POWER MEMORY

To exit VIEW mode: (E) (Reverts to normal (Z) view)
                                                   ZONE