



D8 XCEL 4G

D16 XCEL 4G

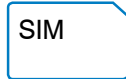


# NAVIGATOR

Touch Screen Keypad

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## USER'S MANUAL



Nes SIM information,  
see page 40.

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Navigator Touch Screen Keypad  
for use with D8XCEL / D16XCEL 4G panels

Document 890-498  
Rev 1.11



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D8XCEL, D16XCEL 4G USER'S MANUAL FOR NAVIGATOR KEYPADS

Document Part No: 890-498

Rev 1.11 May 2021

For use with Ness D8XCEL, D16XCEL control panels with 4G, V11.3 and later.

Related manuals:

890-497 D8/D16 XCEL 4G LCD Keypad User Manual

890-490 D8/D16 XCEL 4G Installer's Manual

#### WARNINGS & NOTICES

Ness Corporation manufacturing processes are accredited to ISO9001 quality standards and all possible care and diligence has been applied during manufacture to ensure the reliable operation of this product. However there are various external factors that may impede or restrict the operation of this product in accordance with the product's specification.

These factors include, but are not limited to:

1. Erratic or reduced radio range (if radio accessories are installed). Ness radio products are sophisticated low power devices, however the presence of in-band radio signals, high power transmissions or interference caused by electrical appliances such as Mains Inverters, Wireless Routers, Cordless Phones, Computers, TVs and other electronic devices may reduce radio range performance. While such occurrences are unusual, they are possible. In this case it may be necessary to either increase the physical separation between the Ness receiver and other devices or if possible change the radio frequency or channel of the other devices.
2. Unauthorised tampering, physical damage, electrical interruptions such as mains failure, electrical spikes or lightning.
3. Solar power inverters are a known source of electrical interference. Please ensure that this product and all associated cabling is installed at least 3 metres away from a solar power inverter and its cabling.
4. While SMS reporting is a powerful and useful feature it is dependent on the integrity and availability of the cellular network. As with any SMS message it is possible that SMS monitoring reports may be delayed or fail to be delivered. Such failures are a function of the cellular network/s and beyond the control of Ness Corporation. Ness recommends central station monitoring as your primary monitoring path.
5. Ness recommends IP Protocol for most reliable back-to-base reporting. Contact ID (CID) is available as an option and should only be used if your central station does not offer IP protocols.

**WARNING:** Installation and maintenance to be performed only by qualified service personnel.

**CAUTION:** Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries in accordance with local regulations.

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# Introduction

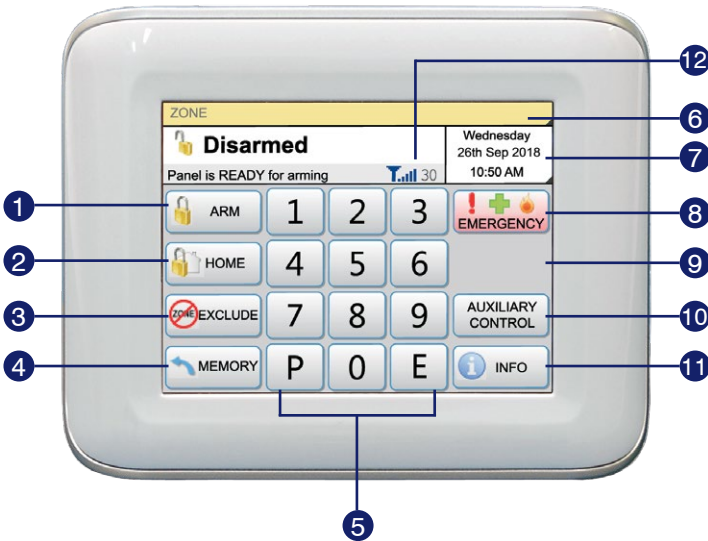
Ness Navigator is a revolutionary touch screen interface for use with Ness D8XCEL and D16XCEL series alarm control panels.

Navigator has a large touch sensitive 3.5" colour LCD which is easy to read, easy to use and makes operating your Ness alarm system a real pleasure.

The large colour screen means Navigator can tell you much more than a conventional keypad with zone descriptions displayed in

plain English and you can even edit zone names yourself to reflect the names of rooms in your own premises.

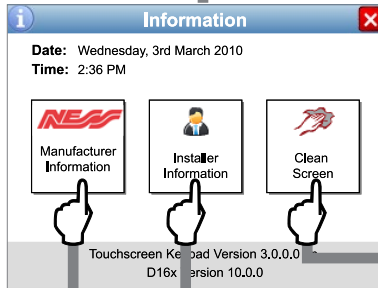
Not only does Navigator provide valuable information about your Ness alarm system, it allows you to arm and disarm your system, tells you what the system is doing, you can use it to program alarm system and if that's not enough - Navigator just looks great!



- 1 Touch to arm the system.
- 2 Touch to arm Home Mode.
- 3 Touch to Exclude zones.
- 4 Touch to view the event memory.
- 5 Numeric keypad.
- 6 Touch to view the full zone list.
- 7 Clock & Calendar. Touch to view the calendar. This area also displays System Alarms.
- 8 Touch to activate the Emergency Alarms.
- 9 Displays current Emergency Alarms.
- 10 Touch to control the Auxiliary Outputs.
- 11 Touch to display the information screens.
- 12 Cellular signal strength display

Navigator Touch Screen Keypad is compatible with Ness D8x and D16x control panels Version 7 and later. D8XCEL/D16XCEL 4G panels (Rev 11.1 and later) require Navigator keypad Rev 3.2 and later.

# Info Screen



See page 6.



Ness Corporation contact details.



Your installer's contact details are stored here. Never lose a business card again!

# Care & Cleaning

## Caring for your Navigator

Do not use a pen, screwdriver or other sharp implement to press the touch screen. Permanent damage may result and will invalidate any warranties.

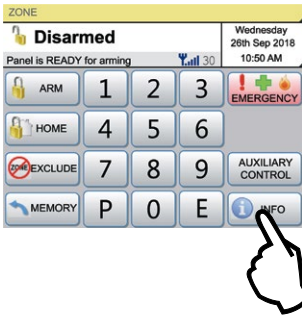
Please press lightly, the touch screen does not need heavy force to operate. Pressing too hard may damage the LCD screen and the housing. Navigator responds to every touch with a short beep.

## Cleaning The Touch Screen

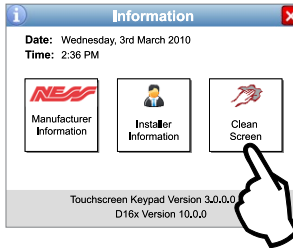
Do not clean the touch screen with abrasive cleaners.

While the system is disarmed, press Info, Clean Screen to see the cleaning instructions.

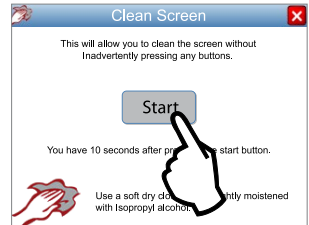
STEP 1. In the disarmed mode, press *Info*.



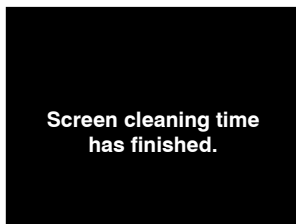
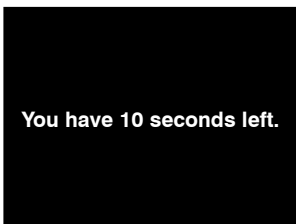
STEP 2. Press *Clean Screen*.



STEP 3. Press *Start*.



Step 4. The touch screen will be disabled for 10 seconds. Clean the bare screen or the protective film using a soft dry cloth or a cloth moistened with Isopropyl Alcohol. Avoid chemical cleaners and solvents which may damage plastic components.



# Screen Protection

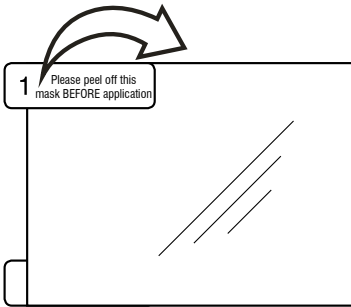
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## Applying the Protective Film

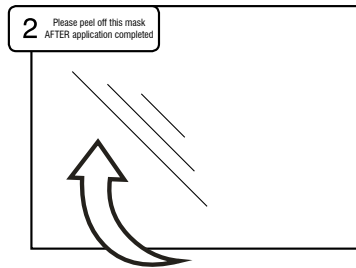
Navigator Touch Screen Keypad is supplied with a self-adhesive screen protector to help protect the sensitive touch surface from marks and scratches which may appear under normal use.

We highly recommend that you apply the protective film to keep the touch surface looking brand new for years to come.

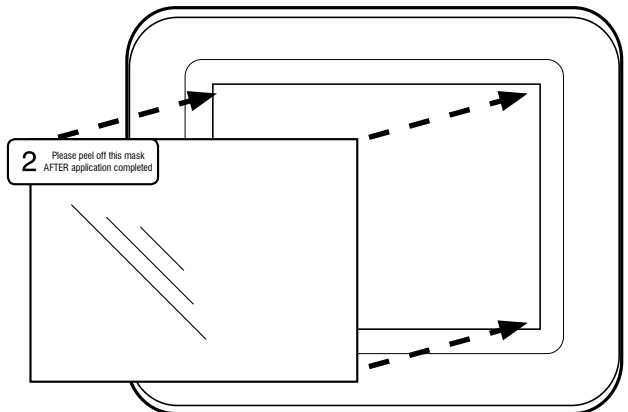
**STEP 1.** Use the orange No. 1 tab to peel off the self-adhesive backing.



**STEP 2.** Flip the film over to position the green No. 2 tab at the top left.

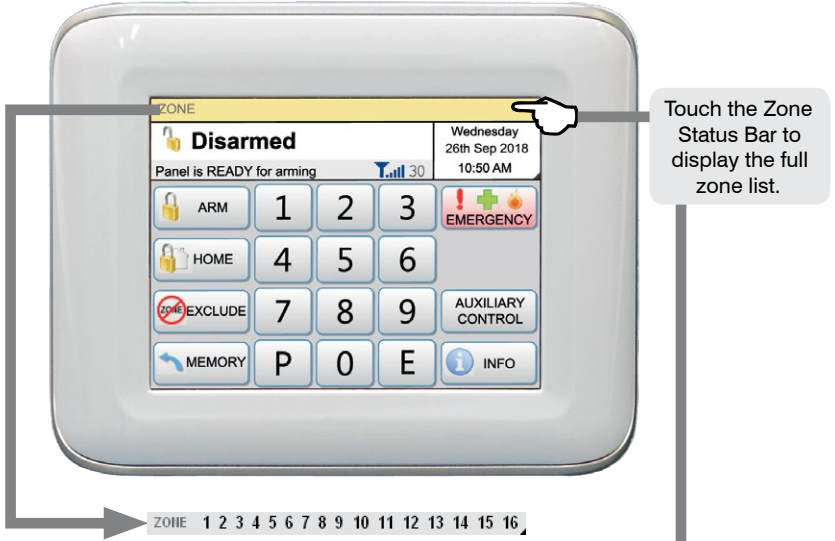


**STEP 3.** Holding the protective film by the green tab, carefully apply the film to the Navigator's screen. Start applying at one end and smooth the film as you go to remove any air bubbles



**STEP 4.** Use the green tab to peel off and discard the topmost layer of the film. Your Navigator is now ready for use.

# Zone Status Display



Touch the Zone Status Bar to display the full zone list.

ZONE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

The Zone Status Bar displays the zone numbers of unsealed zones.

ZONE 1 - Front Door

If only one zone is unsealed its description will also be displayed.

ZONE 1 - Front Door

Zones which are currently in the alarmed state are displayed in flashing red text.

The zone number and description of all zones.

Unsealed zones show a red indicator.

Zone List	
1- Front Door	9- Living Room
2- Side Door	10- Dining Room
3- Back Door	11- Rompus Room
4- Front Window	12- Kitchen
5- Side Window	13- Hall
6- Back Window	14- Study
7- Bedroom	15- Bathroom
8- Lounge Room	16- Laundry

Zone names can be edited in program mode.

Touch X to close the window.

The Zone List display will show 8 or 16 zones depending on the model.

Zone names can only be customised by SMS. Page 34, 35.



# Clock Display

The date and time are normally displayed when the system is armed or disarmed.

The clock is automatically updated from your cellular network so you should only need to adjust the clock if the panel is being used 'offline' without a SIM card

If the clock is manually set you will need to adjust the Hours setting for Daylight Savings.


The date and time can be set in User Program Mode, see page 28.

If there is a System Alarm, this area will display the alarm. See pages 10-11.



## To display the calendar.



Touch  to close the window.



# Cellular Signal

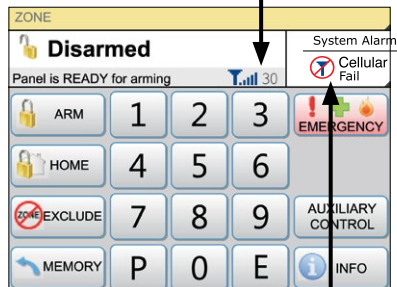
The cellular network signal strength is displayed here.

Signal strength range is 00 (no signal) to 30 (Best signal).

Signal strength below 5 means the antenna should be checked or moved to a better reception area.

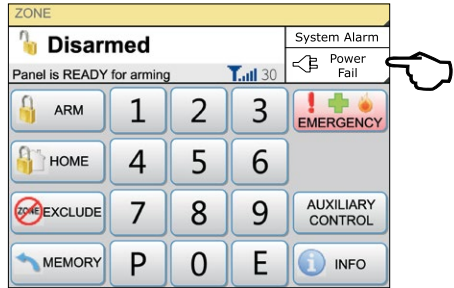
Signal strength 00 and a **Cellular Fail** message could mean that a valid SIM card is not fitted or the cellular network is not available.

**No SIM** means there is no SIM card fitted.




# System Alarm Display

If there is a System Alarm, the clock area will display the alarm. Touch to display details.

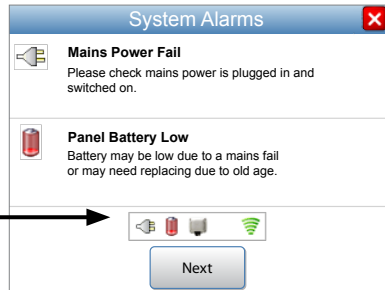


To display System Alarm details.

Touch  the system alarm area.


Full description of the System Alarm and what action to take.

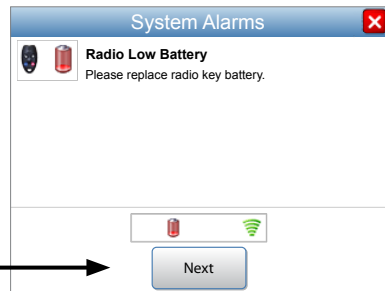
Outstanding System Alarms shown here.



Radio Key low battery alarm.

Touch Next to view any other System Alarms.

Touch  to close the window.




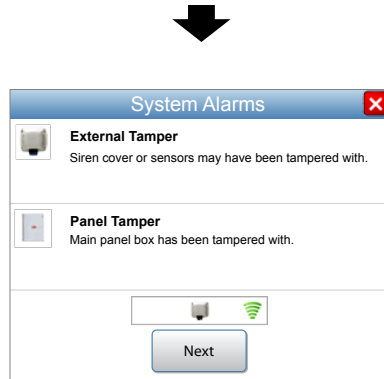
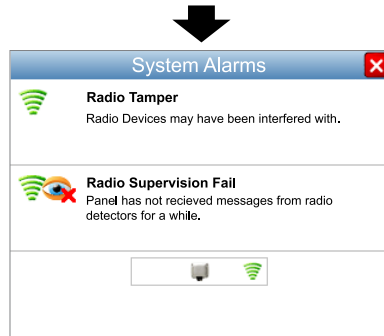
# System Alarm Display

Radio Tamper alarm indicates that a device such as a Radio Reed Switch or Radio PIR may have been opened. Check the device.

Radio Supervision, if enabled by your installer, alerts you if a radio device has not transmitted a signal for a set interval. Ask your installer to check the radio device.

External Tamper alarm and Panel Tamper alarms. Check the external siren cover and main panel.

Touch  to close the window.



# To Arm


The control panel must be armed in order to detect intruders.


Before arming, make sure all zones are “sealed” by ensuring there is no movement in rooms covered by motion detectors and that doors or windows protected by reed switches are closed. The display will tell you when the system is ready for arming.

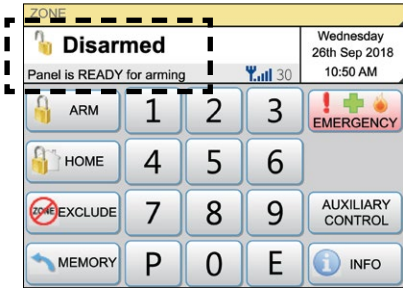
## SIREN WARNING

At the end of the exit time, all zones should be sealed. If any are unsealed, the siren will sound for 2 seconds to indicate that those zones have been automatically excluded. You should disarm the panel, check the premises and then arm again. Continual warnings could mean there is a problem with a detection device - you will have to manually exclude the zone before attempting to arm the system.

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

♪  10 beeps on arming means mains power may be turned off or the backup battery is low.

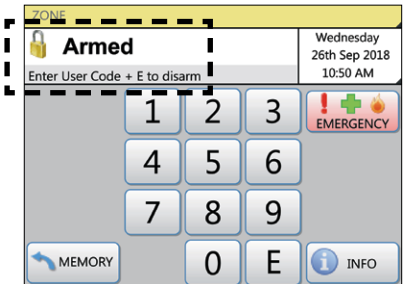
♪  One long beep when you arm could mean the panel is already armed or the keypad code is wrong, (if not using Shortcut Arming).



## To arm the system.

Touch  + 

or touch  +  + 



# To Disarm

When you enter the protected premises through a delay zone, the keypad responds with regular beeps<sup>1</sup> as a reminder to disarm.

If the panel is not disarmed by the end of the entry delay time, an alarm will occur.

Using the optional radio keys, you may disarm your system from inside your premises or from just outside.<sup>2</sup>

If you make a mistake when entering your user code, press "E" and start again. Five incorrect entries will cause an alarm.

The panel can be reset and the siren/s silenced by disarming the panel.

If you arrive at your premises and find the strobe light flashing<sup>3</sup> reset the panel as above. To check the cause of the alarm, you can view the alarms in memory by entering Memory Mode.

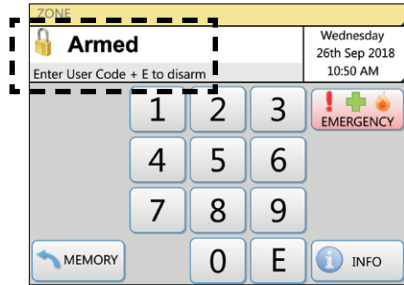
## ARM ONLY CODES

User codes can optionally be programmed to be Arm Only codes. An Arm Only code can arm the system but it cannot disarm. However if an Arm Only code is assigned to a radio key, the radio key OFF button will arm and disarm.

<sup>1</sup> If Entry Beeps are enabled.

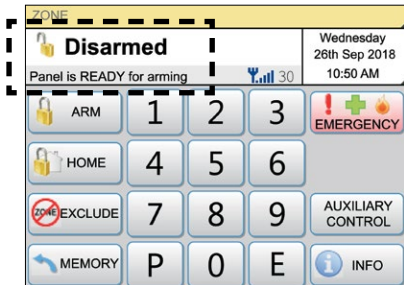
<sup>2</sup> The strobe light will flash to indicate arming and disarming by radio key. Your installer can also enable siren 'Chirps' for an audible indication of radio key operation.

<sup>3</sup> In the event of an alarm, the strobe light will flash for 72 hours or until the panel is reset.



**To disarm the system.**

Touch  +



## AUTO RE-ARM

Your panel may be programmed for Auto Re-Arm to help prevent accidental disarming.

Auto Re-Arm checks that you have entered the premises after disarming. If all zones remain sealed for a period as set by the entry delay time then the panel will re-arm. This is most useful when used with radio keys where the OFF button might be accidentally pressed after you have armed and are leaving the premises.

# To Arm Home Mode

Home 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 Home mode.

If an alarm occurs while in Home mode, entering a valid user code + E will silence the alarm. This will also disarm the panel, so remember to re-arm Home mode again if needed.

Using the optional Radio Keys you can arm Home Mode by pressing either the OFF button or the ON button twice within 4 seconds or by pressing the AUX button, (RK4 radio key only). These options must be enabled by your installer.

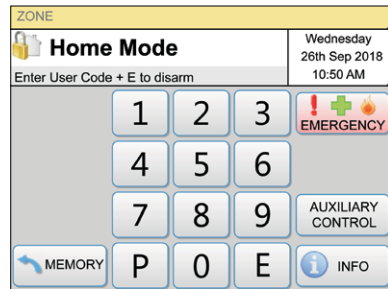
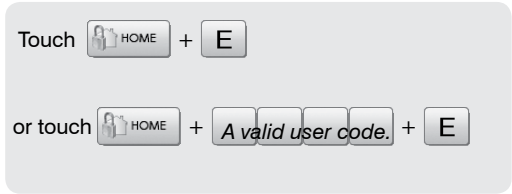
Note: Home Mode and Area arming

Home Mode can be used if the panel is fully disarmed or if only Area2 is armed. Home Mode is not available when Area 1 is armed.

The panel can be armed in Home mode if Area2 is already armed on these conditions:

- Area 1 must be OFF.
- Area 2 must be armed first, and then Home Mode armed – not the reverse.
- Zones assigned to both Home mode and to Area 2 will act as Home Mode zones when both Area 2 and Home Mode are armed.

Note: Home Mode arming when Area2 is armed cannot be done by Radio Key or by keyswitch.



## NOTE

In normal disarmed mode, the Home Mode button is visible only if your installer has enabled Home Mode.

# Keypad Duress Alarm

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 one of the digits 5, 6, 8 or 9 when disarming.

\* The Keypad DURESS is normally not enabled. To enable this function, consult your installer.

\* DURESS alarms can only be used by systems which are monitored by a Central Station.

\* The DURESS alarm can be programmed to sound the internal siren (Reset output). This option is Off by default.

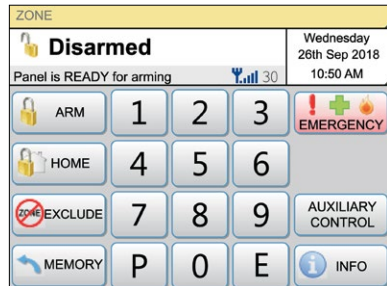
**To trigger the keypad Duress Alarm, add a special digit before your user code when disarming.**

Touch **5** +     + **E**

*A valid user code.*



*You can precede your user code with any of the digits 5, 6, 8 or 9.*



Your system will now be disarmed and a silent Duress alarm is sent to your central monitoring station.

# Emergency Alarms

## PANIC ALARM

The Panic alarm may have been programmed to be either Audible to activate the sirens, or Silent to send a PANIC report by dialler if your system is monitored by a Central Station.

The Emergency Alarm display will show Medical and Fire alarms only if they have been enabled by your installer.

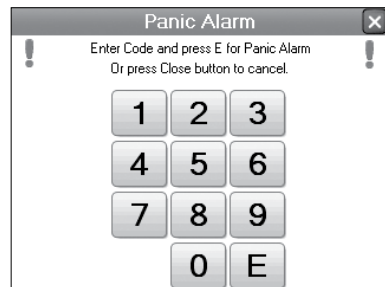
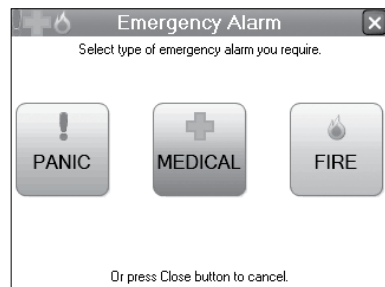
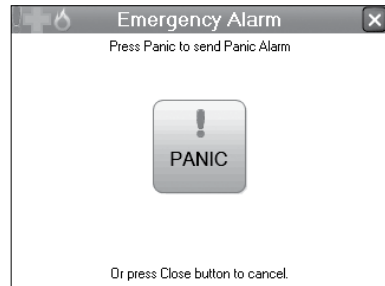
The Medical alarm sends a medical alarm report by dialler if this option has been enabled by your installer and the system is monitored by a central station.

The Medical Alarm does not sound the sirens.

The Fire alarm sounds the siren using the Fire Alarm sound and sends a Fire Alarm report by dialler. If this option has been enabled by your installer and the system is monitored by a central station.

To trigger Emergency alarms.

Touch 



If the Panic Alarm Shortcut is not enabled, you are required to enter your user code + E to trigger the panic alarm.

Touch  to close the window.



# Excluding Zones

If there is a problem with a detection device and the zone cannot be sealed when arming the panel, then that zone can be manually Excluded so that it does not generate alarms.

When zones have been Excluded, the EXCLUDE light flashes continuously while the panel is disarmed and also when armed.


Zones can be excluded while the panel is either disarmed or armed. See notes below.

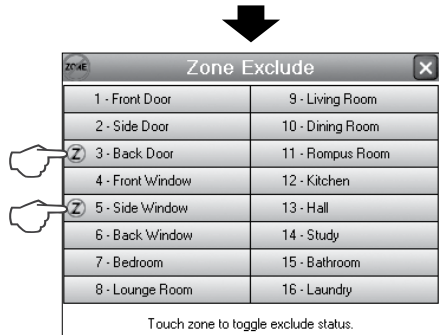
Zone Exclude is not permanent. Excluded zones are automatically included next time the panel is disarmed.

## To Exclude zones.

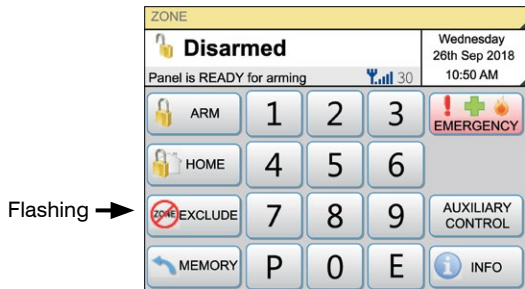
Touch 

Then touch the zone name/s to toggle the exclude status for one or more zones.

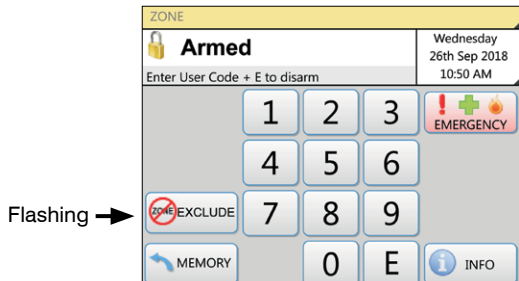
Excluded zones are indicated by the  icon.



Touch  to close the window.



In both disarmed and armed modes, the Zones Excluded icon flashes to indicate that there are zone/s excluded.



# Event Memory

The panel stores a comprehensive event memory, including Arming, Disarming, Low Battery, Mains Fail and Alarm events.


The memory is constantly updated and the last 80 events with time & date are always available for viewing.

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

The MEMORY button flashes continuously when an alarm has occurred as a reminder to view the alarm memory.

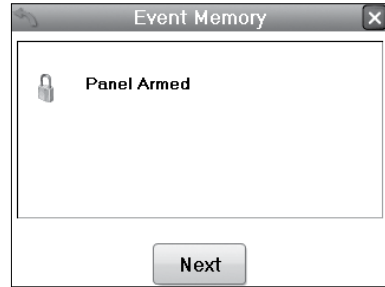
Touching the MEMORY button to view the event history also clears the flashing memory alert.

The Event Memory window will close automatically when the last event has been viewed.

Touch  to close the window.

To view the Event memory.

Touch 




Press Next to view the event memory from most recent to oldest.

 Panic Alarm



 Alarm Zone 1



 Radio Device 10  
Low Battery  
Dining Room



There is no need to refer to charts or tables - the event memory describes exactly what you're viewing, in plain English.

# Day Mode - Set up

Your Navigator control panel has a Temporary Day Zone feature which allows easy and flexible Day Zone selection and operation.

Temporary Day Zones operate in addition to Permanent Day Zones which are usually set up by your installer.

You can easily enable and disable Temporary Day Zones and even program which zones will be Day Zones from the Navigator Touch Screen keypad.

Day Zones can be programmed by your installer to beep the keypad, or briefly sound the siren/s or flash the strobe light, or to sound an optional buzzer.


## TYPICAL APPLICATIONS

Day Zones are useful for a variety of applications such as a shop door beeper triggered by a reed switch on the door.

For example, in a shop situation you can use Day Mode to alert you when a customer enters the front door.

You can also use Temporary Day Zones to monitor switches on, for example, the rear door or the fridge doors.

**Note for installers and advanced users:** Permanent Day Zones are not displayed in selection mode. Permanent Day Zones can be selected as Temporary Day Zones but this has no effect as those zones are already day zones.


Touch  to close the window.

Select which zones will be Temporary Day Zones. You probably will only need to do this once or occasionally.

### To enter Temporary Day Zones selection.

Touch  + 

Then touch the zone name/s you want to enable or disable as Day Zones.

Selected zones are indicated by the  icon.



# Day Mode - Operation

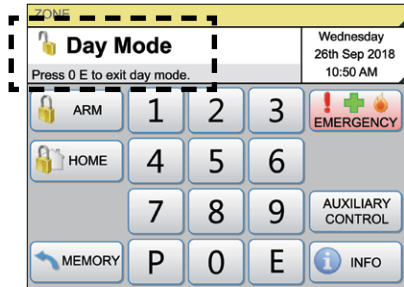
This enables/disables both Temporary and Permanent Day Zones.

When Day Mode is enabled, any unsealed day zone will sound the programmed output for 2 seconds. When Day Mode is disabled, an unsealed day zone will simply be indicated on the keypad as an unsealed zone.

Day Mode can be enabled when the panel is in the normal disarmed mode.

## To enable Day Mode.

Touch **0** + **E**



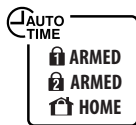
## To disable Day Mode.

Touch **0** + **E**

# Auto Time

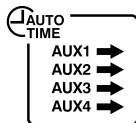
Auto Time - automating your Navigator security system.

Your D8XCEL/D16XCEL Navigator panel features sophisticated automation features making full use of the onboard Real Time Clock and a set of powerful yet simple to program options.



ARM or DISARM AUTOMATICALLY at pre-programmed times of day or day of the week.

Increase site security. No need to rely on staff remembering to arm or disarm the system.



TURN AUX OUTPUTS ON or OFF at pre-programmed times - every day, once a week, any time. Automate doors, sprinkler systems, lights and more.



ENABLE/DISABLE USER CODES depending on the time of day or day of the week. Allows managers to grant users access to the system at selected times and deny after hours entry.

## AUTO TIME WARNING PERIOD

(Optional function - must be enabled by your installer.)

When an Auto Time event is about to begin, your keypad (or keypads) will begin a constant slow beep as a warning that the automatic event is about to happen. The warning beeps can be programmed to start up to 99 minutes prior to the AutoTime event.

Press any key on the keypad to stop the beeps during the warning period. The beeps will start again for the final minute at a faster rate.

**Final Minute beeps.** In the last minute prior to the Auto Time event, the keypad will beep at a faster rate to warn that the event is about to start.

## TO DELAY THE AUTO TIME EVENT

(Optional function - must be enabled by your installer.)

To delay the Auto Time event, enter a valid user code on its own. (The user code must be assigned to an Area to work). This will suspend the warning beeps and the AutoTime event for 1 hour - when the warning process will start again.

Example: Your panel is programmed to Auto Arm at 6pm every weekday and the Warning Period is programmed for 5 minutes. You are working back late and at 5:55pm your keypad begins to beep. Since you're not ready to arm the system yet, enter your user code (without pressing E) at the keypad. The warning beeps will stop and arming will be delayed by one hour. At 6:55pm the warning beeps will start again, followed by automatic arming if you don't delay the event again.

Any AutoTime event can be postponed, not just arming. You can also delay the automatic turn (or off) of one of the AUX outputs in the same manner.

# AUX Outputs - Manual Operation

Manual Operation Of the Aux Outputs (Optional function - must be enabled by your installer.)


As well as automatic operation by Auto Time, the eight auxiliary outputs can also be operated manually by keypad.

The Auxiliary Output Control screen shows the AUX outputs which have been programmed for keypad control by your installer.

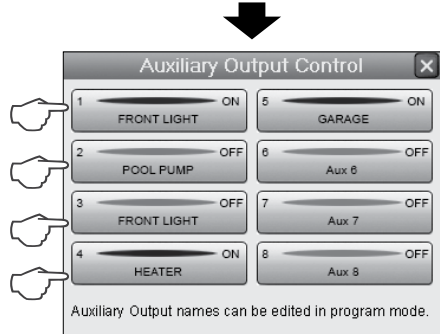
Touch a button to Pulse on or toggle an output. (Pulse or toggle is programmed by your installer.)

Note: Aux Outputs 5~8 are available if the optional Output Expander is fitted.

## To operate the AUX outputs.

Touch 

Auxiliary Control is available in all modes, including when the system is armed.



## MANUAL OPERATION AND AUTO TIME SCHEDULES

Manual operation of outputs works in conjunction with AutoTime schedules, if programmed.

For example, if AutoTime has turned an output on as scheduled (say, a light) you can manually turn it off (and back on again) any time you wish. At the scheduled turn OFF time, if the output is still on it will be turned off.

# Operation by SMS



D8XCEL and D16XCEL control panels can be operated and programmed by SMS (TXT) messaging from any mobile phone.

This section covers programming by direct SMS messaging from a mobile phone.

## SMS COMMANDS

COMMAND	OPERATION
A	ARM
H	HOME
X	EXCLUDE
P	PROGRAM <sup>1</sup>
E	ENTER
F	FIRE
D	MEDICAL
S	PANIC
11E ~ 88E	OPERATE AUX OUTPUTS
T	TEXT <sup>2</sup>

<sup>1</sup> See page 33

<sup>2</sup> See page 34 and the Installer Manual for detail

SMS commands are extremely flexible in their format.

## USE OF SPACES

The panel automatically ignores spaces in SMS programming commands. However, spaces are important in Text Output commands, see page 34.

## UPPER or LOWER CASE is ok

You can use either UPPER CASE or lower case characters in your messages, or even mixed case without a problem.

## COMMAS

Commas are used to separate words when reprogramming text output, so use commas only when the command allows it.

## MULTIPLE COMMANDS

You can send multiple programming commands in one text message. See the Installer Manual for detailed instructions.

### ACK (Acknowledged)

ACK is the panel saying 'I have received the command and applied it'.

### NAK (Not Acknowledged)

The 'NAK' response indicates that the command was not accepted by the panel. Check the format of your SMS or perhaps the command should have been sent in Installer program mode.

## SMS RESPONSES

### SMS IS RECEIVED FROM A KNOWN PHONE NUMBER (one of the phone numbers programmed at P180E--P189E)

- The panel will respond to any SMS command from a known phone number.
- A correctly formatted command will be actioned and replied with ACK (Acknowledged).
- If you send an incorrectly formatted SMS or the wrong user code the panel responds with NAK (Not ACK).

### SMS IS RECEIVED FROM AN UNKNOWN PHONE NUMBER

- If the user code is valid the panel will action the command and reply.
- If the user code is not valid the panel will ignore the command and reply with the message "The SMS just received is wrong. No further responses until correct SMS received"
- The panel ignores further attempts to operate it with an invalid user code.
- Once a correct command with a valid user code is received the panel will action and reply.
- If the valid user code is not the master user code, but the command requires the master code then the reply is "wrong message"

# Operation by SMS

SUMMARY OF SMS OPERATING COMMANDS. The following examples use the default Master Code of 123 just as an example. Substitute your own valid user code/s in operation.

OPERATION	SMS TO THE PANEL	SMS REPLY
ARM	A123E	<p>A123E ACK            arming status: AREA 1 ARMED            IN EXIT DELAY            zones unsealed: NONE            zones in alarm: NONE            zones excluded: NONE            outputs status: ALL OFF</p> <p>Any unsealed zones, zones in alarm and excluded zones will listed as ZONE [x] or by name if named.</p>
DISARM	123E	<p>123E ACK [plus zones and outputs status as per arming response above]</p>
HOME mode	H123E	<p>H123E ACK arming status: AREA 1 ARMED IN EXIT DELAY            [plus zones and outputs status as per arming response above]</p>
EXCLUDE zones (Example zones 4 & 5)	X123E4E5E	<p>X123E ACK 4E ACK 5E ACK E ACK            zones excluded: ZONE 4 ZONE 5</p>
FIRE alarm <sup>1</sup> (Triggers the Fire Alarm, if enabled)	F123E	F123E ACK
MEDICAL alarm <sup>2</sup> (Triggers Medical Alarm, if enabled)	D123E	D123E ACK
PANIC alarm <sup>3</sup> (Triggers Panic Alarm, if enabled)	S123E	S123E ACK
Operate AUX outputs, eg Aux1 (if enabled for use) (Aux2 is 22, Aux3 is 33 etc)	C123E11ON	11* ACK auxiliary outputs on: AUX1
	C123E11OFF	11# ACK auxiliary outputs on: ALL OFF [or the Aux number/s if any are on]

<sup>1</sup> The FIRE alarm sounds the siren using the FIRE siren sound and sends a fire report if programmed.

<sup>2</sup> The MEDICAL alarm triggers the strobe light if programmed and sends a medical report if programmed.

<sup>3</sup> The PANIC alarm triggers the sirens and strobe if programmed.



# Programming Options

User No.	Option No.	Default	User No.	Option No.	Default	User No.	Option No.	Default
1 Master Code	P201E	123	20	P220E		39	P239E	
2	P202E		21	P221E		40	P240E	
3	P203E		22	P222E		41	P241E	
4	P204E		23	P223E		42	P242E	
5	P205E		24	P224E		43	P243E	
6	P206E		25	P225E		44	P244E	
7	P207E		26	P226E		45	P245E	
8	P208E		27	P227E		46	P246E	
9	P209E		28	P228E		47	P247E	
10	P210E		29	P229E		48	P248E	
11	P211E		30	P230E		49	P249E	
12	P212E		31	P231E		50	P250E	
13	P213E		32	P232E		51	P251E	
14	P214E		33	P233E		52	P252E	
15	P215E		34	P234E		53	P253E	
16	P216E		35	P235E		54	P254E	
17	P217E		36	P236E		55	P255E	
18	P218E		37	P237E		56	P256E	
19	P219E		38	P238E				

Option no.	Description	Default	Comment
P26E	Entry Delay Time 1	20 (20 sec)	
P27E	Entry Delay Time 2	6 (60 sec)	This option works in multiples of 10. (6 = 60 sec).
P28E	Exit Delay Time	60 (60 sec)	

Phone Number	Option no.	Record your numbers
Ph No 1 for SMS alarm reports & programming	P180E	
Ph No 2 for SMS alarm reports & programming	P181E	
Ph No 3 for SMS alarm reports & programming	P182E	
Ph No 4 for SMS Area 1 Open/Close reports only	P183E	
Ph No 5 for SMS Area 2 Open/Close reports only*	P184E	
Ph No 6 for for SMS operation*	P185E	
Ph No 7 for for SMS operation*	P186E	
Ph No 8 for for SMS operation*	P187E	
Ph No 9 for for SMS operation*	P188E	
Ph No 10 for for SMS operation*	P189E	

\* Phone number 5 for Area 2 Open/Close reports is available in firmware Rev10.8 and later.

\*Phone Numbers 6 to 10 are used for the panel to recognise "Known" phone numbers and reply appropriately to operation and programming commands. These numbers do not receive any SMS alarm reports.

Note 1. Phone numbers 6 to 10 are not essential if the phone sending SMS commands is programmed in one of Phone Numbers 1 to 5.

Note 2. The panel will respond to a valid command from any mobile phone number, not just the numbers programmed. However, "Unknown" phone numbers will not get replies to invalid messages.

# Programming by Navigator Keypad

In User Program Mode you can program User Codes, Timers, Real Time Clock, Follow Me Telephone Number.

## USER CODES

The panel has 56 user codes which can be operated by keypad code (3-6 digit PIN), by optional radio key or by optional access cards.

**The factory default Master Code is 123. You should re-program this code with a new code of your own choice.**

See page 29.

## TIMERS

You can also re-program the Entry Delay Time and Exit Delay Time if you need more or less time to exit and enter the premises.

See page 31.

## TELEPHONE NUMBERS

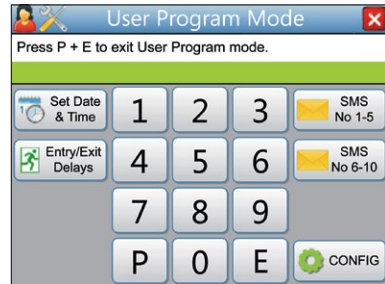
D8XCEL & D16XCEL have 5 user-programmable phone numbers for reporting of alarm events by SMS messaging.

See page 32.

Enter program mode when the panel is in the normal disarmed mode.

### To enter User Program Mode.

Touch **P** + *Your Master code.* + **E**



### To exit User Program Mode.

Touch **P** + **E**

The panel will automatically exit Program Mode if the keypad is inactive for 4 minutes.

# Programming - Navigator Configuration

The Navigator Configuration screen allows you to:

## SET BRIGHTNESS

Adjust the brightness of the Navigator's LCD screen back-lighting as preferred.

## SET VOLUME

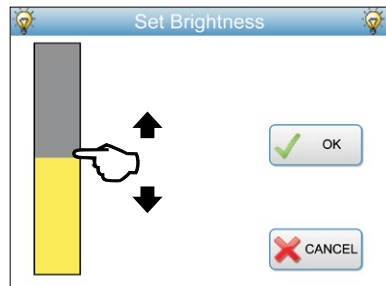
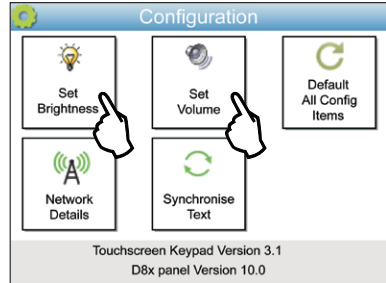
Adjust the beep volume of the Navigator touch screen.

## DEFAULT ALL CONFIG ITEMS

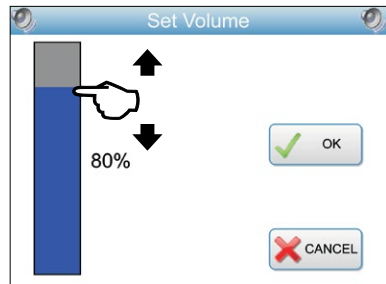
This option deletes your custom settings and returns all configuration options to factory default settings.

In User Program Mode.

Touch 



Slide your finger along the Brightness slider to adjust the brightness from 1% to 100%



Slide your finger along the Volume slider to adjust the beep volume from 1% to 100%. The volume cannot be set to zero.

# Programming the Clock

The clock is automatically updated from your cellular network so you should only need to adjust the clock if the panel is being used 'offline' without a SIM card

If the clock is manually set you will need to adjust the Hours setting for Daylight Savings.

This option allows you to program:

DAY OF MONTH (01-31)

MONTH (01-12)

YEAR (10-63)

HOUR (00-23) 24hr time format

MINUTE (00-59)

The Day Of Week is automatically calculated from the date and does not need to be programmed.

## DATE FORMAT

The date is entered in 24 hour format but is displayed on screen in 12 hour format.

In User Program Mode.



Touch 









To program.

Touch  +  + 


Touch  +  + 



Touch  +  + 

Touch  +  + 

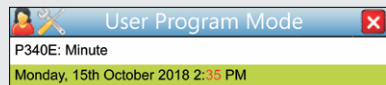
Touch  +  + 

EXAMPLE: To set the minutes.

Touch 

Enter Minutes (00-59)  + 

The green status bar shows the new setting.



# Programming User Codes

- Up to 56 Keypad Codes can be programmed to control your XCEL panel.
- Keypad Codes can be 3 to 6 digits in length.
- User Code 1 is also the Master Code which is used to enter User Program mode.
- User Codes 2 to 56 can be programmed to be Radio Codes or Access Cards as required. Ask your installer.
- If a code has been programmed by your installer to be an Arm Only code, then that user code can arm but not disarm the panel. This is handy for cleaners, temporary staff etc.

Note 1. User codes must not start with zero. (The panel will allow codes beginning with zero to be programmed but they will not operate the panel. This is an alternative method for disabling user codes.)

Note 2. 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.

Touch to delete a user code



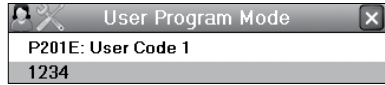
In User Program Mode.

Refer to the User Code options table on page 25 then enter the option number of the user code you want to program.

Touch **P** +    + **E**  
*3 digit option number*



The current user code is displayed.



Now enter your new user code (PIN). The code can be 3 to 6 digits in length.

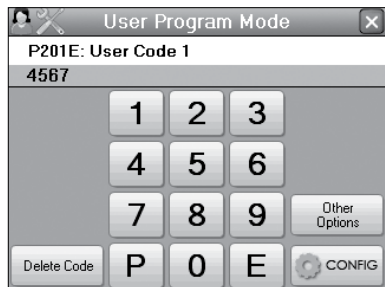
Touch  *Your new PIN* + **E**

Then enter the PIN again to confirm.

Touch  *Your new PIN* + **E**



The new user code will be displayed.



# Programming Radio Keys

Each of the User Codes, except for the Master Code, can be programmed to be Radio Codes.

This allows up to 55 Ness Radio Keys to be used for arming and disarming of the panel.

The optional Ness Radio Interface is required for radio operation. Ask your installer.

Indicates that this code has been enabled as a Radio Code. If the option has been enabled by your installer.

Touch to delete a Radio Key.

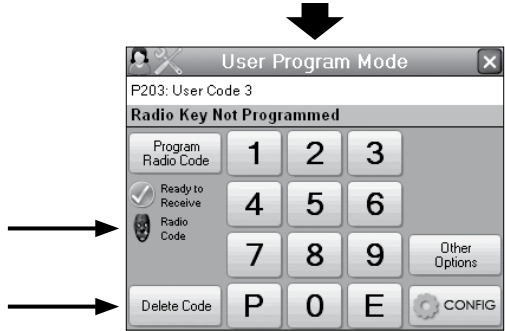
The green status bar will indicate that the Radio Key was successfully programmed.

If you hear a long beep, the Radio key may already be programmed at another user code.

In User Program Mode.

Refer to the User Code options table on page 25 then enter the option number of the user code you want to program.

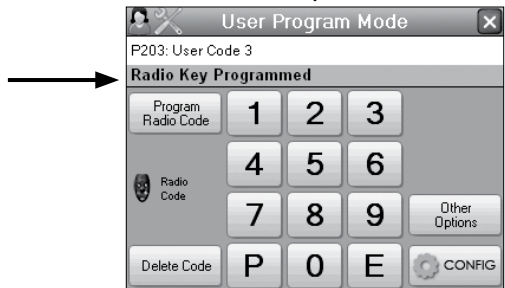
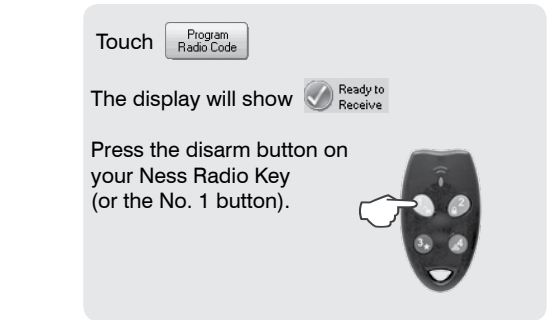
Touch **P** +    + **E**  
*3 digit option number*  
*Example, P203E*



Touch **Program Radio Code**

The display will show  Ready to Receive

Press the disarm button on your Ness Radio Key (or the No. 1 button).



# Programming Timers

This option allows you to program:

**ENTRY DELAY TIME 1 (01-99 sec)**  
 Entry Delay Time 1 sets the time allowed to enter the premises through a delay zone.

**ENTRY DELAY TIME 2 (01-990 sec)**  
 If enabled by your installer, this timer is used to give extra long entry delay on selected zones. Entry Delay Time 2 is internally multiplied by 10. For example, enter 12 to get a time of 120 seconds.

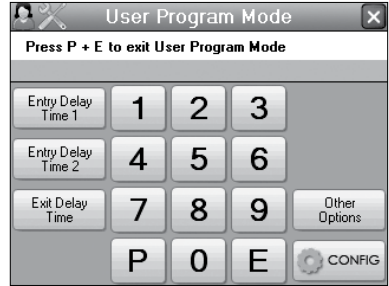
**EXIT DELAY TIME (01-99 sec)**  
 Exit Delay Time sets the time allowed to exit the premises after arming. All zones, except 24hr zones, are inactive during the Exit Delay Time.

The option number and the current delay time is displayed.

The new delay time is displayed.

In User Program Mode.

Touch 




To program.

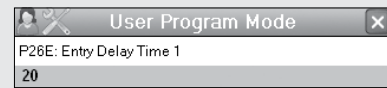
Touch  +  + 


Touch  +  + 

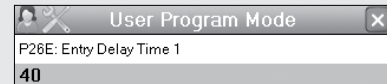
Touch  +  + 

**EXAMPLE: To set Entry Delay Time 1.**

Touch 



Enter the new delay (01-99)   + 



# Programming SMS Telephone Numbers

D8XCEL & D16XCEL have 5 user-programmable phone numbers for reporting of alarm events by SMS messaging.

Phone Numbers 1, 2 and 3 will receive SMS alarm reports (not open/close reports).

Phone Number 4 will only receive open/close reports for Area 1\*

Phone Number 5 will only receive open/close reports for Area 2\*

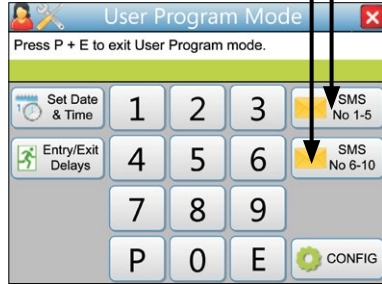
Phone Numbers 6 to 10 are used for the panel to recognise "Known" phone numbers and reply appropriately to operation and programming commands. These numbers do not receive any SMS alarm reports.

Note 1. Phone numbers 6 to 10 are not essential if the phone sending SMS commands is programmed in one of Phone Numbers 1 to 5.

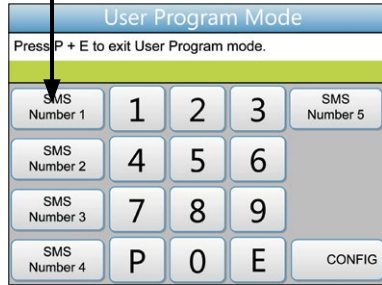
Note 2. The panel will respond to a valid command from any mobile phone number, not just the numbers programmed. However "Unknown" phone numbers will not get replies to invalid messages.

\* If open/close reporting has been enabled by your installer.

In User Program Mode.  
Touch SMS 1-5 or SMS 6-10 to edit one of the telephone numbers.



Choose a telephone number to program



Touch  + E

The option number and the programmed phone number are displayed.





# Programming by SMS



This section covers programming by direct SMS messaging from a mobile phone.

## PROGRAMMING BY SMS FROM A SMARTPHONE

SMS commands can be used to program keypad codes, entry/exit delay timers and phone numbers for receiving SMS self-monitoring messages.

Examples using the factory default master code: 123

<b>EXAMPLE 1</b>	
Program the Entry Delay time to be 15 seconds	
SMS SENT TO THE PANEL	SMS REPLY
P123E P26E 15E	M123E ACK M26E ACK 15E ACK ME ACK
Entry Delay can be programmed in User Program Mode so the installer code is not required.	

This string of commands breaks down into easy to understand parts, where...

### **P123E**

Enters user program mode. 123 in this case is the Master code.

### **P26E**

The option number for Entry Delay

### **15E**

Programs Entry Delay to be 15 seconds

<b>EXAMPLE 2</b>	
Program User Code 2 to be 5678.	
SMS SENT TO THE PANEL	SMS REPLY
P123E P202E 5678E 5678E	M123E ACK M202E ACK 5678E ACK 5678E ACK ME ACK
User Codes can be programmed in User Program Mode so the installer code is not required.	

# Programming by SMS

---

## CHANGING TEXT OUTPUT

D8XCEL and D16XCEL have an extensive library of text descriptions used in SMS messaging, and also give the user the ability to customise the text output to suit individual needs.

For example, the default text sent for a zone alarm is:

```
NESS security report
from LOCATION
ALARM ZONE 3 AREA 1
Tue 7 Aug 2018 4:07:22pm 1/1
```

XCEL allows most words in this message to be modified.

Let's say you want to customise the panel's name and rename zone 3.

The panel name is set by the text output named LOCATION and the zone name by the text ZONE 3. (See the table, page 35).

To rename LOCATION and ZONE 3:

SMS SENT TO THE PANEL	SMS REPLY
T123E,LCN, MYHOME, Z3, Z3 RUMPUS	text report changes made LOCATION,MYHOME, ZONE 3, Z3 RUMPUS 1/1

SMS alarm reports will then appear as:

```
NESS SECURITY REPORT
from MYHOME
ALARM Z3 RUMPUS AREA 1
Tue 7 Aug 2018 4:07:22pm 1/1
```

Using the same method every word and phrase in the SMS message can be renamed. Refer to the text table on page 35

Refer to the Installation Manual for further detail.

**Note: Text Names can only be programmed by SMS messaging as described on this page. This includes Zone Names, User Names and Installer Details for display on the Navigator keypad and for reporting by SMS messaging.**

# Programming by SMS

## TEXT OUTPUT TABLE

Library of available SMS text names. Each can be renamed using the instructions on page 34

Default NAME (Shortcut NAME)*	Navigator Installer Information Screen	Your data
INSTALLER NAME 1 (IN1)	Name	
INSTALLER COMPANY 1 (IC1)	Company	
INSTALLER ADDRESS 1 (IA1)	Address Line 1	
INSTALLER ADDRESS 3 (IA3)	Address Line 2	
INSTALLER TEL NO 1 (IT1)	Phone	
INSTALLER MOBILE 1 (IM1)	Mobile	
INSTALLER EMAIL 1 (IE2)	Email	

Default NAME (Shortcut NAME)*	RENAME
LOCATION (LCN)	
USER 1 (U1)	
USER 2 (U2)	
USER 3 (U3)	
USER 4 (U4)	
USER 5 (U5)	
USER 6 (U6)	
USER 7 (U7)	
USER 8 (U8)	
USER 9 (U9)	
USER 10 (U11)	
USER 11 (U11)	
USER 12 (U12)	
USER 13 (U13)	
USER 14 (U14)	
USER 15 (U15)	
USER 16 (U16)	
USER 17 (U17)	
USER 18 (U18) ... to User 56 (U56)	

Default NAME (Shortcut NAME)*	RENAME
ZONE 1 (Z1)	
ZONE 2 (Z2)	
ZONE 3 (Z3)	
ZONE 4 (Z4)	
ZONE 5 (Z5)	
ZONE 6 (Z6)	
ZONE 7 (Z7)	
ZONE 8 (Z8)	
ZONE 9 (Z9)	
ZONE 10 (Z10) ... to Zone 16 (Z16)	
AUX1 (X1)	
AUX2 (X2)	
AUX3 (X3)	
AUX4 (X4)	
DOOR 1 (D1)	
DOOR 2 (D2)	
DOOR 3 (D3)	

\*Shortcut names are provided for simplified programming by SMS. (Omit the brackets). See page 34 Changing Text Output

# Central Station Monitoring

---



Ness XCEL 4G control panels have an on-board cellular communicator which can send detailed alarm messages to a Central Monitoring Station via IP protocols.

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.

Central station monitoring is highly recommended and is the most effective method of monitoring your alarm system.

For further information about 24 hour monitoring, contact your installer or Ness Corporation.

# SMS Self-Monitoring

---



An active SIM card is required for SMS operations.

SMS 'Self-monitoring' reports can be programmed to be sent by the panel to up to 10 mobile phones.

Monitoring messages can include Arm/disarm reports by Area and User, Zone alarms and Restorals, System Alarms such as AC Fail and Low Battery, Panic alarms.

## SMS REPORTING MESSAGE FORMAT

Example 1 - Alarm from Zone 3

```
NESS security report
from MYPANEL
ALARM Z3 RUMPUS AREA 1
Tue 7 Aug 2018 4:07:22pm 1/1
```

## SMS MESSAGE EXPLAINER

**NESS security report** Identifies the message as a Ness alarm panel report.

**MYPANEL** identifies the premises. This ID can be programmed by SMS using the LOCATION command, see the Installer Manual for details.

**ALARM** Tells us there has been an alarm

**Z3 RUMPUS** What caused the alarm. In this case Zone 3 which has been renamed RUMPUS. The zone name can be programmed by SMS, otherwise the panel just reports the zone number, see the Installer Manual for details.

**AREA 1** Identifies the zone as belonging to Area 1

**Tue 7 Aug 2018 4:07:22pm** Time and date of the event

1/1. Means message 1 of 1. Long SMS messages are split into multiple messages of 160 characters each

While SMS reporting is a powerful and useful feature it is dependent on the integrity and availability of the cellular network.

As with any SMS message it is possible that SMS monitoring reports may be delayed or fail to be delivered. Such failures are a function of the cellular network/s and beyond the control of Ness Corporation.

Ness recommends central station monitoring as your primary monitoring path.

# Troubleshooting

SYMPTOM	POSSIBLE CAUSE	REMEDY
When arming, a zone icon is on or the keypad gives a long beep.	One or more detection devices (a PIR or reed switch) may be <i>unsealed</i> .	Find the cause of movement or close the door or window.
<ul style="list-style-type: none"> <li>• 10 beeps from keypad.</li> <li>• MAINS icon is flashing.</li> <li>• BATTERY icon is flashing.</li> </ul>	The mains power may be off, ...or the panel's backup battery may be low, ...or a Radio Device battery may be low.	Make sure the plug pack is plugged in and the power point is turned on. The backup battery may need replacing, call your installer.
1 long beep from the keypad.	Invalid keypad entry.	Press the E button and try again.
2 second siren at the end of Exit Delay time.	A zone was <i>unsealed</i> at the end of exit delay time.	Disarm the panel and check all zones.
The strobe icon is flashing.	There has been an alarm within the last 72 hours.	Reset the alarm by disarming the panel and check the Alarm Memory
Siren sounds while the panel is disarmed.	A 24 hour zone has been alarmed. (Siren Tamper, Box Tamper, Panic Button).	Reset the alarm by disarming the panel and call your installer.
EXCLUDE is flashing.	A zone/s has been Excluded.	This is to indicate that one or more zones have been Excluded.
Cannot arm and EXCLUDE is displayed.	You are in Exclude mode.	Press E to exit Exclude mode.
TAMPER ALARM is flashing	The 24 hour Tamper input has alarmed. (Siren tamper or box tamper).	Call your installer.
MEMORY is flashing.	There are alarms in memory.	To clear the ALARM MEMORY icon, view the Alarm memory otherwise the icon will clear next time you arm the panel.
Cannot enter Program Mode.	The panel is armed.  Or you may be attempting to enter program mode using one of the user codes.	Disarm the panel before attempting to enter Program Mode.  Try again using the Master Code.
When I arm by radio key, the keypad does not show ARMED immediately.	The panel is waiting 5 seconds for a second press of the ON button to enter Home mode.	This is normal operation when arming of Home mode by radio key is enabled.
The keypad is making a continuous slow beep.	This is the AutoTime warning beep which can be programmed to start from 1 to 99 minutes before an AutoTime event is due to begin.	The beeps will continue during the AutoTime warning period changing to faster beep in the final minute prior to the AutoTime event.
The panel re-arms itself a short time after disarming.	Auto Re-Arm is enabled.	Enter the premises after disarming. Auto Re-Arm is designed to re-arm the panel if you don't enter the premises after disarming.
The clock display shows the wrong time	The panel does not have a valid SIM card installed ...or... the SIM card has expired ...or... if using the panel without SIM, the clock needs to be manually programmed.	Contact your installer and fit a valid SIM card. Check the status of your SIM card with your telco. Program the clock, see page 28
The System Alarm area is flashing CELLULAR FAIL	The 4G antenna may not be fitted or a source of interference has been introduced in the premises	Check that the 4G antenna is connected and mounted in the best position for optimal signal.
... or NO SIM	... a valid SIM card is not fitted.	Fit a valid SIM card.

INSTALLATION RECORD



DATE PURCHASED:	DATE INSTALLED:
INSTALLATION COMPANY:	
TELEPHONE:	
MONITORING COMPANY:	
SIM CARD PROVIDER:	SIM CARD PH NUMBER:

**TIMERS**

User programming options

**P26E** ENTRY DELAY TIME 1

**P27E** ENTRY DELAY TIME 2

**P28E** EXIT DELAY TIME

**P29E** SIREN RESET TIME

	Seconds
	Seconds
	Seconds
	Minutes

**ZONE ASSIGNMENT**

Installer programming options

- P41E ENTRY DELAY 1
- P43E ENTRY DELAY 2
- P42E HANDOVER
- P40E INSTANT
- P45E AREA 1
- P46E AREA 2
- P51E MONITOR
- P52E 24 HOUR
- P54E RESET OUTPUT
- P55E STROBE OUTPUT
- P56E SONALERT OUTPUT
- P57E SIREN OUTPUT
- P74E Report (dialler)

ZONES	DEVICE TYPE	PIR, Reed switch, etc	DESCRIPTION	Entrance, bedroom1, etc	P41E	P43E	P42E	P40E	P45E	P46E	P51E	P52E	P54E	P55E	P56E	P57E	P74E
D8 & D16	1																
	2																
	3																
	4																
	5																
	6																
	7																
	8																
D16	9																
	10																
	11																
	12																
	13																
	14																
	15																
	16																

USER CODE	OPTION No	Extra Options Assigned E.g. Radio Code, Arm Only, etc.
12 <sup>Master Code</sup>	P201E	
22	P202E	
32	P203E	
42	P204E	
52	P205E	
62	P206E	
72	P207E	
82	P208E	
92	P209E	
10	P210E	
11	P211E	
12	P212E	
13	P213E	
14	P214E	
15	P215E	
16	P216E	
17	P217E	
18	P218E	
19	P219E	

USER CODE	OPTION No	Extra Options Assigned E.g. Radio Code, Arm Only, etc.
03	P220E	
14	P221E	
24	P222E	
34	P223E	
44	P224E	
54	P225E	
64	P226E	
74	P227E	
84	P228E	
29	P229E	
30	P230E	
31	P231E	
32	P232E	
33	P233E	
34	P234E	
35	P235E	
36	P236E	
37	P237E	
38	P238E	

USER CODE	OPTION No	Extra Options Assigned E.g. Radio Code, Arm Only, etc.
9	P239E	
0	P240E	
1	P241E	
2	P242E	
3	P243E	
4	P244E	
5	P245E	
6	P246E	
7	P247E	
48	P248E	
49	P249E	
50	P250E	
51	P251E	
52	P252E	
53	P253E	
54	P254E	
55	P255E	
56	P256E	



## NESS SIM Registration & Activation

THIS CELLULAR PRODUCT IS NOT LOCKED AND CAN BE USED WITH ANY ACTIVE SIM.<sup>1</sup>

A Ness SIM card is supplied for your convenience. You can choose to activate the Ness SIM or BYO SIM on a network of your choice.

Please activate the Ness SIM to enjoy the advantages of remote access and monitoring via the cellular network.<sup>2</sup>

Ness SIM benefits:

- A Ness SIM card is supplied
- Easy online activation & simple billing
- Competitive Retail & Trade SIM plans
- No lock-in contracts - opt out anytime



To activate the SIM  
**[activate.ness.com.au](https://activate.ness.com.au)**

1. Standard sized SIM required.
2. Monthly network access charges apply once activated. Access charges do not include central station monitoring which is a separate service.

SIM enquiries: [simactivation@ness.com.au](mailto:simactivation@ness.com.au)