Training Manual

IDS
INHEP DIGITAL SECURITY

X-Series

with Bi-directional Wireless

Installer Training
Firmware Version 2.7x

X16 Stock Code: 860-1-473-X16

X64 Stock Code: 860-1-864-XS

Contents

X-Series v2.70 Features

1. 8 Zone panel expandable up to 64 Zones
2. 8 Partitions
3. 4 Stay profiles per partition
4. 128 User codes
5. User code options to set as Master, Duress, Arm to Disarm (Maids), Arm Only or Disarm Only
6. Auto arm / disarm
   a. Per partition
   b. By day of week
   c. Pre-determined time
   d. No movement
7. Four reporting numbers
   a. Dual reporting
   b. Split reporting
8. Medical Alarm on no movement
9. Maintenance code
   a. Siren time and delay
   b. Keypad lockout
   c. Day light savings
   d. No movement auto arm / disarm
   e. Auto arm
10. Selectable zone bypass
    a. By partition
    b. By user code
    c. By zone property
11. Dynamic battery test
12. Low battery cut out
13. Improved power supply
14. Programmable zone loop response
15. Up & downloadable via IDSwift2 software
16. Panel firmware upgradable onsite via serial cable and IDSwift2 software
17. Fax defeat to bypass fax / answering machines
18. Optional tamper reporting per zone
19. Non-volatile memory
20. 1000 Event log
21. Voice reporting and DTMF control
22. SMS reporting and control
23. Bi-directional Wireless Detector Integration
24. Multi-Language: English, Afrikaans, Portuguese, Spanish, Greek, Italian
25. Monitored Power Supply for Wired Expander modules or Output Expander
26. Output expander
27. IDS aXess integration

This manual incorporates the X8s, X16 & X64 alarm panels. References are to all three panels and depending on the system you are working on will depend on how to read/understand the information.
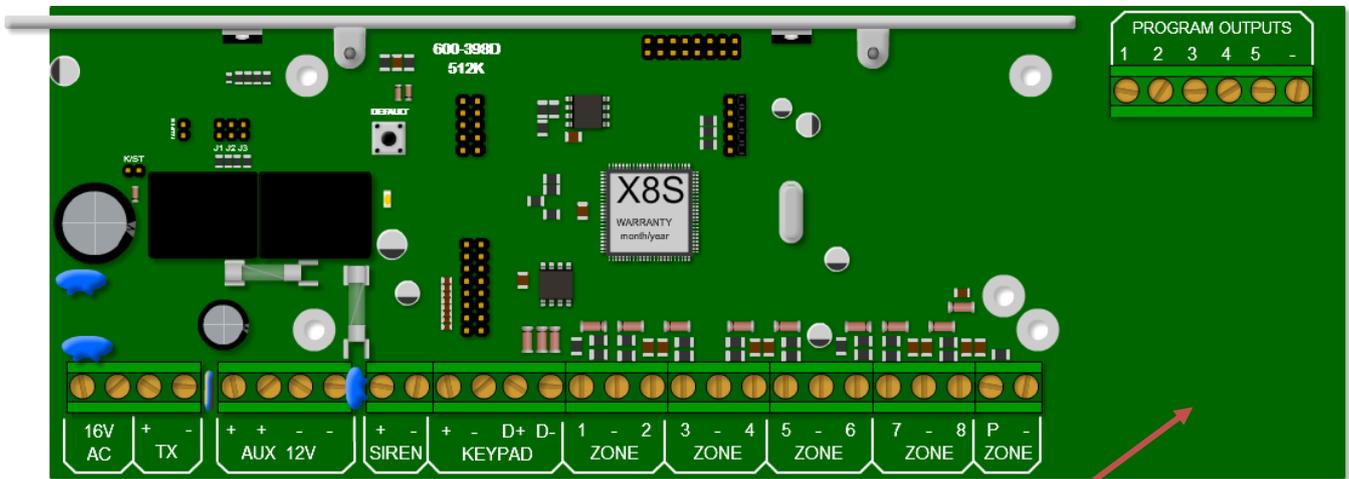
Example: If any zones above 16 are mentioned then X64 is being described.

Training must be done with X64 panels as some of the exercises are not suitable for the X8s or X16. Any settings involving telephone communication are not available on X8s.

Hardware

1. Kick Start 2. Default Button 3. Status LED 4. Serial 5. PGM Outputs

7. Onboard Expander Connector

X64/X16 Alarm Panel

8. Keypad Bus

6. Connectors
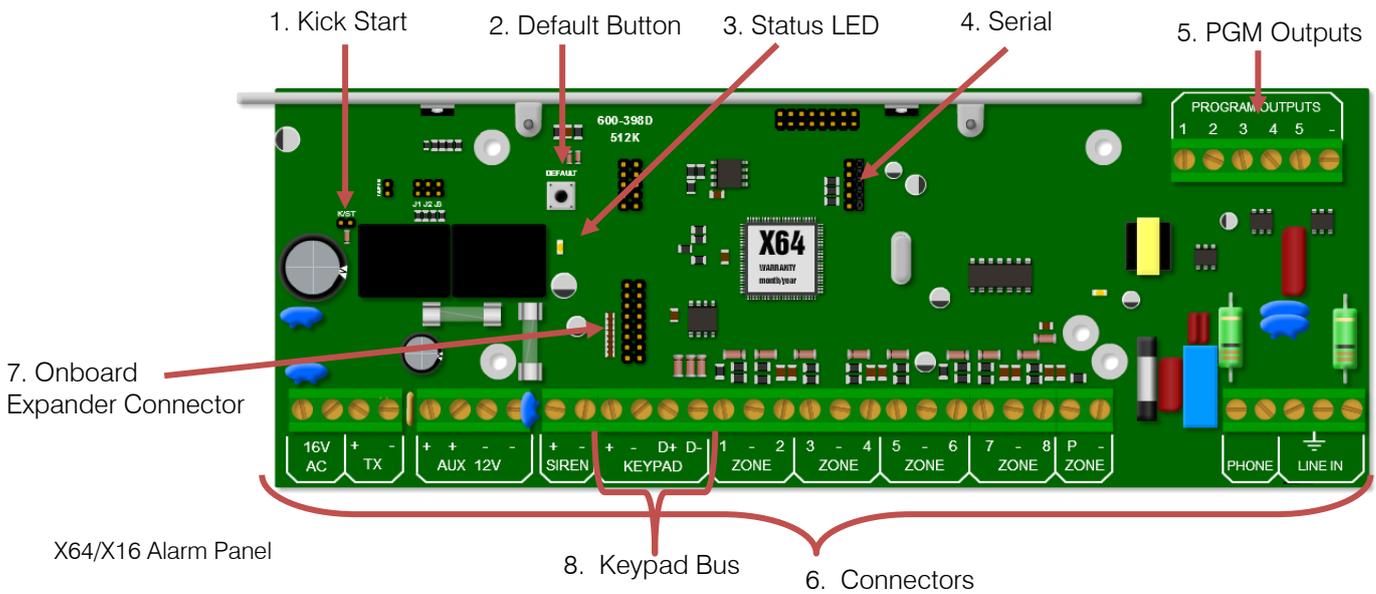
X8Ss Alarm Panel

Note: The X8S has no dialler

1. Kick Start Jumper
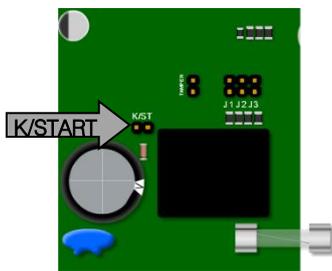
When connecting to a battery, without 16VAC connected, the X-Series alarm panel will not power up until the kick start jumper has been. This feature has been included so that if the battery voltage starts fluctuating and goes below 10.5 volts, without AC, the panel switches off, stopping the alarm from entering any undesirable states that could compromise the integrity of the system. When AC is applied the alarm will power up automatically.

2. Default Button & 3. Panel Status LED
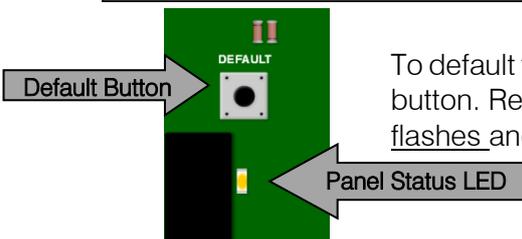
To default the panel, physically remove power from the unit and hold down the default button. Replace power whilst still holding the button. Wait until the panel status LED flashes and then release the button.

The status LED indicates the condition of the operating system.

3. Panel Status LED

The status LED indicates the condition of the operating system.

Off = Not running

Flashing once a second = Normal operation

Flashing fast = Alarm Panel System fault

4. Serial Output

The serial connection on the X-Series alarm panel (Version 2.10 and up) can communicate with any device that has the IDS Serial Protocol incorporated into it.

The example below is the X-SMS Module connected via the serial output:
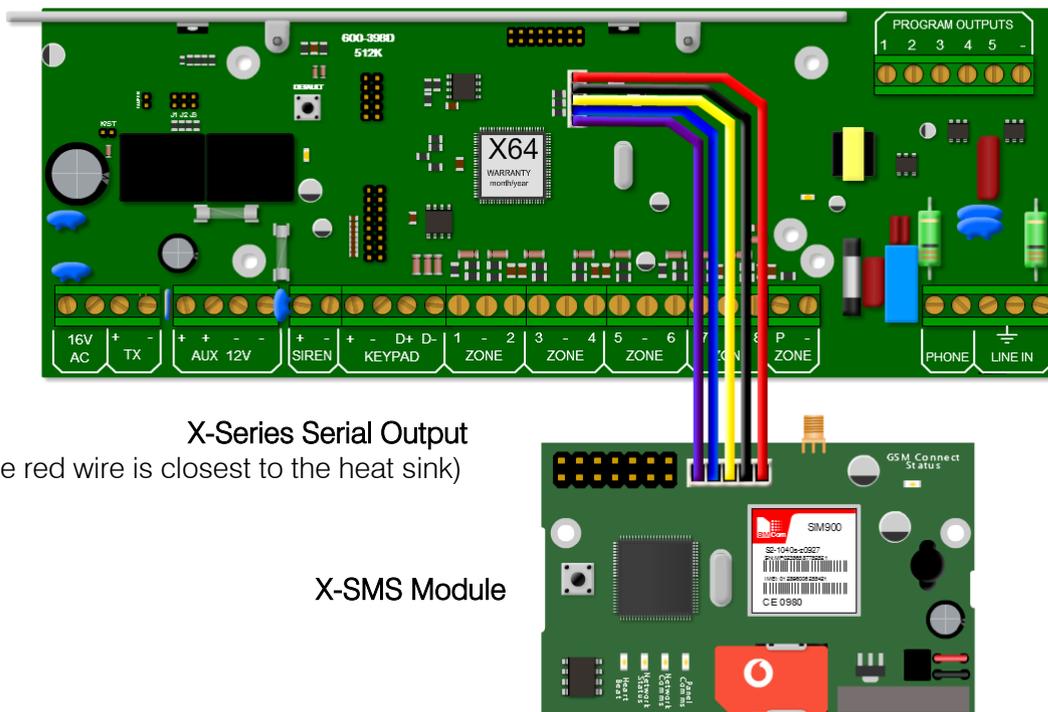
X-Series Serial Output
(Note the red wire is closest to the heat sink)

X-SMS Module

NOTE: As from X-Series v2.50 setting J1 is not required, however in previous X-Series versions it's used to set serial mode to reporting or download (IDSwift2)

<u>X-Series panel v2.00 - v2.41 only</u>
J1 Closed to enable serial reporting.
J1 Open to allow IDSwift2 connection.
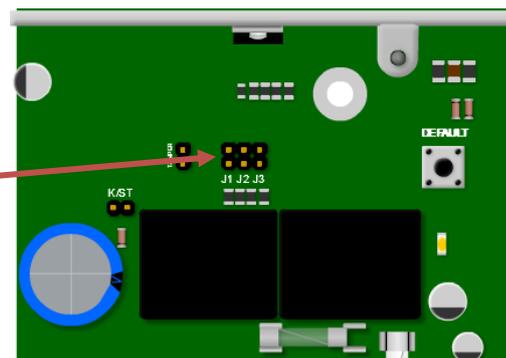
5. Programmable Outputs

Five positively triggered outputs that can supply 80mA of current.

By default: Output 1 will pulse if a panic or a duress is triggered

Output 2 will pulse if a burglary condition is triggered

Output 3 will latch on when the system is away armed

Output 4 will pulse if a fire condition is triggered

Output 5 will pulse if a medical condition is triggered

6. X-Series Connectors
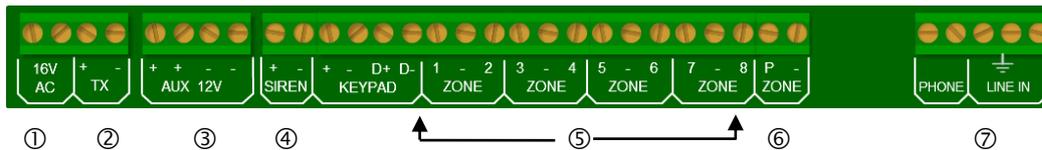
The above figure shows how the X-Series connectors are laid out. Each connection will be briefly discussed.

Please note that devices, especially between different manufacturers, may be different and their manuals should be thoroughly read and understood before attempting installation.

6.1. AC Power
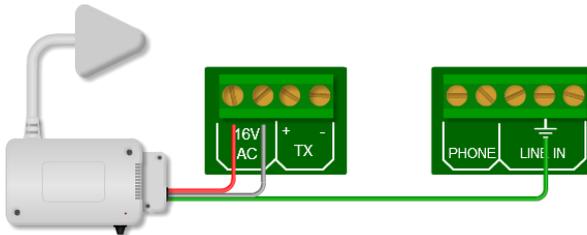
The minimum transformer you can use is a 16V 32VA, but the recommended transformer is a 16V 40VA transformer.

6.2. TX
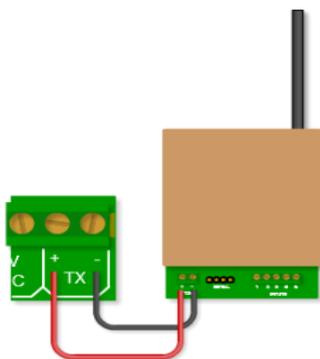
The TX connection can supply enough power for radios up to 15 watts.

⚠️ NOTE: Please use cable with a minimum of 0.5mm copper core depending on the distance between system and radio transmitter.

6.3. Aux 12V
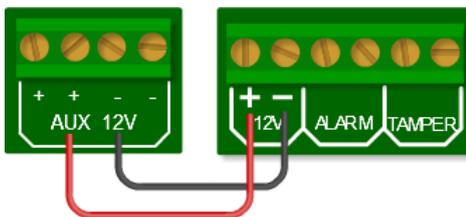
The X-Series Alarm Panel can supply 750mA of power to all bus-wired peripherals, including keypads, expanders and remote receivers, etc.

6.4. Siren

The siren connects directly to the siren output and can drive up to a 30 watt siren.

⚠️ Note: The siren must be self-driven, the siren output just supplies 12v DC and not an audio sound and therefore you cannot use a "standard" speaker.

6.5. Zones

Devices that are connected to zones are divided into two categories, normally open (NO) or normally closed (NC). Some devices have both and the installer can select either, depending on their preference.

⚠️ **NOTE:** The end of line resistor must be 3K3Ω (Ω = ohm)

For a tamper installation a 12kΩ and a 4K7Ω
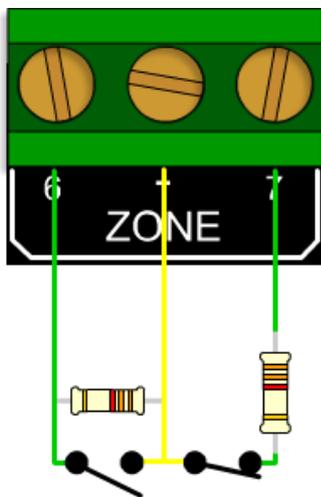
End of Line 3k3 Ohm resistor
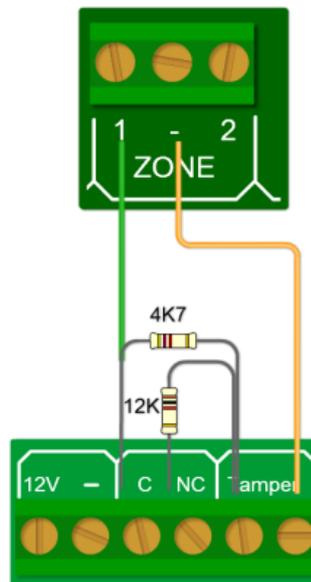
12K & a 4k7 Ohm resistor

6.6. Panic Zone
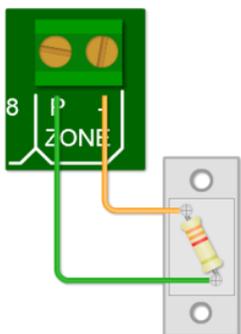
The dedicated panic zone is end-of-line supervised and for safety reasons, if this resistor is not detected the system will show 'Not Ready' and will not arm.

⚠️ **NOTE**: The dedicated panic zone does not display a zone number if open or when in alarm condition.

6.7. Telephone Connections
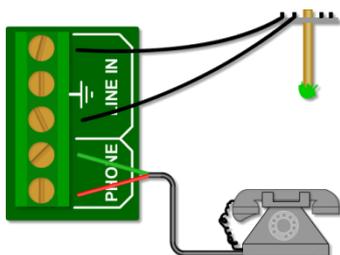
The line coming into the building must go directly to the alarm panel and then onto any telephones. This will stop any attempt to disrupt communication by taking the phone off the hook. Not available on the X8s.

7. Onboard Expander Connection

The number of zones on the X64 and X16 alarm panels can be expanded via zone expanders. Zones 9 to 16 are added by plugging the onboard expander (or plug-in expander) onto the PCB via this connector. Not available on the X8s.

8 pin connect   Standoff mounting hole
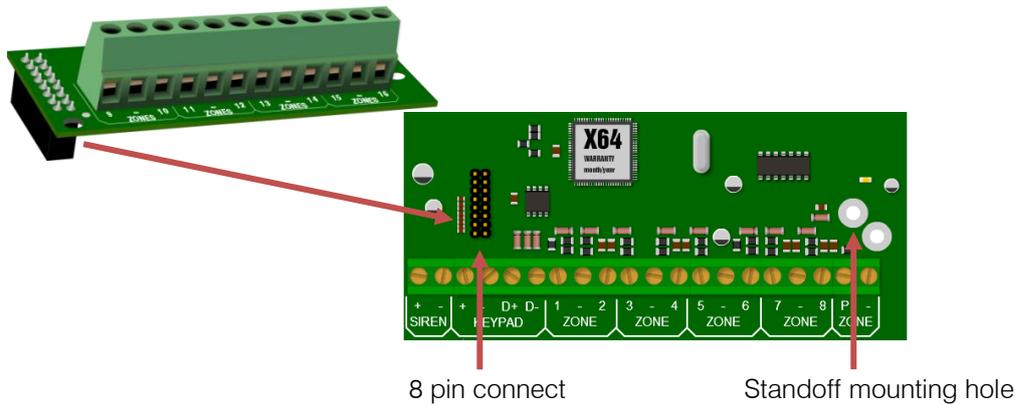
8. Keypad Bus

All devices connected to the bus should be connected in a daisy chain formation (one after each other) for the best results, though the X-Series Panel does not need to be in the beginning or end of the daisy chain.

Note: All X-Series keypad bus devices must be powered from the X-Series panel unless an IDS RS485 Bus Isolator is used, as described in point 8.6.

8.1. IDS X64 – Wired 8 Zone Expander Module

Tamper – Connects directly to a tamper switch

PGM – 12V output

Zones – End of Line Supervised

Dipswitch – ID the expander using binary as shown below

D+ D- – Connect to keypad bus

12V – Connect to keypad bus

Zones 17 to 24

Zones 25 to 32

Zones 33 to 40

Zones 41 to 48

Zones 49 to 56

Zones 57 to 64
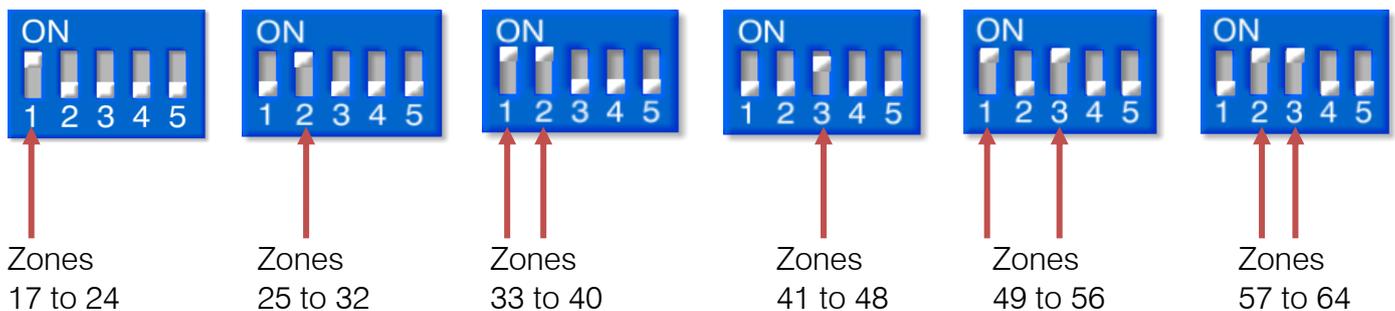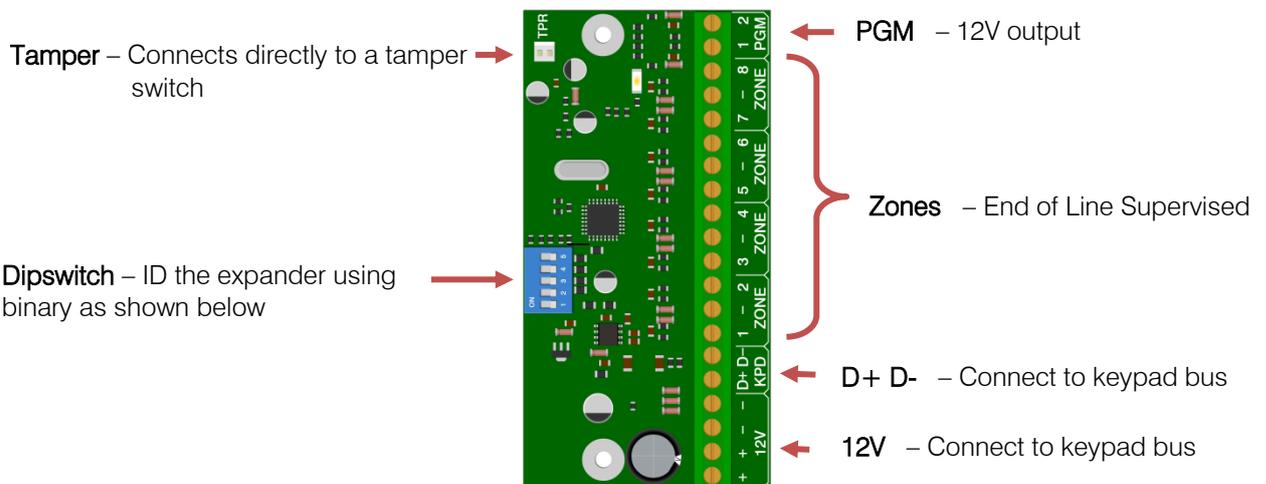
⚠ **NOTE**: Zone 9 - 16 are reserved for the onboard plug-in expander and cannot be allocated to the wired bus expander zones, even if the onboard expander is not used.

Wired Expander Trouble LED

LED: If the LED is ON continuously then there are no errors, however if there are errors it will start pulsing the error number. These error pulses will be separated by a 1sec pause with the LED OFF.

Pulse error number:

1. Low Battery
2. No activity on the X-Series serial bus
3. No X-Series messages detected
4. No messages for this peripheral detected from X-Series
5. Awaiting tamper change
6. Expander not yet registered on the X-Series
7. Expander tamper violated

Wired 8 Zone Expander Module Example
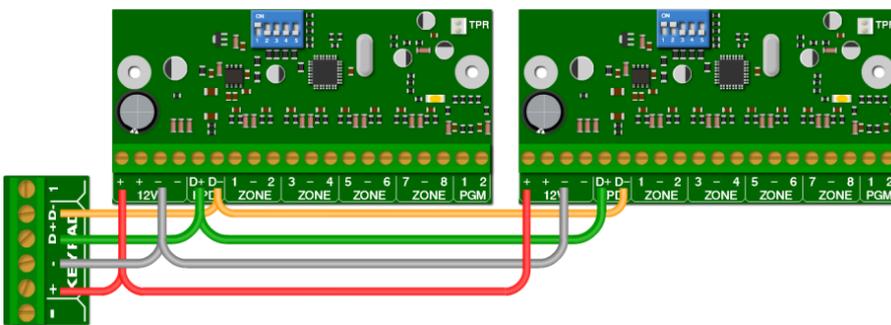
An example of two wired zone expanders connected to the X64 with their ID's set.
Note that they are wired in a daisy (series) format.

8.2. IDS X64 – 8 Zone Smart Expander Module

The IDS X64 – 8 Zone Smart Expander Module comes with 4 new connectors which connect to the IDS Smart Power Supply Module, allowing it to report back to the X-Series alarm panel, in the case of mains failure, low battery and fuse failure.
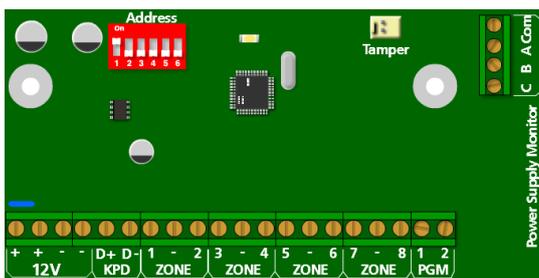
The connector labelled A, B, C and Com connect to the corresponding connectors with the same label on the Monitored Power Supply.
A – Mains Failure monitoring
B – Low Battery monitoring
C – Fuse Failure monitoring
Com – Common

8.3. IDS Smart Power Supply Module

Power Supply connectors that link to IDS X64 to 8 Zone Smart Expander Module.

A – Mains Failure monitoring
B – Low Battery monitoring
C – Fuse Failure monitoring
Com – Common
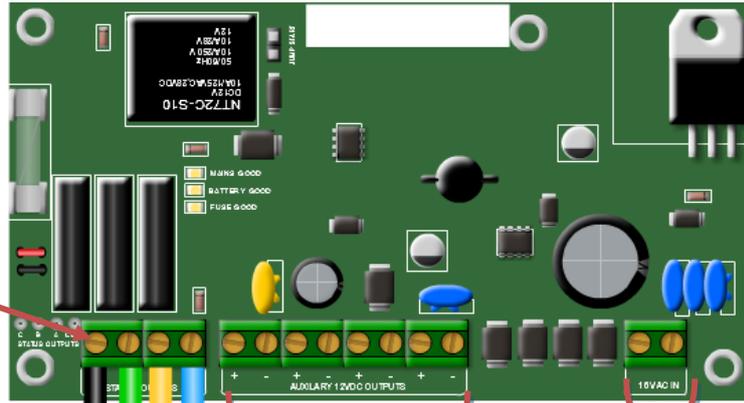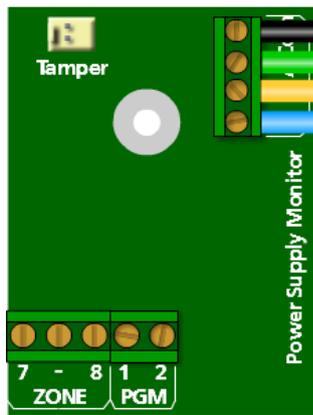
The Monitored Power Supply can supply 750mA of power.

The Monitored Power Supply requires 16V AC to be connected to the AC connector.

The IDS Smart Power Supply Module allows you to add another power supply with dedicated 750mA auxiliary power output and 500mA battery charging without losing the ability to monitor failures. The status outputs connect to an IDS X64 8 Zone Smart Expander Module as shown in this diagram, which will report back to the X-Series alarm panel.

NOTE: To save you from having to replace the fuse when there is a short or when too much current is drawn, the IDS Smart Power Supply Module has a resettable fuse. To reset the fuse just turn the IDS Smart Power Supply Module off for a few seconds and then turn it back on.

The IDS X-Series alarm panels support two PGM Output Expander Modules. Each Output Expander has eight programmable normally open relay outputs.

The outputs are programmed by addresses and actions from a defined list of programmable output events, which will be covered in the programming section of this manual.

The Dipswitches are used to set the output expanders ID

12v DC power supply, same power source as keypad bus

X-Series Keypad bus connections

Each output is a normally open 1amp rated relay

The connector labelled A, B, C and Com connect to the corresponding connectors with the same label on the Monitored Power Supply.
A – Mains Failure monitoring
B – Low Battery monitoring
C – Fuse Failure monitoring
Com – Common
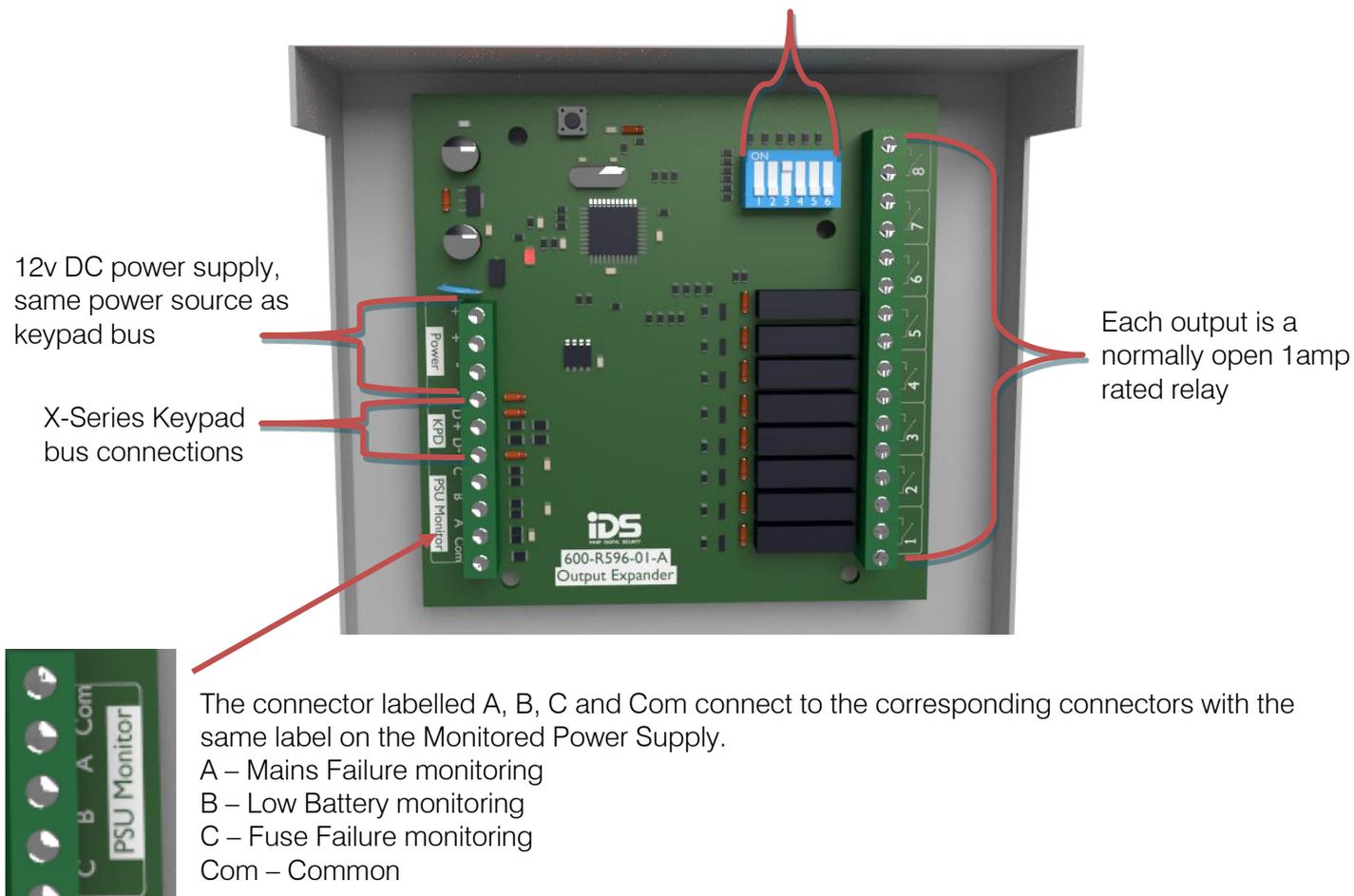
X-Series Output Expander ID and corresponding output addresses:

Output Expander ID1
Outputs 18 - 25

Output Expander ID2
Outputs 26 - 33
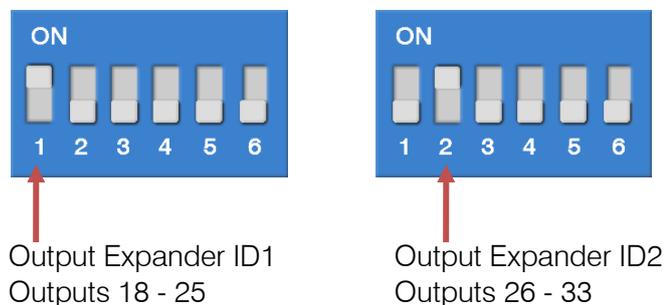
The IDS RS485 Bus Isolator protects the X-Series keypad bus from ground loop problems and potential voltage spikes. IDS recommends using the IDS RS485 Bus Isolator when installing X-Series keypad bus expanders or receivers in separate buildings or floors. It also allows any X-Series keypad bus device to be powered from a separate power supply.

DC 12v Power from Panel or RS485 source.

X-Series RS485 bus source. This is not always direct from the panel, could be via X-Series zone expander or even another isolator.

Separate DC 12v Power supply, which can also be used to power X-Series expanders or keypads on the 2nd side of the Isolator.

Isolated X-Series RS485 bus output. Could be used to connect to X-Series Zone expanders, keypads or receivers.

8.6. IDS X-Series Keypads

The X-Series panel supports a total of eight keypads which can be either LCD or LED keypads. They are wired into the X-Series keypad bus as shown.

The keypad has a programmable output (PGM). The PGM functions the same as the onboard programmable outputs, except that it triggers with 5V and not 12V.
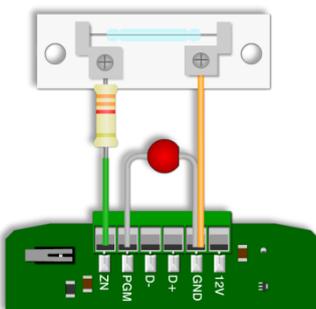
The zone works exactly like a normal zone with an end-of-line resistor. When using the zone it will replace the zone that it has been programmed as. E.g. if the keypad zone has been programmed as zone 5, then zone 5 on the panel will be shut down and cannot be used.

A door contact wired to the keypad zone, and an LED wired to the programmable output.

8.7. Keypad Enrollment

All new keypads connected to an X-Series will need to be enrolled. An unregistered LED keypad will have all LEDs flashing and an LCD keypad will display "Unreg", as shown in the example below.

Version No 2.02
Unreg

Simply press the hash # key to enrol a keypad to the X-Series panel. Keypad IDs are assigned to keypads on enrolment in the order of enrolment, from Keypad ID 1 to Keypad ID 8.

8.8. Remote Receiver and Connections

The X-Series panels support four remote receivers.

RX LED

Bus LED

On - steady communicating
Flashing - no communication

Function LED

Different flashes are
displayed for the mode
that the receiver is in,
stand by, learn, etc.

Set the
receivers ID

Rx 1

Rx 2

Rx 3

Rx 4

Relays are dry contact relays
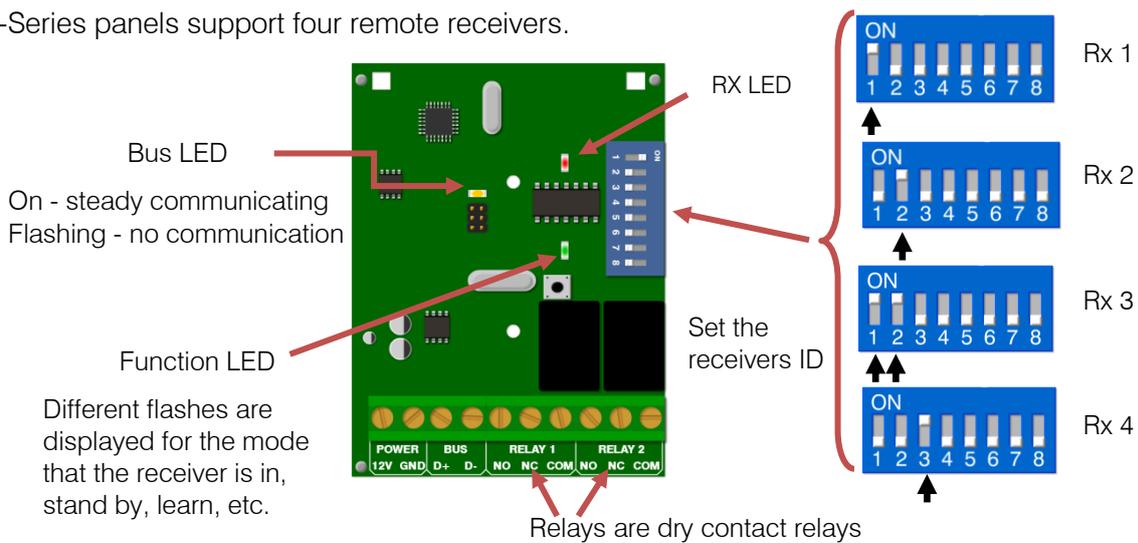
Two remote receivers connected to an
X64 alarm system
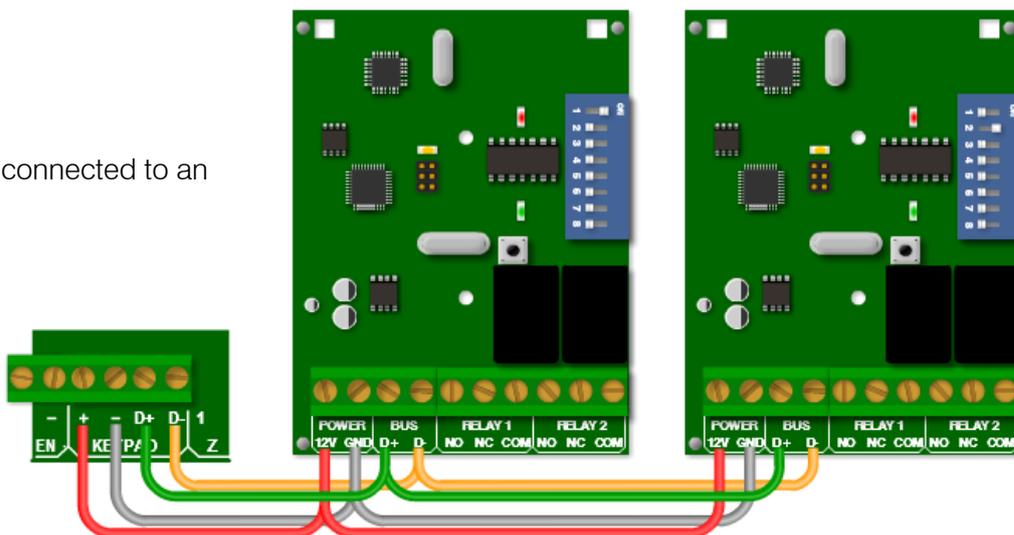
Note: The X-Series remote receiver **cannot** work in a standalone mode, it must be connected to an X-Series alarm panel.

Dip Switch 7 can used to disabled 3 second panic from Receiver hardware v1.05

9. Wireless Integration

The X-Series Panels supports both IDS Xwave and IDS Xwave^2 wireless zone expanders. Xwave^2 only supported from version 2.7x and higher. (X64 and X16)

Xwave Wireless Expander

Xwave^2 Bi-directional Hub
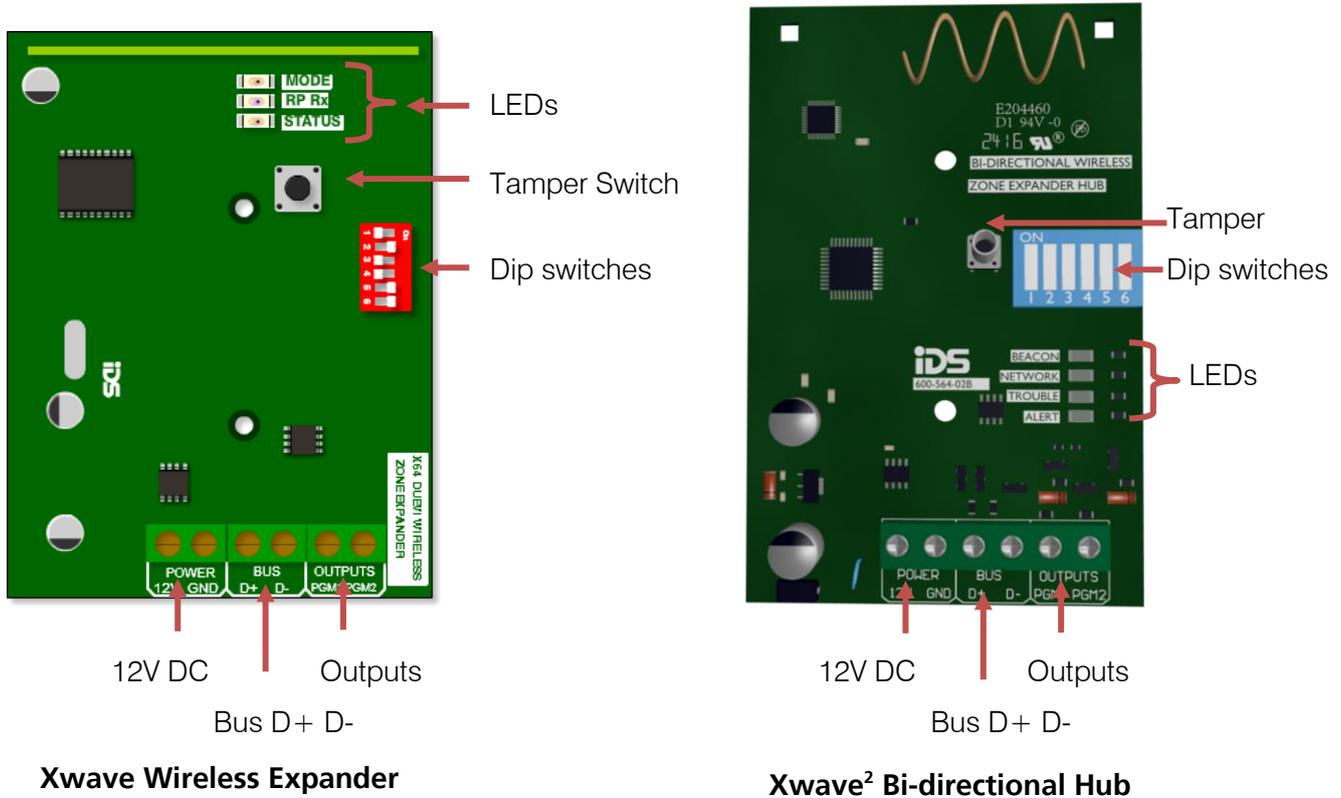
Note: You can have the Xwave and Xwave^2 occupy the same zone range, but you can't learn an Xwave detector to an Xwave^2 expander and vice versa.

9.1. Wireless Zone Expander Bus Connection
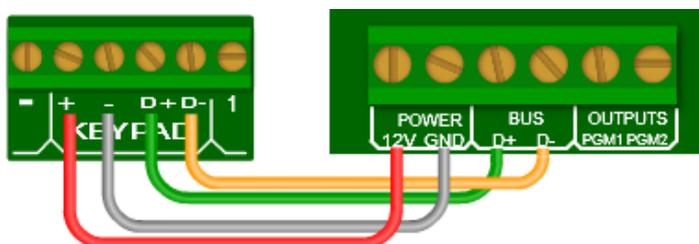
X-Series panels can support up to four Xwave wireless expanders and four Xwave^2 wireless expanders which are connected onto the RS485 keypad bus. Each expander can support up to 16 wireless devices. Each expander must have an ID to map the zone numbers.

9.2. Wireless Expander DIP switch operation

The dipswitch is used to set the device ID on the X-Series bus. This is done in binary the same as was done for the wired expander save for one difference. That these expanders each cater for 16 zones and not 8 like the wired expander.

Zones 1 – 16	Zones 17 – 32	Zones 33 – 48	Zones 49 - 64
Dip 1	Dip 2	Dip 1&2	Dip 3

Xwave Output configuration

PGM 1= RF Jam   PGM 2 = Supervision Loss
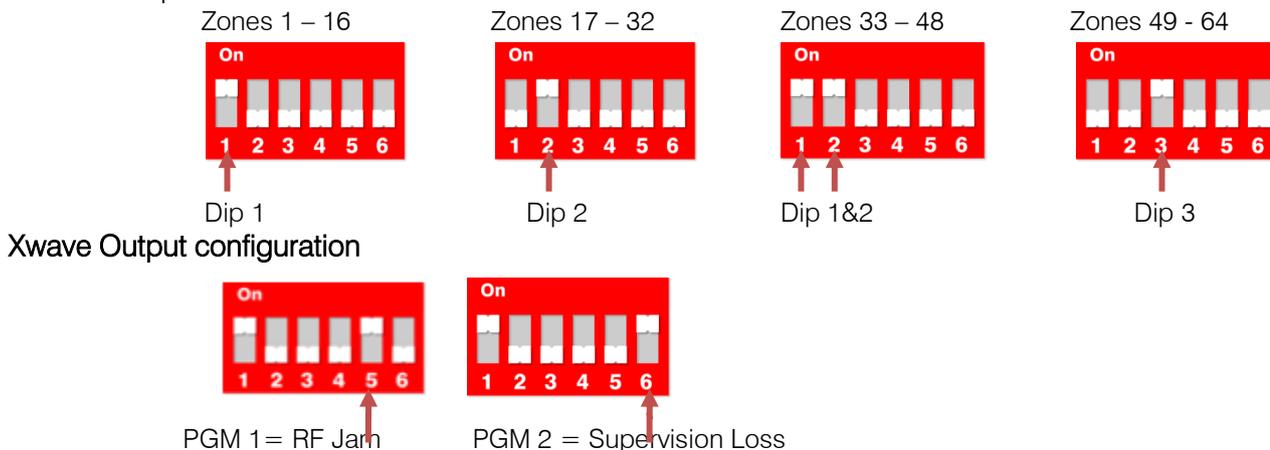
⚠ **Note**: When dip switch 5 and 6 are:
   OFF the outputs are then programmable.
   ON the outputs are by default set to output 1 RF jam and output 2 supervision loss

Xwave² Remote Panic configuration

Put dipswitch 6 up to disable the 3 second any button panic

Default

If all dip-switches are ON during power-up then the unit will default, and delete all learnt wireless detector serial numbers on the receiver. Please power down after, set appropriate ID and power up to resume normal operation.

9.3. Wireless Expander LED Operation

Xwave LEDs

There are 3 LEDs on the Xwave board marked:
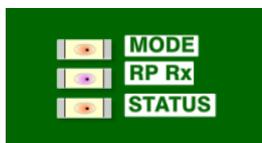
STATUS: indicates whether it's connected to the X-Series alarm panel properly. If the receiver notices X-Series communication then it will stay ON.

RF RX: indicates when the receiver receives a message from a learnt detector.

MODE: indicates current operating errors. If the LED is ON continuously then there are no errors. If there are errors it will start pulsing the error number. These error pulses will be separated by a 1sec pause with the LED OFF.

Xwave pulse error number:
1. Wireless receiver module not responding
2. No activity on the X-Series serial bus
3. No X-Series messages detected
4. No messages for this peripheral detected from X-Series
5. Not used
6. Expander not yet registered on the X-Series
7. Expander tamper violated
8. Unsupported DIP address configured

Xwave² LEDs

There are 4 LEDs on the Xwave² board marked:

Beacon: will flash when the Xwave² Hub is transmitting information.

Network: indicates the bi-directional networks information. The LED will be ON in normal operation with no errors.

Trouble: indicates troubles with the Hubs connection to the X-Series bus. The LED will be OFF if there are no troubles. If there are errors it will start pulsing the error number.

Alert: will flash when the Xwave² Hub receives a message.

Xwave² Network pulse error number:
1. Learn Mode
2. Remote Panic
3. Detector Low Battery
4. Detector Tamper
5. Supervision Loss
6. Low Signal Strength
7. Signal Jam

Xwave² Trouble pulse error number:
1. Dead Keypad Bus
2. Not Registered to Keypad Bus
3. Registered but not receiving messages
4. Invalid dipswitch

9.4. Xwave² I/O Module

The Xwave2 I/O Module is a wireless solution that has two inputs that will supersede the wired zone the module is taught to and the next consecutive zone. The output will automatically be registered and an output number assigned to it depending on the zone that it is associated with. *(See Output programming)*

2 Zone Inputs

12V Power Input

Programmable Output (Relay)
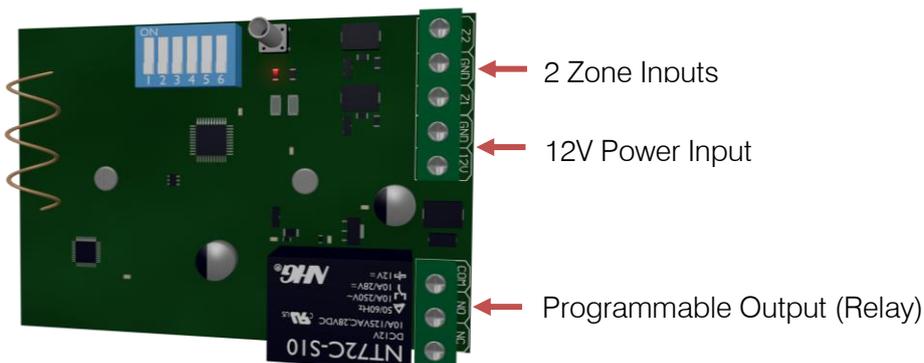
LED Status
LED1 will light up when powering up and change state when a beacon from the Xwave² Hub is received.

10. X-Series aXess

X-Series v2.6x and higher supports an integrated access control system with up to eight doors. Each door reader can be configured as an access reader, arm/disarm reader or both. Each door is controlled by either a reader interface, which can support two readers, or a single integrated reader, both with a push to release button, and a door status input.

All aXess programming can be done from an X-Series LCD Keypad and will be explained in the programming section of this manual.

In this manual when using the word "door" we are referring to the aXess interface and reader as one system, which may or may not be connected to a physical door as with an arming only door.

10.1. Interface

The interface is the "brain" of the X-Series aXess control system, all tag information and door permissions are stored on each interface and therefore does not need to communicate with the X-Series panel to grant/deny access permissions, this allows readers to continue working in the offline mode, although not enabled by default.

An interface is required for each access door reader or each arming reader to a maximum of eight interfaces/doors and is wired to the X-Series Panel RS485 keypad bus.
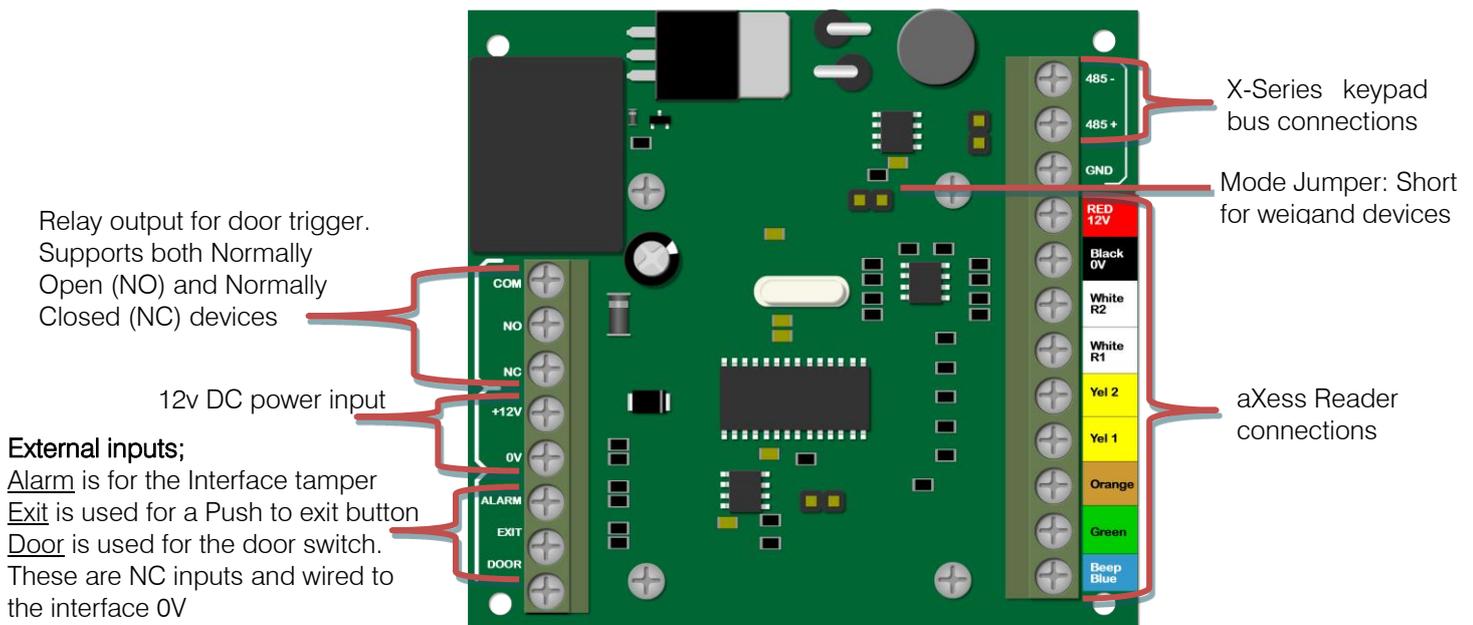
Relay output for door trigger. Supports both Normally Open (NO) and Normally Closed (NC) devices

12v DC power input

External inputs;
Alarm is for the Interface tamper
Exit is used for a Push to exit button
Door is used for the door switch.
These are NC inputs and wired to the interface 0V

X-Series keypad bus connections

Mode Jumper: Short for weigand devices

aXess Reader connections

Note: Only use 'Remove Missing Devices' (0*4* in installer programming) if the aXess Interface is being permanently removed. If the device has just lost communications and reconnects then you will need to default the aXess Interface before it registers on the panel and this loses all tags. Use IDSwift2 to download all tag information before replacing any interfaces or removing missing devices.

Red – 12v power

Black – 0v power

White – R1/R2

Yellow – Yellow1/Yellow2 LED

Orange – Red LED

Green – Green LED

Blue – Beeper
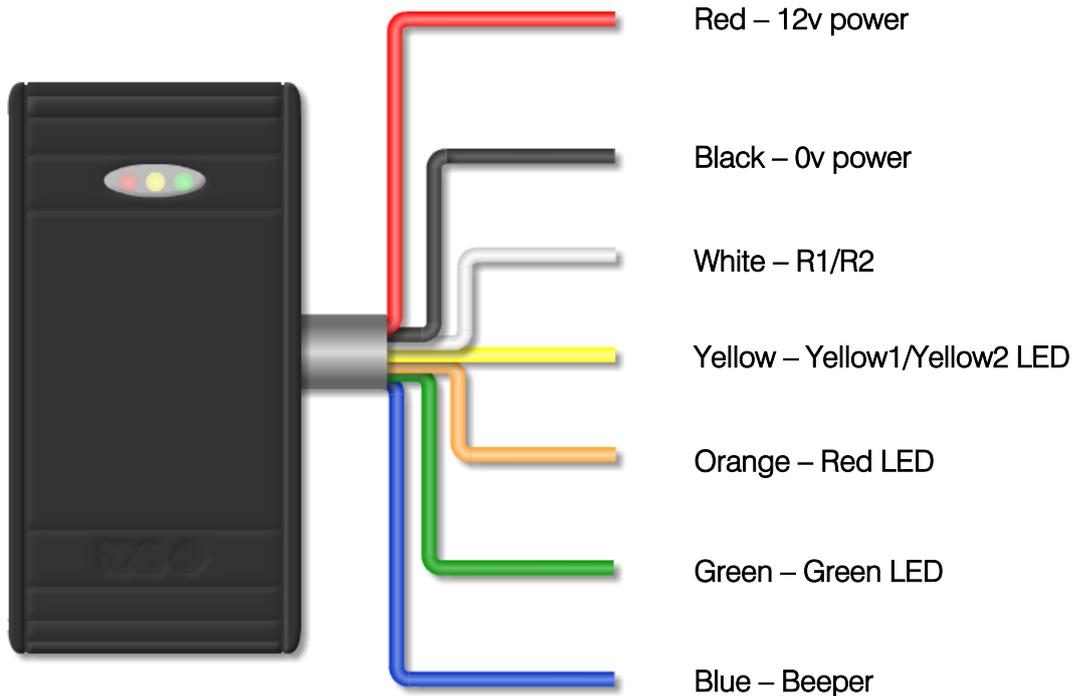
10.3.   Reader Feedback

Each aXess reader has three different colour LEDs, Red, Yellow, Green and a beeper to communicate feedback to users of the system, depending on the type of reader.

Action Description	Arming Only	Access Only	Arming and Access
Factory Reset	All LEDs flash in sync.		
Enrol Mode	Red and Green LEDs flash in sync, and Yellow LED flashes out of sync.		
Idle	Red LED follows Arm LED, and Green LED follows Ready LED.	Red LED follows Arm LED and Green LED follows the relay.	
Learn Tag Mode	Red LED follows Arm LED and Green LED flashes.		
Access Granted	*N/A*	Red LED follows Arm LED and Green LED follows Relay. Beeper sounds once.	
Access Denied	*N/A*	Red LED on for 2 seconds. Beeper sounds 3 times.	
Door Forced	Beeper sounds 3 times.	Red LED on for 2 seconds and Beeper sounds 3 times.	
Door Left Open	Beeper sounds for 15 seconds.		
Tag Held in Field	Yellow LED flashes slowly.	*N/A*	*N/A*

Note: Unless otherwise stated the Yellow LED will stay on unless there is a communication issue with the panel in which case it will flash.

The X-Series Keypad Bus to the aXess Interface RS485 Bus:
D+ to 485+
D - to 485 -
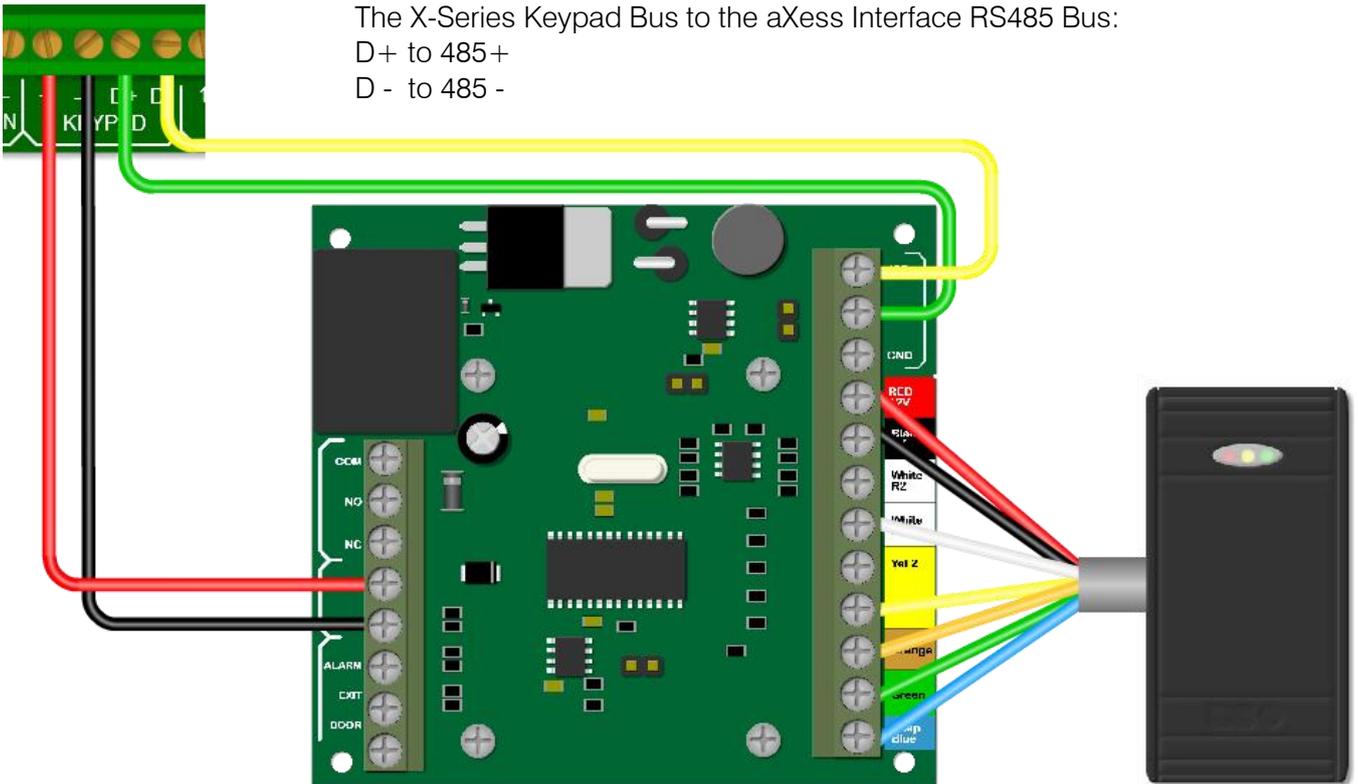
Note: To add a second reader to the same door follow the same wiring as Reader 1, except Reader 2s white wire goes to R2 and yellow wire goes to Yel 2.

Integrated Reader

The Integrated Reader is wired directly into the X-Series Keypad Bus.

Red – 12v power
Black – 0v power
Yellow – Keypad Bus D+
White – Keypad Bus D-
Blue – Normally Closed Output
Orange – Normally Closed Output
Brown – Door Switch
Purple – Door Switch
White – Exit Button
White – Exit Button
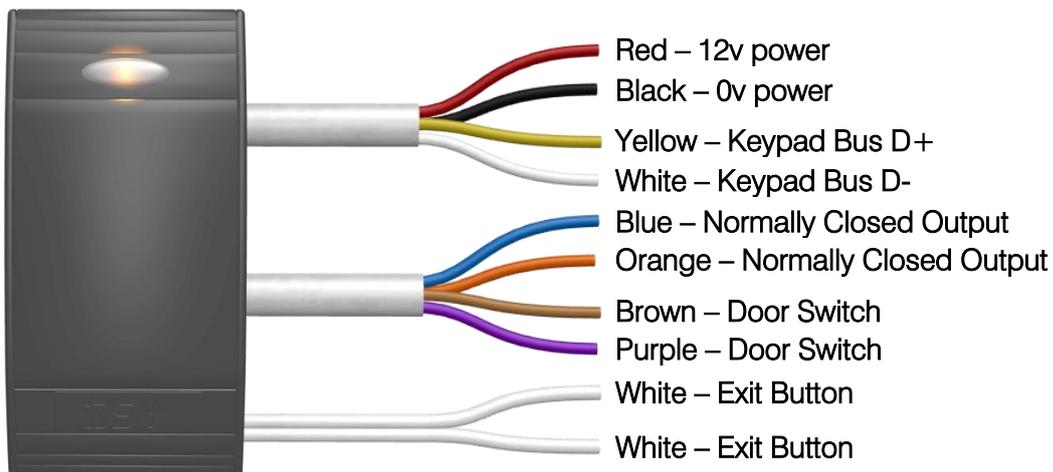
To default the Integrated Reader you must short the Exit Button wires together for 3 seconds on power up.

NB: You cannot power a magnetic lock with the aXess interface or Integrated Reader. Use a Smart PSU to power the magnetic lock, or use a Smart PSU and Bus Isolator to power the aXess Interface and magnetic lock.

Menu options
Hold for 3 seconds and select menu option

Chime
Allocating zones to a chime profile

Scroll keys >> &<< LCD Keypad only.
Panic key [>>] scroll forward and the Medical [<<] will scroll you backward.

The scroll keys can be used in;
The User menu options
Zone status.
Install bitmap options

Quick Away arm
Press and hold until exit delay begins

Stay Zones
Allocating zones to a stay profile

Buzz Zones
Allocating zones to a buzz profile

Quick stay
1. Press and hold until stay armed
2. Press and hold again and next profile is made active

Trouble view
Press and hold until beep

Stay & Go
Arms the system in Stay and Go Mode

* Key
1. Used to confirm entry and save information
2. Hold until beep, enter master user code, and choose menu option
3. In dealing with options that have zone selections, the LED keypad can only show 16 zones at a time. To access zones above 16 press the [*] key to page to the next 16, until the correct page with the zone is located

Bypass
Manually bypass zones

Alarm Memory
Holds violated zone, tamper, bypassed and event log information from the last arm cycle.

Auto Pickup
Press and hold for Panel to auto answer on telephone dialler

Clear / Exit
1. Clears last pressed key
2. Exit out of menus

Feedback while entering data

1. Single extended beep = Correct entry
2. 3 beeps = Incorrect entry

Reading Numerical Values Stored in Locations via an LED Keypad

When using an LED keypad, values will be displayed in Binary format. Every zone is given a value which needs to be added together to makeup the value in the location.

Units	
Zone	Value
1	1
2	2
3	4
4	8

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

Thousands	
Zone	Value
13	1000
14	2000
15	4000
16	8000

Tens	
Zone	Value
5	10
6	20
7	40
8	80

Hundreds	
Zone	Value
9	100
10	200
11	400
12	800

Example:

Zone	Value
1	1
4	8
Total	9

+ =

The value is 9

Zone	Value
3	4
6	20
9	100
Total	124

+ + =

The value is 124
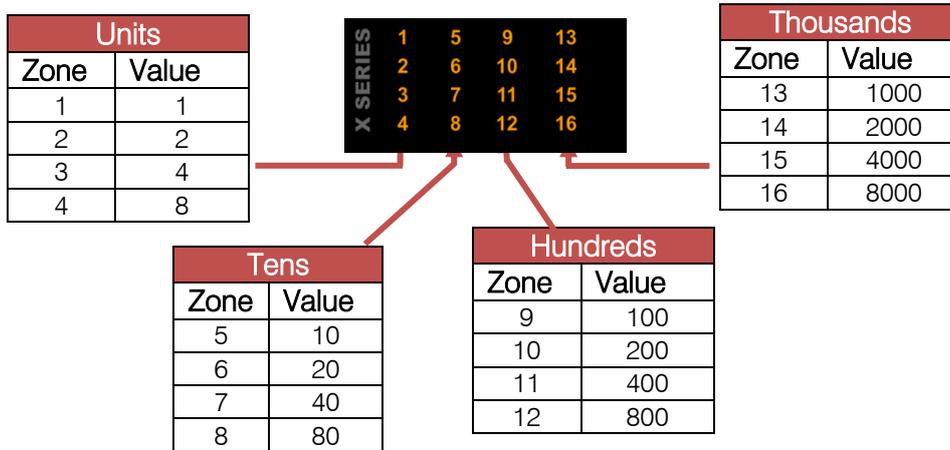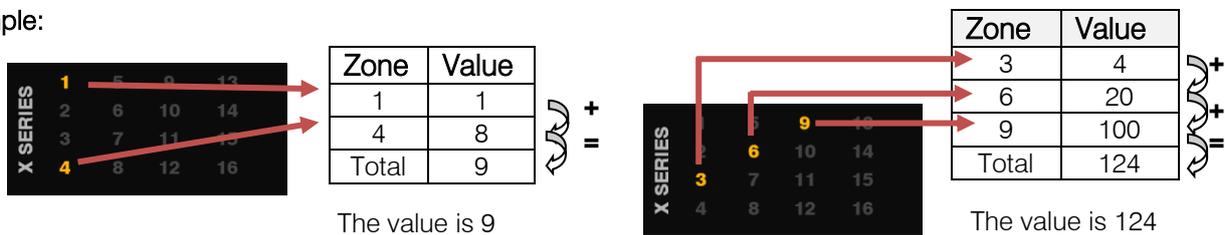
Reading Time Locations via an LED Keypad

When reading time on an LED keypad remember that it is always in the 24 hour format, (mm:ss, hh:mm), therefore each digit has four zone LEDs associated to it. Example, zone 1 to 4 belong to digit 1, zone 5 to 8 belong to digit 2, etc. as shown below. As with calculating any value each zone is given a value, zone 1/5/9/13 have a value of 1, zone 2/6/10/14 have a value of 2, zone 3/7/11/15 have a value of 4 and zone 4/8/12/16 have a value of 8.

H = Hour   m = minutes   s = seconds

Value

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

m   m   s   s
H   H   m   m
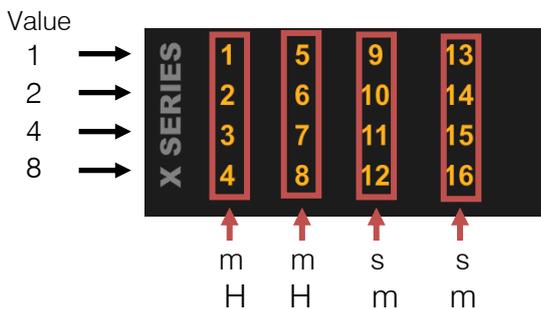
Example:
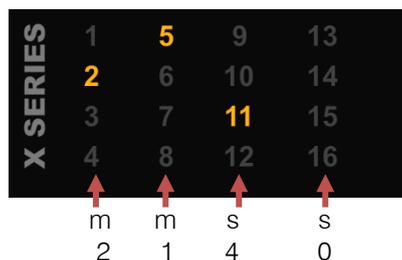
The time in this location is:
 21 minutes and 40 seconds

m   m   s   s
2   1   4   0

Programming

Installer Mode

Installer mode is where all settings can be changed to suit any installation requirements.
The default installer code is "**9999**".

⚠️ **Note**: Please remember to change the installer code when you have completed the installation.
(Location 197)

Exercise:

Entering the installer code.

Instructions	Key presses
Clear any previously pressed keys that may be in memory	[#]
Enter the installer code and confirm with a * (Default is 9999)	[9] [9] [9] [9] [*]
The Ready LED will begin to flash indicating installer mode	Pwr Rdy Arm Away

Location Definitions

A location is an area of memory that holds a value. Each location is associated to a function that the alarm needs to operate correctly. These locations have options, other locations or different data that can be entered, to allow for customisation depending on the property being protected and on the monitoring company.

1. **Standard Location**
   A standard location is an area of memory that holds a value only.
2. **Extended Location**
   An extended location is a location that has multiple sub-locations within it.
3. **Bitmap**
   A bitmapped location is a location that has more than one option in it and each option needs to be enabled or disabled depending on the requirements.

Programming Standard Locations

A standard location is an area of memory that holds a value only.

To program a standard location:

1. Enter Installer mode [#] [9] [9] [9] [9] [*] (This step is only required if you are not already in Installer mode)
2. Then press the keys that represent the location number followed by the [*] key
3. Now enter the data value that needs to be in the location followed by the [*] key
4. You can enter the next location or press the [#] key to exit Installer mode.

Programming Extended Locations

Sub-location Method

The sub-location method programs each sub-location within a location individually.

Entering data in the sub-location format:

1. Enter Installer mode **[#] [9][9][9][9] [*]** (This step is only required if you are not already in Installer mode)
2. Then enter the location number followed by the **[*]** key
3. Then enter the sub-location number followed by the **[*]** key
4. Now enter the data value that needs to be in the location followed by the **[*]** key
5. You can enter the next sub-location or press the **[#]** key to exit the location
6. You can enter the next location or press the **[#]** key to exit Installer mode.

String Method

The string method programs all sub-locations within a location at once.

Entering data in the string format:

1. Enter the location (E.g. **[1] [*]**)
2. Now enter the complete string of data (E.g. **[0][1] [0][2] [0][4] [0][4] [0][4] [1][0] [0]5] [0][3] [*]**)
3. When the **[*]** key is pressed at the end of the string, you will be removed out of the location and the data saved. If there is an error you will hear 3 error beeps, and will remain in the location to re-enter the data.

Programming Bitmap Locations

A bitmapped location holds many options within a single location that have to be selected or deselected. Bitmapped locations can also be sub-locations.

1. Enter Installer mode **[#] [9][9][9][9] [*]** (This step is only required if you are not already in Installer mode)
2. Then press the keys that represent the location number followed by the **[*]** key
3. Below is a diagram of what you may see when entering a bitmapped location or sub-location

Enabled option – LED number is on
Disabled option – LED number is off
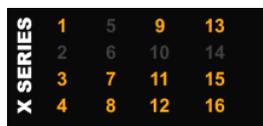
LED Keypad

LCD Keypad

Y – Option Enabled
N – Option Disabled

4. To enable or disable an option, press the number corresponding to the option, then press the **[*]** key, the number will come on if it was off or go off if it was on.
5. On the LCD keypad when the **[*]** key is pressed you will be taken to the option you have chosen. This will show you the current value and if you want to then change the value, press the **[*]** key
(You can also scroll through the options using the scroll keys **[>>] [<<]**)
6. Continue with any other options you wish to change
7. When complete, press the **[#]** key to exit the location or sub-location.

Review:

Location Type	Keys Presses
Entering the Installer Code	[#] [9] [9] [9] [9] [*]
Standard Location	[Location Number] [*] [Value] [*]
Bitmap Location	[Location Number] [*] [Option] [*] [Option] [*]....[#]
Sub-location method	[Location Number] [*] [Sub-location Number] [*] [Value] [*]
String method	[Location number] [*] [all values to be entered] [*]

Locations

Location 0: Defaults

Location Type: Standard

This location is used for defaulting the alarm system.

Value	Action
0	Default the complete system back to factory settings
1	Will default the Primary Master User Code back to 1234 - or 123456 if 6 digits are being used Master User Code properties will also be defaulted
2	Defaults ALL user codes and their properties
3	Defaults ALL keypads
4	Remove Missing Devices Any missing devices (keypads, for example), will have its address freed up, making its address available for a new device when it is enrolled. This MUST be performed when replacing a faulty device (You must wait for 10 seconds)
5	"Central Monitoring Mode" default setting change. Defaults some settings to factory default and changes some others (Implemented in v2 please see appendix for complete listing)
6	"Private Reporting Mode" settings change. Defaults some settings to factory default and changes some others (Implemented in v2 please see appendix for complete listing)
7	Defaults all wireless zones and settings

Note: Only use 'Remove Missing Devices' (0*4* in installer programming) if the aXess Interface is being permanently removed. If the device has just lost communications and reconnects then you must default the aXess Interface and this loses all tag.

Exercise: Defaulting back to factory settings

Instructions	Key presses
Enter installer mode	[#] [9] [9] [9] [9] [*]
Enter location zero	[0] [*]
Enter a value of zero	[0] [*]
The keypad will begin to beep until all locations have been reset. The LEDs on the keypads will flash indicating that they have no IDs and the system is defaulted.	

Location 1 to 8: Zone Type

Location Type: Extended Location
Can be programmed using the string method.

Root Location: ⟶

The table on the right shows each location and the defaults programmed into them.

Zones 1 to 8 are the only zones programmed with zone types.

All other zones must be programmed and allocated to a partition, as described below.

Loc	Zone Types							
	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8
[1]	01	02	04	04	04	04	04	04
	Z9	Z10	Z11	Z12	Z13	Z14	Z15	Z16
2	--	--	--	--	--	--	--	--
	Z17	Z18	Z19	Z20	Z21	Z22	Z23	Z24
3	--	--	--	--	--	--	--	--
	Z25	Z26	Z27	Z28	Z29	Z30	Z31	Z32
4	--	--	--	--	--	--	--	--
	Z33	Z34	Z35	Z36	Z37	Z38	Z39	Z40
5	--	--	--	--	--	--	--	--
	Z41	Z42	Z43	Z44	Z45	Z46	Z47	Z48
6	--	--	--	--	--	--	--	--
	Z49	Z50	Z51	Z52	Z53	Z54	Z55	Z56
7	--	--	--	--	--	--	--	--
	Z57	Z58	Z59	Z60	Z61	Z62	Z63	Z64
8	--	--	--	--	--	--	--	--

As can be seen in the table above, **Loc [1]** has a square bracket around it, indicating that it is a root location. This means that zone types can be entered in the string method for zones 1 to 8 or the sub-location method for <u>all</u> 64 zones from location 1.

Zone Types and Their Values

The value indicated in the left column of the table, is the information that must be entered. Each zone must have a type associated to it, for the alarm to react accordingly when violated. Think of a sports team each player is given a function, defender, attacker, etc. This allows them to function within the game which is the same with each zone; their function is what causes them to work correctly for the security that is needed.

Value	Zone Type	Description
00	DISABLED	This disables the zone.
01	PRIMARY ENTRY / EXIT ZONE	An Entry/Exit zone is used to determine if the occupants have left the building once the arming procedure is initiated. Violating an Entry/Exit zone when armed will initiate the entry delay. If a valid User Code is not entered before the entry delay period expires, an alarm condition will be registered. Failure to exit through an Entry/Exit zone after arming will cause the panel to Stay Arm. This zone may also function as an Entry/Exit zone that is COMMON to two partitions. In such a case, should a user violate this zone and then disarm his partition, the OTHER partition will re-arm after the entry delay.
02	FOLLOWER ZONE	A violation of a Follower zone is ignored during the Entry/Exit delay period (this allows the user to enter/exit via the Follower zone). A Follower zone will behave as an Instant zone if the panel is armed and an Entry/Exit zone is not violated prior to violation of the Follower zone.
03	PANIC / PRIORITY ZONE	Regardless of whether the panel is armed or not, a violation of a Priority zone will cause the control panel to register a panic condition.
04	INSTANT ZONE	When the panel is armed the violation of an Instant zone will cause the control panel to register an alarm condition.
05	ARM / DISARM ZONE	The violation of an Arm/Disarm zone will cause the panel to toggle between (away) armed and disarmed. It is typical to connect a momentary key-switch, or non-latching remote control unit to this zone.
08	SECONDARY ENTRY / EXIT ZONE	The Secondary Entry delay will be activated if this zone is violated when the panel is armed.
09	INSTANT FIRE ZONE	This zone will trigger on the first violation of the smoke detector.
10	FIRE ZONE	Violation of a Fire zone will cause the siren to sound regardless of whether the panel is armed or not. The siren will sound intermittently (one second on, one second off). For correct operation, a programmable output programmed as a fire detector power output must be used to control power to the fire detector.
11	TAMPER ZONE	Violation of this zone will be reported to the base station regardless of whether the panel is armed or disarmed. If the panel is armed, the siren will be activated.
12	24 HOUR ALARM ZONE	This works the same as a Panic zone – except that it reports as a 24 hour zone.
13	WARNING ZONE	When the panel is armed, violation of a Warning zone will cause the siren to beep. The violation is logged in the event log but it is not reported to the base station. Warning zones may be included and will be counted when used as part of the cross-zone
15	OUTDOOR INSTANT ZONE	When the panel is armed the violation of an Outdoor Instant zone will cause the panel to register an alarm condition the only difference to an Instant zone is the contact ID code sent to the control room.

Zone Programming Example

Exercise:

1. Programming zones using both the string and bitmapped methods.
   a. Let's program zones 9 to 16 using the string method and zones 17 to 24 using the sub-location method

b. The table describes what type of zone each one will be

Zone	Type	Value		Zone	Type	Value
9	Secondary Entry / Exit	08		17	Entry / Exit	01
10	Follower	02		18	Follower	02
11	Follower	02		19	Instant	04
12	Instant	04		20	Instant	04
13	Instant	04		21	Follower	02
14	Outdoor Instant	15		22	Follower	02
15	Outdoor Instant	15		23	Outdoor Instant	15
16	Panic	03		24	Panic	03

   c. To program zones 9 to 16 into the system via the string method:

Instructions	Key presses
Enter installer mode	[#] [9] [9] [9] [9] [*]
Enter the location 2	[2] [*]
Type in the complete string of information for all zones	[0][1] [0][2] [0][4] [0][4] [0][4] [1][5] [1][5] [0][5] [*]

   d. Programming zones 17 to 24 using the sub-location method:

Instructions	Key presses
Enter location 3	[3] [*]
Press the [*] key to sub-location method	[*]
Enter the value for an entry/exit zone followed by the [*] key.	[0] [1] [*]
Press the [*] key to go to the next sub-location - Zone 18	[*]
Follower zone	[0] [2] [*]
Next Sub-location - Zone 19	[*]
Instant zone	[0] [4] [*]
Next Sub-location - Zone 20	[*]
Instant zone	[0] [4] [*]
Next Sub-location - Zone 21	[*]
Follower zone	[0] [2] [*]
Next Sub-location - Zone 22	[*]
Follower zone	[0] [2] [*]
Next Sub-location - Zone 23	[*]
Outdoor instant zone	[1] [5] [*]
Next Sub-location - Zone 24	[*]
Panic zone	[1] [5] [*]
To exit location 3 press the [#] key	[#]
Note: You will still be installer mode	

   e. Programming zones 7 and 8 using the sub-location method from Root location 1

Instructions	Key presses
Enter location 1	[1] [*]
Enter the sub-location number for zone 7 and press the [*] key	[7] [*]
Enter the value for an instant zone followed by the [*] key.)	[0] [4] [*]
Now zone 8	[8] [*]
Panic zone	[0] [3] [*]
To exit location 1 press the [#] key	[#]
Note: You will still be installer mode	

Global Settings

Location 9: IDS Smart Power Supply Module Trouble Display

Location Type: Bitmap

When the Monitored Power Supply detects any of the trouble conditions that are enabled in the table below, the power light on the keypad flashes and if set in location 14, option 2, will beep. To view the trouble condition: Press and hold the [7] key down until the beep.

When the trouble condition has been corrected, pressing and holding [7] until the beep, and then press the [#] key to clear the power LED trouble condition. Note these trouble conditions cannot be viewed on an LED keypad.

LED	Default	Action	Description
1	OFF	AC fail on Smart power supply trouble display	This trouble condition monitors the AC that powers the Smart Power Supply and will register a trouble condition after the time programmed in location 15. This will only clear when AC is restored
2	OFF	Low battery on Smart power supply trouble display	The Smart Power Supply tests the battery every 30 mins. If a trouble is encountered a condition will be shown
3	OFF	Fuse fail on Smart power supply trouble display	A trouble condition will be displayed when the fuse on the Smart Power Supply goes down.

Location 10: Zone Shutdown Count

Location Type: Standard

This option monitors the zone for the number of times it violates when the system is armed. Once the number of violations reaches the number entered in this location, the zone is automatically bypassed.

Each partition has an option to enable any zones belonging to the partition that were bypassed due to this option in locations 221 to 228 depending on the partition.

Valid Range: 1 - 15
Default: 5

Location 11: Programmable Zone Loop Response Time

Location Type: Standard
This is the time that the zone must be violated before the zone will register a violation.

Valid Range: 1 - 255
Default: 2

Value	Response Time	Value	Response Time	Value	Response Time
1	12 ms	12	144 ms	120	1.44 seconds
2	24 ms	13	156 ms	135	1.62 seconds
3	36 ms	14	168 ms	150	1.80 seconds
4	48 ms	15	180 ms	165	1.98 seconds
5	60 ms	16	192 ms	180	2.16 seconds
6	72 ms	30	360 ms	195	2.34 seconds
7	84 ms	45	540 ms	210	2.52 seconds
8	96 ms	60	720 ms	225	2.70 seconds
9	108 ms	75	900 ms	240	2.88 seconds
10	120 ms	90	1.08 seconds	255	3.06 seconds
11	132 ms	105	1.26 seconds		

The table shows a representation of the values. If the value you want to use is not in this table see below.
To work out a response time:
1. Take a value from 1 to 255.
2. Multiply the value by 0.012

Example: Value of 66 x 0.012 = 792 ms

Location 12: Cross-Zone Delay Time

Location Type: Standard

Zones can be set to trigger only after two sets of options have been fulfilled. These are, Time (Location 12) & number of violations (Location 13), the number of violations must happen within the time set. If this does not happen the system will reset both these counters.

Cross-zone delay time is the time that the violations must take place within, before a violation is triggered.

Data Format: mmss
Valid Range: 0000 - 5959
Default: 0030

> ⚠️ **Note**: Each zone must be enabled to be part of the cross-zone group. (Location 101 to 164 depending on the zone number)

Example:

> If the cross-zone delay time is set for 30 seconds and location 13 cross-zone delay count, below, is set to 2, then when the zone violates the first time the system begins a 30 second timer waiting for the second violation. If the second violation does not happen the timer resets waiting for the next violation to start the countdown. But if the second violation does happen within the 30 second count down the alarm will be triggered.

Location 13: Cross-Zone Delay Count

Location Type: Standard

This is the number of times the zone must violate within the time set in location 12, Cross-zone delay time, above.

Valid Range: 1 -15
Default: 3

> ⚠️ **Note**: Each zone must be enabled to be part of the cross-zone group. (Location 101 to 164 depending on the zone number)

Location 14: Global Options

Location Type: Bitmap

These options are global to the alarm system and affect all partitions.

LED	Default	Action	Description
1	ON	Cancel the siren	This will allow any user from any partition to enter their code to stop the siren.
2	OFF	Keypad trouble beep	When this option is enabled and the system detects a trouble condition, the keypad will beep intermittently to alert the users.
3	OFF	Telephone line monitoring	This will look for the telephone line voltage and if the telephone line voltage goes missing a trouble condition will be logged and if another form of communication is available this will be communicated if option 3 is enabled in location 571.
4	OFF	Keypad beep on communication	Whenever the alarm successfully communicates via telephone, the keypad will beep to indicate a successful transfer of information.
5	ON	Keypad Fire, Medical and Panic keys	The keypad has an F for fire, M for medical and P for panic keys and this option enables or disables these keys.
6	ON	Display of bypassed zones when armed	When the alarm is armed and this option is enabled, the keypad will display all zones that have been bypassed. If disabled then none will be shown. This includes Stay Zones.
7	OFF	Siren delay	This will delay any sound coming from the siren for a period entered into location 18. The alarm will still communicate instantly.
8	ON	Box tamper monitoring	If you have a switch on the alarm panel housing so that if anyone opens the housing and the switch is triggered, the panel will log an event and send a tamper signal if option 8 in location 571.
9	ON	Siren tamper monitoring	This looks for a load on the siren port, if the load goes missing then a tamper is triggered and logged. If option 4 in location 571 is enabled a tamper will be sent to the monitoring company.
10	OFF	Peripheral tamper monitoring	For monitoring tampering on other devices on the systems keypad bus. If option 1 in location 572 is enabled a message will be sent to the monitoring station.
11	OFF	Onboard dedicated panic–silent	On the panel next to zone 8 there is a panic zone. If a silent panic is required enable this option.
12	ON	Low battery monitoring	This option will allow the panel to test the battery every 30 min. If the battery is faulty or low, an event will be logged and with option 8 in location 572 enabled, a signal will be sent to the control room.
13	ON	Low battery cut out	This option enables the alarm system to monitor the battery voltage and when it reaches 10.5V it will shut the system down. When AC is restored the alarm will switch back on and begin to charge the battery.
14	OFF	Bypassing with user code	If the area that is being protected is a high security area this forces a user to insert their code before zones can be bypassed.
15	OFF	Dedicated panic bypass	This option will allow users to bypass the dedicated onboard panic zone. The panic zone is bypassed using zone number 65.
16	OFF	Cancel panic via a remote Tx	If a panic has been triggered this option will allow or deny panic violations to be reset via the arm/disarm button on the remote Tx. If off only a user code entered on a keypad will cancel the panic condition.

Location 15: AC Fail / Restore Reporting

Location Type: Standard

This is the time the system waits before reporting that the electricity has been disconnected.

Data format: HHmm
Valid Range: 0001 - 1800
Default: 0004

⚠️ **Note**: AC restoral waits for one minute, after AC has been restored before reporting the restoral.

Location 16: Trouble Display

Location Type: Bitmap

When the alarm system detects any of the trouble conditions that are enabled in the table below, the power light on the keypad flashes and can be set in location 14, option 2, to beep. To view the trouble condition: Press and hold the [7] key down until the beep.

When the trouble condition has been corrected, pressing and holding [7] until the beep, and then press the [#] key to clear the power LED trouble condition. Some troubles will clear themselves, E.g. AC Fail.

LED	Default	Action	Description
1	ON	AC fail trouble display	This trouble condition monitors the AC that powers the alarm panel and will register a trouble condition after the time programmed in location 15. This will only clear when AC is restored.
2	OFF	Reporting communication fail trouble display	This is if the panel tries to communicate and fails to communicate after trying the number of times in location 47.
3	OFF	Phone line trouble display	A trouble condition will be displayed when the telephone line goes down.
4	ON	Siren tamper trouble display	This option looks for a load and when this load goes missing a trouble is indicated.
5	ON	Low battery detection trouble display	The alarm system tests the battery every 30 min. If a trouble is encountered a condition will be shown.
6	OFF	Aux. 12V trouble display	When there is a short or some sort of trouble that causes the 12V output to fail.
7	OFF	Engineers reset trouble display	If this option is set in partition options (location 211 to 218) and the alarm triggers, this option will show and the alarm can only be armed again once the installer code has been entered.
8	ON	Box tamper trouble display	If the alarm control box is fitted with a switch that is connected to the tamper pins on the control board and enabled in location 14 and the door of the box is opened a trouble will be displayed.
9	OFF	Peripheral tamper trouble display	If any peripherals tamper has been set then a tamper will cause this option to be displayed.
10	OFF	485 bus fail trouble display	This will display when a device attached to the system via the bus fails and stops communicating.
11	OFF	Peripheral low power/ battery display	If an expander detects low power on the 12V terminal a trouble condition will be displayed.
12	ON	Wireless battery low	When a wireless device's battery needs to be replaced the device will send a battery low signal and trigger a trouble if enabled.
13	OFF	Wireless supervision Monitoring	Each wireless device will check in and if a device does not a trouble is triggered.
14	OFF	Wireless RF jam	If an unknown signal that can interfere with signals from wireless devices is detected a trouble will be triggered.
15	OFF	Wireless low RSSI	RSSI is signal strength measurement and if lower than 20% a trouble will be logged.
16	OFF	Zone tamper	If a zone is monitored for tamper and then a tamper signal is detected by the alarm a trouble will be triggered.

Location 17: Siren Time Out

Location Type: Standard

This is the time the siren will turn off after an alarm is registered.

Data format: mmss
Valid Range: 0001 - 5959
Default: 0200

Location 18: Siren Delay

Location Type: Standard

The siren can be delayed not to sound for a specific time after an alarm is registered. For the siren delay to take effect location 14 sub-location 7 must be enabled.

Data format: mmss
Valid Range: 0001 - 5959
Default: 0200

Location19: Extra Global Options

Location Type: Bitmap

These options are global to the alarm system and affect all partitions.

LED	Default	Action	Description
1*	OFF	Wireless Zone Supervision Trigger	This option enables or disables wireless supervision failures from triggering alarms. Supervision monitors the wireless devices to make sure that they remain communicating with the system.
2	OFF	Voice Login Lockout	This option enabled the voice module to follow the keypad lockout settings.
3	OFF	24Hour Zone Report Only	This option enables 24hour zones to only report when triggered. No other actions on the panel will occur, siren won't sound and the keypad will not show an alarm condition.
4	OFF	Box tamper always triggers the siren	This option will trigger the siren when a box tamper is triggered whether the system is armed or not.
5	OFF	Bus-wired peripheral tamper always triggers the siren	This option will trigger the siren when a bus-wired peripheral tamper is triggered whether the system is armed or not.
6	OFF	Zone tamper always triggers the siren	This option will trigger the siren when a zone tamper is triggered whether the system is armed or not.
7	OFF	Voice Module Answers before modem	This option enables the voice module to answer calls to the panel before the dialler answers.

*NB: This feature is only available when using wireless expanders v1.07 or higher

Location 20: Keypad Lockout Count

Location Type: Standard

If a user code is entered incorrectly the number of times entered in this location the keypad will lock-up for the time entered in location 21.

Valid Range: 2 - 16
Default: 4

⚠️ **Note**: Keypad lockout must be enabled under extra partition options.

(Location 221 to 228 option 4 depending on the partition the keypad belongs too.)

Location 21: Keypad Lockout Time

Location Type: Standard

This is the time the keypad will not respond to any key presses except for the panic button.

Data format: mmss
Valid Range: 0001 - 5959
Default: 0030

Location 22: Keypad Sleep Delay

Location Type: Standard

If the keypad is set in location 251 to 258, depending on the keypad's ID, to go into sleep mode, this location is how long after the last key press does the keypad wait to switch of all its LEDs.

Data format: mmss
Valid Range: 0001 - 5959
Default: 0500

Location 23: User, Installer, Maintenance Code Number of Digits

Location Type: Standard
By default all codes are made up of four digits. This location can change the number of digits that make up a code to six digits.
If the number of digits is changed to six, then:

Code	Old four-digit code	New six-digit code
Installer Code	9999	999999
Maintenance Code	8888	888888
Master User Code 1	1234	123456
User Codes 2-128	XXXX	XXXX00

Valid Range: 4 or 6
Default: 4

Location 24: Account Code Number of Digits

Location Type: Standard

The reporting account codes can be increased to six digits from four.

Valid Range: 4 or 6
Default: 4

Daylight Savings

Daylight savings is practiced in some countries in summer where they advanced their time to increase daylight in the evenings and back in autumn.

Location 25: Month to Start Daylight Savings

Location Type: Standard

Select the month that daylight savings begins.

Value	Month		Value	Month		Value	Month
0	Disabled		5	May		9	September
1	January		6	June		10	October
2	February		7	July		11	November
3	March		8	August		12	December
4	April						

Location 26: Day of the Week to Start Daylight Savings

Location Type: Standard

Select the day that daylight savings begins.

Value	1	2	3	4	5	6	7
Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Location 27: Week of the Month to Start Daylight Savings

Location Type: Standard

Select the week in the month that daylight savings begins.

Value	1	2	3	4	5
Week	Week 1	Week 2	Week 3	Week 4	Week 5

Location 28: Month to End Daylight Savings

Location Type: Standard

Select the month that daylight savings ends.

Value	Month	Value	Month	Value	Month
0	Disabled	5	May	9	September
1	January	6	June	10	October
2	February	7	July	11	November
3	March	8	August	12	December
4	April				

Location 29: Day of the Week to End Daylight Savings

Location Type: Standard

Select the day that daylight savings ends.

Value	1	2	3	4	5	6	7
Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Location 30: Week of the Month to End Daylight Savings

Location Type: Standard

Select the week in the month that daylight savings ends.

Value	1	2	3	4	5
Week	Week 1	Week 2	Week 3	Week 4	Week 5

Location 31: Daylight Savings Time Offset

Location Type: Standard

This is the value that the time must be offset by when daylight savings is enabled.

Data Format: mmm

Valid Range: 1 - 250
Default: 060

Advanced Miscellaneous Settings

Location 32: Auto Test Interval

Location Type: Standard

The time between test signals that are sent back to the monitoring company. Every time an auto test is done the event is automatically and sequentially numbered, the counter starts at 0 and increments to 255.

Value	Time Period	Value	Time Period	Value	Time Period	Value	Time Period
0	Every hour	6	Every 12 hours	11	Every 5 days	16	Every 10 days
1	Every 2 hours	7	Every 1 days	12	Every 6 days	17	Every 11 days
2	Every 3 hours	8	Every 2 days	13	Every 7 days	18	Every 12 days
3	Every 4 hours	9	Every 3 days	14	Every 8 days	19	Every 13 days
4	Every 6 hours	10	Every 4 days	15	Every 9 days	20	Every 14 days
5	Every 8 hours						

Location 33: Auto Test Time

Location Type: Standard

This is the time of day that the test signal, set in location 32, must be transmitted.

Data Format: HHmm
Valid Range: 0000 - 2359
Default: 0010

Location 34: Download Code Default Disable

Location Type: Standard

The download code is a security code to stop any illegal connection and changing of data via external connections, using IDSwift software. If this option is enabled then defaulting the system will have no effect on the download code.

Value	Action
0	Enable Download code defaulting
10	Disable Download code defaulting

Valid Range: 0 or 10

Location 35: Hardware Default Switch Disable

Location Type: Standard

Every system has a hardware default switch which is activated by removing power from the system and powering up while holding the switch down until the status LED flashes. If this option is enabled then the only way to default is via the installer code and location 0.

Default Switch

Status LED
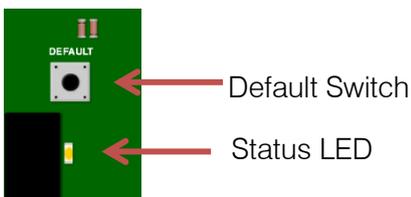
Value	Action
0	Enable defaulting of the default button
10	Disable the defaulting of the default button

Location 36: Zone Status Verify Time

Location Type: Standard

This is the time a zone is monitored for a restore. If the zone does not restore, the system will wait the time entered in this location after the siren timeout before sending another burglary event after the siren has timed out.

Data Format: mmss
Valid Range: 0001 to 5959
Default: 1000 (10 min)

> ⚠ **Note**: Zone restoral verify must enabled in partition extra options (Location 221 to 228 option 8) and Zone Status Verify count (location 37) must be set to value of 1 – 16.

Location 37: Zone Status Verify Count

Location Type: Standard

The number of times a burglary event will be sent if the zone does not restore once the siren times out. After the number in this location is reached the zone will be ignored until it restores.

Valid Range: 0 to 16
Default: 0

Communication Settings

Location 40: Serial Communication Format

Location Type: Standard

This is used to configure the communication format for serial devices.

Value	Format Name	Description
0	Ademco Express	Dual Tone HS, DTMF
1	FBI 4 x 2 (With Parity)	1.8kHz TX, 2.3kHz HS, 40PPS
2	FBI 4 x 2 (No Parity)	1.8kHz TX, 2.3kHz HS, 20PPS
3	Silent Knight 4 x 2 Fast	1.9kHz TX, 1.4kHz, 20PPS
4	Silent Knight 4 x 2 Slow	1.9kHz TX, 1.4kHz, 20PPS
5	Contact ID	Dual Tone HS, DTMF
7	SIA Reporting	Bell 103 FSK, HS

Location 41 to 44: Telephone Communication Format

Location Type: Standard

This is the language (format) the alarm panel transmits to the equipment in the control room through the telephone dialler. Each phone number can be enabled to communicate in a different format. Location 41 is for telephone number 1, 42 for telephone number 2, etc.

Value	Format Name	Description
0	Ademco Express	Dual Tone HS, DTMF
1	FBI 4 x 2 (With Parity)	1.8kHz TX, 2.3kHz HS, 40PPS
2	FBI 4 x 2 (No Parity)	1.8kHz TX, 2.3kHz HS, 20PPS
3	Silent Knight 4 x 2 Fast	1.9kHz TX, 1.4kHz, 20PPS
4	Silent Knight 4 x 2 Slow	1.9kHz TX, 1.4kHz, 20PPS
5	Contact ID	Dual Tone HS, DTMF
7	SIA Reporting	Bell 103 FSK, HS

> ⚠ **Note:** For the Contact ID and SIA formats, event reporting codes are automatically configured. Locations 501 to 588 enable or disable reporting events for Contact ID and SIA. All other formats, the reporting codes must be entered manually into location 300 to 373.

Location 45: Communication Delay

Location Type: Standard

This is the time the alarm will wait before reporting an event; it must be enabled under partition options in locations 221 to 228.

Data Format: mmss
Valid Range: 0001 to 5959
Default: 0000

Location 46: Reporting Communication Options

Location Type: Bitmap

These options set up how the alarm system will communicate with the telephone system and how many numbers it will dial to report events.

LED	Default	Action	Description
1	ON	Tone Dialling	Depending on the telephone system will depend on the choice. Modern systems use Tone.
2	OFF	Join the Telephone Numbers	24 digits can be entered into a telephone number location. If this is not enough, the two telephone numbers can be joined to form one 48 digit number.
3	OFF	Dual Reporting	Dual reporting allows the system to report to two numbers every time an event happens.
4	OFF	Alternate Reporting	Off = will alternate between telephone numbers for the number of dial attempts. On = will dial 1st number until all dial attempts are exhausted, then will try the 2nd phone number for the number of dial attempts.

⚠️ **Note**: The panel can be programmed to report to 4 different phone numbers. Phone numbers 1 and 2, are grouped into Module 1; phone numbers 3 and 4 are grouped into Module 2, this allows for dual and split reporting.

Dual reporting is when the alarm will report to both numbers to make sure the signal gets through to the control room, in case there is a problem reporting on one of the numbers, it will try the second number and go back to the first after it has succeeded with the second number.

Split reporting is when certain events are programmed to report to certain groups of phone numbers and each group can have two numbers for dual reporting.

Location 47: Number of Dial Attempts

Location Type: Standard

If the alarm cannot report on the first attempt, this location tells the system how many times to try. The default is 6 attempts, and can be changed to a maximum of 9. (0 will disable dialling)

Valid Range: 1 - 9
Default: 6

Location 48: Download Options

Location Type: Bitmap

The IDS X-Series alarm system can be up/downloaded with IDSwift software over a standard phone line, via an IDS modem. The following options help the system to deal with incoming calls.

LED	Default	Action	Description
1	ON	Fax Defeat	The system monitors the line and if the phone rings twice and stops, then 10 seconds later rings again, the panel will answer before any other device that may be on the line.
2	ON	Forced Answer	Pressing and holding down the [8] key for 3 seconds will force the alarm system to pick up the telephone line.
3	ON	Auto Pickup	By default if the telephone line rings 15 times the alarm will pick up the line. Location 49.

Location 49: Number of Rings to Answer

Location Type: Standard

When the panel detects this number of rings on a phone line it will automatically pick up the phone if automatic pickup is enabled in location 48.

Valid Range: 1 - 15
Default: 15

Location 51 to 54: Entering a Telephone Number

Location Type: Standard

When entering phone numbers please follow these instructions:

To dial a "*****" enter [MODE] [1]
To dial a "**#**" enter [MODE] [2]
For a "**12-second pause**" enter [MODE] [3] (On the LCD keypad it will be displayed as a "+")
For a "**8-second pause**" enter [MODE] [4] (On the LCD keypad it will be displayed as a "=")
For a "**4-second pause**" enter [MODE] [5] (On the LCD keypad it will be displayed as a "-")

⚠ Note: [MODE] [0] will clear the phone number.

Exercise:

The control rooms' phone number is 0860105937. The alarm is installed in a building with a switchboard and 0 has to be dialled to get a line and then must wait 4 seconds before dialling.

Instructions	Key presses
Enter location 51	[5][1] [*]
Enter the value needed to dial	[0] [mode] [5] [0] [8] [6] [0] [1] [0] [5] [9] [3] [7] [*]

Location 55: Serial Reporting Telephone Number

Location Type: Standard

The telephone number that the serially connected device must dial to report any signals.

⚠ Note: This option is only entered if the serial device has this option built in.

Location 56: Time between Dial Attempts

Location Type: Standard

If the alarm fails to report to the basestation, it will wait this length of time before trying to dial out again.

Data Format: mmss
Valid Range: 0001 - 5959
Default: 0010

Location 61 to 68: Primary Account Codes per Partition

Location Type: Standard

The account code is what identifies the alarm system to the security company so that they can respond to the correct customer. It is by default a four digit number but can be changed in location 24 to a six digit number.

Exercise: Enter an account code 0123

Instructions	Key presses
Enter location 61	[6][1] [*]
Enter the account Code	[0] [1] [2] [3] [*]

Note: If the account code is 0000 no reporting will take place. This also allows you to configure which partitions report and which do not.

Location 71 to 78: Secondary Account Codes

Location Type: Standard

The secondary account code is used if dual reporting is enabled and the second telephone dialled must have a different account code to the primary account code.

Note: If the account code is 0000 no reporting will take place. This also allows you to configure which partitions report and which do not.

Location 101 to 164: Setting Zone Properties

Location Type: Bitmap

Note: Zone properties are individually setup for each zone.

Option	Default	Description	Explanation
1	OFF	Tamper	This option allows the monitoring of devices, even when the alarm is not active, for any interference. Note: requires double end of line resistors.
2	OFF	Cross-zone	This is when the device has to be triggered a predetermined number of times within a set time period before the alarm will be activated. Also known as double knock. (I.e. The zone must trigger twice in 20 seconds.)
3	OFF	Shutdown Zone	This option monitors the zone for violations and if the set number of violations is reached whilst the alarm is on, the zone will be bypassed. (There is an option to try and re-enable the zone when the alarm does its auto test, if the zone is not violated, under extra partition options. Locations 221 to 228.)
4	OFF	Silent Zone	This will not set off an audible alarm, (siren) but will report an alarm activation if the alarm has been configured to do so.
5	OFF	Chime Zone	This will cause the keypad to beep 5 times when violated in an unarmed state. This can also be done via the user menu.
6	ON	Zone Bypass-able	Enable or disable the zone from being bypassed.
7	OFF	PGM Always Triggers	When enabled this will set the zones PGM outputs (locations 415 - 422) to always trigger when the zone is violated.
9 Profile 1 10 Profile 2 11 Profile 3 12 Profile 4	OFF	Stay Profile	This is to allocate the zone to a stay profile so that if that profile is activated the zone will be bypassed. A stay profile is used to deactivate certain zones when the alarm is active, allowing movement within those zones. Different, or the same zones, can be allocated to 4 different profiles allowing for different situations that may arise. (This can also be set via the user menu.)
13 Profile 1 14 Profile 2 15 Profile 3 16 Profile 4	OFF	Buzz Profile	Again this is an option to allocate zones to a buzz profile. A buzz zone only works in the stay mode, allowing the zone to be violated for 30 seconds before triggering the alarm. During the 30 seconds, the keypad will sound the buzzer as an audible warning to alert the person that the zone has been violated. As with stay profiles, different or the same zones can be allocated to 4 different profiles allowing for different situations that may arise. (This can also be set via the user menu.) Buzz profile 1 is associated with stay profile 1, etc.

Exercise:

Zone 16 is a panic zone, let's make it a silent panic so that the siren will not trigger alerting the intruder, but will send the signal to the monitoring company.

Instructions	Key Presses
Enter location 116	[1][1][6] [*]
Select the silent zone option	[4] [*]
LED 4 will come on	
Exit the location	[#]

Auto Arm and Auto Alarm

Arm on no Movement

Each partition can be set to automatically arm if no movement is detected within a certain time period. There are 3 steps that need to be completed:

Location 165: No Movement Auto Arm Time Out

Location Type: Extended

There is a sub-location for each of the 8 partitions.

This is the time the panel will wait before beginning to arm, once all movement has stopped.
If movement is detected within this time, the system resets and waits for the movement to stop. Movement is seen as a change in zone status, a constantly open zone is not seen as movement.

Format: HHmm
Default: 0000
Valid range: 0000 to 2359

Location 166: Auto Arm Start Time

Location Type: Extended
There is a sub-location for each of the 8 partitions.

The time entered here in the 24 hour format (HHmm) is when the system will start to monitor for no movement.

Format: HHmm
Default: 0000
Valid range: 0000 to 2359

Location 167: No Movement Auto Arm Stop Time

Location Type: Extended

There is a sub-location for each of the 8 partitions.
If movement has not stopped when this time (HHMM) has been reached the system stops monitoring for no movement.
Format: HHmm
Default: 0000
Valid range: 0000 to 2359

Medical Alarm on No Movement

Each partition can be set to monitor for no movement and if movement is not detected within a certain period of time, an alarm can be triggered to alert someone of the situation.
There are 3 steps that need to be completed:

Location 168: No Movement Medical Alarm Time Out

Location Type: Extended
There is a sub-location for each of the 8 partitions.

This is the time the panel will wait before triggering the alarm, once all movement has stopped.
If movement is detected within this time, the system resets and waits for all movement to stop again.

Format: HHmm
Default: 0000
Valid range: 0000 to 2359

Location 169: No Movement Medical Alarm Start Time

Location Type: Extended
There is a sub-location for each of the 8 partitions.
The time entered here in the 24 hour format (HHMM) is when the system will start to monitor for movement to stop.
Format: HHmm
Default: 0000
Valid range: 0000 to 2359

Location 170: No Movement Medical Alarm Stop Time

Location Type: Extended
There is a sub-location for each of the 8 partitions.
If movement has not stopped when this time has been reached the system stops monitoring for no movement.
Format: HHmm
Default: 0000
Valid range: 0000 to 2359

Location 171 to 178: Days for No Movement Auto Arm / Medical Alarm

Location Type: Bitmap

NOTE: These locations contain both no movement auto arm and no movement alarm days of the week.

LED	ARM Days of the Week		LED	Medical Alarm Days of the Week
1	Monday		9	Monday
2	Tuesday		10	Tuesday
3	Wednesday		11	Wednesday
4	Thursday		12	Thursday
5	Friday		13	Friday
6	Saturday		14	Saturday
7	Sunday		15	Sunday
All OFF	(Arm Day Disabled)		All OFF	(Disarm Day Disabled)

To set the partition to arm on a Friday, Saturday and Sunday

Instructions	Key presses
Enter location 181	[1][8][1] [*]
Enter the partition number	[1] [*]
Enter the days for the partition to auto arm	[5] [*] [6] [*] [7] [*]
To exit	[#]

Auto Arm and Disarm

Each partition can be set to automatically arm or disarm at a certain time and on specific days.

Location 180: Auto Arm

Location Type: Extended
There is a sub-location for each of the 8 partitions.
Time that the partition must auto arm entered in 24 hour format (HHmm H=hour, m=minute)

Instructions	Key presses
Enter location 180	[1][8][0] [*]
Enter the partition number	[1] [*]
Enter the time for the partition to auto arm	[2] [0] [3] [0] [*]

Location 181 to 188: Days to Auto Arm / Disarm

Location Type: Bitmap

⚠️ **NOTE:** These locations contain both auto arm and disarm days of the week.

LED	Auto ARM Days of the Week	LED	Auto disarm Days of the Week
1	Monday	9	Monday
2	Tuesday	10	Tuesday
3	Wednesday	11	Wednesday
4	Thursday	12	Thursday
5	Friday	13	Friday
6	Saturday	14	Saturday
7	Sunday	15	Sunday
All OFF	(Arm Day Disabled)	All OFF	(Disarm Day Disabled)

Location 189: Auto Disarm

Location Type: Extended
There is a sub-location for each of the 8 partitions.

This option sets the time the partition must disarm automatically.

Format: HHmm
Default: 0000
Valid range: 0000 to 2359

Instructions	Key presses
Enter location 189	[1][8][9] [*]
Enter the partition number	[1] [*]
Enter the days for the partition to auto arm	[0] [8] [0] [0] [*]
To exit	[#]

⚠️ **NOTE:** This option must be enabled in the partition options, location 211 to 218
Plus the days to auto arm / disarm in locations 181 to 188 must be set.

Location 190: Auto Arm Delay

Location Type: Standard

This location sets the delay period for the keypad buzzer warning, before the panel auto arms. At the completion of the Auto Arm Delay, the panel will arm. A valid user code entered during the delay period will cancel the auto arming.

Format: mmss
Default: 0200
Valid range: 0000 to 5959

Security Options

These are the security codes that protect the panel's programming from being changed without the correct authorization.

Location 196: Serial Code

Location Type: Standard

This is the serial code used to link a serial device to the X-Series panel. Once the serial device is connected and running, enter a six digit code in this location.

Default: 000000
Valid range: 000001 to 999999

Instructions	Key presses
Enter location 196	[1][9][6] [*]
Enter a serial code	[1] [2] [3] [4] [5] [6] [*]

Location 197: Installer Code

Location Type: Standard

This is the installer code we have been using throughout the training to change settings.
Default: 9999
Valid range: 0001 to 9999

Instructions	Key presses
Enter location 197	[1][9][7] [*]
Enter the new installer code	[8] [4] [2] [1] [*]

⚠ **Note**: It is important to change the installer code to minimise the risk of someone changing any settings.

Location 198: Download Code

Location Type: Standard

This code protects the system from unwanted external connections via the IDSwift software. (To connect successfully you must have the installer code and the download code.)
Default: 9999
Valid range: 0001 to 9999

Instructions	Key presses
Enter location 197	[1][9][8] [*]
Enter the new installer code	[9] [6] [3] [1] [*]

Location 199: Maintenance Code

Location Type: Standard

The maintenance code is for a super user to be able to change some settings, using the location method as an installer would.

⚠ **Note**: No settings can be changed that would compromise communication with the security company.

Panel functions that can be edited in maintenance mode are:
- Siren time
- Siren delay
- Keypad lockout count
- Keypad sleep delay
- All daylight savings settings
- All partition auto arm settings
- All no zone activity auto arm settings
- All no zone activity alarm settings

Default: 8888
Valid range: 0001 to 9999

Instructions	Key presses
Enter location 197	[1][9][9] [*]
Enter the new installer code	[4] [3] [2] [1] [*]

Partition Options

The X-Series alarm panels have eight partitions that can have a number of zones and users allocated to them. A partition is a separately controlled group of zones. Zones can be unique to the partition or can be shared between partitions for areas that are common, and are referred to as common zone.

⚠️ **NOTE**: A common zone will only trigger an alarm condition if all partitions that it's allocated to are armed.

Location 201 to 208: Placing Zones into a Partition

Location Type: Bitmap

By default only the first eight zones are placed into partition one and any added zones must be allocated to a partition.

Valid Range: 01 - 64

Location	Partition	Default Zones	Location	Partition	Default Zones	Location	Partition	Default Zones
201	1	1 to 8	204	4		207	7	
202	2		205	5		208	8	
203	3		206	6				

Exercise: Zones 17 to 24 need to be programmed into partition 2.

Exercise: Zones 9 to 16 need to be programmed into partition 1.

Instructions	Key presses
To allocate all the zones that we configured earlier to partition 2 enter location 202.	[2][0][2] [*]
The green READY LED should be on and the ARM, AWAY and POWER LEDs should be off.	Pwr Rdy Arm Away
Press the [*] key to move to the 2nd page.	[*]
This is a bitmapped location so data is entered by entering the zone number of the zone you want to allocate to the partition.	[1] [*] [2] [*] [3] [*] [4] [*] [5] [*] [6] [*] [7] [*] [8] [*]
Zone 1 to 8 LEDs should now be on.	
Exit location 202.	[#]

⚠️ **Note:** When using an LED keypad to gain access to zones 17 onwards press the [*] key to page to the next sixteen zones.
The diagrams below show which page is being displayed via the keypad LEDs and which zones they represent for the X64.

Curve keypad LEDs

Pwr Rdy Arm Away	Pwr Rdy Arm Away	Pwr Rdy Arm Away	Pwr Rdy Arm Away
Zones: 1 to 16	17 to 32	33 to 48	49 to 64

Classic keypad LEDs

ARMED ○ AWAY ○ / READY ● POWER ○	ARMED ● AWAY ○ / READY ○ POWER ○	ARMED ○ AWAY ● / READY ○ POWER ○	ARMED ○ AWAY ○ / READY ○ POWER ●

Location 211 to 218: Partition Configuration

Location Type: Bitmap

These options are to set how the system must behave when the partition needs to be armed.

LED	Default	Action	Description
1	OFF	Instant Arm	Instant arm allows the partition to arm without an exit delay.
2	ON	Instant Key-switch arm	When using a zone to arm or disarm this will enable the partition to arm without an exit delay.
3	ON	Quick Arm Key	This is to enable/disable the pressing of the 1 key to start the arm cycle instead of inserting a user code.
4	ON	Quick Stay Arm Key	This is to enable/disable the pressing of the 5 key to stay arm.
5	ON	Auto Stay Arm if No Exit Zone is Triggered	When arming with a user code and no entry/exit zone is triggered then the partition will automatically arm in stay mode.
6	OFF	Auto Stay Arm if No Exit Zone is Triggered When Arming with a Key-switch	When arming using an arm/disarm zone and no entry/exit zone is triggered then the partition will automatically arm in stay mode.
7	OFF	Forced Arming	This will bypass any triggered zone allowing the system to be armed even though there are triggered zones.
8	ON	Zone Bypassing	This enables or disables the ability for a user to bypass zones using the 9 key.
9	OFF	Arm with Zones in the Entry Route Violated	This allows movement to take place in a follower zone and the entry/exit zone to be violated when you are about to arm.
10	OFF	Siren Toot on Arm	When the partition arms in the away mode the siren will give one toot to indicate that it has armed.
11	OFF	Siren Toot on Disarm	When the partition disarms from being away armed it will toot twice.
12	ON	Entry Beep	This will silence the keypad when the entry zone is triggered to start the entry cycle.
13	ON	Exit Beep	This will silence the keypad when the partition starts to arm.
14	OFF	Engineer's Reset	This option will lock the partition, until the installer code has been entered, when an alarm has occurred.
15	OFF	Auto Disarm	When enabled the partition will automatically disarm at the time set in location 189.
16	OFF	Open & Close Reporting	This option will enable or disable opening & closing user reporting events for this partition. All users are enabled by default.

Exercise:

Let us enable siren toot on arm and disarm so the customer will know if the alarm is armed when using a remote transmitter.

Instructions	Keypad presses
Enter the partitions location	[2][1][1] [*]
Option 10 and 11 need to be enabled	[1][0] [*] [1][1] [*]
Exit the location	[#]

Locations 221 to 228: Extra Partition Options

Location Type: Bitmap

These are more partition options that can be set.

LED	Default	Action	Description
1	OFF	Automatic Re-enabling of Shutdown Zones at the Time of the Dialler Test	If a zone is disabled due to reaching the number of triggers in location 10 when armed, the alarm will try and re-enable those zones at auto test.
2	OFF	Bypassing of Common Zones	If zones are in more than one partition and the zones may need to be bypassed at some time this option must be enabled in all partitions it belongs to.
3	OFF	Delay Before Communications	This option will delay any communication for the time set in location 45. Except for panic or duress signals.
4	OFF	Keypad Lockout	If a person enters a wrong code the number of times set in location 20 the keypad will stop responding to any key presses, for the amount of time set in location 21.
5	OFF	Disable Silent Keypad Panic	This will stop the siren from sounding if the P key on the keypad is pressed and a panic is triggered.
6	OFF	Toot on Successful Communication	When closing reporting is enabled and this option is on the siren will only toot once the system is armed and has communicated that to the security company successfully.
7	OFF	4x2 Stay Zone Reporting	When enabled and stay closing is enabled all bypassed zones will be reported to the security company when using 4x2 reporting.
8	OFF	Zone Restoral Sends After Siren Time Out	When enabled a zone restoral will only be sent once the siren time out period has completed.

Location 230: Exit Delay

Location Type: Extended

There is a sub-location for each of the 8 partitions.

This is the time the partition waits before fully arming. During this time any zones that are entry/exit or follower zones are disabled and only when the exit delay is finished do these zones become active. By default the exit delay is indicated by the keypad beeping.

Format: mmss
Default: 0030
Valid range: 0000 to 5959

Exercise:

Instructions	Keypad presses
Enter the location 230	[2][3][0] [*]
Enter partition 1's sub-location	[1] [*]
Change the 30 sec default to 10sec (mmss)	[0][0] [1][0] [*]
Exit the location	[#]

Location 231: Primary Entry Delay

Location Type: Extended

There is a sub-location for each of the 8 partitions.

This is the time a person has from triggering the primary entry/exit zone to entering a valid disarm code before triggering the alarm. When the entry/exit zone triggers, it automatically disables the follower zones. There is a secondary entry delay (location 232) for a different entry times.

Format: mmss
Default: 0030
Valid range: 0000 to 5959

Exercise:

Instructions	Keypad presses
Enter the location 231	[2][3][1] [*]
Enter partition 1's sub-location	[1] [*]
Change the 30 sec default to 10sec (mmss)	[0][0] [1][0] [*]
Exit the location	[#]

Location 232: Secondary Entry Delay

Location Type: Extended

There is a sub-location for each of the 8 partitions.

This is the time a person has from triggering the secondary entry/exit zone to entering a valid disarm code before triggering the alarm. When the entry/exit zone triggers, it automatically disables the follower zones.

Format: mmss
Default: 0030
Valid range: 0000 to 5959

Keypad Configuration

Each X-Series system can have up to eight LCD or LED keypads controlling it. Keypads can be allocated to any partition.
To register a keypad:

> When a new keypad or after a factory or keypad default, all the keypads LEDs will flash. By pressing the [#] key the keypad will ask the system for an ID. The first available ID will be given to the keypad. To clear a keypads ID hold down the 1 and 3 keys while powering the keypad up.

⚠️ **NOTE:** By default all keypads, when registered, belong to partition 1.
If a keypad is allocated to a partition without any zones enabled it will display "Not ready."

Location 240: Keypad and Partitions

Location Type: Extended

There is a sub-location for each of the 8 keypads.
Each keypad when registered will belong to partition 1.
Valid range: 1 – 8
Default: 1

Exercise: Add keypad 1 to partition 1, keypad 2 to partition 2, 3 to partition 3 and 4 to 4.

Instructions	Key presses
Enter location 240	[2][4][0] [*]
Now enter the string for each of the keypads and the keypads not installed leave as default by leaving them in partition 1	[1] [2] [3] [4] [1] [1] [1] [1] [*]
When the [*] key is entered the data will be saved and you will be exited out of the location	

Location 241: Keypad Display Start Zone

Location Type: Extended

There is a sub-location for each of the 8 keypads.

Default: 01
Valid range: 01 – 64

The LED keypad can only show 16 zones at a time, therefore on an LED keypad you can set the keypad to start at any zone.

This allows you to set what physical zone the LED keypad will display as zone 1. For example, by setting the keypad to start at zone 20, zone 1 on the keypad will now represent the physical zone 20.
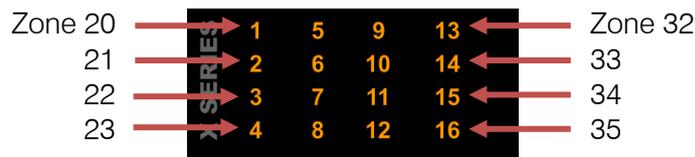
Exercise: Let us make keypad 2 start displaying from zone 9.

Instructions	Key presses
If you are not in installer mode, enter into installer	[#][9][9][9][9] [*]
Keypad display start zone is in location 241	[2][4][1] [*]
Only keypad 2 is changing so we will use the bitmapped method	[2][*]
Enter the start zone number	[0][9] [*]
As you enter * your data is saved and you are exited back into location 241	
To exit out of location 241	[#]
To exit installer mode	[#]

Location 242: Keypad Zone

Location Type: Extended

There is a sub-location for each of the 8 keypads.

On each keypad is a physical zone input which can be mapped to any zone on the alarm. The physical zone that the keypad zone is mapped to, on the panel or expander will be switched off. For example if I make keypad 3s zone, zone number 8 then zone 8 on the panel will be no longer be in operation, but the zone on the keypad will display and report as zone 8.

Default: 00
Valid range: 01 - 64
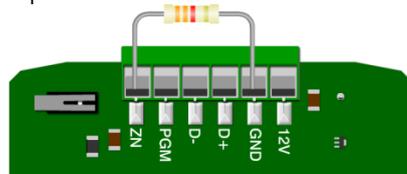
Exercise:

Instructions	Key presses
If not in installer mode enter into installer	[#][9][9][9][9] [*]
To enable the keypad zone go to location 242	[2][4][2] [*]
Again we are only changing keypad 3 so we will use the bitmap method	[3] [*]
Enter the zone that this keypad's zone will represent	[8] [*]
Exit from the location	[#]
To exit programming	[#]

You could also map the keypad zone to zone 33 even though you don't have an expander with zone 33 physically connected.

⚠ **NOTE:** Please remember that you still need to give the zone a zone type and place it into a partition for it to work.

Location 243: View Keypad ID

To view a keypad ID, enter this location from the physical keypad that you want to know the ID.

⚠️ **Note**: This is only for viewing the keypad ID. The Keypad ID is set when you enrol the keypad and cannot be changed in this location.

Location 251 to 258: Keypad Options

Location Type: Bitmap

Each keypad can be set with the following options:

Option	Default	Action	Description
1	ON	Keypad Timeout	If a keypad is made global, i.e. The keypad will be able to view other partitions on the system. This option will automatically return the keypad to its home partition which was programmed into location 240.
2	OFF	Keypad Sleep Mode	If this is enabled, the keypad will switch all its LEDs off after the time programmed into location 22. Press any key to wake it up.
3	OFF	Global Keypad Status	If this is enabled the keypad can view any partition on the system. This option ties in with option 1.
4	OFF	Show All Zones	If the keypad is set to global this option determines if the user sees all zones, or only the zones that belong to the partition.
5	OFF	Partition Menu	Shows all partitions if any of the following keys are pressed: 1-Quick Arm Key, 5-Stay Arm Key, 6-Stay and Go Key.
6	OFF	Stay Menu	This option will ask for a profile number when the stay key, [5] is pressed to arm in the stay profile.
7	OFF	Buzzer Follows Siren	Enable this option if you want the keypad buzzer to sound when the siren sounds.
8	OFF	Global Chime	If the keypad is set to global this option will chime for chime zones in all partitions.

Exercise:

Configure keypad 1, to be a global keypad with the partition menu active.

Instructions	Key presses
Enter the location for keypad 1	[2][5][1] [*]
Option 3 must be enabled	[3] [*]
Enable partition menu	[5] [*]
Exit the location	[#]

X-Series aXess

X-Series aXess allows you to integrate access control, for up to eight doors into the X-Series system. Each door has an interface that can be installed in two configurations:

1. Two readers on each side of the door for entry and exit or
2. One reader for entry and a push button for exit

Access tags can be linked to alarm codes to be able to arm and disarm the alarm.

⚠️ **Note**: Only LCD keypads can be used to program aXess locations.

Location 259: IDS aXess configuration

Location Type: Extended

Location 259 has a four sub-locations listed in the table below:

Sub-location	Description
1	Enrol Door
2	Remove Door
3	Configure Door Options
4	Configure Advance Door options

You can either use the Panic or Medical keys to scroll through the options and press the * key to select or enter the sub-location number and * key.

⚠️ **Note**: The IDS aXess location can only be programmed using an IDS LCD keypad and IDSwift2. You cannot use and LED keypad.

Sub-location 1: Enrol Door

Each X-Series aXess interface needs to enrol as a door number – similar to keypads. An unenrolled interface is indicated by all reader status LEDs flashing together.

On selecting sub-location 1 the X-Series will prompt for a door number, as shown below.

Enter door no:

Then enter the door number to be enrolled and press the * key.

All unenrolled readers will then be put into the enrolment mode indicated by the alternative flashing of the outer RED and Green LEDs and then the inner Yellow LED.

To enrol a reader (door) present any tag to the reader, a confirmation beep will be heard on the reader and keypad will display – Enrolled.

⚠️ **Note**: You cannot enrol (re-enrol) to an existing door number, the X-Series will give three error beeps when entering the door number if the selected door number is already enrolled.

Sub-location 2: Remove Door

This sub-location allows you to delete a door (interface) from the X-Series Panel configuration.
Note all door configuration and tags will be removed from the selected door and will have to be re-added, either manually in the User Menu or with IDSwift2.

This option can be used if a door was enrolled to the incorrect number. It must first be deleted and then re-enrolled to the correct door number.

Sub-location 3: Configure Door Options

This sub-location is used to allocate doors to a partition, set the time the relay triggers for and allocate a zone that monitors the door switch if using door left open or forced door functions.

Upon entering this sub-location select the door number and press *, select the partition the door should belong to and press *, enter the relay trigger time in milliseconds and press *, finally enter the zone number that monitors the door status and press *.

Note: If monitoring a zone with the door switch, this will replace the zone number on the X-Series panel, and operate as a normal zone.

Sub-location 4: Configure Advanced Door Options

In this sub-location you can enable/disable a number of advanced options, listed and detailed in the table below, including if a door is an Access Door only, Arm/Disarm only or both.

You can either use the Panic or Medical keys to scroll through the options and press the * key to select or enter the sub-location number and * key.

Option	Default	Action	Description
1	NO	Door Switch	Enable this setting if you want to monitor the door switch as a zone. For door left open, forced door and monitoring of that zone.
2	NO	Silence Beeps from Reader	This option will disable the reader's beeper.
3	NO	Deny entry if Armed	When enabled this option will prevent the system from allowing anybody access through the door when its partition is armed.
4	NO	Reader is an Arm/Disarm Reader	When enabled this option allows a tag allocated to an arm/disarm user code to arm or disarm the system, depending on the state of the alarm, by holding the tag for three seconds in front of the reader.
5	YES	Reader is an Access Reader	Enables the reader to allow entry or exit access.
6	YES	Reader is an Fire Door	If a door is enabled as a fire door and a fire alarm is triggered the door will automatically unlock.
7	NO	Allow access if offline	If the interface loses communication with the X-Series alarm panel it will still work as an access reader. Only alarm functions will stop working.
8	YES	Door Left Open Beep	If the door is monitored by a door magnet connected to a zone and left open for 30 seconds the reader will beep for 15 seconds to draw attention to the door being open.
9	YES	Forced door monitoring	If the door is monitored by a door magnet connected to a zone and the door opens without a valid tag being presented a Forced Door Alarm will trigger.

Location 260: Wireless Configuration

Location Type: Extended

Location 260 has a four sub-locations listed in the table below:

Sub-location	Description
1	Add Wireless Device
2	Delete Wireless Device
3	Wireless Device Signal Strength
4	Supervision Interval Time **(Not used for Xwave²)**
5	Xwave 2

⚠️ **Note**: Depending if you have an LED or LCD keypad will depend on the feedback you can expect to receive while programming.
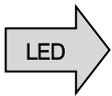
LED ▷ **LED Keypad Instructions**
Upon Location entry the user will notice the following:

On   On   Flashing

a. Ready LED ON, Armed LED ON, Away LED flashing.
b. Menu system now only awaiting sub-location selection.
   i. User must enter [**number**] [*****] to advance into "sub menu".
c. When entering sub menus, I.e. add wireless device or delete wireless device.
   Zones that are wireless zones will be on.
d. [**#**] will return user to Installer menu location entry.
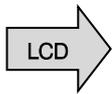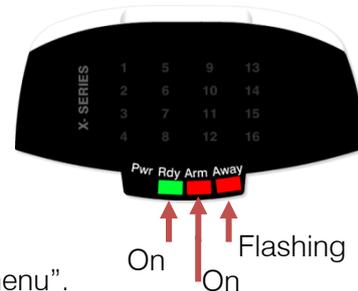
LCD ▷ **LCD Keypad Instructions**
Upon location entry the following will be displayed:

Wireless Menu
Add Device <*>

Scroll backwards using   Scroll forward using
the Medical key   the Panic key

Press * key
to enter

[#] will return user to Installer menu location entry.

Note: Do not place batteries into multiple Xwave^2 devices while learning, only do one at a time and close the housing once complete as if left open in the tamper state, each device will continuously send join requests.

Using an LED Keypad

When working with more than 16 zones on an LED keypad press the [*] key to page through to the next 16 zones.

Note: Each time a new page of zones are shown the Pwr, Rdy, Arm and Away LEDs will change to show which zones are being displayed.
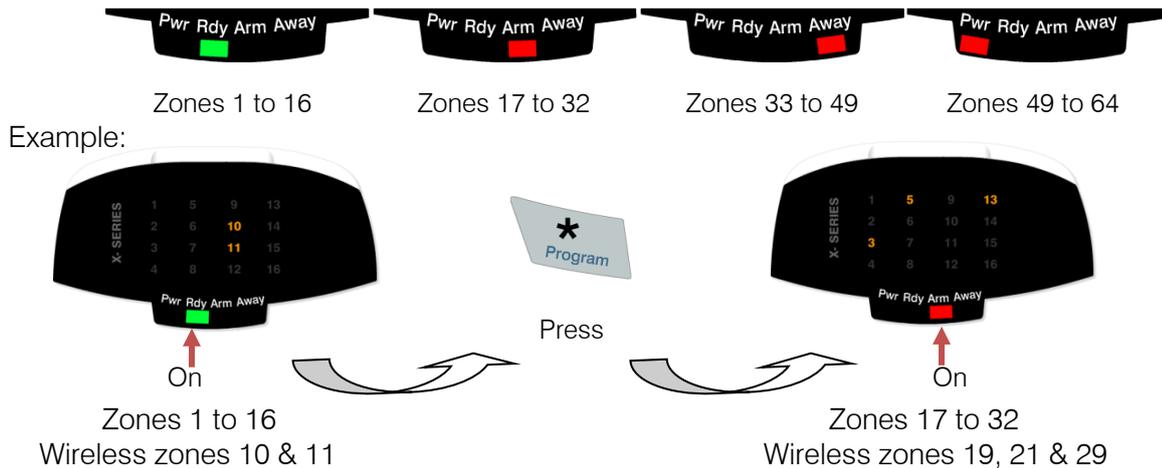
Pwr Rdy Arm Away	Pwr Rdy Arm Away	Pwr Rdy Arm Away	Pwr Rdy Arm Away
Zones 1 to 16	Zones 17 to 32	Zones 33 to 49	Zones 49 to 64

Example:

Press

On

Zones 1 to 16
Wireless zones 10 & 11

On

Zones 17 to 32
Wireless zones 19, 21 & 29

1. Zone LEDs will be ON if the zone already has a wireless detector assigned.
   The menu is now waiting for the user to select which zone to add a detector. If the user selects a pre-allocated zone then the keypad will sound 3 error beeps and wait for a valid zone entry.

   Note: Detectors may only be added on LED keypads via the tamper method.

2. Upon valid zone selection the keypad will sound an OK (single beep) and the zone LED will start flashing. The system is now waiting for the new detector to be tampered.

   When the user triggers the tamper the system will receive a notification and determine whether the detector has already been assigned to any other zones. If this is the case the user will be notified by 3 error beeps and the menu will keep waiting for a tamper from an unassigned detector.

   If the detector has not been assigned then it will be automatically added to the system. The user will be notified via keypad by a long beep as well as the zone LED previously flashing will now be ON.

3. The system will now wait for a new zone to be selected.

4. [#] key at any time will return the user back to the sub menu selection menu.

Using an LCD Keypad

Upon Sub menu entry the user will notice the following:

Zone Names <*>
Zone No + *

Scroll using Medical or Panic Keys, enter with [*] key

Or enter the zone number followed by the [*] key
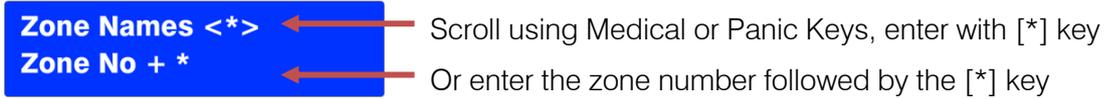
[#] will return user to sub menu selection entry.

Note: If the zone name is still default or named "Main Lounge"

Zone Names <*>
02 Zone 02

Zone Names <*>
02 Main Lounge

1. Upon selecting a zone that is not already a wireless zone the user will be presented with the following.

SN:_ _ _ _ _ _ _
02 Zone 02

2. Press enter to confirm zone selection

Tamper or Enter
SN: _ _ _ _ _ _ _

The user must now either trigger the tamper on the detector or key in the serial number of the device.

When the user triggers the tamper the system will receive a notification and determine whether the detector has already been assigned to any other zones. If this is the case the user will be notified by 3 error beeps and the menu will keep waiting for a tamper from an unassigned detector.

Incorrect or pre-allocated serial numbers will also result in a 3 beep error tone and the menu will keep waiting for a valid entry.

3. Upon valid Serial Number entry or tamper the user will be presented with the following.

Serial No.
SN:12345678   [*]

Press [*] to confirm the serial number is correct

Sub-location 2: Delete Wireless Detector

Use an LED Keypad

Go to sub-location 2:

1. Zone LEDs will be ON if the zone already has a wireless detector assigned.

The menu is now waiting for user to select which zone they want to delete a detector from.
Note: The user may select a zone that is not pre-allocated.

2. Zone LED will turn OFF on zone selection.
3. [#] key at any time will return the user back to the sub menu selection menu.

Using an LCD Keypad

Go to sub-location 2:

1. Enter [*] to enter the delete sub-location.
2. Enter the zone number or scroll to the zone.
3. Enter [*] to delete that detector.
4. [#] key at any time will return the user back to the sub menu selection menu.

Sub-location 3: Signal Power of Receiver

⚠️ NOTE: This menu is only available with the LCD keypad. The user will need to trigger the zone to get a signal power update.

Go to sub-location 3.

1. Enter [*] to enter signal strength testing.
2. Enter or scroll to the zone to be deleted.
3. Press the [*] key to select the zone.
4. Trigger the device and the display will show the signal strength on the first row.

Sub-location 4: Supervision Monitoring

Supervision is the monitoring of wireless devices to make sure that they remain in communication with the system. In this sub-location you can choose the time that the alarm waits before raising a trouble condition if it has not received a signal from a device.

Your options are:

Option	Description
1	3 Hours
2	24 Hours

Default: 2 (24 hour)
Valid range: 1 – 2

⚠️ Note: When entering this sub-location the first supervision time displayed is the entered time.
Note: This is note used with Xwave^2 devices.

Sub-location 5: Xwave^2 Zone Properties

Certain compatible Xwave^2 devices allow you to change detector properties from the panel. The following options can be set:

Option	Default	Description
1	N	Device LED can be enabled = Y or disabled = N
2	N	Set sensitivity pulse count. See the detector manual that is allocated to the zone for options N = Default option Y =second option

Reporting Codes

In the following locations, 261 to 335, the value of the reporting codes are entered for reporting formats other than SIA and Contact ID. For example formats like, FBI 4x2.

[INSTALLER CODE] [*] [LOCATION] [*] [SUB-LOCATION] [*] [REPORTING CODE] [*]

Location 261 to 264 Stay Zone Reporting Codes

Location Type: Extended
Each location represents a set of 16 zones.

Locations to enter reporting codes if you want to report stay zones to the control room.

Location	Profile	Zones	Location	Profile	Zones
261	1	1 to 16	263	3	33 to 48
262	2	17 to 32	264	4	49 to 64

Default is 00
Valid Range: 00 - FF

Location 300 Global Reporting

Location Type: Extended

Sub-Loc	Description	Explanation
1	AC Fail	This reporting code is sent when the main electrical supply has failed and the system is running on the backup battery.
2	AC Restore	This reporting code is sent when the main electrical supply is restored.
3	Communication Fail	This reporting code is sent when the communication dial attempts have been exhausted.
4	Communication Restored	When communication is restored this code is sent.
5	Phone Line Tamper	If the phone line is tampered with and the line voltage goes missing and this code is sent.
6	Phone Line Restore	When the line voltage is restored this reporting code is sent alerting the security company.
7	Siren Tamper	The X-Series alarm panel monitors the siren and if it goes missing a signal is sent.
8	Siren Tamper Restore	Once the siren has been restore the security company is alerted.

Location 301 Global Reporting

Location Type: Extended

Sub-Loc.	Description	Explanation
1	Battery Low	When the system detects that the battery voltage has reached 10.5V this code is sent to warn the company that it is about to switch off.
2	Battery Restore	Once charged a restore will be sent to confirm the battery is charged.
3	Auxiliary 12V Fuse Failed	If the fuse protecting the auxiliary 12V output goes faulty this code is sent to alert the security company.
4	Auxiliary 12V Fuse Restored	When the auxiliary fuse fault is corrected a restore is sent.
5	Installer Reset Required	If this option is enabled in location 211 to 218 and the alarm is tripped in that partition, the alarm can't be armed until the installer code is entered.
6	Installer Reset Restored	Once the installer code has been entered after an alarm has tripped a restoral will be sent.
7	Box Tamper	The alarm panel has a connector to monitor a tamper switch so that the alarm box can't be opened without notifying the security company.
8	Box Tamper Restore	When the box is closed a restore is sent.

Location 302 Global Reporting

Location Type: Extended

Sub Loc.	Description	Explanation
1	Bus Device Tamper	When a device that is connected to the keypad bus registers a tamper this code is sent to the alarm company.
2	Bus Device Tamper Restore	When the device on the bus registers that the tamper condition has been restored it will send this code.
3	Bus Peripheral Communication Fail	When a device that has been registered on the bus stops communicating with the control panel this code is sent.
4	Bus Peripheral Communication Restore	Once the communication between the control panel and the missing device is corrected a restoral is sent to the alarm company.
5	Bus Peripheral Power/Battery Low	A device that has the ability to monitor its power detects that its power is low a message can be sent.
6	Bus Peripheral Power/Battery Restore	Once the power is restored a signal alerting the monitoring company can be sent.
7	Wireless Detector Battery Low	Wireless devices monitor their batteries and when a battery needs changing this low battery code is sent.
8	Wireless Detector Battery Restore	After changing the battery a restoral is sent.

Location 303 Global Reporting

Location Type: Extended

Sub Loc.	Description	Explanation
1	Wireless Detector Supervision Failure	Each device checks in with the controller at a predetermined time and if this signal is not received, the alarm company is alerted that it has gone missing.
2	Wireless Detector Supervision Restore	If the wireless device starts communicating after being missing a restoral is sent.
3	Wireless Receiver Signal Jam	If the receiver detects a signal that could block effective communication from the devices that it is monitoring an alert is sent to the monitoring company.
4	Wireless Receiver Signal Restore	When the signal causing the jam has been removed a restoral is sent.
5	Wireless Detector RSSI Low	Each detectors signal strength is checked and if the signal strength drops below 20% a low RSSI is sent.
6	Wireless Detector RSSI Restore	Once the signal strength of a device increases above 20% an RSSI restore is sent.
7	Dedicated Panic	On board is a dedicated panic zone, when triggered this code is sent.
8	Test Report	The X-Series alarm panel can be programmed to send test signals to confirm that it is still alive.
9	Download Report Code	After the system has been connected to by IDSwift software a code is sent.
10	AC Fail on Smart Power Supply	This code is sent when the main electrical supply to the Smart PSU has failed and the system is running on the backup battery.
11	AC Restore on Smart PSU	This code is sent when the main electrical supply is restored to the Smart PSU.
12	Low Battery on Smart PSU	When the Smart PSU detects that the battery voltage has reached 10.5V this code is sent to warn the company that it is about to switch off.
13	Battery Restore on Smart PSU	Once the battery is charged this code will be sent to confirm the battery is charged.
14	Fuse Fail on SmartPSU	If the fuse protecting the Smart PSU auxiliary 12V output goes faulty this code is sent to alert the security company.
15	Fuse Restore on Smart PSU	When the fuse fault is corrected a restore is sent.

Location 304 to 335: Zone Reporting

Location Type: Extended

Each location represents a set of 16 zones, for example;
- Location 304 is zones 1-16
- Location 305 is zones 17-32
- Location 306 is zones 33-48
- Location 307 is zones 39-64

Location	Sub Loc.	Description	Explanation
304 to 307	1 to 16	Zone Alarm Reporting	When the system is armed, a 24Hr zone or a panic zone is triggered this code is reported.
308 to 311	1 to 16	Zone Alarm Restoral	When the zone restores after being violated this code is sent.
312 to 315	1 to 16	Zone Tamper Reporting	If the tamper monitoring option is enabled and a tamper signal is received this code is sent.
316 to 319	1 to 16	Zone Tamper Restoral	Once the tamper condition is corrected a restoral is sent.
320 to 323	1 to 16	Zone Bypass Reporting	If a zone is bypassed and the alarm is armed this code is sent to report which zones are inactive.
324 to 327	1 to 16	Forced Arming	If the system is programmed to bypass zones that are violated when arming, this code is sent to alert the monitoring company.
328 to 331	1 to 16	Swinger Shutdown Reporting	If swinger shutdown has been enabled and the alarm automatically shuts down a zone that has violated the swinger shutdown settings.
332 to 335	1 to 16	Swinger Shutdown Restore	The system can be set to try restore a zone that has been disabled by swing shutdown and if it's able to then this code is sent.

Extending Contact ID Zone Reporting

Location Type: Extended

Locations 304 to 335 can be programmed with a value that will change the contact ID reporting code for each zone to extend what can be connected to each zone and what is reported to the control room.

Example: If a gas detector is connect to zone 8
By entering 26 into location 304 sub-location 8, whenever zone 8 triggers, a contact ID code of 151 (Gas detected) is sent to the control room.

Please see Appendix at the end of the manual for all values.

Value	CID	Description	Value	CID	Description
01	100	Medical Zone	3C	303	RAM Checksum bad Zone
02	101	Personal Emergency Zone	3D	304	ROM checksum bad Zone
26	151	Gas detected Zone	3E	305	System reset Zone
28	153	Loss of heat Zone	3F	306	Panel programming changed Zone

Location 336 to 340: Partition Reporting Codes

Location Type: Extended
There is a sub-location for each of the 8 partitions.

[INSTALLER CODE] [*] [LOCATION] [*] [SUB LOC] [*] [REPORTING CODE] [*]

Loc	Sub Loc	Description	Explanation
336	1 to 8	Duress Reporting	A user code can be programmed to send a duress signal to alert the security company of a life threatening situation.
337	1 to 8	Keypad Panic	This code is sent when the panic button on the keypad is pressed.
338	1 to 8	Fire Alarm	If a fire is detected or the fire key is pressed this code will be reported.
339	1 to 8	Medical Key	A medical code is sent alerting the monitoring company to send an ambulance.
340	1 to 8	Keypad Lockout	This code is sent if the keypad locks itself due to incorrect codes being used.

Location 342 to 373: User Reporting Codes

Location Type: Extended

Each location represents a set of 16 users:

- Location 342 are users 1-16
- Location 343 are users 17-32
- Location 344 are users 33-48
- Location 345 are users 39-64
- Location 346 are users 65-80
- Location 347 are users 81-96
- Location 348 are users 97-112
- Location 349 are users 113-128

[INSTALLER CODE] [*] [LOCATION] [*] [SUB LOC] [*] [REPORTING CODE] [*]

Loc	Sub Loc	Description	Explanation
342 to 349	1 to 16	Close Reporting	Every time a user arms the alarm this code is sent.
350 to 357	1 to 16	Stay Close Reporting	If the user arms in stay mode this code is sent.
358 to 365	1 to 16	Open Reporting	Every time a user disarms the alarm this code is sent.
366 to 373	1 to 16	Siren Cancel Reporting	When a user cancels the siren this code is sent.

Location 374: Quick Close Reporting Codes per Partition

Location Type: Extended
There is a sub-location for each of the 8 partitions.
These reporting codes are sent when someone away arms the system using the quick arm key, [1]

Location 375: Quick Stay Reporting Codes per Partition

Location Type: Extended
There is a sub-location for each of the 8 partitions.
These reporting codes are sent when someone stay arms the system using the quick Stay arm key, [5].

Triggering Outputs

Outputs are normally used to trigger communication devices like radios, with a voltage. All outputs on the panel and Zone Expanders are positive 12 volt outputs. The output can be either pulsed or latched. The outputs on the X-Series Output Expanders are a normally open relay (Max 1Amp) contacts, which could be used to trigger other devices, for example the inputs on a CCTV DVR.

Definition:
i. Pulse is when the output goes from 0V up to 12V and goes back to 0V. Like a spring if you compress it and then leave it alone and it will automatically start uncompressing.
ii. Latch is when the output will go from 0V to 12V and stay there until something else tells it to go back to 0V, like a light switch.

Defaults:

Output	Event	Action
1	Panic and Duress	Pulse to 12V
2	Burglary	Pulse to 12V
3	Arm	Latch to 12V
4	Disarm	Unlatch to 0V

PGM Output Address

The X-Series alarm panel has 5 physical outputs on the main board, supports two Output expanders of 8 outputs each, and each of the possible 8 keypads has an output. Plus the X64 system can have up to 6 expanders with 2 outputs per expander. Below shows the number assigned to each outputs.

Number	Physical Outputs	Number	Physical Outputs
00	Disabled	29	Output expander 2 output 4
01	Onboard output 1	30	Output expander 2 output 5
02	Onboard output 2	31	Output expander 2 output 6
03	Onboard output 3	32	Output expander 2 output 7
04	Onboard output 4	33	Output expander 2 output 8
05	Onboard output 5	34	Keypad 1 output
06	Zone expander 1 output 1	35	Keypad 2 output
07	Zone expander 1 output 2	36	Keypad 3 output
08	Zone expander 2 output 1	37	Keypad 4 output
09	Zone expander 2 output 2	38	Keypad 5 output
10	Zone expander 3 output 1	39	Keypad 6 output
11	Zone expander 3 output 2	40	Keypad 7 output
12	Zone expander 4 output 1	41	Keypad 8 output
13	Zone expander 4 output 2	42	I/O Module zones 1-4
14	Zone expander 5 output 1	43	I/O Module zones 5-8
15	Zone expander 5 output 2	44	I/O Module zones 9-12
16	Zone expander 6 output 1	45	I/O Module zones 13-16
17	Zone expander 6 output 2	46	I/O Module zones 17-20
18	Output expander 1 output 1	47	I/O Module zones 21-24
19	Output expander 1 output 2	48	I/O Module zones 25-28
20	Output expander 1 output 3	49	I/O Module zones 29-32
21	Output expander 1 output 4	50	I/O Module zones 33-36
22	Output expander 1 output 5	51	I/O Module zones 37-40
23	Output expander 1 output 6	52	I/O Module zones 41-44
24	Output expander 1 output 7	53	I/O Module zones 45-48
25	Output expander 1 output 8	54	I/O Module zones 49-52
26	Output expander 2 output 1	55	I/O Module zones 53-56
27	Output expander 2 output 2	56	I/O Module zones 57-60
28	Output expander 2 output 3	57	I/O Module zones 61-64

NOTE: The Xwave[2] I/O Module output number is based on what zone that I/O Module is learnt to.

PGM Output Actions

When allocating an output to an event, an output action must also be entered so that the system knows what to do when triggered. The action can be either a pulse or latch as discussed before. Below are the values for the actions.

Value	Output Action	Action
00	Set Output High (Set)	From 0V to 12V
01	Set Output Low (Reset)	From 12V to 0V
02	Pulse Output High	From 0V to 12V back to 0V
03	Pulse Output Low	From 12V to 0V back to 12V

When entering the value into the location use the following steps:
1. Enter the output number that is to be triggered. [0][5]
2. Then enter the action to be performed. [0][2]
3. Only once the output number and the action have been entered press [*]

Note: All Xwave^2 I/O PGM options are found in locations 620 – 648.

Location 380: Clear Onboard Programmable Outputs on Disarm

Location Type: Bitmap

Any outputs enabled in this location will be reset when the alarm system is disarmed.
The onboard outputs are 1 to 5.

Default: OFF

Location 381 to 386: Clear Zone Expander Programmable Outputs on Disarm

Location Type: Bitmap

Any outputs enabled in this location will be reset when the alarm system is disarmed.
Location 381 is expander 1, Location 382 is expander 2... etc.

The zone expander outputs are:

Expander No.	1		2		3		4		5		6	
Output Address	6	7	8	9	10	11	12	13	14	15	16	17

Default: OFF

Location 387 to 388: Clear Output Expander Programmable Outputs on Disarm

Location Type: Bitmap

Any outputs enabled in this location will be reset when the alarm system is disarmed.
Location 387 is output expander 1, Location 388 is output expander 2.

The zone expander outputs are:

Output Expander 1							
Output Address	18	19	20	21	22	23	24	25

Output Expander 2							
Output Address	26	27	28	29	30	31	32	33

Default: OFF

Location 389: Clear Keypad Programmable Outputs on Disarm

Location Type: Bitmap

Any outputs enabled in this location will be reset when the alarm system is disarmed.

The keypad outputs are:

Keypad No.	1	2	3	4	5	6	7	8
Output Address	34	35	36	37	38	39	40	41

Default: OFF

Partition Dependant Events:

Location Type: Extended

There is a sub-location for each of the 8 partitions.

Loc	Event	Description	Default
390	Close Programmable Output	Enter the output and action to be performed when the alarm is away armed.	0300
391	Stay Close Programmable Output	When the alarm is armed in the stay mode, someone is staying on the premises and internal zones are automatically bypassed.	0000
392	Open Programmable Output	Open means disarmed from either away or stay armed.	0301
393	Cancel Programmable Output	By disarming the partition an output can be turned off.	0000
394	Alarm Restoral Programmable Output	This is when a device has triggered and comes back to the normal working state.	0000
395	Bypass Programmable	When a zone is disabled using the bypass key [9].	0000
396	Forced Arm Programmable Output	If forced arm has been enabled and zones have been automatically bypassed by the system to allow the panel to arm.	0000
397	Zone Tamper Programmable Output	If tamper has been enabled on a zone and the tamper switch on the device is triggered.	0000
398	Zone Tamper Restoral Programmable Output	When the tamper switch goes back to normal.	0000
399	Zone Shutdown Programmable Output	If enabled and a zone does get bypassed.	0000
400	Zone Shutdown Restoral Programmable Output	When the zone is un-bypassed at the auto test time if enabled to do so.	0000
401	Keypad Panic Programmable Output	When the panic on the keypad is pressed.	0102
402	Keypad Fire Programmable Output	When the fire button on the keypad is pressed.	0402
403	Keypad Medical Programmable Output	When the medical button on the keypad is pressed.	0502
404	Keypad Lockout Programmable Output	If someone randomly presses keys and all parameters are met in locations 20 and the keypad options menu (251 to 258) the keypad will lock for the time specified in location 21.	0000
405	Duress Programmable Output	A duress code can be programmed into the system to mimic a user code but will send a duress (panic) signal to the control room.	0102
406	Verifies Cross-Zone Trigger Programmable Output	This output when programmed will trigger when an alarm is caused by zones that are cross zoned. I.e. The number of triggers in the time allocated is exceeded.	0000
407	Burglary Programmable Output	Triggered when the alarm is armed and a zone is triggered.	0202
408	Panic Programmable Output	If any panic event is triggered.	0102
409	Fire Programmable Output	If a fire zone is triggered.	0402
410	Tamper Zone Programmable Output	If a zone is set to be of the zone type tamper.	0000

Partition Dependant Events:

The following events do not need an action as they follow the event action.

Loc	Event	Description
411	Siren Programmable Output	Follows the dedicated siren output in every way.
412	Strobe Programmable Output	Will set the output until a valid user code is entered.
413	Chime Programmable Output	The output triggers when a chime zone is violated.
414	Arm Follow Programmable Output	The output mimics the arm LED on the keypad.

Note: When programming output 411 to 414, enter an output number only, as they mimic other devices or actions.

Exercise: When the fire button on keypad 1, in partition 1, is pressed output 4 will pulse.

Instruction	Key presses
Enter location 402	[4][0][2][*]
We are working in partition 1	[1][*]
The rule is output first then the action: output 4 then pulse	[0][4][0][2][*]
Exit location	[#]

Zone Triggered Outputs

A zone can be set to trigger a dedicated output, either only when the set zone triggers an alarm condition (default) or the set zone will always trigger the programmed output. This requires the output zone property to be enabled. - Locations 101 - 164 Option 7.

Remember if the zone is set to only trigger an output on an alarm condition then it will only trigger the output when all conditions are met. For example, an instant zone will only trigger when the system is armed, but a 24-hour zone is always active, therefore, even if the system is unarmed and the zone is triggered the output will trigger.

Location 415 to 422: Zone Triggered Outputs

Location Type: Extended
There are 8 sub-locations for every location, each sub-location represents a zone.

[Installer Code] [*] [4] [1] [5] [*] [Zone No.] [*] [Output] [Action] [*]

Location	Zones	Locations	Zones	Locations	Zones
[415]	1 to 8	418	25 to 32	421	49 to 56
416	9 to 16	419	33 to 40	422	57 to 64
417	17 to 24	420	41 to 48		

Data format: 0000
Valid Range: 0000 - 4103
Default: 0000

Location Type: Extended

These events do not depend on a partition but are system related events. Each event can be programmed to activate a PGM output.

Loc	Sub-loc	Event	Description	Default
423	1	AC Fail Programmable Output	By default the system monitors the 16V AC and will trigger these outputs if there are any changes.	0000
	2	AC Restore Programmable Output		0000
	3	Low Battery Programmable Output	The battery is monitored constantly and will trigger these outputs if the battery's power becomes too low, or is restored.	0000
	4	Low Battery Restore Programmable Output		0000
	5	Auto Test Programmable Output	The system can be set to do a test at different intervals as programmed into location 32.	0000
	6	Download Programmable Output	When someone has connected to the alarm via the download software.	0000
	7	Siren Tamper Programmable Output	If siren monitoring is enabled and the siren goes missing.	0000
	8	Aux 12V Trouble Programmable Output	The 12V output on the panel is monitored constantly.	0000

Loc	Sub-loc	Event	Description	Default
424	1	Reserved		
	2	Bus-wired Peripheral Tamper Programmable Output	This is a tamper on any device that connects to the system via the communication bus.	0000
	3	Bus-wired Peripheral Fail Programmable Output	If the actual communication bus fails.	0000
	4	Box Tamper Programmable Output	The alarm panel has a 2 pin connector that can be connected to a switch to monitor the door of the panel box.	0000
	5	Dedicated Panic Programmable Output	Onboard dedicated panic connector is next to Zone 8.	0102
	6	Communication Fail Programmable Output	If the system cannot communicate and deliver an event via phone after the number of tries programmed into location 47.	0000
	7	Telephone Line Tamper Programmable Output	The telephone line voltage is monitored and if this changes then the output will trigger.	0000
	8	Telephone Line Restore Programmable Output	Set this to restore the output of option 7 if it was set to latch.	0000

Loc	Sub-loc	Event	Description	Default
425	1	RF Jam	If a signal is detected that interferes with the receiver a jam will be logged and an output can be triggered and reset when the jamming signal stops.	0000
	2	RF Jam Reset		0000
	3	RF Supervision Fail	Each device is set to send a signal, either every 90min or 12 hours to confirm it is still available. If the system does not receive the signals a supervision fail is logged.	0000
	4	RF Detector Battery Low	When the wireless device detects that its battery voltage is low it will inform the system and the system can set the output to warn the occupants and restores when battery is replaced.	0000
	5	RF Detector Battery Restore		0000
	6	RF Receiver Battery	If the receiver's battery goes low an output can be triggered and reset when restored.	0000
	7	RF Receiver Battery restore		0000

Globally Triggered Outputs

Location Type: Extended
These events do not depend on a partition but are system related events. Each event can be programmed to activate a PGM output.

Loc	Sub-loc	Event	Description	Default
426	1	Wired Zone Expander Low Battery Programmable Output	When a powered expander's battery voltage drops below 11V a low battery will be reported.	0000
	2	Wired Zone Expander Battery Restore Programmable Output	Once the battery is recharged a restore will be reported.	0000
	3	Fire Sensor Power Programmable Output	Fire sensors need to be reset when they have been triggered. This option allows the system to reset the device.	00
	4	Dual Reporting Programmable Output	When the system has been set to dual reporting and the second number is dialled, this option will trigger the output.	00
	5	AC Fail on Smart Power Supply Programmable Output	By default the Smart Power Supply monitors the 16V AC and will trigger these outputs if there are any changes.	0000
	6	AC Restore on Smart Power Supply Programmable Output		0000
	7	Low Battery on Smart Power Supply Programmable Output	The battery is monitored constantly and will trigger these outputs if the battery's power becomes too low, or is restored.	0000
	8	Battery Restore on Smart Power Supply Programmable Output		0000
Loc	Sub-loc	Event	Description	Default
427	1	Fuse Fail on Smart Power Supply Programmable Output	By default the Smart Power Supply monitors the fuse and will trigger these outputs if there are any changes.	0000
	2	Fuse Restore on Smart Power Supply Programmable Output		0000
	3	Event Log Output	Every time an event is written to the event log this will trigger the action set.	0000

Configuring Pulse Length

The pulse duration of each PGM output can change to the required time in minutes and seconds, if needed.

Location 428: Onboard Outputs Pulse Length

Location Type: Extended
Each of the five onboard outputs can be lengthened or shortened.

[Installer Code] [*] [4] [2] [8] [*] [Output No.] [*] [m] [m] [s] [s] [*]

Data format: mmss
Valid Range: 0000 – 5959
Default: 0002

Location 429 to 434: Zone Expander Outputs Pulse Length

Location Type: Extended
Each of the six zone expanders has two outputs.

[Installer Code] [*] [Location] [*] [Output No.] [*] [m] [m] [s] [s] [*]

Data format: mmss
Valid Range: 0000 – 5959
Default: 0002

Location 435 to 436: Output Expander Outputs Pulse Length

Location Type: Extended
Each of the two expanders have eight outputs.

[Installer Code] [*] [Location] [*] [Output No.] [*] [m] [m] [s] [s] [*]

Data format: mmss
Valid Range: 0000 – 5959
Default: 0002

Location 437: Keypad Outputs Pulse Length

Location Type: Extended
Each of the eight keypads have one output.

[Installer Code] [*] [4] [3] [7] [*] [Keypad No.] [*] [m] [m] [s] [s] [*]

Data format: mmss
Valid Range: 0000 – 5959
Default: 0002

Scheduled Output On times

The X-Series programmable outputs can be scheduled to turn on or off by time and day per output. Note that is important that the time and date is set for this feature to work correctly.

Location 438: Onboard Output On Time

Location Type: Extended
This location has 5 sub-locations representing outputs 1 to 5 on the main system board.
[Installer Code] [*] [4] [4] [8] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables)
Default: 2400

Location 439 to 444: Zone Expander Output On Time

Location Type: Extended
This location has 2 sub-locations representing the 2 outputs on each expander.

[Installer Code] [*] [Location] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables)
Default: 2400

Location 435 to 446: Output Expander Output On Time

Location Type: Extended
Each location has 8 sub-locations representing the 8 outputs on each expander.

[Installer Code] [*] [Location] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables)
Default: 2400

Location 447: Keypad Output On Time

Location Type: Extended
This location has 8 sub-locations representing the output on each keypad.
[Installer Code] [*] [4] [5] [7] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables)
Default: 2400

Scheduled Output Off Times

The next few locations are used to schedule the output turn off time.

Location 448: Onboard Output Off Time

Location Type: Extended
This location has 5 sub-locations representing outputs 1 to 5 on the main system board.
[Installer Code] [*] [4] [4] [8] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables)
Default: 2400

Location 449 to 454: Zone Expander Output Off Time

Location Type: Extended
This location has 2 sub-locations representing the 2 outputs on each expander.

[Installer Code] [*] [Location] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables)
Default: 2400

Location 455 to 456: Zone Expander Output Off Time

Location Type: Extended
Each location has 8 sub-locations representing the 8 outputs on each expander.

[Installer Code] [*] [Location] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables)
Default: 2400

Location 457: Keypad Output Off Time

Location Type: Extended
This location has 8 sub-locations representing the output on each keypad.
[Installer Code] [*] [4] [5] [7] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables)
Default: 2400

Location 458 to 498: Output On / Off Days

Location Type: Bitmap

Each output can be scheduled to switch on or off on certain days of the week.

Option	ON Days		Option	OFF Days
1	Monday		9	Monday
2	Tuesday		10	Tuesday
3	Wednesday		11	Wednesday
4	Thursday		12	Thursday
5	Friday		13	Friday
6	Saturday		14	Saturday
7	Sunday		15	Sunday
8	Disabled		16	Disabled

Manually Triggered

The outputs can be triggered via the keypad, by pressing and holding the [MODE] key until you hear a beep (about 3 seconds) then pressing [3][*]. Enter the [output number] [*] (LCD keypad press [*] again).

Follow the same procedure to turn the output off.

⚠️ **NOTE**: X-Series systems version earlier than v2.50 could only manually trigger the panel's onboard outputs (1 to 5)

Event Reporting

When using Contact ID and SIA formats all event codes are programmed into the X-Series alarm system and only need to be enabled or disabled in the following locations. The first eight options are to enable or disable the reporting and the second 8 are to select which group of phone numbers to use.

Location 501 to 564 Global Split Reporting

Location Type: Bitmap

These locations are for each of the zones, 501 is for zone 1, 502 is for zone 2, 503 is for zone 3, etc.

LED	Default	Action	Explanation	Split Reporting Option	Default
1	ON	Zone Alarm Reporting	If this option is selected whenever a zone is violated the alarm reports via telephone.	9	OFF
2	OFF	Zone Alarm Restore	When the zone restores the alarm reports via telephone.	10	OFF
3	OFF	Zone Bypassing	When a zone is bypassed it is reported via telephone.	11	OFF
4	OFF	Zone Force Bypassing	When the system is set to bypass zones that are violated when arming it reports that it was forced to arm by bypassing zones.	12	OFF
5	OFF	Zone Tamper	When tamper has been set for a zone and the tamper signal is received it will be reported via telephone.	13	OFF
6	OFF	Zone Tamper Restore	When the tamper restores a report is sent via telephone.	14	OFF
7	OFF	Zone Swinger Shutdown	A zone shuts down because it has exceeded the shutdown count and the system will report via telephone.	15	OFF
8	OFF	Zone Swinger Shutdown Restore	At the auto test report, the system will try and restore the zone if it is not violated and this will be reported via telephone.	16	OFF

Location 571 Global Split Reporting

Location Type: Bitmap

LED	Default	Action	Explanation	Split Reporting Option	Default
1	ON	AC Fail Reporting	After the wait time set in location 15, the AC failure will be reported.	9	OFF
2	OFF	Communication Fail Reporting	If the system cannot report a failure to report message is sent.	10	OFF
3	ON	Telephone Line Tamper Reporting	The alarm monitors the voltage on the telephone line and if it goes missing a tamper is reported.	11	OFF
4	ON	Siren Fail Reporting	The siren output monitors the load on the output and if it goes missing then a tamper is reported.	12	OFF
5	ON	Panel Low Battery Fail Reporting	When the battery voltage drops to 10.5V a battery low signal is sent, warning that the system is close to shutting down.	13	OFF
6	ON	Enable Aux 12V Fuse Fail Reporting	If a short circuit or too much current is drawn from the auxiliary 12V the fuse will shut off and send a signal warning of a problem.	14	OFF
7	OFF	Installer Reset Required	If installer reset is enabled and the alarm is triggered the system will not arm until the installer code is entered. This alerts the security company of this.	15	OFF
8	ON	Box Tamper Reporting	The alarm has an input that monitors a switch that monitors if the housing that it is in is opened.	16	OFF

Location 572 Global Split Reporting

Location Type: Bitmap

LED	Default	Action	Explanation	Split Reporting Option	Default
1	ON	Bus-wired Peripheral Tamper Reporting	If any device connected on the keypad bus is tampered with this option will send a report.	9	OFF
2	ON	Bus-wired Peripheral Fail Reporting	If a device on the keypad bus fails and stops communicating this report is sent.	10	OFF
3	OFF	Bus-wired Peripheral Low Battery Reporting *	If a device is powered by a battery because of a power failure and the battery has reached a critical level a low battery signal is sent.	11	OFF
4	ON	Wireless Detector Battery Low	When a wireless device's battery needs replacing a battery low signal will be sent.	12	OFF
5	OFF	Wireless Detector Supervision Fail	If a device stops communicating after a set amount of time a supervision failure is sent	13	OFF
6	OFF	Wireless Receiver Signal Jammed	When an unknown signal is detected that could block signals from wireless detectors a jam is reported.	14	OFF
7	OFF	Wireless Detector RSSI Low	RSSI is the monitoring of signal strength from detectors and if the signal drops below 20% a message will be sent to alert the security company.	15	OFF
8	ON	AC Restored	After AC is restored a message can be sent.	16	OFF

Location 573 Global Split Reporting

Location Type: Bitmap

LED	Default	Action	Explanation	Split Reporting Option	Default
1	OFF	Comms Restored	When the system is able to communicate after a failure a restoral is sent.	9	OFF
2	OFF	Comms Tamper Restore	If the lines went down and when they start working again a restore is sent.	10	OFF
3	OFF	Siren Restore	If the siren went missing and is reconnected a restore will be sent.	11	OFF
4	OFF	Battery Restore	After a battery low is reported and the battery is changed or charged a restore will be sent.	12	OFF
5	OFF	Aux 12V Restored	After a short circuit or too much current being drawn is fixed the fuse will restore and send a signal.	13	OFF
6	OFF	Installer Reset Restored	After an installer reset required condition is reset a signal will be sent.	14	OFF
7	ON	Box Tamper Restored	When the box that the system is housed is closed a restore is sent.	15	OFF
8	ON	Bus Device Tamper Restored	When the device on the keypad bus that was tampered is restored a signal will be sent.	16	OFF

Location 574 Global Split Reporting

Location Type: Bitmap

LED	Default	Action	Explanation	Split Reporting Option	Default
1	OFF	Bus Device Comms Restored	When a device has stopped communicating on the bus and when communication is restored a signal is sent to confirm this.	9	OFF
2	OFF	Bus Device Battery Restored	A device that reported a low will send a restore when the battery voltage is restored.	10	OFF
3	OFF	Wireless Detector Battery Restored	Once the wireless devices battery is changed it will respond by sending a restore.	11	OFF
4	OFF	Wireless Detector Supervision Restored	When a device starts communicating after being marked as missing by the system a supervision restoral is sent.	12	OFF
5	OFF	Wireless Receiver Jam Restored	After detecting a signal that could cause wireless devices from communicating is switched off a restoral will be sent.	13	OFF
6	OFF	Wireless Detector RSSI Low Restored	A device that recorded a low signal recovers and the signal comes up to an acceptable level a restoral will be sent.	14	OFF
7	ON	Dedicated Panic	The X-Series alarm panel has a dedicated panic onboard and if this is triggered a panic signal will be sent.	15	OFF
8	ON	Test Report	The alarm can be configured to send a test report every 1 hours to every 14 days.	16	OFF

Location 575 Global Split Reporting

Location Type: Bitmap

LED	On/Off	Action	Explanation	Split Reporting Option	Default
1	OFF	IDSwift Download Accessed	This option reports when the system has been communicated with by the download software.	9	OFF
2	OFF	AC Fail on Smart Power Supply	This option reports when the Smart Power Supply has an AC failure.	10	OFF
3	OFF	AC Restore on Smart Power Supply	This option reports when the Smart Power Supply has an AC restore.	11	OFF
4	OFF	Low Battery on Smart Power Supply	This option reports when the Smart Power Supply has a low battery.	12	OFF
5	OFF	Battery Restore on Smart Power Supply	This option reports when the Smart Power Supply has a battery restore.	13	OFF
6	OFF	Fuse Fail on Smart Power Supply	This option reports when the Smart Power Supply has a fuse failure.	14	OFF
7	OFF	Fuse Restore on Smart Power Supply	This option reports when the Smart Power Supply has a fuse restore.	15	OFF

Location 581 - 588 Partition Split Reporting

Location Type: Bitmap

LED	On/Off	Action	Explanation	Split Reporting Option	Default
1	ON	Duress Reporting	When a duress code is used this enables the contact ID code to be sent to the security company.	9	OFF
2	ON	Keypad Panic Reporting	When the "P" key on the keypad is pressed a panic signal is sent to the security company.	10	OFF
3	ON	Fire Reporting	When the "F" key is pressed or a zone is a fire zone and is violated a fire signal is sent to the security company.	11	OFF
4	ON	Medical Reporting	When the "M" key is pressed or the option "Medical alarm if no movement is detected" is programmed a medical signal will be sent if this option is enabled.	12	OFF
5	ON	Keypad Lockout Reporting	If this option is enabled in location 221 – 228 and an incorrect code is entered the number of times set in location 20 within the time set in location 21, the signal will be sent.	13	OFF
6		Reserved			
7	Off	Arm without User Code Reporting	When arming with the "Quick Arm" keys or an arm/disarm zone this option must be enabled to send an arm signal.	15	OFF
8		Reserved			

Location 600 - 616 Voice Module Reporting Telephone numbers

Location Type: Standard

The voice module, if installed, will report programmed events to the telephone numbers entered into these locations. Depending on the location the telephone number is entered into will depend on the partition the person can interact with via the voice module.

The table below shows which locations belong to which partitions.

Location	Partitions	User Slot		Location	Partitions	User Slot
600	All			609 & 610	5	50 to 59
601 & 602	1	10 to 19		611 & 612	6	60 to 69
603 & 604	2	20 to 29		613 & 614	7	70 to 79
605 & 606	3	30 to 39		615 & 616	8	80 to 89
607 & 608	4	40 to 49				

⚠️ **Note**: The user code must have permissions to the partition the voice module is dialling. For versions below 2.41 the user code must also be in the correct user slot numbers for the partition, as seen above. V2.41 and higher the user can be in any slot number as long as Voice Login is enabled for that user.

Location 617: User Reporting Codes

Location Type: Bitmap

For open and close reporting all user options are enabled by default therefore to enable reporting the partition options, Locations 211 to 218 must be enabled. In this location you can enable or disable per user. Sub-locations 6 – 10 are used for Voice Module reporting only.

Option	Default	Action	Description
1	ON	Close Reporting	Enable if a close signal is to be sent to the security company.
2	ON	Stay Close Reporting	Enable if a stay close signal is to be sent.
3	ON	Open Reporting	Enable if an open signal is to be sent.
4	OFF	Siren Cancel Reporting	Enable if the siren is active and a user cancels the siren.
5	Reserved		
6	OFF	AC Fail Reporting	A signal is sent when the electricity goes off.
7	OFF	AC Restore Reporting	A signal is sent when the electricity is stored.
8	OFF	Low Battery Reporting	A signal is sent when the battery reaches 10.5V.
9	ON	Auto Test Reporting	This is a signal reporting that the alarm is communicating.
10	OFF	Zone Bypassing Reporting	A signal is sent when zones are bypassed.

Location 618: User Split Reporting

Location Type: Bitmap

Select which group of phone numbers to report the user reporting codes per code.

Option	Default	Action	Description
1	OFF	Telephone Module 1	Close reporting Telephone module 1 or 2.
2	OFF	Telephone Module 1	Stay Close reporting Telephone module 1 or 2.
3	OFF	Telephone Module 1	Open signal reporting Telephone module 1 or 2.
4	OFF	Telephone Module 1	Siren cancelled reporting Telephone module 1 or 2.
5	Reserved		
6	OFF	Telephone Module 1	AC Fail Reporting telephone module 1 or 2.
7	OFF	Telephone Module 1	AC restored report Telephone module 1 or 2.
8	OFF	Telephone Module 1	Low Battery reporting Telephone module 1 or 2.
9	OFF	Telephone Module 1	Auto test report telephone module 1 or 2.
10	OFF	Telephone Module 1	Zones bypassed reporting Telephone module 1 or 2.

Location 620: Xwave^2 I/O Module Programmable Outputs on Disarm

Location Type: Bitmap
Any outputs enabled in this location will be reset when the alarm system is disarmed.
The I/O Module outputs are:

Learnt to zones:	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32
Output Address	42	43	44	45	46	47	48	49

Learnt to zones:	33-36	37-40	41-44	45-48	49-52	53-56	57-60	61-64
Output Address	50	51	52	53	54	55	56	57

Default: OFF

Location 621 - 624: Xwave^2 I/O Module Outputs Pulse Length

The pulse duration of each PGM output can change to the required time in minutes and seconds, if needed.

Location Type: Extended
These location has 4 sub-locations representing 4 outputs learnt to each Xwave^2 Hub.

[Installer Code] [*] [6] [2] [1] [*] [Output No.] [*] [m] [m] [s] [s] [*]

Data format: mmss
Valid Range: 0000 – 5959 (Output number is 1-4)
Default: 0002

Location 625 - 628: Xwave^2 I/O Module Output On Time

The X-Series programmable outputs can be scheduled to turn on or off by time and day per output. Note that is important that the time and date is set for this feature to work correctly.

Location Type: Extended
These location has 4 sub-locations representing 4 outputs learnt to each Xwave^2 Hub.
[Installer Code] [*] [6] [2] [5] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables) (Output number is 1-4)
Default: 2400

Location 629 - 644: Xwave^2 I/O Module Output On / Off Days

Location Type: Bitmap
Each output can be scheduled to switch on or off on certain days of the week.

Option	ON Days	Option	OFF Days
1	Monday	9	Monday
2	Tuesday	10	Tuesday
3	Wednesday	11	Wednesday
4	Thursday	12	Thursday
5	Friday	13	Friday
6	Saturday	14	Saturday
7	Sunday	15	Sunday
8	Disabled	16	Disabled

Location 645 - 648: Xwave^2 I/O Module Output Off Time

Location Type: Extended
These location has 4 sub-locations representing 4 outputs learnt to each Xwave^2 Hub.
[Installer Code] [*] [6] [4] [5] [*] [Output No.] [*] [h] [h] [m] [m] [*]

Data format: HHmm
Valid Range: 0000 – 2359 (2400 disables) (Output number is 1-4)
Default: 2400

Appendix

Contact ID Zone Reporting

This is the complete list of values that can be entered into locations 304 to 335 to extend the Contact ID reporting.

Value	CID	Description	Value	CID	Description
01	100	Medical Zone	3C	303	RAM Checksum bad Zone
02	101	Personal Emergency Zone	3D	304	ROM checksum bad Zone
03	102	Fail to report in Zone	3E	305	System reset Zone
04	110	Fire Zone	3F	306	Panel programming changed Zone
05	111	Smoke Zone	40	307	Self- test failure Zone
06	112	Combustion Zone	41	308	System shutdown Zone
07	113	Water flow Zone	42	309	Battery test failure Zone
08	114	Heat Zone	43	310	Ground fault Zone
09	115	Pull Station Zone	44	311	Battery Missing/Dead Zone
0A	116	Duct Zone	45	312	Power Supply Overcurrent Zone
0B	117	Flame Zone	46	313	Engineer Reset User
0C	118	Near Alarm Zone	47	320	Sounder/Relay Zone
0D	120	Panic Zone	48	321	Bell 1 Zone
0E	121	Duress User	49	322	Bell 2 Zone
0F	122	Silent Zone	4A	323	Alarm relay Zone
10	123	Audible Zone	4B	324	Trouble relay Zone
11	124	Duress – Access granted Zone	4C	325	Reversing relay Zone
12	125	Duress – Egress granted Zone	4D	326	Notification Appliance Ckt. # 3 Zone
13	130	Burglary Zone	4E	327	Notification Appliance Ckt. #4 Zone
14	131	Perimeter Zone	4F	330	System Peripheral trouble Zone
15	132	Interior Zone	50	331	Polling loop open Zone
16	133	24 Hour (Safe) Zone	51	332	Polling loop short Zone
17	134	Entry/Exit Zone	52	333	Expansion module failure Zone
18	135	Day/night Zone	53	334	Repeater failure Zone
19	136	Outdoor Zone	54	335	Local printer out of paper Zone
1A	137	Tamper Zone	55	336	Local printer failure Zone
1B	138	Near alarm Zone	56	337	Exp. Module DC Loss Zone
1C	139	Intrusion Verifier Zone	57	338	Exp. Module Low Battery Zone
1D	140	General Alarm Zone	58	339	Exp. Module Reset Zone
1E	141	Polling loop open Zone	59	341	Exp. Module Tamper Zone
1F	142	Polling loop short Zone	5A	342	Exp. Module AC Loss Zone
20	143	Expansion module failure Zone	5B	343	Exp. Module self-test fail Zone
21	144	Sensor tamper Zone	5C	344	RF Receiver Jam Detect Zone
22	145	Expansion module tamper Zone	5D	350	Communication trouble Zone
23	146	Silent Burglary Zone	5E	351	Telco 1 fault Zone
24	147	Sensor Supervision Failure Zone	5F	352	Telco 2 fault Zone
25	150	24 Hour Non-Burglary Zone	60	353	Long Range Radio Transmitter fault Zone
26	151	Gas detected Zone	61	354	Failure to communicate event Zone
27	152	Refrigeration Zone	62	355	Loss of Radio supervision Zone
28	153	Loss of heat Zone	63	356	Loss of central polling Zone
29	154	Water Leakage Zone	64	357	Long Range Radio VSWR problem Zone
2A	155	Foil Break Zone	65	370	Protection loop Zone
2B	156	Day Trouble Zone	66	371	Protection loop open Zone
2C	157	Low bottled gas level Zone	67	372	Protection loop short Zone
2D	158	High temp Zone	68	373	Fire trouble Zone
2E	159	Low temp Zone	69	374	Exit error alarm (zone) Zone
2F	161	Loss of air flow Zone	6A	375	Panic zone trouble Zone
30	162	Carbon Monoxide detected Zone	6B	376	Hold-up zone trouble Zone
31	163	Tank level Zone	6C	377	Swinger Trouble Zone
32	200	Fire Supervisory Zone	6D	378	Cross-zone Trouble Zone
33	201	Low water pressure Zone	6E	380	Sensor trouble Zone
34	202	Low CO2 Zone	6F	381	Loss of supervision - RF Zone
35	203	Gate valve sensor Zone	70	382	Loss of supervision - RPM Zone
36	204	Low water level Zone	71	383	Sensor tamper Zone
37	205	Pump activated Zone	72	384	RF low battery Zone

Value	CID	Description		Value	CID	Description
38	206	Pump failure Zone		73	385	Smoke detector Hi sensitivity Zone
39	300	System Trouble Zone		74	386	Smoke detector Low sensitivity Zone
3A	301	AC Loss Zone		75	387	Intrusion detector Hi sensitivity Zone
3B	302	Low system battery Zone		76	388	Intrusion detector low sensitivity Zone
77	389	Sensor self-test failure Zone		AD	521	Bell 1 disable Zone
78	391	Sensor Watch trouble Zone		AE	522	Bell 2 disable Zone
79	392	Drift Compensation Error Zone		AF	523	Alarm relay disable Zone
7A	393	Maintenance Alert Zone		B0	524	Trouble relay disable Zone
7B	400	Open/Close User		B1	525	Reversing relay disable Zone
7C	401	O/C by user		B2	526	Notification Appliance Ckt. # 3 disable Zone
7D	402	Group O/C User		B3	527	Notification Appliance Ckt. # 4 disable Zone
7E	403	Automatic O/C User		B4	531	Module Added Zone
7F	404	Late to O/C (Note: use 453, 454 instead)		B5	532	Module Removed Zone
80	405	Deferred O/C (Obsolete-do not use)		B6	551	Dialler disabled Zone
81	406	Cancel User		B7	552	Radio transmitter disabled Zone
82	407	Remote arm/disarm User		B8	553	Remote Upload/Download disabled Zone
83	408	Quick arm User		B9	570	Zone/Sensor bypass Zone
84	409	Keyswitch O/C User		BA	571	Fire bypass Zone
85	441	Armed STAY User		BB	572	24 Hour zone bypass Zone
86	442	Keyswitch Armed STAY User		BC	573	Burg. Bypass Zone
87	450	Exception O/C User		BD	574	Group bypass User
88	451	Early O/C User		BE	575	Swinger bypass Zone
89	452	Late O/C User		BF	576	Access zone shunt Zone
8A	453	Failed to Open User		C0	577	Access point bypass Zone
8B	454	Failed to Close User		C1	601	Manual trigger test report Zone
8C	455	Auto-arm Failed User		C2	602	Periodic test report Zone
8D	456	Partial Arm User		C3	603	Periodic RF transmission Zone
8E	457	Exit Error (user) User		C4	604	Fire test User
8F	458	User on Premises User		C5	605	Status report to follow Zone
90	459	Recent Close User		C6	606	Listen- in to follow Zone
91	461	Wrong Code Entry Zone		C7	607	Walk test mode User
92	462	Legal Code Entry User		C8	608	Periodic test - System Trouble Present Zone
93	463	Re-arm after Alarm User		C9	609	Video Transmitter active Zone
94	464	Auto-arm Time Extended User		CA	611	Point tested OK Zone
95	465	Panic Alarm Reset Zone		CB	612	Point not tested Zone
96	466	Service On/Off Premises User		CC	613	Intrusion Zone Walk Tested Zone
97	411	Callback request made User		CD	614	Fire Zone Walk Tested Zone
98	412	Successful download/access User		CE	615	Panic Zone Walk Tested Zone
99	413	Unsuccessful access User		CF	616	Service Request Zone
9A	414	System shutdown command User		D0	621	Event Log reset Zone
9B	415	Dialler shutdown command received		D1	622	Event Log 50% full Zone
9C	416	Successful Upload Zone		D2	623	Event Log 90% full Zone
9D	421	Access denied User		D3	624	Event Log overflow Zone
9E	422	Access report by user		D4	625	Time/Date reset User
9F	423	Forced Access Zone		D5	626	Time/Date inaccurate Zone
A0	424	Egress Denied User		D6	627	Program mode entry Zone
A1	425	Egress Granted User		D7	628	Program mode exit Zone
A2	426	Access Door propped open Zone		D8	629	32 Hour Event log marker Zone
A3	427	Access point Door Status Monitor t		D9	630	Schedule change Zone
A4	428	Access point Request To Exit trouble Zone		DA	631	Exception schedule change Zone
A5	429	Access program mode entry User		DB	632	Access schedule change Zone
A6	430	Access program mode exit User		DC	641	Senior Watch Trouble Zone
A7	431	Access threat level change User		DD	642	Latch-key Supervision User
A8	432	Access relay/trigger fail Zone		DE	651	Reserved for Ademco Use Zone
A9	433	Access RTE shunt Zone		DF	652	Reserved for Ademco Use User
AA	434	Access DSM shunt Zone		E0	653	Reserved for Ademco Use User
AB	501	Access reader disable Zone		E1	654	System Inactivity
AC	520	Sounder/Relay Disable Zone				

Location 0 Option 5 Default changes

Location 14 Global Options

LED	Factory Default	Default 5	Action
1	ON	ON	A user assigned to any partition may cancel the siren
2	OFF	OFF	Keypad trouble beep
3	OFF	OFF	Telephone line monitoring
4	OFF	OFF	Keypad beep on successful reporting to the base station
5	ON	ON	Keypad Fire, Medical and Panic keys
6	ON	ON	Display of bypassed and stay zones when armed
7	OFF	OFF	Siren delay
8	ON	OFF	Box tamper monitoring
9	ON	OFF	Siren monitoring
10	OFF	Off	Bus-wired peripheral tamper monitoring*
11	OFF	OFF	Onboard dedicated panic – silent
12	ON	ON	Low battery monitoring**
13	ON	ON	Low battery cut-out**
14	OFF	OFF	Bypassing with user code***
15	OFF	OFF	Dedicated Panic Zone Bypassing
16	OFF	OFF	Remote transmitters are able to cancel a panic condition

Location 41 - 44 Communication Format

Factory Default	Default 5	Format Name	Description
5	5	Contact ID	Dual Tone HS, DTMF

Location 46 Reporting Option

LED	Factory Default	Default 5	Action
1	ON	ON	Enable Tone Dialling
2	OFF	OFF	Keep Two Separate Telephone Numbers
3	OFF	OFF	Disable Dual Reporting
4	OFF	OFF	Disable Alternate Reporting

Locations 51 – 54 Primary Telephone Numbers

Clears all numbers

Location 211 – 218 Partition Arm Options

LED	Factory Default	Default 5	Action
1	OFF	OFF	Instant Arm
2	ON	ON	Instant Key-switch Arm
3	ON	ON	Quick Away Arm Key
4	ON	ON	Quick Stay Arm Key
5	ON	OFF	Auto Stay Arm if No Exit Zone is Triggered*
6	OFF	OFF	Auto Stay Arm if No Exit Zone is Triggered When Arming with a key-switch
7	OFF	OFF	Forced Arm
8	ON	ON	Zone Bypassing
9	OFF	ON	Arm with Zones in the Entry Route Violated
10	OFF	OFF	Siren Toot on Arm
11	OFF	OFF	Siren Toot on Disarm
12	ON	ON	Entry Beep
13	ON	ON	Exit Beep
14	OFF	OFF	Engineer's Reset
15	OFF	OFF	Auto Disarm
16	OFF	OFF	Opening & Closing Reporting

Locations 342 – 349 Close Reporting Codes

Clears all codes

Locations 350 – 357 Stay Close Reporting

Clears all codes

Locations 358 – 365 Open Reporting

Clears all codes

Locations 366 – 373 Siren Cancel Reporting

Clears all codes

Locations 501 – 564 Zone Split Reporting

LED	Factory Default	Default 5	Action	LED	On/Off	Reporting Pair
1	ON	ON	Zone alarm reporting	9	OFF	Telephone module 1
2	OFF	OFF	Zone alarm restore reporting	10	OFF	Telephone module 1
3	OFF	OFF	Zone bypass reporting	11	OFF	Telephone module 1
4	OFF	OFF	Zone force arm reporting	12	OFF	Telephone module 1
5	OFF	OFF	Zone tamper reporting	13	OFF	Telephone module 1
6	OFF	OFF	Zone tamper restore reporting	14	OFF	Telephone module 1
7	OFF	OFF	Zone swinger shutdown reporting	15	OFF	Telephone module 1
8	OFF	OFF	Zone swinger shutdown restore reporting	16	OFF	Telephone module 1

Location 571 Global Split Reporting 1

LED	Factory Default	Default 5	Action
1	ON	ON	AC fail reporting
2	OFF	OFF	Communication fail reporting *
3	ON	ON	Telephone line tamper reporting
4	ON	ON	Siren fail reporting
5	ON	ON	Panel low battery fail reporting
6	ON	ON	Aux 12V fuse fail reporting
7			Reserved
8	ON	ON	Box tamper reporting

LED	On/Off	Reporting Pair
9	OFF	Telephone module 1
10	OFF	Telephone module 1
11	OFF	Telephone module 1
12	OFF	Telephone module 1
13	OFF	Telephone module 1
14	OFF	Telephone module 1
15		Reserved
16	OFF	Telephone module 1

Location 572 Global Split Reporting 2

LED	Factory Default	Default 5	Action
1	ON	ON	Bus-wired Peripheral Tamper Reporting
2	ON	ON	Bus-wired Peripheral Fail Reporting
3	OFF	OFF	Bus-wired Peripheral Low Battery Reporting *
4	ON	OFF	Wireless Detector Battery Low
5	OFF	OFF	Wireless Detector Supervision fail
6	OFF	OFF	Wireless Receiver Signal Jammed
7	OFF	OFF	Wireless Detector RSSI Low
8	ON	ON	AC Restored

LED	On/Off	Reporting Pair
9	OFF	Telephone module 1
10	OFF	Telephone module 1
11	OFF	Telephone module 1
12	OFF	Telephone module 1
13	OFF	Telephone module 1
14	OFF	Telephone module 1
15	OFF	Telephone module 1
16	OFF	Telephone module 1

Location 573 Global Split Reporting 3

LED	Factory Default	Default 5	Action
1	OFF	OFF	Comms Restored
2	OFF	OFF	Comms Tamper Restore
3	OFF	OFF	Siren Restore
4	ON	ON	Battery Restore
5	OFF	OFF	Aux 12V Restored
6	OFF	OFF	Installer Reset Restored
7	OFF	OFF	Box Tamper Restored
8	OFF	OFF	Bus Device Tamper Restored

LED	On/Off	Reporting Pair
9	OFF	Telephone module 1
10	OFF	Telephone module 1
11	OFF	Telephone module 1
12	OFF	Telephone module 1
13	OFF	Telephone module 1
14	OFF	Telephone module 1
15	OFF	Telephone module 1
16	OFF	Telephone module 1

Location 574 Global Split Reporting 4

LED	Factory Default	Default 5	Action
1	OFF	OFF	Bus Device Comms Restored
2	OFF	OFF	Bus Device Battery Restored
3	OFF	OFF	Wireless Detector Battery Restored
4	OFF	OFF	Wireless Detector Supervision Restored
5	OFF	OFF	Wireless Receiver Jam Restored
6	OFF	OFF	Wireless Detector RSSI Low Restored
7	ON	ON	Dedicated Panic
8	ON	ON	Test Report

LED	On/Off	Reporting Pair
9	OFF	Telephone module 1
10	OFF	Telephone module 1
11	OFF	Telephone module 1
12	OFF	Telephone module 1
13	OFF	Telephone module 1
14	OFF	Telephone module 1
15	OFF	Telephone module 1
16	OFF	Telephone module 1

Location 575 Global Split Reporting 5

LED	Factory Default	Default 5	Action	LED	On/Off	Reporting Pair
1	OFF	OFF	IDSwift Download Accessed	9	OFF	Telephone module 1

Location 581 - 588 Partition Split Reporting

LED	Factory Default	Default 5	Action	LED	On/Off	Reporting Pair
1	ON	ON	Enable duress reporting	9	OFF	Telephone module 1
2	ON	ON	Enable keypad panic reporting	10	OFF	Telephone module 1
3	ON	ON	Enable fire reporting	11	OFF	Telephone module 1
4	ON	ON	Enable medical reporting	12	OFF	Telephone module 1
5	ON	ON	Enable keypad lockout reporting	13	OFF	Telephone module 1
6	OFF		Reserved	14		Reserved
7	OFF	OFF	Disable armed without user code reporting	15	OFF	Telephone module 1
8	OFF		Reserved	16	Reserved	

Location 600 – 616 Voice Module Phone Numbers

All numbers cleared

Location 0 Option 6 Default changes

Location 14 Global Options

LED	Factory Default	Default 6	Action
1	ON	ON	A user assigned to any partition may cancel the siren
2	OFF	OFF	Disable keypad trouble beep
3	OFF	OFF	Disable telephone line monitoring
4	OFF	OFF	Disable keypad beep on successful reporting to the base station
5	ON	ON	Enable keypad Fire, Medical and Panic keys
6	ON	ON	Enable the display of bypassed and stay zones when armed
7	OFF	OFF	Disable the siren delay
8	ON	OFF	Enable box tamper monitoring
9	ON	OFF	Enable siren monitoring
10	OFF	OFF	Disable bus-wired peripheral tamper monitoring
11	OFF	OFF	Disable onboard dedicated panic– audible
12	ON	ON	Enable low battery monitoring
13	ON	ON	Enable low battery cut-out
14	OFF	OFF	Disable bypassing with user code***
15	OFF	OFF	Disable Dedicated Panic Zone Bypassing
16	OFF	OFF	Disable remote transmitters to cancel a panic condition

Location 46 Reporting Options

LED	Factory Default	Default 6	Action
1	ON	ON	Tone Dialling
2	OFF	OFF	Join the Telephone Numbers Together
3	OFF	OFF	Disable Dual Reporting
4	OFF	OFF	Disable Alternate Reporting

Locations 51 – 54 Primary Telephone Numbers

Clears all numbers

Location 211 – 218 Partition Arm Options

LED	Factory Default	Default 6	Action
1	OFF	OFF	Instant Arm
2	ON	ON	Instant Key-switch Arm
3	ON	ON	Quick Away Arm Key
4	ON	ON	Quick Stay Arm Key
5	ON	OFF	Auto Stay Arm if No Exit Zone is Triggered*
6	OFF	OFF	Auto Stay Arm if No Exit Zone is Triggered When Arming with a key - switch
7	OFF	OFF	Forced Arm
8	ON	ON	Zone Bypassing
9	OFF	ON	Arm with Zones in the Entry Route Violated
10	OFF	OFF	Siren Toot on Arm
11	OFF	OFF	Siren Toot on Disarm
12	ON	ON	Entry Beep
13	ON	ON	Exit Beep
14	OFF	OFF	Engineer's Reset
15	OFF	OFF	Auto Disarm
16	OFF	OFF	Opening & Closing Reporting

Locations 342 – 349 Close Reporting Codes

Clears all codes

Locations 350 – 357 Stay Close Reporting

Clears all codes

Locations 358 – 365 Open Reporting

Clears all codes

Locations 366 – 373 Siren Cancel Reporting

Clears all codes

Locations 501 - 564 Zone Split Reporting

LED	Factory Default	Default 6	Action		LED	On/Off	Reporting Pair
1	ON	ON	Zone alarm reporting		9	OFF	Telephone module 1
2	OFF	OFF	Zone alarm restore reporting		10	OFF	Telephone module 1
3	OFF	OFF	Zone bypass reporting		11	OFF	Telephone module 1
4	OFF	OFF	Zone force arm reporting		12	OFF	Telephone module 1
5	OFF	OFF	Zone tamper reporting		13	OFF	Telephone module 1
6	OFF	OFF	Zone tamper restore reporting		14	OFF	Telephone module 1
7	OFF	OFF	Zone swinger shutdown reporting		15	OFF	Telephone module 1
8	OFF	OFF	Zone swinger shutdown restore reporting		16	OFF	Telephone module 1

Location 571 Global Split Reporting 1

LED	Factory Default	Default 6	Action		LED	On/Off	Reporting Pair
1	ON	OFF	Enable AC fail reporting		9	OFF	Telephone module 1
2	OFF	OFF	Disable communication fail reporting *		10	OFF	Telephone module 1
3	ON	OFF	Enable telephone line tamper reporting		11	OFF	Telephone module 1
4	ON	OFF	Enable siren fail reporting		12	OFF	Telephone module 1
5	ON	OFF	Enable panel low battery fail reporting		13	OFF	Telephone module 1
6	ON	OFF	Enable aux 12V fuse fail reporting		14	OFF	Telephone module 1
7	OFF	OFF	Installer Reset Required		15	OFF	Telephone module 1
8	ON	OFF	Enable box tamper reporting		16	OFF	Telephone module 1

Location 572 Global Split Reporting 2

LED	Factory Default	Default 6	Action		LED	On/Off	Reporting Pair
1	ON	OFF	Enable bus-wired peripheral tamper reporting		9	OFF	Telephone module 1
2	ON	OFF	Enable bus-wired peripheral fail reporting		10	OFF	Telephone module 1
3	OFF	OFF	Disable bus-wired peripheral low battery reporting *		11	OFF	Telephone module 1
4	ON	OFF	Wireless Detector Battery Low		12	OFF	Telephone module 1
5	OFF	OFF	Wireless Detector Supervision fail		13	OFF	Telephone module 1
6	OFF	OFF	Wireless Receiver Signal Jammed		14	OFF	Telephone module 1
7	OFF	OFF	Wireless Detector RSSI Low		15	OFF	Telephone module 1
8	ON	OFF	AC Restored		16	OFF	Telephone module 1

Location 573 Global Split Reporting 3

LED	Factory Default	Default 6	Action
1	OFF	OFF	Comms Restored
2	OFF	OFF	Comms Tamper Restore
3	OFF	OFF	Siren Restore
4	OFF	OFF	Battery Restore
5	OFF	OFF	Aux 12V Restored
6	OFF	OFF	Installer Reset restored
7	ON	OFF	Box tamper restored
8	ON	OFF	Bus device tamper restored

LED	On/Off	Reporting Pair
9	OFF	Telephone module 1
10	OFF	Telephone module 1
11	OFF	Telephone module 1
12	OFF	Telephone module 1
13	OFF	Telephone module 1
14	OFF	Telephone module 1
15	OFF	Telephone module 1
16	OFF	Telephone module 1

Location 574 Global Split Reporting 4

LED	Factory Default	Default 6	Action
1	OFF	OFF	Bus device Comms restored
2	OFF	OFF	Bus device battery restored
3	OFF	OFF	Wireless detector battery restored
4	OFF	OFF	Wireless detector supervision restored
5	OFF	OFF	Wireless receiver jam restored
6	OFF	OFF	Wireless detector RSSI low restored
7	ON	ON	Dedicated Panic
8	ON	OFF	Test Report

LED	On/Off	Reporting Pair
9	OFF	Telephone module 1
10	OFF	Telephone module 1
11	OFF	Telephone module 1
12	OFF	Telephone module 1
13	OFF	Telephone module 1
14	OFF	Telephone module 1
15	OFF	Telephone module 1
16	OFF	Telephone module 1

Location 575 Global Split Reporting 5

LED	Factory Default	Default 6	Action
1	OFF	OFF	IDSwift Download Accessed

LED	On/Off	Reporting Pair
9	OFF	Telephone module 1

Location 581 - 588 Partition Split Reporting

LED	Factory Default	Default 6	Action
1	ON	ON	Duress reporting
2	ON	ON	Keypad panic reporting
3	ON	ON	Fire reporting
4	ON	ON	Medical reporting
5	ON	ON	Keypad lockout reporting
6		Reserved	
7	OFF	OFF	Armed without user code reporting
8		Reserved	

LED	On/Off	Reporting Pair
9	OFF	Telephone module 1
10	OFF	Telephone module 1
11	OFF	Telephone module 1
12	OFF	Telephone module 1
13	OFF	Telephone module 1
14		Reserved
15	OFF	Telephone module 1
16		Reserved

Location 600 – 616 Voice Module Phone Numbers

Clears all Numbers

Training Manual

IDS
INHEP DIGITAL SECURITY

Multi-Language with Wireless

User Menu

Firmware Version 2.7x

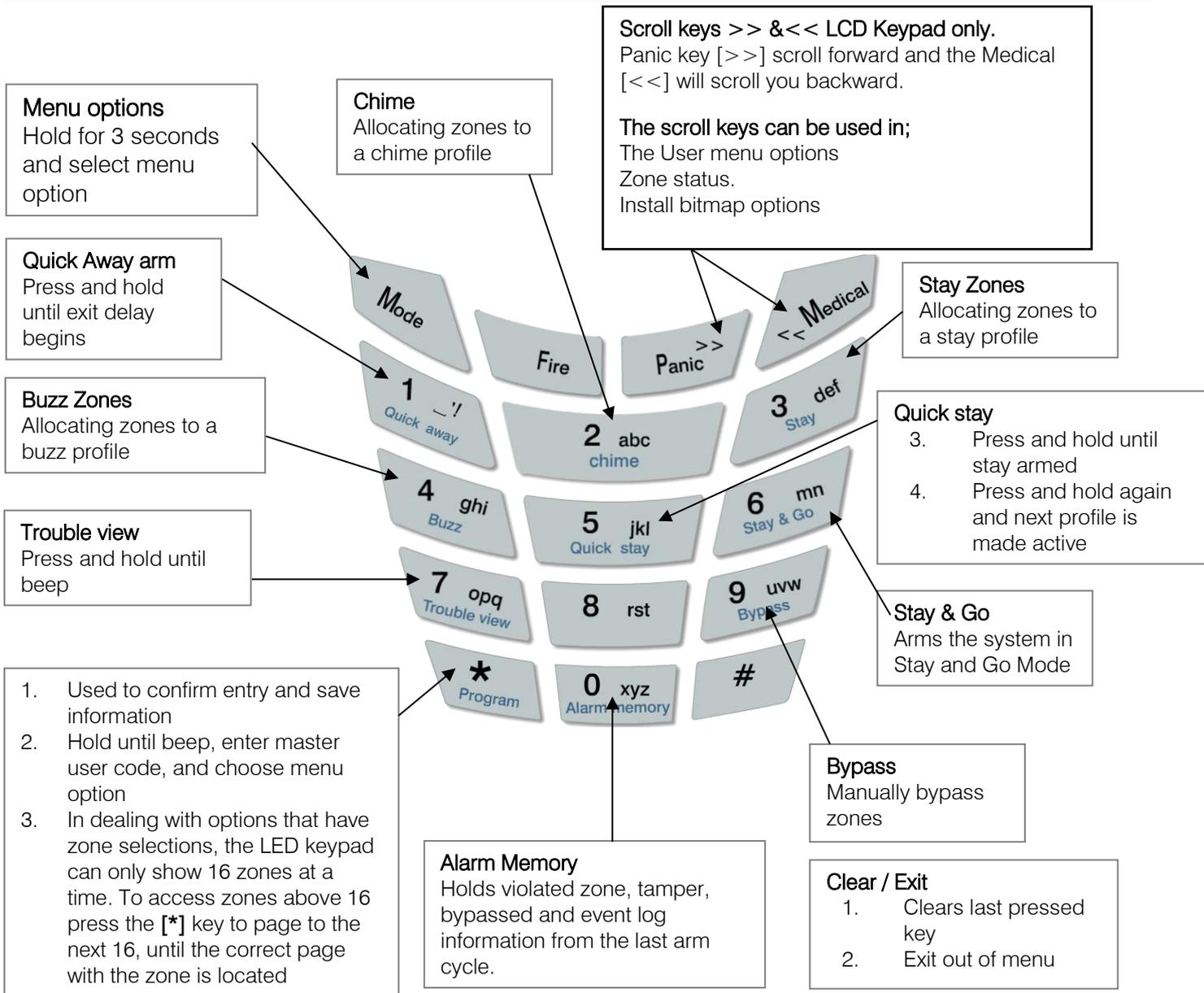X16 Stock Code: 860-1-473-X16

X64 Stock Code: 860-1-864-XS

Liquid Crystal Display Keypad
(LCD)

Light Emitting Diode Keypad
(LED)

Keypad Key Descriptions

Menu options
Hold for 3 seconds and select menu option

Chime
Allocating zones to a chime profile

Scroll keys >> &<< LCD Keypad only.
Panic key [>>] scroll forward and the Medical [<<] will scroll you backward.

The scroll keys can be used in;
The User menu options
Zone status.
Install bitmap options

Quick Away arm
Press and hold until exit delay begins

Stay Zones
Allocating zones to a stay profile

Buzz Zones
Allocating zones to a buzz profile

Quick stay
3. Press and hold until stay armed
4. Press and hold again and next profile is made active

Trouble view
Press and hold until beep

Stay & Go
Arms the system in Stay and Go Mode

1. Used to confirm entry and save information
2. Hold until beep, enter master user code, and choose menu option
3. In dealing with options that have zone selections, the LED keypad can only show 16 zones at a time. To access zones above 16 press the [*] key to page to the next 16, until the correct page with the zone is located

Bypass
Manually bypass zones

Alarm Memory
Holds violated zone, tamper, bypassed and event log information from the last arm cycle.

Clear / Exit
1. Clears last pressed key
2. Exit out of menu

The keypad includes a buzzer that is used for audible signalling and verification of certain functions. There are 3 different keypad tones that can be set at 3 different volumes, as well as a subtle click tone.

NOTE: All zones programmed as Buzz or Chime zones will sound with a loud tone regardless of the keypad volume set.

To change the volume press the # key and the relevant number key simultaneously for 1 second. The keypad will respond with a beep at the new tone setting.
This is keypad specific and only applies to the keypad that this operation is performed on.

Key Entry	Keypad Volume
# + 1	Soft
# + 2	Medium
# + 3	Loud

Key Entry	Keypad Tone
# + 4	440Hz
# + 5	1KHz
# + 6	2Khz
# + 0	Click tone
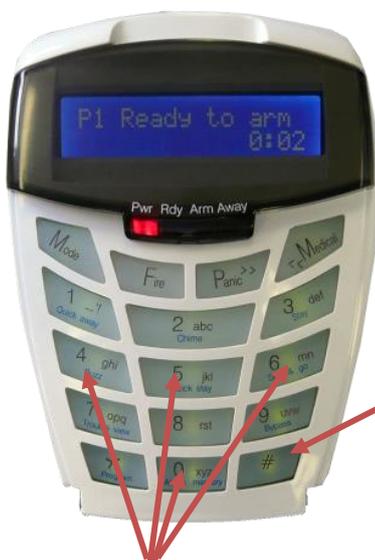
To select a keypad Tone press and hold the # Key.

Then press either 4, 5 or 6 Key to select the different key press tones. To select the 'click' tone press and hold the #Key and the 0 key.

To select a keypad Tone Volume and hold the # Key.

Then press either 1, 2 or 3 Key to select the different key tone Volumes.

Standard User Functions

The following are the functions that all users can use.

Away Arm

When the system is armed in away mode, all enabled zones are active and ready to trigger if an intrusion is detected.
The following zone types work a little different when the system is armed.

1.   Entry / exit.
      a.   When arming, it is only armed once the system has completed the exit time out, giving everyone time to exit the building.
      b.   When armed, and the zone is triggered, the system begins the entry countdown giving you time to disarm

2.   Follower.
      a.   This zone is never active during the arming or disarming time.
      b.   If the entry / exit zones are not triggered first then this zone is active.

How to away arm the system

1.   Press and hold the [1] key until the exit delay starts, and then leave the premises via the entry / exit zone.
2.   Enter a user code, the exit delay will begin, and exit via an entry / exit zone. (Eg. [2][3][3][2])

⚠️   **NOTE:** If the entry / exit zone is not triggered, the system by default will automatically arm in the stay mode. (This can be changed in the installer mode.)

3.   Use a remote transmitter.

Stay Arm

This option is when someone is inside the premises and the system must be armed, but certain zones must not trigger when someone enters that area. Stay arm, when setup, will automatically turn off (bypass) those areas that will have movement once armed.

How to stay arm:

1.   Press and hold the [5] key until the system arms
2.   Enter a user code and do not exit

How to create stay zones
A stay zone is a zone that will automatically be bypassed when the system arms in the stay mode.

Explanation	Key Presses
Press and hold the [3] stay key until the beep	[3] Stay
Select the Stay Profile you want to create/edit.	[<<] [>>]
Enter each zone to be bypassed until complete, then press the [#] key to exit	[5][*][1][7][*][1][8][*][2][1][*].....[#]

There are 4 stay profiles so that different zones can be bypassed depending on different scenarios that may arise.

Stay Arm Profiles Example

During the early evening a family may access all the rooms in the house, but want all external zones armed.
When they go to bed all rooms except the bedrooms must be armed.
This family could have 2 profiles, one profile for early evening and another for bed time.
Only one profile is active, the others need to be activated by entering the profile and adding stay zones.

How to enable stay arm profiles:

Explanation	Key Presses
Press and hold the [5] stay arm key and then press the profile number 1 to 4 and release	[5] then [1] or [2] or [3] or [4]
Press and hold the [3] stay key until the beep	[3] Stay
Enter each zone to be bypassed until complete, then press the [#] key to exit	[5] [*] [7] [*] [8] [*] [2] [1] [*].....[#]
To access the next 16 zones press the [*] key, add the zones as needed	[*]
Now zone 17 is represented by zone 1, 18 by 2, 19 by zone 3, etc.	[1] [*] [8] [*] [1] [0] [*] [1] [5][*]
When complete press the [#] key	[#]

Curve Keypad

Zones   1 to 16   17 to 32   33 to 48   49 to 64

Classic Keypad
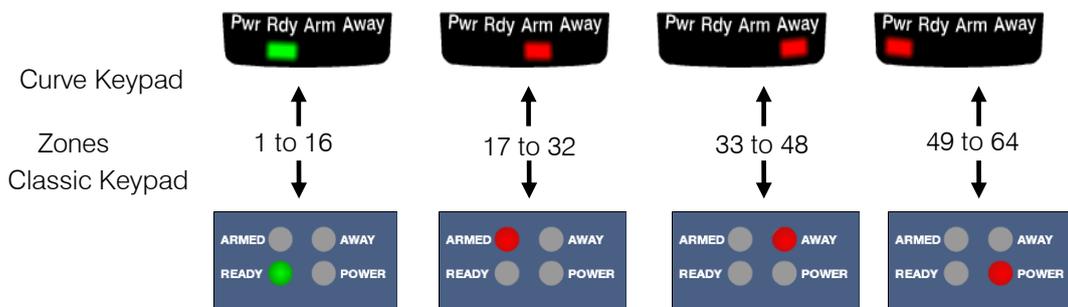
Toggling between the stay profiles, can be done in three ways:
1. Toggle method (Note: only if there is more than one profile with stay zones)
   a. Press and hold the [5] key until the system arms. (The system will arm in the profile that it last armed in.)
   b. Press and hold the [5] key again until the beep. The zones will change.
      NOTE:
      By pressing the [5] key in this manner will toggle through all active profiles
   c. Press and hold the [MODE] key until the beep, then press the [2] key followed by the [*] key and finally the [STAY PROFILE NUMBER] followed by the [*] key.
2. Selection method
   a. Press and hold the [5] key, then press the profile number and release
   b. Now press and hold the [5] key until armed
3. Stay Profile Menu
   a. Press the [5] key, then the keypad will ask you in which stay profile to arm. This feature only works with an LCD keypad.

Stay Profile + *

⚠️ **Note:** This option must be enabled under installer settings, location 251 – 258: Keypad Options

Buzz Zone

A buzz zone is only active during stay arms. It is a zone that when violated, when the system is stay armed, will buzz the keypad for 30 seconds before sounding the alarm.

How to setup buzz zones.

Explanation	Key Presses
Press and hold the [4] buzz zone key until the beep	[4]
Enter each zone to be a buzz zone until complete for zones 1 to 16	[1] [*] [2] [*] [8] [*]
To access zones 17 to 32 press the [*] key	[*]
Now zone 17 is represented by zone 1, 18 by 2, 19 by zone 3, etc.	[1] [*] [5] [*] [1] [0] [*] [1] [5] [*]
To access the next 16 zones press the [*] key, and add the zones as needed	[*]
When complete press the [#] key	[#]

Chime Zone

A chime zone is a zone that will beep all keypads 5 times when a zone is violated in the unarmed state.

How to create chime zones:

Explanation	Key Presses
Press and hold the [2] chime zone key until the beep	[2]
Enter each zone to be a chime zone until complete for zones 1 to 16	[4] [*] [6] [*] [1] [1] [*]
To access zones 17 to 32 press the [*] key	[*]
Now zone 17 is represented by zone 1, 18 by 2, 19 by zone 3, etc.	[1] [3] [*] [1] [4] [*] [1] [6] [*]
To access the next 16 zones press the [*] key, and add the zones as needed	[*]
When complete press the [#] key	[#]

Bypassing Zones

If a zone is faulty and is preventing the system from being armed it can be bypassed. If option 14 in location 14 is enabled you must enter a user code to bypass zones.

Explanation	Key Presses
Press and hold the [9] bypass key until the beep	[9]
Enter a [USER CODE] followed by the [*] key	[1] [2] [3] [4] [*]
Enter each zone to be bypassed until complete for zones 1 to 16	[4] [*] [6] [*] [1] [1] [*]
To access zones 17 to 32 press the [*] key	[*]
Now zone 17 is represented by zone 1, 18 by 2, 19 by zone 3, etc.	[1] [3] [*] [1] [4] [*] [1] [6] [*]
To access the next 16 zones press the [*] key, and add the zones as needed	[*]
When complete press the [#] key	[#]
The zone LED will be on	

⚠️ Panic zones can be bypassed if enabled in zone options location 101 to 164

Alarm Memory

The alarm memory will hold information from the last time it was armed. When the alarm is armed again the memory clears and will store information from that alarm system arm period.

The alarm memory holds information on:

2. Violated zone
    a. Zones that triggered while the system was armed

3. Bypassed zones
    a. Zones that where bypassed when the system armed, making them ineffective.

4. Tampered zones
    a. Zones that someone may have opened and messed about with to stop it functioning correctly.

5. Event log
    a. This is a history of all system messages, going back a thousand events. Once the system reaches the thousandth event it will start over writing from the oldest event.

Explanation	Key Presses		
Press and hold the [0] bypass key until the beep	[0]		
The violated zones will be displayed			
Press the [2] for bypassed zones or the [3] key for tampered zones or the [6] key for the event log	Option	Description	
	1	Violated Zones	
	2	Bypassed Zones	
	3	Tampered Zones	
	6	Event Log	
When complete press the [#] key	[#]		

User Codes

1. 128 user codes can be programmed into the system.
2. The only code pre-programmed into the system is User 1 which is a master code, and it is defaulted to 1234.
    a. A master code is the administrator of the system, which can do the following.
        i. Add and delete users
        ii. Configure user settings
        iii. Set the time and date
        iv. Teach remote transmitters to a user code
3. From version 2.7x you can edit user codes by using its slot number without knowing what the user code is.

Standard Master User Functions

The master menu is for administering the system by adding, deleting users, adding remote transmitters, etc.

To access the master menu press and hold the [*] key until the beep, about 3 seconds, then enter the master code [1][2][3][4] followed by the [*] key.

Option 0 - Adding User Codes

User codes can be added sequentially or via slot numbers. Option 0 adds users sequentially as you type them in. If user codes have been deleted previously and this option is used the first empty slot will be filled, then the next.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to add a user code, followed by the [*] key	[0] [*]
Now enter a new user code, followed by the [*] key	[5][8][7][9] [*]
Keep adding the rest of the codes in the same manner	[3][2][3][2] [*] [2][2][3][4] [*] [1][5][9][0] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 1 - Changing a User Code

To change a user code using option 1 the original user code must be known.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code followed, by the [*] key	[1][2][3][4] [*]
Enter the value to change a user code, followed by the [*] key	[1] [*]
Now enter a new user code, followed by the [*] key	[5][8][7][9] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 2 - Deleting a User Code

To delete a user code the original code must be known or option 4 can be used if the slot number is known.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code followed by the [*] key	[1][2][3][4] [*]
Enter the value to delete a user code, followed by the [*] key	[2] [*]
Now enter the user code to be deleted, followed by the [*] key	[5][8][7][9] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 3 - Add a User Code to a Specific Slot

A slot is the memory location a user code is saved to. Slot 1 = user 1 up to Slot 128 = user 128.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code followed by the [*] key	[1][2][3][4] [*]
Enter the value to add a user code to a specific slot, followed by the [*] key	[3] [*]
Enter the slot number, followed by the [*] key	[8][7] [*]
Now enter the user code to be deleted, followed by the [*] key	[2][5][8][0] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 4 - Delete a User Code via Slot Number

If the original code is not known but the user's slot number is option 4 allows deleting via slot number.

Example:

Instruction	Key presses
Press and hold the **[*]** key for 3 seconds	**[*]**
Enter the master code followed, by the **[*]** key	**[1][2][3][4] [*]**
Enter the value to delete a user code via a slot number, followed by the **[*]** key	**[4] [*]**
Now enter the user code to be deleted, followed by the **[*]** key	**[5][8] [*]**
When complete press the **[#]** key	**[#]**
This will leave you in the master menu	

Option 5 - View a User Codes Slot Number

If the user code is known but you want to know which slot that code is, this option will display the slot number once the original code is entered.

Example:

Instruction	Key presses
Press and hold the **[*]** key for 3 seconds	**[*]**
Enter the master code, followed by the **[*]** key	**[1][2][3][4] [*]**
Enter the value to call up the slot number of a user code, followed by the **[*]** key	**[5] [*]**
Now enter the user code, followed by the **[*]** key	**[5][8][7][9] [*]**
When complete press the **[#]** key	**[#]**
This will leave you in the master menu	

Option 10 - Editing User Code Properties

By default when entering user codes the code is an arm disarm code. There are a number of other options that can be added to a code. The table below describes each of these options and indicates the value to enter to add the property.

Zone LED	Property	Explanation
1	Master User	Adds, deletes and changes user settings
2	Duress Code	A code that works exactly like a normal code, but sends a panic signal to the control room.
3	Arm to Disarm Code [Maid's Code]	This code can only disarm the system if used to arm the system
4	Arm Code	Can only arm the system
5	Disarm Code	Can only disarm the system
6	Global Arm/Disarm	Can arm or disarm any partition
7	Programmable Output Code	This option will trigger an output when entered
8	Allow bypassing	If enabled the user can bypass zones if bypass with user code is enabled by the installer
9	Voice Module Login	If enabled the user can access the panel via the voice module

⚠️ **Note:** Any code between 2 & 128 that is a "master code" can only add users to the partition that it belongs too. The default Master code can add to any partition.

Example:

Instruction	Key presses
Press and hold the **[*]** key for 3 seconds	**[*]**
Enter the master code, followed by the **[*]** key	**[1][2][3][4] [*]**
Enter the value to edit user code properties, followed by the **[*]** key	**[1][0] [*]**
Now enter the user code or user slot number, followed by the **[*]** key	**[2][5][8][0] [*]**
Above is a table of all the user properties, we will make a Duress Code (followed by the **[*]** key)	**[2] [*]**
When complete press the **[#]** key	**[#]**
This will leave you in the master menu	

Option 11 - User Partition Allocation

By default each user is allocated to partition one. If more partitions exist then users must be allocated to the correct partition or multiple partitions.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to call up the user codes partition information, followed by the [*] key	[1][1] [*]
Now enter the user code or user slot number, followed by the [*] key	[2][5][8][0] [*]
Allocate the partitions to the user code, followed by the [*] key	[2] [*] [3] [*] [5] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 12 - Allow Installer code Access

This option is to Enabled or Disabled access to the **user** menu using the installer code.
This a bitmap type option, LED 1 ON is enabled or on LCD keypad set to Yes.

Default: Enabled - allow installer code access to user menu

Zone LED	Property	Explanation
1	Installer Code access	Allows the installer code to access the user menu. This allows the installer to Add, delete and change all user settings. This options is enabled by default

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to set installer code access, followed by the [*] key	[1][2] [*]
Enter the property value of 1 (followed by the [*] key	[1] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 13 - User Outputs

⚠️ **Note**: The user code property "Programmable Output Code" must be enabled before this option will work

This is to allocate the output which the user code set as an output trigger code, in option 10, must activate.

Example

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to call up the user code output allocation, followed by the [*] key	[1][3] [*]
Now enter the user code or slot number, followed by the [*] key	[2][3][6][5] [*]
Allocate the output, followed by the [*] key	[5] [*]
Allocate the action, followed by the [*] key	[2] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

A table and details of the available outputs and their corresponding values is on 56.

⚠️ **Note**: By default there are only five outputs on the alarm panel. The other outputs are only available if the device that has the output required is installed.

Option 14 – Xwave^2 Bi-directional Remote Identification

You can check the identification of an Xwave^2 bi-directional remote.

To check the identification of a bi-directional remote:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value for the bi-directional battery check, followed by the [*] key	[1][4] [*]
Now press a button on the remote	
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 15 – Xwave^2 Wireless Device Battery Check

You can check the battery voltage on Xwave^2 devices via the keypad to determine if the batteries will require changing in the near future. The system will begin to notify you of a low battery, when the battery voltage reaches 2.5V.

To check battery voltage of a device:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value for the bi-directional battery check, followed by the [*] key	[1][5] [*]
Now enter the Xwave^2 hub number, followed by the [*] key	[1] [*]
Scroll using the [Panic >>] or [Medical <<] keys to the zone	[Panic >>]
When complete press the [#] key	[#]
This will leave you in the master menu	

Note: This can only be seen on an LCD Keypad.

Bi-directional Remote Transmitters

The Xwave^2 hub has a remote transceiver for all Xwave^2 bi-directional remote transmitters built in. The receiver will communicate bi-directionally with learnt remote transmitters to give feedback on any instructions received from the remote transmitters. Each hub can learn up to 16 bi-directional remotes.

Default Button Assignment:
        Button 2 = Stay Arm
        Button 3 = Arm / Disarm
        Any button held down for more than three seconds will cause a panic to trigger

Stay Arm   Arm / Disarm

Multi-coloured LED   Query Button
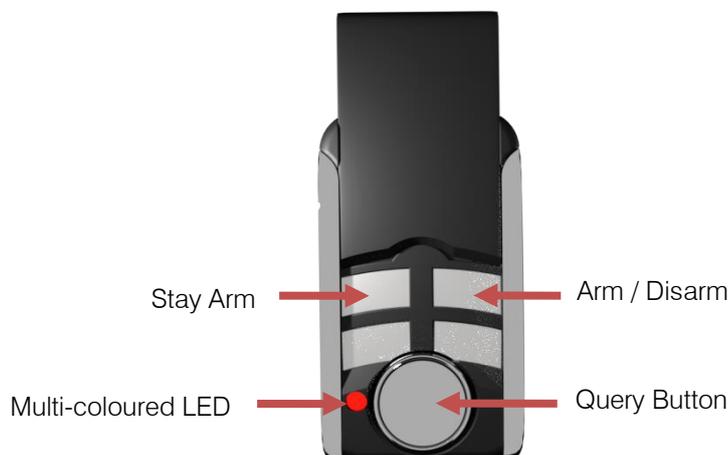
Defaulting the bi-directional remote transmitter

If the remote transmitter was learnt to a different bi-directional installation it must be defaulted before joining a new installation.

Defaulting procedure 1:
1. Delete the remote from the previously learnt hub
2. Remove the battery from the unit
3. Hold down Button 1
4. Insert the battery while holding Button 1
5. Release Button 1

Defaulting procedure 2:
1. Delete the remote from the previously learnt hub, or be out of range of the previously learnt hub
2. Press and hold Button 1 until the remote stops sending panic alerts (flashing Red LED), approximately 40 seconds

Querying the X-Series

The bi-directional remote can query the alarm and feedback different information, e.g. Armed or disarmed, current stay profile, alarm was activated.

To query status:
1. Press the Query button
2. Then press the button that is allocated to the function that is being queried
3. The LED will indicate the status. (See Table 1: Remote Transmitter LED Colour Meaning)

Example to query the arm status of the alarm using the default button assignments:
Press button 1 (Query button) then button 3 (Arm/Disarm button). The led will flash white indicating transmitting message then blue if the alarm is ready to arm, red if armed or flash red if armed but a violation has occurred.

Remote Transmitter LED

The bi-directional remote has two way communication with the X-Series alarm panel and can display different information by changing the colour of the LED and flashing a number of times.

Table 1: Remote Transmitter LED Colour Meaning

Colour	Description	Flash	Description
White	Transmitting signal to the Xwave^2 Hub		
Blue	Ready	Long	Ready to arm
		1 short	Stay Arm in profile 1
		2 short	Stay Arm in profile 2
		3 short	Stay Arm in profile 3
		4 short	Stay Arm in profile 4
	Output	Long	Not Triggered
Yellow	Not ready	Long	Not Ready to arm
		1 short	Not Ready to Stay Arm in profile 1
		2 short	Not Ready to Stay Arm in profile 2
		3 short	Not Ready to Stay Arm in profile 3
		4 short	Not Ready to Stay Arm in profile 4
Red	Armed	Long	Away armed
		1 short	Stay Armed in profile 1
		2 short	Stay Armed in profile 2
		3 short	Stay Armed in profile 3
		4 short	Stay Armed in profile 4
		15 flashes	Alarm has been triggered
	Output	Long	Triggered

Option 16 - Adding Bi-directional Remotes

To add a bi-directional Xwave^2 remote transmitter to a user code.

Instruction	Key presses
All user codes must be added into the system beforehand	
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to add bi-directional remotes, followed by the [*] key	[1][6] [*]
Enter the Xwave^2 hub ID that the remote will be taught to, followed by the [*] key	[1] [*]
Now enter the user code or user slot number, followed by the [*] key	[1][3][7][6] [*]
Press the [*] key when ready to teach the remote transmitter	[*]
Press a button on the bi-directional remote	
Press the [*] key to confirm	[*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 17 - Edit Bi-directional Remote Buttons

Each button on a bi-directional remote can be assigned a different function, each function requires a parameter value to indicate which partition or output to apply the function. The user code assigned to the remote must have the appropriate partition and user property permissions.

To change the button functions:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to assign bi-directional remote buttons, followed by the [*] key	[1][7] [*]
Enter the Xwave^2 hub ID that the remote will be taught to, followed by the [*] key	[1] [*]
Now enter the user code or user slot number of the bi-directional remote, followed by the [*] key	[1][3][7][6] [*]
Scroll to the desired button using the [Panic >>] key, followed by the [*] key	[Panic >>] [*]
Scroll to the button function needed using the [Panic >>] key, followed by the [*] key	[Panic >>] [*]
Enter the parameter followed by [*] to confirm (See Table 4: Button Functions)	[1] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Table 2: Button Functions

Function	Parameter	Description
Unassigned	--	No function allocated
Arm	Partition Number	Will only arm the partition allocated to button and user code
Disarm	Partition Number	Will only disarm the partition allocated to button and user code
Arm/Disarm	Partition Number	Will only arm or disarm the partition allocated to the user code
Global Arm		Will only arm the partitions allocated to the user code
Global Disarm		Will only disarm the partitions allocated to the user code
Global Arm/Disarm		Will only arm or disarm the partitions allocated to the user code
Stay Arm	Partition Number	Will arm the allocated partition in the current/last used stay profile
Stay Arm Prof1	Partition Number	Will arm the allocated partition in stay profile 1 and then allow you to scroll to the next available profile if one is configured
Stay Arm Prof2	Partition Number	Will arm the allocated partition in stay profile 2 and then allow you to scroll to the next available profile if one is configured
Stay Arm Prof3	Partition Number	Will arm the allocated partition in stay profile 3 and then allow you to scroll to the next available profile if one is configured
Stay Arm Prof4	Partition Number	Will arm the allocated partition in stay profile 4 and then allow you to scroll to the next available profile if one is configured
Stay & Go	Partition Number	Will arm the allocated partition in the current/last used stay profile

Function	Parameter	Description
Stay & Go Prof1	Partition Number	Will arm the allocated partition in stay & Go in stay profile 1 and then allow you to scroll to the next available profile if one is configured
Stay & Go Prof2	Partition Number	Will arm the allocated partition in stay & Go in stay profile 2 and then allow you to scroll to the next available profile if one is configured
Stay & Go Prof3	Partition Number	Will arm the allocated partition in stay & Go in stay profile 3 and then allow you to scroll to the next available profile if one is configured
Stay & Go Prof4	Partition Number	Will arm the allocated partition in stay & Go in stay profile 4 and then allow you to scroll to the next available profile if one is configured
Duress Disarm	Partition Number	Will disarm the allocated partition and cause a duress condition in the alarm system and if configured the alarm will transmit the duress signal to the security company
Panic	Partition	Will cause the alarm to go into a panic condition and if configured the alarm will transmit the panic signal to the security company
Medical	Partition	Will cause the alarm to send a medical alert signal to the security company if configured
Fire	Partition	Will cause the alarm to send a fire alert signal to the security company if configured
PGM Low	PGM Number	Will trigger the specified programmable output depending on the type of output, to switch from 12V to 0V or from a closed state to an open state
PGM High	PGM Number	Will trigger the specified programmable output depending on the type of output, to switch from 0V to 12V or from an open state to a closed state
PGM PulseL	PGM Number	Will trigger the specified programmable output depending on the type of output, to switch from 12V to 0V and back to 12V or from a closed state to an open state and back to a closed state. (Pulse length setup under the output properties)
PGM PulseH	PGM Number	Will trigger the specified programmable output depending on the type of output, to switch from 0V to 12V and back to 0V or from an open state to a closed state and back to an open state. (Pulse length setup under the output properties)
PGM Toggle	PGM Number	Will trigger the specified programmable output depending on the type of output, to switch from 0V to 12V or 12V to 0V depending on its current state

Option 18 - Deleting Bi-directional Remotes

To delete a bi-directional Xwave^2 remote transmitter to a user code.

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to delete bi-directional remotes, followed by the [*] key	[1][8] [*]
Enter the Xwave^2 hub ID that the remote was taught to, followed by the [*] key	[1] [*]
Now enter the user code or user slot number paired to the remote, followed by the [*] key	[1][3][7][6] [*]
When complete press the [#] key	[#]
This will leave you in the master menu	

Option 19 - Walk Test

Walk test mode will put certain capable devices into walk test mode from the X-Series keypad. Once in walk test mode the device will trigger continuously when an object has been detected and the LED will come on to indicate the detection.

To enter a device into walk test mode:

1. Enter the Master User Menu: Hold down [*] for 3 seconds
2. Enter the Master code: [1][2][3][4] [*]
3. Scroll using the [Panic >>] key to Walk Test menu or enter [1][9][*]
4. Enter the partition whose devices you want to walk test: [1][*]
5. Enter the number of minutes the walk test must stay active, 1 to 15 minutes. The system will automatically exit walk test mode once the time entered expires

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value for walk test mode, followed by the [*] key	[1][9] [*]
Enter the partition number, followed by the [*] key	[1] [*]
Enter the number of minutes the walk test must stay active, 1 to 15 minutes	[5]
The system will automatically exit walk test mode once the time entered expires	

Standard Remote Transmitters

The system can be installed with four remote receivers and each will be allocated an ID. This is very important as learning a remote transmitter must be done to a specific remote receiver.

There are two ways to learn remote transmitters to a user code:

1.   Standard method menu option 20
    a.   The standard method allocates default settings to each transmitter taught
2.   Advanced method menu option 21
    a.   Most setting have to be done during the programming of the remote

Option 20 – Adding Remotes - Standard Method

Each remote taught using the standard method will have default settings allocated to it.

Example:

Instruction	Key presses
All user codes must be added into the system before	
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to add remotes using the standard method, followed by the [*] key	[2][0] [*]
Enter the remote receiver ID that the transmitter will be taught to, followed by the [*] key	[1] [*]
Now enter the user code or user slot number, followed by the [*] key	[2][3][6][5] [*]
Press the [*] key when ready to teach the remote transmitter	[*]
Press a button on the remote transmitter until the beep	
When complete press the [#] key	[#]
This will leave you in the master menu	

Default Button Assignment:

        Button 1 = Arm / Disarm

        Button 3 = Stay Arm

        Any button held down for more than three seconds will cause a panic to trigger

Stay Arm   ←   →   Arm / Disarm
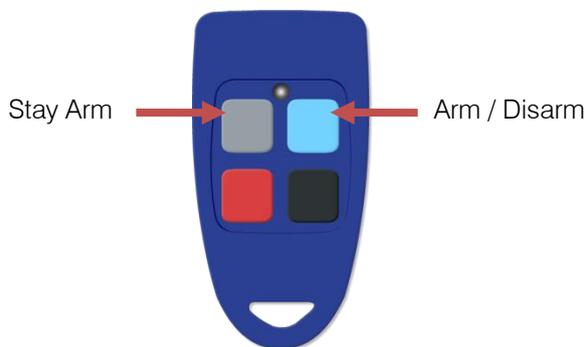
Option 21 - Adding Remotes - Advanced Method

The advanced method allows each button to be taught to different user codes as an arm / disarm button. Management button is the button that you are teaching to a user code to be the arm / disarm button for that user code.

Example:

Instruction	Key presses
All user codes must be added into the system before	
Press and hold the [*] key for 3 seconds	[*]
Enter the master code followed by the [*] key	[1][2][3][4] [*]
Enter the value to add remotes using the advanced method, followed by the [*] key	[2][1] [*]
Enter the remote receiver ID that the transmitter will be taught to, followed by the [*] key	[1] [*]
Now enter the user code or user slot number, followed by the [*] key	[2][3][6][5] [*]
Enter the management button number, followed by the [*] key	[1] [*]
Press the [*] key when ready to teach remote transmitter	[*]
Press the button on the remote transmitter that will belong to that management button number until the beep	
When complete press the [#] key	[#]
This will leave you in the master menu	

IDS Remote Transmitter button number assignment:

Button 3

Button 1

Button 4

Button 2
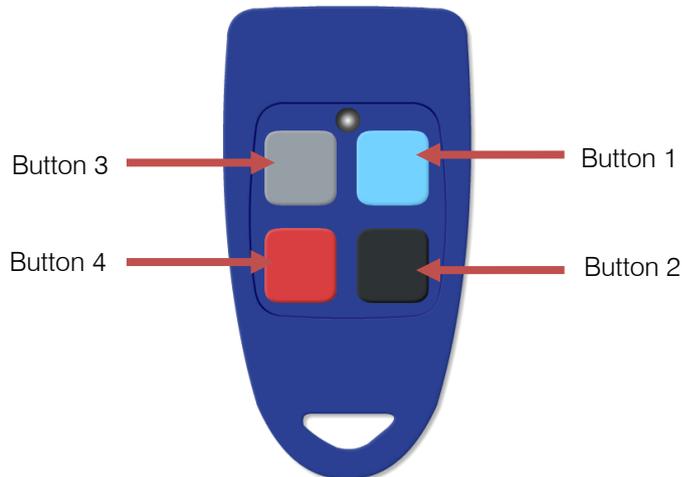
Option 22 - Deleting Remote Transmitters

Each remote transmitter is assigned to a user code, therefore to delete a remote transmitter the user code must be entered.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to delete a remote transmitter, followed by the [*] key	[2][2] [*]
Enter the remote receiver ID that the transmitter was taught to, followed by the [*] key	[1] [*]
Now enter the user code or user slot number, followed by the [*] key	[2][4][6][8] [*]
When complete press the [#] key	[#]
This will leave you in the remote receiver menu	

Option 23 - Button Properties

A button can be changed from the default settings by changing the properties.

Zone LED	Property
1	Relay 1
2	Relay 2
3	Arm / Disarm
4	Stay Arm
5	Panic

This table shows the properties that can be allocated to a button

Changing a button's property example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to change the button properties, followed by the [*] key	[2][3] [*]
Enter the remote receiver ID that the transmitter will be taught to, followed by the [*] key	[1] [*]
Enter the button number, followed by the [*] key	[2] [*]
Enter the property number, followed by the [*] key	[1] [*]
When complete press the [#] key	[#]
This will leave you in the remote receiver menu	

Option 24 - Relay Properties

The following properties can be set:

Zone LED	Property	Description
1	Secure	When power is lost the relay rests in the opposite position. I.e. Normally closed will rest in normally open
2	Panic	When a panic is triggered via a button, or the 3 second hold option, the relay will trigger
3	Retrigger	This stops the relay from retriggering for 20 seconds after an initial trigger
4	Pulse	The relay will trigger and then reset without any intervention

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to change the relay properties, followed by the [*] key	[2][4] [*]
Enter the remote receiver ID that the transmitter will be taught to, followed by the [*] key	[1] [*]
Enter the relay number, followed by the [*] key	[2] [*]
Enter the property number, followed by the [*] key	[2] [*]
When complete press the [#] key	[#]
This will leave you in the remote receiver menu	

Option 25 - Relay Pulse Time

The default pulse time is 1.5 seconds.
When entering the time, enter in the following format "mmss".

Example:

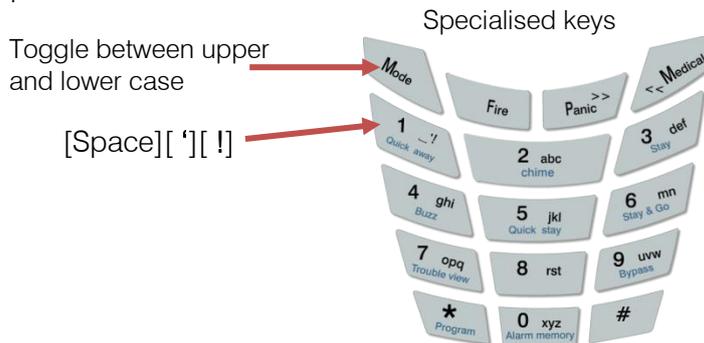| Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to change the relay pulse time, followed by the [*] key	[2][5] [*]
Enter the remote receiver ID that the transmitter will be taught to, followed by the [*] key	[1] [*]
Enter the relay number, followed by the [*] key	[1] [*]
Enter the pulse time in mmss, followed by the [*] key	[0][0][1][0] [*]
When complete press the [#] key	[#]
This will leave you in the remote receiver menu	

Option 26 - Defaulting the Remote Receiver

This will put all the settings back to factory default.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to default the remote receiver, followed by the [*] key	[2][6] [*]
Enter the remote receiver ID that is to be defaulted, followed by the [*] key	[1] [*]
Press the [*] key to proceed	[*]
When complete press the [#] key	[#]

Option 30 - Zone Naming using an LCD Keypad

By default zone names are stored as, "Zone 1" for example. This can be changed to a more descriptive name up to twelve characters.

Specialised keys

Toggle between upper and lower case

[Space]['][!]

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to edit zone names, followed by the [*] key	[3][0] [*]
Enter the zone number, followed by the [*] key	[1] [*]
Enter [*] to proceed	[*]
Enter the name of the zone (Front door), followed by the [*] key	[f][mode][r][o][n][t] [space] [d][o][o][r] [*]
When complete press the [#] key	[#]

> **Note**: When the zone names are updated with IDSwift2 or when add/replacing an LCD keypad you will need to do the following:
> [*] [master code] [*] [3][0] [*] [0][*] to force the names to all LCD keypads

Option 31 - Language

The X-Series alarm panel firmware version 2.3, keypad version 2.02 and up can display multiple languages. The languages that can be selected are: English, Afrikaans, Spanish, Portuguese, Italian and Greek.

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to select a language, followed by the [*] key	[3][1] [*]
Scroll to the language, followed by the [*] key to select	[Panic] [*]
When complete press the [#] key	[#]

X-Series aXess

X-Series aXess user settings allow you to add/delete/edit access tags and view aXess transactions.

Option 32 – Adding Access Tags by Typing a Tag Number

Allows the adding of access tags to the system or the editing of existing tags. The procedure to add a tag is to enter the tags number, allocate it to a user code and any of the eight doors the system is monitoring.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to add a tag, followed by the [*] key	[3][2] [*]
Enter the tag number, followed by the [*] key	[tag number] [*]
Select the doors by entering door number followed by [*] key	[door number] [*]
When finished selecting doors press the [*] key	[*]
Enter user code, followed by [*] (if no user code just press [*])	[user code] [*]
When complete press the [#] key	[#]

Option 33 – Adding Access Tags by Swiping a Tag

Allows the adding of access tags to the system or the editing of existing tags. The procedure to add a tag is to swipe the tag, allocate it to a user code and any of the eight doors the system is monitoring.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to add a tag, followed by the [*] key	[3][3] [*]
Enter the door number you will use to swipe the tag, followed by the[*] key	[door number] [*]
Swipe the tag, followed by the [*] key	[*swipe tag*] [*]
Select/Deselect the doors by entering door number followed by [*] key	[door number] [*]
When finished selecting doors press the [*] key	[*]
Enter user code, followed by [*] (if no user code just press [*])	[user code] [*]
When complete press the [#] key	[#]

Option 34 – Delete Access Tags by Typing a Tag Number

Allows the user to remove a tag from the reader by typing in the tag number.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to delete a tag, followed by the [*] key	[3][4] [*]
Enter the card number, followed by the [*] key	[tag number] [*]
When complete press the [#] key	[#]

Option 35 – Delete Access Tags by Swiping a Tag

Allows the user to remove a tag from the reader by swiping the tag at a reader.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to delete a tag, followed by the [*] key	[3][5] [*]
Enter the door number you will use to swipe the tag, followed by the [*] key	[door number] [*]
Swipe the tag, followed by the [*] key	[*swipe tag*] [*]
When complete press the [#] key	[#]

Option 36 – View Transactions

Allows the master user to view the log of transactions for a specific door. The most recent transaction is displayed first. Use the scroll keys to move through the transactions. The keypad will give an error beep if there are no transactions or the last recorded one has been reached.

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to view transactions, followed by the [*] key	[3][6] [*]
Enter the door number, followed by the [*] key	[door number] [*]
When complete press the [#] key	[#]

Setting the Time and Date

Note: Time should be set even with LED keypads as all events are logged with date and time, and having the correct date and time will help the readability of these logs if ever needed.

Options	Summary of Programmable Options
Option 40	Allows for the editing of the time.
Option 41	Allows for the editing of the date.

Option 40 – Setting the Time

The format is the 24 hour format and the data is entered HHMM. (H = hours, M = minutes)

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to change the time, followed by the [*] key	[4][0] [*]
Enter the time, followed by the [*] key	[1][4][5][6] [*]
When complete press the [#] key	[#]

Option 41 – Setting the Date

When the data is entered, the format is DD/MM/YY. (DD = day, MM = month, YY = year)

Example:

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to change the date, followed by the [*] key	[4][1] [*]
Enter the date, followed by the [*] key	[1][8][0][7][1][0] [*]
When complete press the [#] key	[#]

Option 97 – Manual Auto Test

If you want to test that signals are being transmitted via telephone, this option will force the X-Series alarm to transmit an auto test.

Instruction	Key presses
Press and hold the [*] key for 3 seconds	[*]
Enter the master code, followed by the [*] key	[1][2][3][4] [*]
Enter the value to default the remote receiver, followed by the [*] key	[9][7] [*]
When complete press the [#] key	[#]

Master Mode menu

The master mode menu adds more functionality to the X-Series, as shown in the table below.

Option	Description
1	Change between partitions
2	Change between stay profiles
3	Toggle onboard outputs
4	Toggle between LCD alphanumeric display and LED simulation display

⚠️ **Note**: As before the first key press must be held until a beep is heard. (Approx. 3 seconds)

Changing Partitions

This option allows a user to access different partitions on a keypad.

[Mode] [1] [*] [Partition] [*]

Press and hold until beep — Menu Option — Partition Number
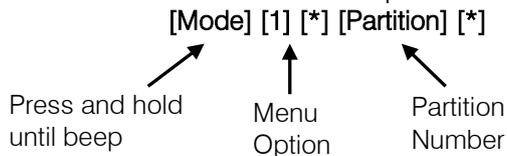
⚠️ **Note:** This will only be available if the keypad is a global keypad. (Keypad Options Location 251 to 258)

Changing Stay Profiles

There are four stay profiles that can be created for different requirements, for example: When staying at home in the evening the outside detectors can be activated while the indoor detectors are bypassed. Then when going to bed all external and internal detectors except the bedrooms are made active by changing the profile.

[Mode] [2] [*] [Stay Profile] [*]

Press and hold until — Stay Profile Menu Option — Stay Profile Number
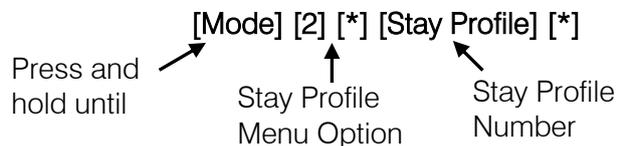
Manually Setting Outputs

The X-Series Outputs, can be manually triggered on or off, via the keypad.

[Mode] [3] [*] [Output [*]

Press and hold until beep — Output triggering Menu — Output Number
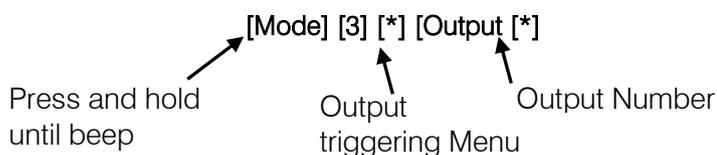
Alarm Memory

Alarm memory holds information on zones that triggered, tampered with and bypassed for the arm cycle that has just been disarmed. Once the system arms again this information is cleared, ready for any new information to store.

To access this information: press and hold **[0]** until the beep.

Key press	Information displayed	Explanation
Hold **[0]** until beep	Any zones that were violated	All zones that triggered while the system was armed will be displayed
Press **[2] [*]**	Zones that were bypassed	Any zones that were bypassed for that arm cycle
Press **[3][*]**	Tampered zones	All zones that were fiddled with and their tamper monitoring circuits triggered
Press **[6] [*]**	Event log	A user can view all event logged by the X-Series panel. Only on LCD Keypad

Changing between Alphanumeric Mode and LED Simulation Mode

This feature allows a quick look at all zones and what state they are in.

[Mode] [4] [*] [Option] [*]

Press and hold until beep

LED Mode Menu Option

1= Alphanumeric
2 =LED simulation

Zone 1 to 16

Zone 33 to 48

Zone 17 to 32

Zone 49 to 64

Zone Restored

Zone Violated

This larger view shows how to distinguish between a zone that is not violated or restored and a zone that is violated.
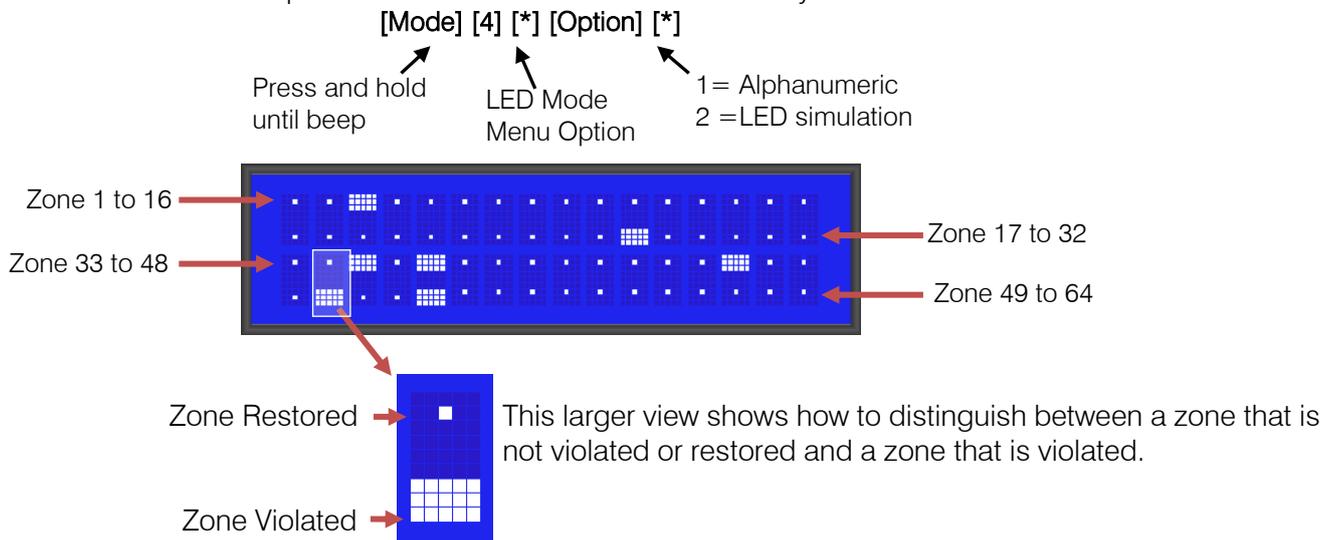
Partition Menu on LCD keypads

When entering quick arm, stay arm or stay go and the option is enabled all partitions will be shown with their status

Menu status options:

   i. r = Ready

   ii. n = Not Ready

   iii. E = Entry/Exit delay

   iv. S = Stay Armed

   v. A = Away Armed

   vi. ! = Alarm

Partitions →

Status →

1 2 3 4 5 6 7 8
r n E S A ! n r

LCD Screen

Note: This option must be enabled under installer settings, location 251 – 258: Keypad Options

Trouble conditions

If a trouble condition is detected, the power LED will begin to flash. Displaying of trouble conditions are programmable via the installer programming location 16.
To see what trouble condition has been encountered press and hold the [7] key.
The zone LEDs will indicate the trouble condition on a LED keypad, shown in the table below.

Zone LED	Trouble Condition	Description
1	Panel AC Supply Failure	When there is no more supply voltage and the system is running on battery
2	Panel Communications Failure	When the system has tried to send an event via telephone, but could not reach the control room
3	Telephone Line Trouble	If the telephone line voltage is no longer detected
4	Siren Tamper	If the siren wires are cut
5	Low Battery	The system checks the battery constantly and if lower than 11V a trouble is triggered
6	Aux 12V Resettable Fuse Blown	If the auxiliary 12V supply is no longer supplying voltage this trouble condition will display
7	Engineer reset	When this option is set, and an alarm condition is triggered, the alarm can only be armed again, once the installer code has been entered
8	Box tamper	The panel has pins to connect a switch that can monitor if the box is opened
9	Peripheral Device Tamper	Any device that is tampered with that is connected to the communication bus
10	Peripheral Communications Failure	If a device stops communicating on the communication bus
11	Peripheral Low Supply Voltage	If a device on the communication bus detects that its voltage is less than 11V
12	Wireless battery low	When a wireless device's battery needs to be replaced the device will send a battery low signal and trigger a trouble if enabled
13	Wireless supervision Monitoring	Each wireless device will check in and if a device does not a trouble is triggered
14	Wireless RF jam	If an unknown signal that can interfere with signals from wireless is detected a trouble will be triggered
15	Wireless low RSSI	RSSI is signal strength measurement and if lower than 20% a trouble will be logged
16	Zone tamper	If a zone is monitored for tamper and then a tamper signal is detected by the alarm a trouble will be triggered.

Once the trouble has been corrected, press and hold [7] again, and [#] immediately thereafter. AC failure will clear automatically, once AC has been restored.

Description	Programming
Add a User Code	[*] [Master Code] [*] [0] [*] [New Code] [*]
Edit a User Code	[*] [Master Code] [*] [1] [*] [Old Code] [*] [New Code] [*]
Delete a User Code by Code	[*] [Master Code] [*] [2] [*] [User Code] [*]
Add/Edit Slot	[*] [Master Code] [*] [3] [*] [Slot Number] [*] [User Code] [*]
Delete a User Code by Slot Number	[*] [Master Code] [*] [4] [*] [Slot Number] [*]
View a Slot Number	[*] [Master Code] [*] [5] [*] [User Code] [*] View the Slot number via the zone LEDs
Edit User Code Properties	[*] [Master Code] [*] [1] [0] [*] [User Code] [*] [Bitmap] [*] 1 = Master 2 = Duress 3 = Arm to Disarm Code 4 = Arm 5 = Disarm 6 = Global Arm/Disarm Code 7 = Output trigger code
Allocate a User Code to a Partition	[*] [Master Code] [*] [1] [1] [*] [User Code] [*] [Partition] [*]
User Outputs	[*] [Master Code] [*] [1] [3] [*] [User Code] [*] [Output No.] [*] [Output Action] [*]
User RC Enable*	[*] [Master Code] [*] [1] [4] [*] [User Code] [*] [Bitmap] [*] (Firmware ver. 1.08 & below)
User RC Module*	[*] [Master Code] [*] [1] [5] [*] [User Code] [*] [Bitmap] [*] (Firmware ver. 1.08 & below)
Add Remotes – Basic	[*] [Master Code] [*] [2] [0] [*] [Receiver No] [*] [User Code] [*] [*] *[Press RT Button]*
Add Remotes – Advanced	[*] [Master Code] [*] [2] [1] [*] [Receiver No] [*] [User Code] [*] [Management No] [*] [*] *[Press RT Button]*
Delete Remote	[*] [Master Code] [*] [2] [2] [*] [Receiver No] [*] [User Code] [*]
Button Properties	[*] [Master Code] [*] [2] [3] [*] [Receiver No] [*] [Button No] [*] [Properties] [*]
Relay Properties	[*] [Master Code] [*] [2] [4] [*] [Receiver No] [*] [Relay No] [*] [Properties] [*]
Relay Pulse Time	[*] [Master Code] [*] [2] [5] [*] [Receiver No] [*] [Time] [*]
Defaulting Receiver	[*] [Master Code] [*] [2] [6] [*] [Receiver No] [*] [*]
Identifying Receiver	[*] [Master Code] [*] [2] [7] [*] [Receiver No] [*]
Testing Receiver	[*] [Master Code] [*] [2] [8] [*] [Receiver No] [*] *[Press RT Button]*
Receiver Capacity	[*] [Master Code] [*] [2] [9] [*] [Receiver No] [*]
Edit Zone Name via LCD Keypad	[*] [Master Code] [*] [3] [0] [*] [Zone No] [*] [*] [Name] [*]
Edit the Time	[*] [Master Code] [*] [4] [0] [*] [Time] [*]
Edit the Date	[*] [Master Code] [*] [4] [1] [*] [Date] [*]
Trigger an Auto Test	[*] [Master Code] [*] [9] [7] [*]
Change Partitions	[Mode] [1] [*] [Partition Number] [*]
Toggle Outputs	[Mode] [3] [*] [1, 2, 3, 4 or 5] [*] 1 – 5 is onboard outputs 1 – 5
Bypassing/Un-bypassing a Zone	[9] [Master Code] [*] [Zone Number] [*]
Alarm Memory	[0] Displays zones violated.

View Trouble Conditions	[7]	1 = AC Mains Fail	9 = Tamper on Peripheral Device
		2 = No Communication	10 = Comms Loss to Peripheral Device
		3 = Phone Line	11 = Loss/low Power to Peripheral Device
		4 = Siren Tamper	12 = Wireless Battery low
		5 = Low Battery	13 = Wireless Supervision Failure
		6 = 12V Aux Fuse	14 = Wireless RF Jam
		7 = Engineer Reset	15 = Wireless low RSSI
		8 = Box Tamper	16 = Zone Tamper

Multi-Language with Wireless

X-SMS Module

X-SMS Stock Code: 860-36-0485

Introduction

IDS X-SMS offers powerful, versatile and highly configurable SMS reporting and control capabilities, which will keep you informed and in control of your X-Series alarm system when away from your premises. The X-SMS module works with IDS X-Series panels from version 2.3x and above.

In this training guide we will cover step by step how to install the IDS X-SMS Module, we will explain the concept of programming the unit and go through same of the main commands.

1. Installation

1.1. X-SMS Connection to an X-Series Panel

The IDS X-SMS Module connects to the X-Series panel using a serial connection.
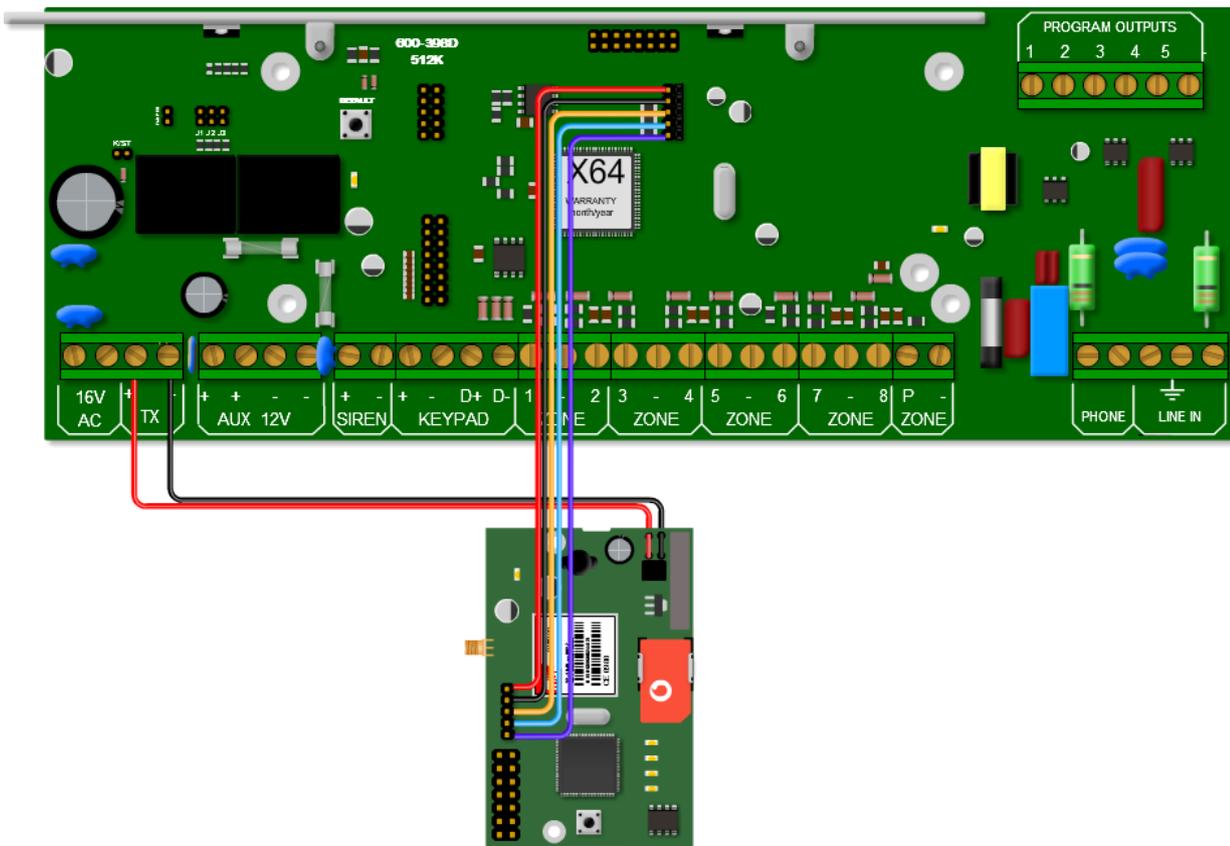
The serial connection between the X-SMS module and the X-Series Alarm Panel is shown in the image above. **Remember that the serial pin that is closest to the X-SMS Antenna connector is connected to the pin closest to the X-Series heat sink.**

The colours of the serial cable are correct at time of writing.

The X-SMS Module can be powered by an X-Series panel's TX or Aux output. The power connection between the X-SMS module and the X-Series Alarm Panel using the TX output is shown in the image above.

1.2. Jumper 1

As the X-SMS uses serial communication with the X-Series Panel, don't forget to short Jumper J1. This is not needed for X-Series v2.5x and above.
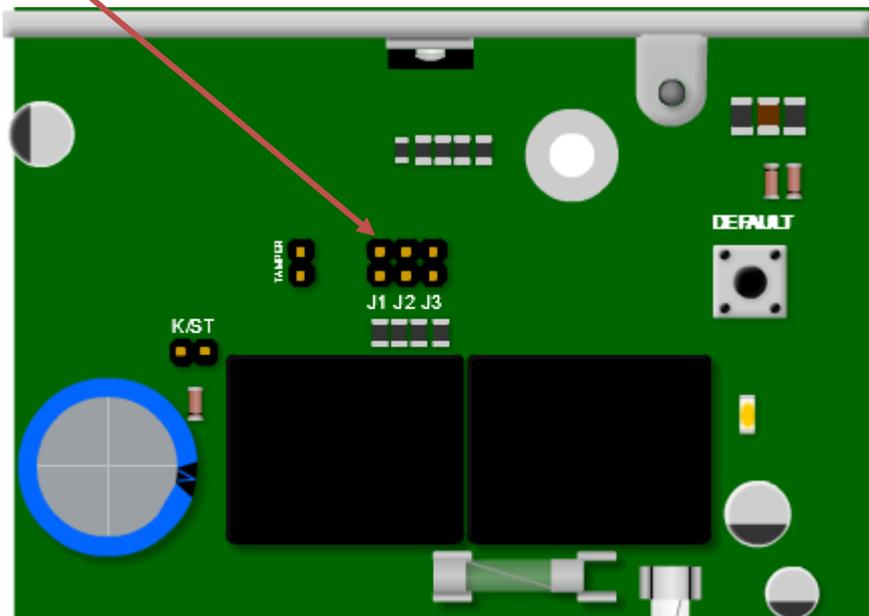
⚠️ It is recommended to default the X-SMS Module on a new installation. To default the X-SMS Module, hold the 'Default' button on power up until the 'Heart Beat LED' comes on, ± 3 seconds.

1.3. Status LEDs
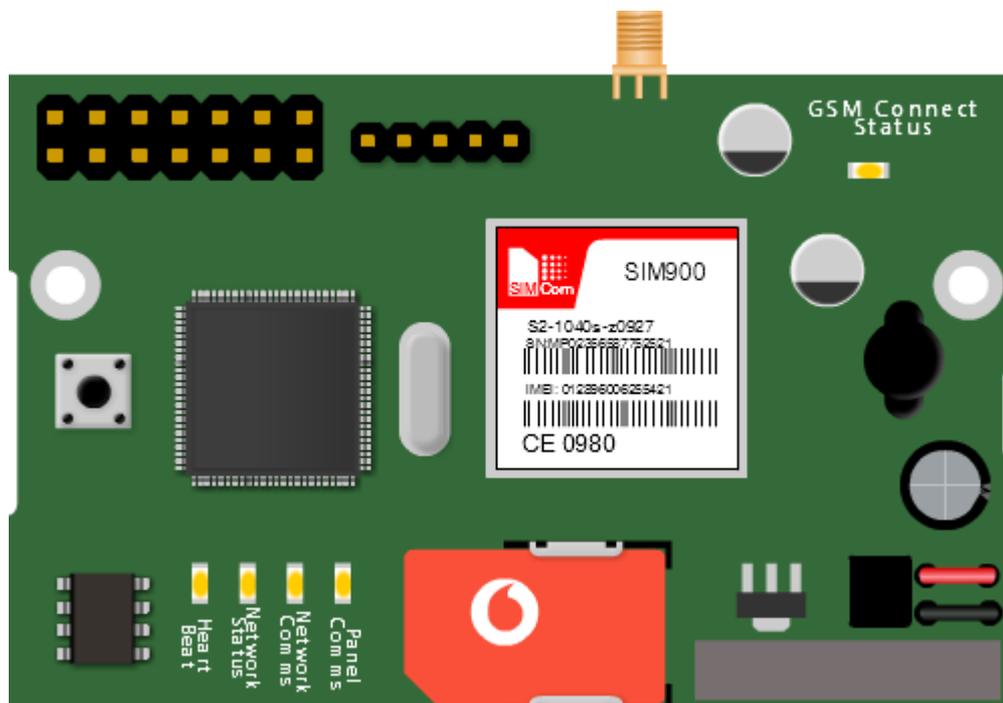
GSM Connect Status
LED flashes once per second if not connected and once every three seconds when connected to the Cell network and the signal strength is good enough to communicate.

Heart Beat
LED Flashes when the unit is running and the power up sequence has completed.

Network Status
LED Flashes when connected to the Cell provider's network and accepted by the service provider.

Network Comms
LED on when communicating with the Cell network and off when no communication.

Panel Comms
LED on when communicating with the X-Series alarm panel.

⚠️ LEDs are a good way to troubleshoot if any problems arise.

1.4. Location 196

To create a link between your X-SMS Module and your X-Series Alarm Panel, a six digit number, of your choosing, must be put into location 196 of installer programming.

Serial Code
User Code: 123456

NB: the X-SMS Module MUST be connected to the panel and powered on when inputting the number in location 196.

The reason for location 196 is to create a unique link with your X-SMS Module, giving you extra security. This means you cannot connect any X-SMS Module to your panel without entering installer mode. Before you can start sending SMSes you must exit installer mode to set the security code.

⚠️ Don't forget to enter an Account code into locations 61, 62, 63 etc.

2. Basic Programming

In this next section we will discuss the basic programming needed to get started with the X-SMS Module.

2.1. Command structure

All commands follow the same command structure to make programming easy to remember. The command structure goes as follows:

[CODE] *space* [COMMAND] *space* [EXTENDED COMMAND] *space* [DATA]

Where:
Code – A valid alarm user code stored in the X-Series Alarm Panel.
Command – The function that you are wanting to access in the X-series Alarm Panel.
Extended Command – Supplementary information the command requires. (Not always used)
Data – The value/setting required of the command/extended command.

⚠️ The cell networks limit the number of characters to 160 per SMS.
The X-SMS Module doesn't store any user codes, it just sends them to the X-Series Panel.
Make sure the code you use has the appropriate permissions in the X-Series Alarm Panel.

2.2. Adding Phone Numbers

In the default state any cell phone can be used to enter the first "Master Phone Number", you can only add another phone number to the X-SMS Module using a "Master Phone Number".

There are different types of categories a phone number can fall under:

Master Phone Number
Master phone numbers have the highest level of access to the SMS Module, they are allowed access to all configuration data.

Arming phone Numbers
Arming phone numbers have permissions for all panel functions, arm/disarm, panel status, bypass zone, PGM control and receive reports.

Reporting Phone Numbers
Reporting phone numbers are only permitted to receive reports from the SMS module, and to temporarily turn off reporting to that number.

To add a Master Phone Number you will use the following information:
Code – 1234 (a user code)
Command – Add
Extended Command – Master (category the number must be under)
Data – 074 049 2481 (the number to be made master)

The SMS should look like this:
1234 add master 0740492481

All phone number commands:

Action	Code	Command	Ext. Command	Data
Add phone number as an Master number	1234	Add	Master	074 049 2481
Add phone number as an Arm number	1234	Add	Arming	073 917 0759
Add phone number as a Reporting number	1234	Add	Reporting	071 348 9467
Deleting a phone number	1234	Delete		074 049 2481

2.3. Reporting

Each phone number can turn reporting off, as well as choose how they want to receive reporting messages.

On/Off – Enables/Disables reporting to the phone that sent the SMS.
    Global – Events that are not partition related. Eg. Ac Fail.
    P1;P2;P3... – Events that are partition based. (P1 for partition 1, P2 for partition 2 and so on) Eg. Arm/Disarm.

Type – Enables the type of reporting that the phone number will receive.
    There are three types to choose from:
        Raw – A contact ID string is sent to the phone.
        Full – All enabled events will be sent to the phone in English.
        Reduced - Only the following will be reported: Arm/Disarm, Zone violations, Panics, AC Fail/Restore and Battery Low/Restore. (This is the default)

To turn on reporting for partition 1 and global you will use the following information:
Code – 1234 (a user code)
Command – Report
Extended Command – On P1, global
Data – 074 049 2481 (the number to receive the reporting SMSes)

The SMS should look like this:
1234 report on p1,global 0740492481

To change reporting to full you will use the following information:
Code – 1234 (a user code)
Command – Report
Extended Command – Type
Data – Full 074 049 2481

The SMS should look like this:
1234 report type full 074 049 2481

All reporting commands:

Action	Code	Command	Ext. Command	Data
Turn on reporting for partition events	1234	Report	On P1,P2,P3.....	074 049 2481
Turn off reporting for global events	1234	Report	Off Global	073 917 0759
Turn on reporting for partition and global events	1234	Report	On P1,P2,Global	071 348 9467
Turn on full reporting	1234	Report	Type	Full 074 049 2481
Turn on reduced reporting	1234	Report	Type	Reduced 074 049 2481
Turn on raw data reporting	1234	Report	Type	Raw 074 049 2481

⚠️ Only events that are enabled on the alarm panel will be reported.
Only a "Master Phone Number" can allocate partitions to a phone number.

2.4. SMS Threshold

By default there is a threshold of 20 SMSes per day to a single phone number. You can increase or decrease this threshold by sending a threshold command.

To increase the threshold to 50 SMSes you will use the following information:
Code – 1234 (a valid user code)
Command – Report
Extended Command – Threshold
Data – 50 (Number of SMSes) 073 917 0759

The SMS should look like this:
1234 report threshold 50

To decrease the threshold to 14 smses you will use the following information:
Code – 1234 (a valid user code)
Command – Report
Extended Command – Threshold
Data – 14 (Number of SMSes) 071 348 9467

The SMS should look like this:
1234 report threshold 14

Action	Code	Command	Ext. Command	Data
Increase the reporting threshold to 50 SMSes	1234	Report	Threshold	50 073 917 0759
Decrease the reporting threshold to 14 SMSes	1234	Report	Threshold	14 071 348 9467

2.5. Arm/Disarm

Master and Arming phone numbers are able to arm or disarm the X-Series Alarm Panel in multiple profiles. Arming the panel requires a valid user code for the partition you want to arm/disarm.

To away arm partition 1 you will use the following information:
Code – 1234 (a valid user code in partition 1)
Command – Arm
Extended Command – *Not needed
Data – P1 (Partition number)

The SMS should look like this:
1234 arm p1

To arm partition 3 in stay profile 2 you will use the following information:
Code – 1234 (a valid user code in partition 1)
Command – Arm
Extended Command – S2 (Stay Profile number)
Data – P3 (Partition number)

The SMS should look like this:
1234 arm s2 p3

All arm/disarm commands:

Action	Code	Command	Ext. Comm	Data
Away arm all partitions	1234	Arm		All
Away arm P1 & P3	1234	Arm		P1,P3
Stay arm P2 in stay profile 3	1234	Arm	S3	P2
Stay arm P1 & P4 in stay profile 1	1234	Arm	S1	P1,P4
Disarm all partitions	1234	Disarm		All
Disarm P2	1234	Disarm		P2
Disarm P5 & P6	1234	Disarm		P5,P6

2.6. Bypass/Unbypass

When needed you are able to send a command to bypass or unbypass a specific zone/s. You must specify which zones to bypass in the data field.

To bypass zone 3 you will use the following information:
Code – 1234 (a valid user code)
Command – Bypass
Extended Command – *Not needed
Data – 3 (Zone number)

The SMS should look like this:

1234 bypass 3

To unbypass zones 4 and 9 you will use the following information:

Code – 1234 (a valid user code)
Command – Unbypass
Extended Command – *Not needed*
Data – 4,9 (Zone numbers)

The SMS should look like this:

1234 unbypass 4,9

Action	Code	Command	Ext. Comm	Data
Bypass zone 1	1234	Bypass		1
Bypass zone 3,4,8,10	1234	Bypass		3,4,8,10
Bypass named zone "Passage"	1234	Bypass		Passage
Bypass named zone "Lounge" & "Kitchen"	1234	Bypass		Lounge, Kitchen
Unbypass Zone 5	1234	Unbypass		5
Unbypass "Kitchen"	1234	Unbypass		Kitchen

All bypass/unbypass commands:

2.7. Panel Status

Using the X-SMS Module you are able to check the status of various parts of the panel, such as Arm Status, Zone Status, Bypass Status, and PGM Status.

To check the arm status of partition 1 you will use the following information:

Code – 1234 (a valid user code in partition 1)
Command – Arm
Extended Command – Status
Data – P1 (Partition number)

The SMS should look like this:

1234 arm status p1

To check the zone status of partition 3 you will use the following information:

Code – 1234 (a valid user code in partition 1)
Command – Zone
Extended Command – Status
Data – P3 (Partition number)
*You can only check the zone status of a partition when the partition is unarmed

The SMS should look like this:

1234 zone status p3

To check the bypass status of zone 1 you will use the following information:

Code – 1234 (a valid user code in partition 1)
Command – Bypass
Extended Command – Status
Data – 1 (Zone number)

The SMS should look like this:

1234 bypass status 1

To check the PGM status of PGM 4 you will use the following information:
Code – 1234 (a valid user code in partition 1)
Command – PGM
Extended Command – Status
Data – 4 (PGM number)

The SMS should look like this:
1234 pgm status 4

All status commands:

Action	Code	Command	Ext. Comm	Data
Retrieve the status of all partitions	1234	Arm	Status	All
Retrieve the status of P1	1234	Arm	Status	P1
Retrieve the status of P3 & P6	1234	Arm	Status	P3,S6
Retrieve the status of zones in partition 1	1234	Zone	Status	P1
Retrieve the status of zones in partition 1 & 3	1234	Zone	Status	P1,P3
Get PGM 8's status	1234	PGM	Status	8
Get PGM Gate's status	1234	PGM	Status	Gate
Retrieve bypass status of zone 1	1234	Bypass	Status	1
Retrieve status of "Lounge"	1234	Bypass	Status	Lounge

3. Command Table

Action	Code	Command	Ext. Command	Data
Phone Numbers				
Add phone number as an Master number	1234	Add	Master	074 049 2481
Add phone number as an Arm number	1234	Add	Arming	073 917 0759
Add phone number as a Reporting number	1234	Add	Reporting	071 348 9467
Deleting a phone number	1234	Delete		074 049 2481
Reporting				
Turn on reporting for partition events	1234	Report	On P1,P2,P3.....	074 049 2481
Turn off reporting for global events	1234	Report	Off Global	073 917 0759
Turn on reporting for partition and global events	1234	Report	On P1,P2,Global	071 348 9467
Turn on full reporting	1234	Report	Type	Full 074 049 2481
Turn on reduced reporting	1234	Report	Type	Reduced 073 917 0759
Turn on raw data reporting	1234	Report	Type	Raw 071 348 9467
Increase the reporting threshold to 50 SMSes	1234	Report	Threshold	50 074 049 2481
Arm/Disarm				
Away arm all partitions	1234	Arm		All
Away arm P1 & P3	1234	Arm		P1,P3
Stay arm P2 in stay profile 3	1234	Arm	S3	P2
Stay arm P1 & P4 in stay profile 1	1234	Arm	S1	P1,P4
Disarm all partitions	1234	Disarm		All
Disarm P2	1234	Disarm		P2
Disarm P5 & P6	1234	Disarm		P5,P6

Action	Code	Command	Ext. Command	Data
Setting Time				
Set the X-SMS to retrieve the time once a week	1234	Add	Time	061 458 2504
Naming				
Assigning a site name	1234	Site	Name	Home
Name partition 1 "Main House"	1234	Partition	Name	1:Main House
Name partition 2 as "Granny Flat" & partition 3 as "Garage"	1234	Partition	Name	2:Granny Flat, 3:Garage
Name zone 1 as "Kitchen"	1234	Zone	Name	1:Kitchen
Name zone 2 "Lounge" & zone 5 "Patio"	1234	Zone	Name	2:Lounge, 5:Patio
Name PGM 5 Lights	1234	PGM	Name	5:Lights
Bypass/Unbypass				
Bypass zone 1	1234	Bypass		1
Bypass zone 3,4,8,10	1234	Bypass		3,4,8,10
Bypass named zone "Lounge" & "Kitchen"	1234	Bypass		Lounge, Kitchen
Unbypass Zone 5	1234	Unbypass		5
Unbypass "Kitchen"	1234	Unbypass		Kitchen
Turn PGM's On/Off				
Turn PGM 1 on	1234	PGM	On	1
Turn PGM 3, 4 & 5 off	1234	PGM	Off	3,4,5
Pulse PGM 2 Low	1234	PGM	PulseL	2
Pulse PGM 3 High	1234	PGM	PulseH	3
Panel Status				
Retrieve the status of all partitions	1234	Arm	Status	All
Retrieve the status of P1	1234	Arm	Status	P1
Retrieve the status of P3 & P6	1234	Arm	Status	P3,S6
Retrieve the status of zones in partition 1	1234	Zone	Status	P1
Retrieve the status of zones in partition 1 & 3	1234	Zone	Status	P1,P3
Get PGM 8's status	1234	PGM	Status	8
Get PGM Gate's status	1234	PGM	Status	Gate
Retrieve bypass status of zone 1	1234	Bypass	Status	1
Retrieve status of "Lounge"	1234	Bypass	Status	Lounge
Event Log				
Retrieve the last 5 Events	1234	Event	Panel	5
Lockout Phone Number				
Temporarily disable a phone number	1234	Lockout	On	074 049 2481
Enable a phone number after being disabled	1234	Lockout	Off	074 049 2481
Manage Airtime				
Save balance string in the SMS module	1234	Airtime	Command	Enter the string supplied
Query airtime balance	1234	Airtime	Balance	
Add airtime	1234	Airtime		Network supplied string

Voice Module

X-Series Voice Module Stock Code: 860-06-X64-0412

Introduction

The Voice Module is a plug-in board for the X-Series alarm panel. The board contains a DMTF decoder chip and a flash memory chip which add telephonic voice interaction to the panel.

The user can receive alarm messages or can control the system via the phone by pressing keys on the phone.

The user must enter their user code before any communication can take place. If the code is entered incorrectly three times the system will hang up.

⚠️ **Note:** The X-Series alarm panel must have firmware version 1.08 or higher and hardware version "D" or higher.

1. Hardware Installation

The voice module plugs onto the X-Series panel via the, 5 pin serial connector. When setup correctly a message will be delivered to each telephone number entered into the system. The voice module also allows a user to dial into the alarm system and control it via DTMF tones.

The controls are: Arm/Disarm, Bypass zones, Trigger an output, Query status of the partition
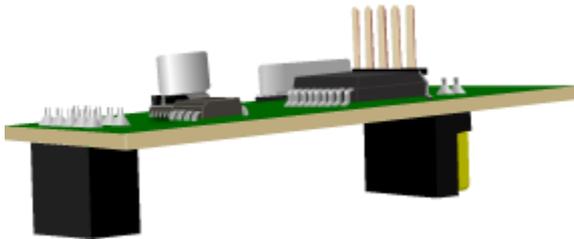
⚠️ **Note**: The voice module only works on version "D" X-Series boards and firmware version 1.08 and up.
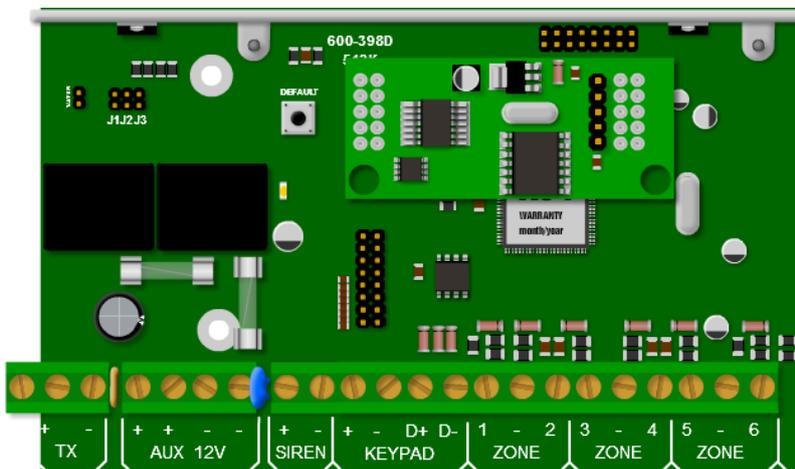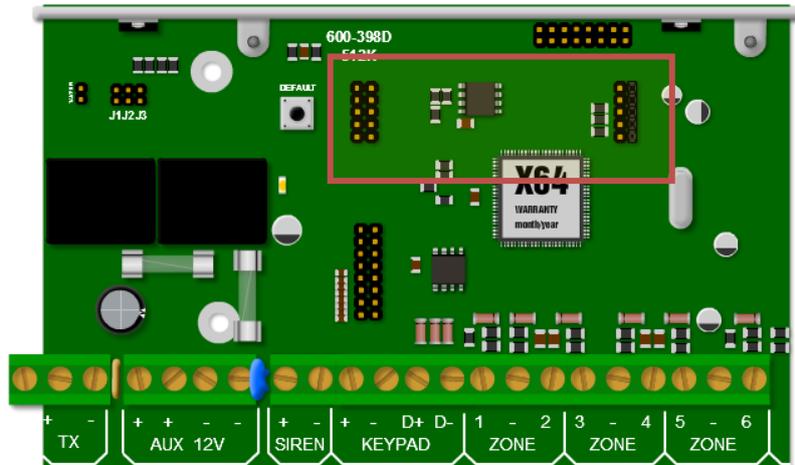
2. Event Reporting

When an event needs to be reported, the panel will dial the user and the login sequence will begin.
The user will hear a series of beeps followed by three seconds of silence. This sequence will continue for forty seconds. This will be interrupted by the first DTMF tone detected, key press, during the silence.
During the three seconds of silence a valid user code should be entered and the module will first acknowledge the correct code with "welcome" and then begin delivering the events.
If an incorrect code is entered the voice module will indicate this with "code incorrect". Three incorrect code entries will cause the system to hang up.
The events delivered will depend on the user code and which partitions that code belongs too. Global events will be delivered to all users, i.e. ac fail. Once all events have been delivered the system will wait for further instructions.

3. User Initiated Communication

After picking up the phone line, the panel will first try and communicate with a modem by giving the modem handshake tones, and if this fails it will then start the login sequence.
The login sequence is a series of beeps followed by three seconds of silence for a valid user code to be entered, this will continue for forty seconds if a code is not entered. After the forty seconds or three incorrect attempts at guessing the code, the system will drop the line.
When the user inserts the correct code the voice module will respond with, "Welcome, press star for menu or enter number" and is given access to the menu.

4. User Menu

Key Press	Action	Reply
[*]	Menu details	"Press 1 for status, press 2 to arm disarm "
[1]	Full status report (arm status, alarmed zones, siren status, bypass status)	Partition 1 armed / dis-armed....
[2]	Arm / disarm	Enter partition
[3]	Switch siren off	Siren off
[4]	Programmable outputs	Enter output
[5]	Bypass / Unbypass	Enter zone
[6]	Alarm memory	Zone.....

4.1. Menu Details

To hear which keys to press for the required action:
Press [*]
Voice "1 status report, 2 arm/disarm ..."

4.2. Status report

To get a status report on the partition and its zones:
Press [1]
Voice "partition 1 disarmed, zone 3 bypassed..."

4.3. Arm / Disarm

To arm or disarm a partition:
Press [2]
Voice "enter partition"
Press [partition number]
Voice "partition number armed"

4.4. Siren

This option allows the siren to be switched off:
Press [3]
Voice "Siren off"

4.5. Programmable Outputs

To be able to toggle outputs:
Press [4]
Voice "Enter output"
Press [output number]
Voice "output number on" or "output number off"
(The output is toggled on if it was off and off if on)
Note: All entries must be 2 digits, e.g. enter [0][2] for output 2

4.6. Bypassing / Un-bypassing

Bypassing or un-bypassing zones:
Press [5]
Voice "enter zone"
Press [zone number] (remember to enter a two digit number, e.g. 02, 08, 12)
Voice "zone number bypassed"
Note: All entries must be 2 digits, e.g. enter [0][5] for zone 5

4.7. Alarm Memory

If you need to know which zones where violated:
Press [6]
Voice "zone 3, zone 4...."

4.8. Exit the Call or a Menu

When complete and want to exit the call or want to go back to the menu:
To return back to the menu after entering an action menu:
Press [#]
Voice "Welcome"
To exit:
Press [#]
Voice "Good bye" (the system will hang up)

5. X-Series Alarm Panel Programming

Once the voice module is installed the X-Series alarm panel needs to be programmed with user codes that will have access to each partition and the phone numbers that it must to report too.

5.1. User Codes (v2.40 and below)

The X-Series alarm panel has 8 partitions and user codes are divided into groups for each of the partitions and depending on which group the user code belongs to will depend on the partition they can interact.

Partition	Users	Partition	Users
1	10 to 19	5	50 to 59
2	20 to 29	6	60 to 69
3	30 to 39	7	70 to 79
4	40 to 49	8	80 to 89

The master user, user 1, belongs to all partitions and can interact with them all.

⚠️ **Note:** Remember to allocate the user codes to the correct partitions.

To add a user to a specific slot number:
[*]   [1]   [2] [3] [4] [*] [3] [*] [1] [0] [*] [5] [6] [2] [1] [*]

Hold   Master Code   Add   Slot   User code
4 sec   by Slot

To change or add a user code's partition
[*]   [1]   [2] [3] [4] [*] [1] [1] [*] [5] [6] [2] [1] [*] [2] [*]

Hold   Master Code   Partition   User code   Partition
4 sec

5.2. User Codes (v2.41 and above)

In versions 2.41 and above any user slot will work with any partition, as long as the user code has permissions to that partition and Voice Login is enabled in user properties.

5.3. Telephone Numbers

Locations 600 to 616 are for the cell phone numbers that the system must report too.
There a two numbers per partition and a master:

Partition	Location	Partition	Location
All	600	5	609 & 610
1	601 & 602	6	611 & 612
2	603 & 604	7	613 & 614
3	605 & 606	8	615 & 616
4	607 & 608		

To add a cell phone to a location:

[*] [9][9][9][9][*] [6][0][0][*] [0][8][3][1][2][2][4][5][6][7][*]

Note: If a user is receiving the call from the system but his code is being rejected, please check the following:
For each of the users that receive events on their phones, their user codes must be created in the correct user slot and their phone number must be entered into the correct location for their partition.
E.g. Partition 1 user must be added to slot 10 and their phone number must be added to 601.

There are three reasons why you may want to connect to the alarm panel:

1. To up or download the programming of the system, via the IDS up and download software.
2. To upload the event log to verify a burglary.
3. To upgrade the firmware of the system.
    a. This will be distributed as an encrypted file.

To do this: a direct connection board must be connected serially to a computer and the IDS software must be loaded on the computer.

The PCB is then connected to the alarm panel via the serial connector on the board.

Firmware Upgrading

1. While panel is powered down. Place a jumper onto pins J3.
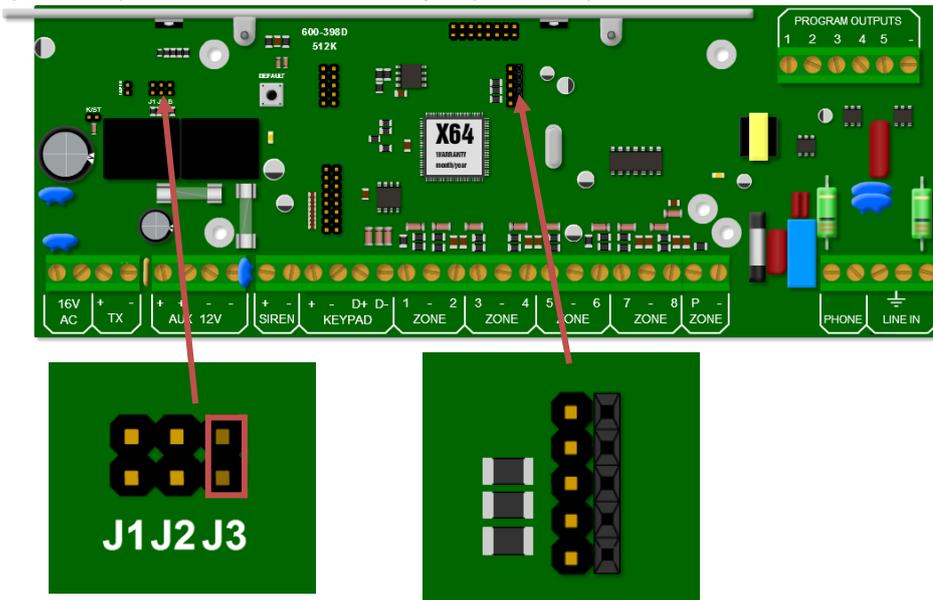
Note: If the panel is powered up with J3 on, for more than a minute the X-Series alarm panel will reset and go into normal working mode as a security precaution.

2. Connect the USB Panel Interface to the serial connector displayed in figure 39. The red strip on the USB device is pin 1 and is connected to the top of the connector.
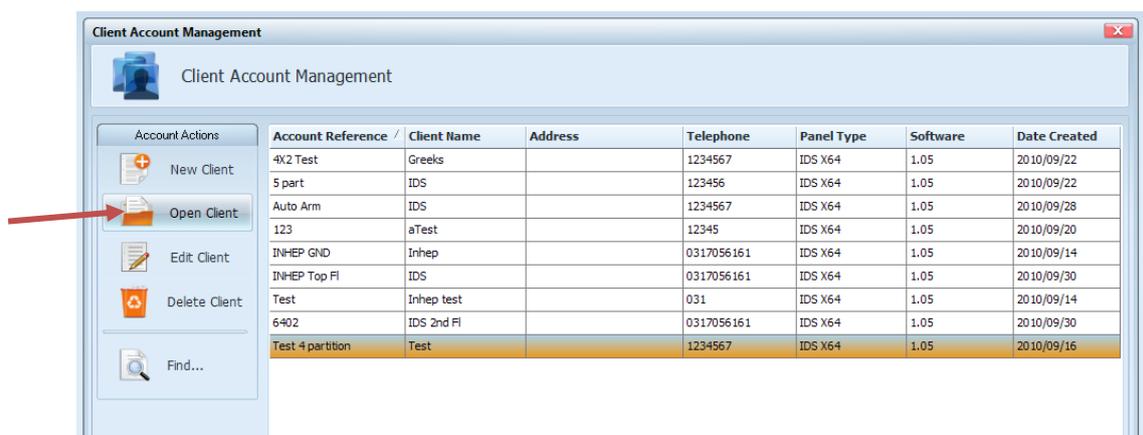

USB serial interface
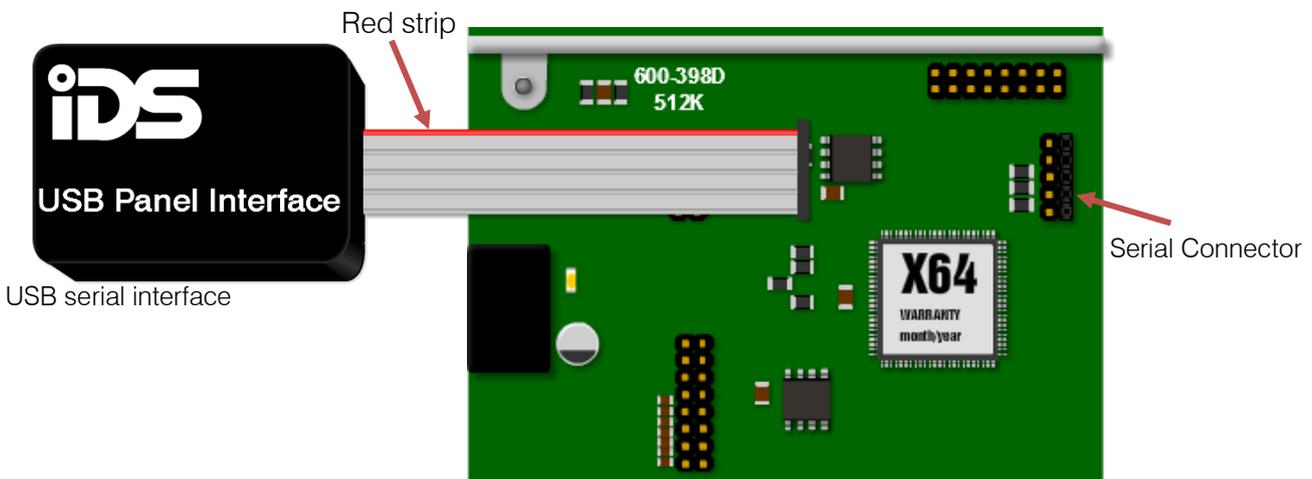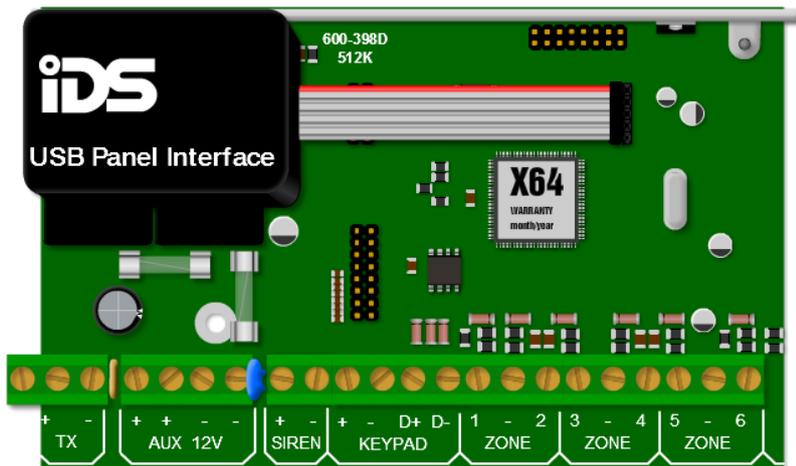
3. Double click on the IDSwift software icon to run the software and login. Default user name is "admin" and password is "admin".
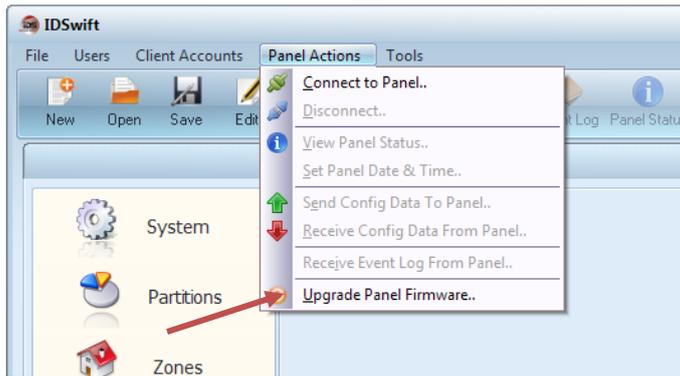

4. Open the client window.
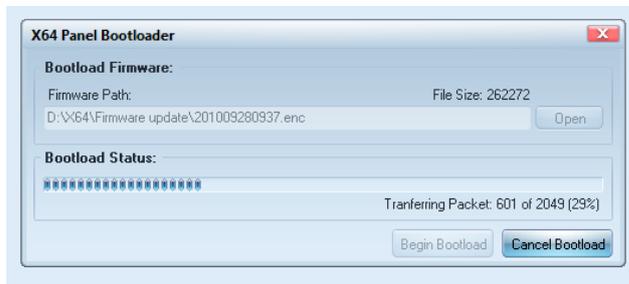

5. Choose the client and then open the client.

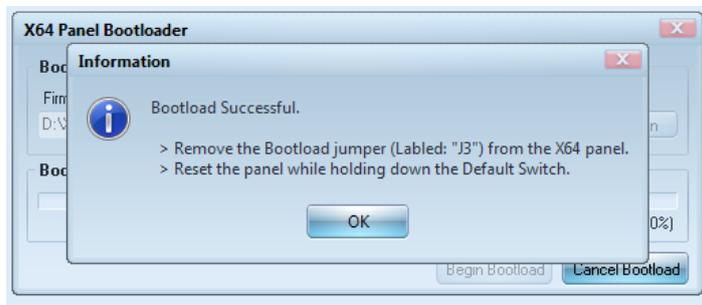6. Click on panel actions and then firmware upgrade

7. Navigate to where the firmware file is located

8. Power up the panel and click on the Begin "Bootload" button and the progress bar will indicate progress of the upgrade.

9. When complete and successful, read and follow the instructions.

⚠ **Note**: The alarm panel must be defaulted after the upgrade.