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806
Installer Manual
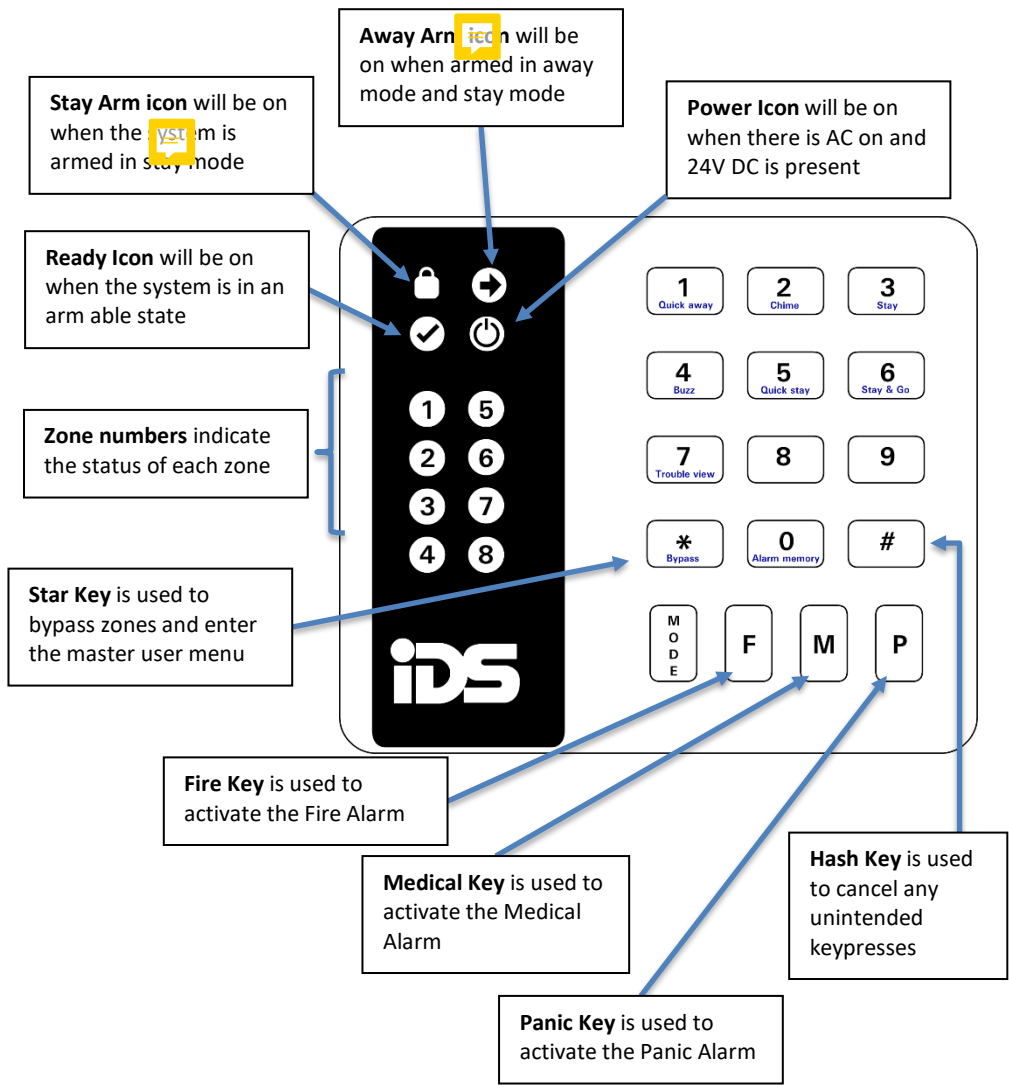
Content

Figures

Figure 1: Classic Keypad Description

Away Arm icon will be on when armed in away mode and stay mode

Stay Arm icon will be on when the system is armed in stay mode

Power Icon will be on when there is AC on and 24V DC is present

Ready Icon will be on when the system is in an arm able state

Zone numbers indicate the status of each zone

Star Key is used to bypass zones and enter the master user menu

1 Quick away	2 Chime	3 Stay
4 Buzz	5 Quick stay	6 Stay & Go
7 Trouble view	8	9
* Bypass	0 Alarm memory	#
MODE	F	M	P

Fire Key is used to activate the Fire Alarm

Medical Key is used to activate the Medical Alarm

Panic Key is used to activate the Panic Alarm

Hash Key is used to cancel any unintended keypresses

Introduction to the 806

The 806 is a versatile, state of the art, microprocessor based, eight-zone Alarm Panel. Most features are optional and may be programmed either directly through the keypad or via the USB Panel Interface module, using IDSwift 2. There are eight programmable burglary zones, appropriate siren, auxiliary power outputs and 5 outputs which may be programmed to perform various trigger/switching functions.

For correct operation, the 806 must be used in conjunction with the specified transformer/battery combination and appropriate peripheral sensors and signalling devices.

Features

- ➤ New power saving mode when AC fails and battery goes low the system will start to shut down auxiliary devices to maintain only basic panel functionality. (see Status LED page:10)
- ➤ Bylaw 5 & 25 compliant.
- ➤ Four wire keypad operation - up to a maximum of 2 keypads.
- ➤ Eight, fully programmable, end-of-line (3K3) supervised or wireless zones, and 1 dedicated panic zone per keypad which is not end-of-line supervised.
- ➤ Optional box tamper and tamper reporting using double end-of-line resistors (12K and 4K7).
- ➤ Five programmable trigger outputs.
- ➤ Non-volatile EEPROM memory retains all program and event log data in the event of a total power failure.
- ➤ Programmable loop response time for all zones (global).
- ➤ Up and downloadable using IDSwift2 windows-based software.
- ➤ Excellent protection against lightning (provided by specialised zap tracking and transient suppressors).
- ➤ Auto arm - panel can be programmed to arm daily at a predetermined time.
- ➤ Event log (1000 events) date and time stamped.
- ➤ Programmable silent or audible panic.
- ➤ 12V, 1A auxiliary power output.
- ➤ Optional add-on modules.
  - o DTMF module for Contact ID reporting to 3rd party transmitters. (Firmware version 1.85 and above)
  - o Xwave wireless module for wireless devices and remote transmitters.
  - o HYYP GSM communication device to the security company and cell phone app.

Installation and Wiring

Please refer to Figure 1: Connection Diagram and familiarise yourself with the following sections.

Figure 2: Connection Diagram - without tamper per zone
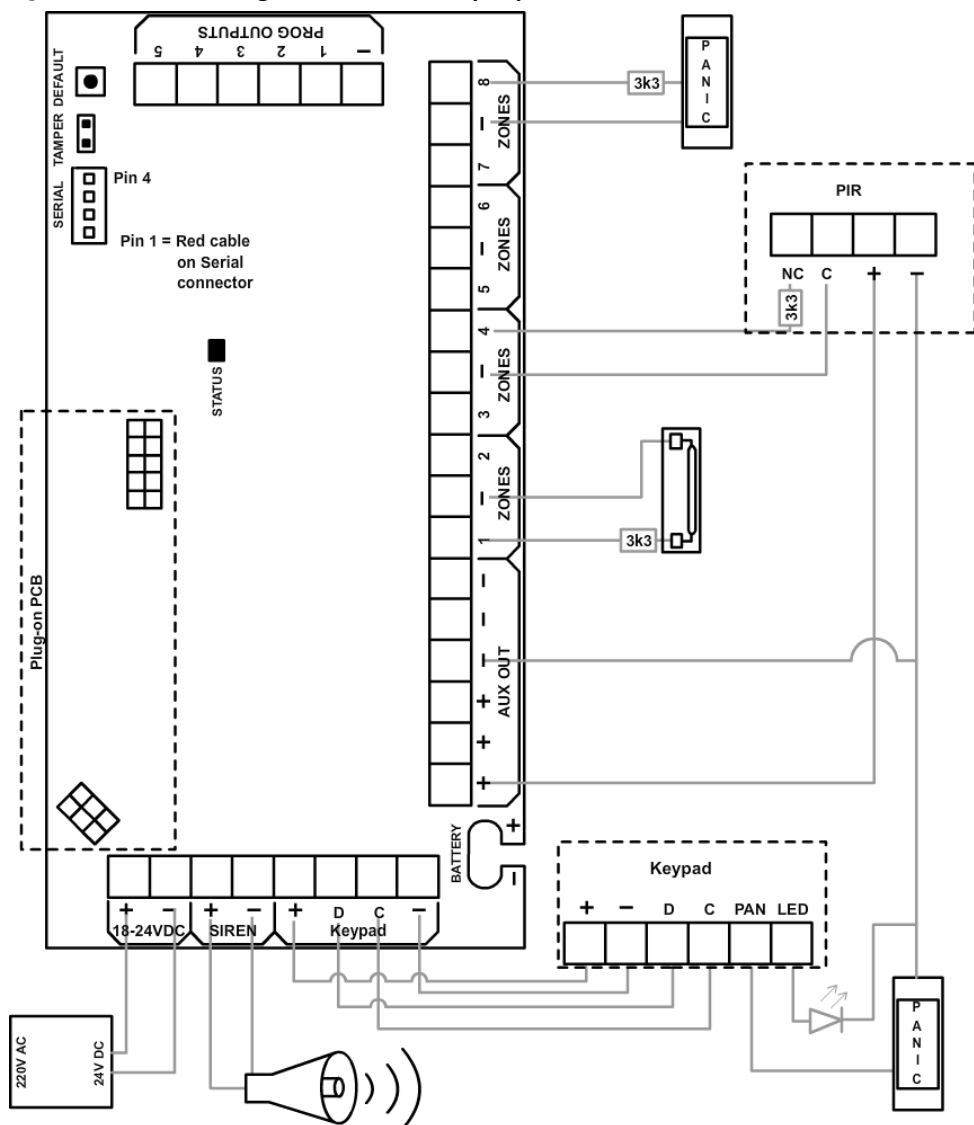
End-of-Line Resistors/Tamper per Zone

➢ All zones are end-of-line supervised. Any unused zones must also be terminated with the appropriate resistor.
➢ The end of line resistor should be placed inside or as close to the sensor as possible.
➢ If the zones are not programmed to report tamper by zone i.e. a **[0]** is programmed into location 11 then use the 3K3 end-of-line resistor.
➢ If the zones are programmed to report tamper by zone, the 4K7 and 12K end-of-line resistors should be connected as per Figure 3: Tamper per Zone Connection below. The 4K7 and 12K resistors are not included with the panel but may be obtained from your local distributor of IDS products.

Figure 3: Tamper per Zone Connection
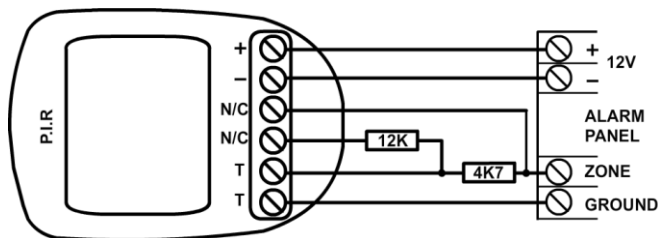
The operation of the tamper is as follows:
➢ If the panel is not armed and a tamper condition occurs, the siren will not sound but a tamper condition will be reported if programmed to do so in location 118.
➢ If the panel is armed and tamper condition occurs the alarm will register a zone violation and a tamper condition will be reported if location 118 is programmed.
➢ Regardless of whether the panel is armed or not, if a zone is programmed as a priority/panic zone, a tamper will register a panic condition as well as a tamper condition.
➢ If the tamper per zone is enabled, it affects all zones and therefore both end-of-line resistors must be connected in all zones. If the tamper facility is not used on a zone then the 12K resistor must be connected directly across the zone (i.e. between the zone input and ground) and the 4K7 resistor is used as the normal end-of-line resistor.
➢ The colour codes for the 12K and 4K7 resistors are as seen in Figure 3 below.

Figure 4: Resistors Used for Tamper per Zone
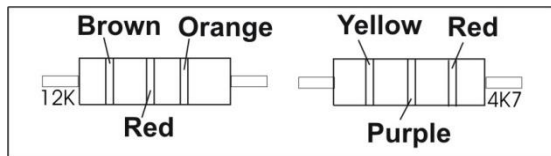
Programmable Outputs

A relay board must be used when any device requiring a high current is connected to a programmable output. The current sink and source capability is the same for outputs 1 to 5. Output maximum current is 80mA.

Remote Control Unit

A non-latching remote control receiver may be connected to any zone to allow remote arm/disarm capability and/or remote panic.

- ➢ If a remote control unit is used, a 3K3 resistor must be connected between the zone input and ground. (Use the 4K7 and 12K resistors if tamper per zone is enabled).
- ➢ Use a normally open, *non-latching* remote control unit. The remote receiver must provide a pulsed output.
- ➢ If using a Remote receiver, program the zone as an Arm/Disarm zone i.e. a value of **[5]** entered into the relevant location.
- ➢ If using a remote transmitter as a panic button, program the zone the receiver is connected to, as a Panic zone **[3]**.
- ➢ The panel will arm instantly (no entry/exit delay) when arming by means of an Xwave remote transmitter.
- ➢ The panel has an exit delay which can be enabled or disabled for a remote control triggering an arm/disarm zone (See location 12).

Additional Technical Data

- ➢ Use an IDS 24V 1.5A DC power supply.
- ➢ Use a 12V sealed lead acid or Gel battery, min. 7ah. The backup period after mains failure will depend on the number of keypads, sensors, and peripheral devices attached to the system. The current drawn by the panel and keypad (no indicators lit) excluding sensors is **40**mA.
- ➢ The panic zone provided on the keypad is not an end-of-line supervised zone and requires a normally open panic switch. If this zone is not used, leave the terminal open circuit.
- ➢ The box tamper is not end-of-line supervised.
- ➢ A door LED may be connected to the keypad. This LED will mimic the ARM LED on the keypad i.e. When the system is not armed the LED will be off. If the system is armed, the LED will be on and will flash if an alarm condition was registered while the system was armed. Note that the anode '+' of the LED connects to the LED terminal on the keypad and the cathode '-'of the LED is connected to the GND terminal. No series resistor is required.
- ➢ The siren output requires a self-driven 12-volt siren. The siren minus terminal is connected to ground. The positive terminal of the siren is connected to 12 volts via a relay during the siren period.
- ➢ 12V, 1A maximum auxiliary power output.

Hardware Reset Switch

In the event that the installer code is lost, it is possible to reset the panel to its factory default values using the hardware reset switch labelled 'DEFAULT' on the main PC board. Provided that the reset switch has not been disabled (see location 21), the panel may be defaulted by removing both battery and 24V DC power from the panel, and then reapplying the power (24V DC/battery) while depressing the switch. Factory default values will be restored to all locations.

NOTE:
If the default switch has been disabled, it is *only* possible to default the alarm, if a valid installer code is used and a value of **[0]** is entered into location 0.

Event Log

The 806 automatically keeps an internal log of all events which may be communicated through the onboard serial port to IDS compatible communication devices. 1000 of the most recent events will be retained in the non-volatile memory. Once the event log is "full", the oldest event will be overwritten by the most recent event. An event is logged regardless of whether the panel is programmed to communicate the event to the security companies control room.

The event log can only be retrieved by means of IDSwift 2 and an IDS serial to USB convertor (860-320-01) or via HYYP.

The 806 does not contain an onboard battery to maintain the clock time in the event of a total power failure (24V DC failure and discharged battery) therefore in the event of a total power failure time will be reset to the default time, until the time and date is corrected manually or via a HYYP communication device.

Download Code

A download code is used for download access. The default download code is **9999.** Via the downloading it is possible to set a location to either allow or disallow defaulting of the download code. The location is only accessible using IDSwift 2 software. If selected to allow defaulting of the download code, the download code will be defaulted to 9999 if the panel is defaulted.

Status LED

The status LED indicates two different statuses:
1. On = Alarm panel power is on and working correctly.
2. 2 second pulse = Power off and the Battery voltage is low.

NOTE:
When replacing the battery without the DC 24V input the system will power up in the low power mode and the keypads will be off. When the status LED starts flashing every 2 seconds press the default button to wake up the keypads and auxiliary devices.

Introduction

The panel may be programmed either using the keypad or using the IDSwift2 software. Programming the panel by means of the keypad is explained in the following sections of this manual. For information on programming the panel using IDSwift2 software refer to the manual pertaining to the software.

NOTE:

Before commencing the programming, it is advisable to read the Installer Manual thoroughly.

Location Values

To represent numbers above eight each zone is allocated a value and if more than one zone is illuminated then the allocated zone values are added together to reach the correct value. The table below indicates how these values may be read.

Table 1: Value Represented by Each Zone Indicator

Zone 1	1
Zone 2	2
Zone 3	4
Zone 4	8

To read a binary value on the keypad add the values represented by each lit LED. The total value is the number being represented e.g. assume the following zone indicators are on: Zone 1, Zone 3, and Zone 4. The value would be as shown in the table below.

Zone 1	1
Zone 3	4
Zone 4	8
Total	**13**

Table 2: Location Number Representation

Value	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Zone 1	●	✶	●	✶	●	✶	●	✶	●	✶	●	✶	●	✶	●	✶
Zone 2	●	●	✶	✶	●	●	✶	✶	●	●	✶	✶	●	●	✶	✶
Zone 3	●	●	●	●	✶	✶	✶	✶	●	●	●	●	✶	✶	✶	✶
Zone 4	●	●	●	●	●	●	●	●	✶	✶	✶	✶	✶	✶	✶	✶

● Off   ✶ On

Programming the Panel

➢ For all programming procedures:
  o The **[*]** (star) key functions as the enter key
  o The **[#]** (hash) key functions as a clear key to clear incorrect or unintended entries, as a backspace and to exit the programming mode.
➢ If an error has been made, i.e. an attempt is made to enter an illegal value or an incorrect series of keystrokes, the keypad will beep three times to indicate the error. The panel will automatically discard the invalid entry allowing the correct entry to be made without manually clearing the incorrect entry.

Procedure:
1. Ensure that the panel is not armed.
2. Press the **[#]** key (this will clear any previous or accidental entries) followed by the 4 digit **[INSTALLER CODE]** (the default installer code is 9999).
3. If the correct code has been entered, the green READY indicator will begin flashing.
4. Enter the **[LOCATION NUMBER]** of the program location that you wish to change. Location is displayed in binary (Table 2: Location Number Representation).
5. Press the **[*]** key. The READY indicator will continue flashing and the AWAY indicator will come on.
6. The zone LED's will now display the content of the selected program location in binary format (ref. Table 2: Location Number Representation).
7. If you wish to change the content of the location, enter the **[NEW VALUE]** followed by the **[*]** key. If you do not wish to change the location value, press the **[#]** key. The READY indicator will continue flashing and the AWAY indicator will turn off.
8. If the data value has been changed, the buzzer will give a long beep indicating that a valid entry has been stored.
9. Repeat steps 5-8 until all necessary locations have been programmed.
10. To exit from the programming mode, press the **[#]** key.

The READY indicator will stop flashing to indicate that the program mode has been exited.

Program Location Summary

Following is a detailed description of the functioning of each location and its options.

LOCATION 0:   **Defaulting Options**

Value	Action
0	Resets all locations to the factory default values as shown in the DEFAULT column in the programming list. All user codes will also be defaulted, and the master code will become 1234.
1	Will default the master user code to 1234 without defaulting the remainder of the user codes. All other information will remain unaltered.
2	Reset all reporting settings to factory default. (All enabled)
7	Restore all wireless locations to factory default

LOCATIONS 1-8:   **Zone 1 to 8 Characteristics**

Program locations 1 to 8 define the zone characteristics of each of the eight zones. Each zone can be programmed to function in one of eleven modes. Table 3 provides a location/zone cross-reference together with the default zone characteristics.

Table 3: Location/Zone Defaults

Location	Zone	Default	Zone Type
1	1	1	Entry/Exit
2	2	2	Follower
3	3	4	Audible Instant
4	4	4	Audible Instant
5	5	4	Audible Instant
6	6	4	Audible Instant
7	7	4	Audible Instant
8	8	3	Audible Priority

Table 4 provides a description of the different zone types that may be programmed into these locations i.e. a value of 3 programmed into location 5 would cause zone 5 to be an audible priority zone.

Table 4: Programmable Zone Types

Value	Zone Type
0	**DISABLED** The zone will be disabled. Violation of a disabled zone is ignored.
1	**ENTRY/EXIT** Violation of an Entry/Exit zone is ignored during the exit delay period of the arming procedure. Violating an Entry/Exit zone when armed initiates the entry delay. The entry delay programmed into location 20 and the exit delay programmed into location 18 will be used. Failure to exit through an Entry/Exit zone after arming will enable the stay mode. If a valid user code is not entered before the entry delay period expires, an alarm condition will be registered. The behaviour of this zone type during the exit delay period is affected by the value programmed into location 9.
2	**FOLLOWER** A Violation of a Follower zone will be ignored during the E*ntry/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 first. The behaviour of this zone type is affected by the value programmed into location 9.
3	**AUDIBLE PRIORITY/PANIC** Regardless of whether the panel is armed or not, a violation of an Audible Priority zone will cause the control panel to register an alarm condition and sound the siren.
4	**AUDIBLE INSTANT** If the panel is armed, the violation of an Instant zone will cause the control panel to immediately register an alarm condition. The behaviour of the siren will depend upon the value programmed into location 15. While the panel is unarmed, a violation of an Instant zone is ignored.
5	**ARM/DISARM** A violation of an Arm/Disarm zone will cause the panel to arm or disarm. To use this facility, connect a momentary key-switch or non-latching remote-control unit to this zone. The end-of-line resistor will still be required.
6	**SILENT PRIORITY** Regardless of whether the panel is armed or not, a violation of a Silent Priority zone will not cause the siren to sound but will report the appropriate code programmed into the relevant program locations to the central station.

7	**SILENT INSTANT** If the panel is armed, the violation of a Silent zone will cause the control panel to immediately register an alarm condition. The siren will not sound. While the panel is unarmed, the violation of a Silent Instant zone is ignored. This zone is not affected by the value programmed into location 15.	
8	**SECONDARY ENTRY/EXIT** The Secondary Entry Delay (see location 10) will be used when this zone is violated while the panel is armed. When entering the premises, and if a Secondary Entry/Exit zone is violated after a Primary Entry/Exit has been violated the panel will continue to countdown the Primary Entry Delay.	
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). A programmable output programmed as a fire detector power output (see location 37) will also be activated.	

LOCATION 9: **Entry/Exit Options (Default = 9)**

Value	Entry/Exit Zones Must be Clear	Follower Zones Must be Clear	Entry/Exit Delay Enabled
0 to 7	Instant Arm All zones must be clear		
8	●	●	✱
9	✱	●	✱
10	●	✱	✱
11	✱	✱	✱
12	●	●	✱
13	✱	●	✱
14	●	✱	✱
15	✱	✱	✱

✱ Enabled   ● Disabled

If the Entry/Exit delay is enabled, the panel can be programmed to allow arming with violated Follower and/ or Entry/Exit zones.

NOTE:
For all values programmed into location 9, the panel will only arm if the READY indicator is lit. If Entry/Exit zones must be clear is disabled, then the arming code will be able to arm while an entry/exit zone is violated but not the quick arm option or a remote.

LOCATION 10:	Secondary Entry Delay (Default = 5)

Value	Delay	Value	Delay	Value	Delay
0	0.25 seconds	6	2 minutes	12	18 minutes
1	10 seconds	7	3 minutes	13	21 minutes
2	20 seconds	8	4 minutes	14	24 minutes
3	30 seconds	9	5 minutes	15	27 minutes
4	45 seconds	10	10 minutes		
5	1 minute	11	15 minutes		

The secondary entry delay applies to the secondary Entry/Exit zone. If a primary entry zone is violated, the primary entry delay is activated. If a subsequent violation of a secondary Entry/Exit zone occurs, the panel will continue to count down the primary delay. If a valid user code is not entered during this period, an alarm condition will occur.

LOCATION 11:	Tamper per Zone Enabled (Default = 0)

Value	Action
0	Disabled
1	Enabled

See **End-of-Line Resistors/Tamper per Zone** above:

NOTE:
When enabled all zones will require tamper resistors

LOCATION 12:	Arming Options (Default = 1)

The **Quick Arm** option allows the user to arm the panel by holding down the **[1]** key until the keypad beeps. Using the quick arm key initiates an arming cycle as if a valid user code has been entered. User code 1 will be reported if the quick arm key is used.

The option '**Entry/Exit delay with arm zone'**, enables or disables entry/ exit delays when an arm zone is used to arm the alarm. See the User Manual for information pertaining to remote transmitter arming.

Forced Arming allows the panel to arm with violated zones e.g. an open window. Once the panel arms, a violated zone will bypass automatically. If a zone which has been automatically bypassed clears while the panel is armed, the zone will become active i.e. the window is pushed closed. Opening the window again will cause an alarm condition to be registered.

The **Engineer Reset** function determines whether the panel can be armed after an alarm condition has been registered. This can be used to force the customer to have the system inspected in the event of an alarm condition.

➢ If the function is enabled:

If an alarm condition occurs and a valid user code is entered, thereby disarming the system, a trouble condition will be indicated. Upon entering the Trouble mode (hold down **[7]**), the indicator for zone 8 is on indicating that the installers code must be entered to clear this condition before re-arming. To clear the engineer reset simply enter the program mode by entering a valid **[INSTALLER CODE]** followed by **[*]** followed by **[#]** to exit the program mode. The panel can now be armed.

➢ If the function is disabled:

The panel can be rearmed normally after an alarm condition has been registered. No trouble condition will be indicated.

Value	Quick Arm	Entry/Exit Delay with Arm Zone	Forced Arming	Engineer Reset
0	●	●	●	●
1	✱	●	●	●
2	●	✱	●	●
3	✱	✱	●	●
4	●	●	✱	●
5	✱	●	✱	●
6	●	✱	✱	●
7	✱	✱	✱	●
8	●	●	●	✱
9	✱	●	●	✱
10	●	✱	●	✱
11	✱	✱	●	✱
12	●	●	✱	✱
13	✱	●	✱	✱
14	●	✱	✱	✱
15	✱	✱	✱	✱

✱ Enabled   ● Disabled

LOCATION 13:	Stay Arm Options (Default = 0)

The stay mode allows the user access to certain pre-programmed "stay/bypassed" zones while the panel is armed. Zones that are programmed as stay zones (See Section 12 in the User Manual) will automatically be bypassed when the panel is armed into the stay mode. The **[5]** key will arm the panel in stay mode with no exit delay.

Value	Action
0	The Alarm Panel will automatically arm in the stay mode if the user arms and does not use the Entry/Exit zone (i.e. violation of an Entry/Exit zone).
1	The Alarm Panel will arm in the away mode even if no violation of an Entry/Exit zone occurs. The stay mode quick arm key (holding down **[5]** is also disabled.
2	The Alarm Panel will arm in the away mode even if no violation of an Entry/Exit zone occurs, however the stay mode quick arm key remains active.

LOCATION 14:	Silent Keypad Panic Options (Default = 0)

The value programmed into this location only affects the keypad panic.

Value	Action
0	Disabled (audible panic)
1	Enabled (silent panic)

LOCATION 15:	Silent Alarm Option (Default = 0)

If a zone is programmed as a Silent Instant zone, an alarm condition as a result of a violation of this zone would be silent regardless of the value programmed into this location.

Value	Action
0	Disabled (audible alarm)
1	Enabled (silent alarm)

LOCATION 16: **Siren Toot on Arm & Disarm (Default = 0)**

This option allows the user to confirm that arming has occurred with the siren giving a short beep after arming successfully, and two short beeps after disarming. This is recommended if a remote control or external key-switch is used.
NOTE:
The siren will *not* beep if the panel is stay armed or disarmed from the stay mode.

Value	Siren Toot on Arm	Siren Toot on Disarm
0	●	●
1	✶	●
2	●	✶
3	✶	✶

✶ Enabled   ● Disabled

LOCATION 17: **Siren Time Out Period (Default = 6)**

The siren time out period is the period for which the siren will sound after an alarm condition is registered. Select the time-out period required from the table below.

Value	Delay	Value	Delay	Value	Delay
0	0.25 seconds	6	2 minutes	12	18 minutes
1	10 seconds	7	3 minutes	13	21 minutes
2	20 seconds	8	4 minutes	14	24 minutes
3	30 seconds	9	5 minutes	15	27 minutes
4	45 seconds	10	10 minutes		
5	1 minute	11	15 minutes		

LOCATION 18: **Exit Delay Period (Default = 3)**

This is the period allowed for exiting before the panel arms. The exit delay begins after entry of a valid user code. During this period, it is possible to violate Entry/Exit and Follower zones without causing an alarm condition. Select the appropriate exit delay period from the table above.

Value	Delay	Value	Delay	Value	Delay
0	0.25 seconds	6	2 minutes	12	18 minutes
1	10 seconds	7	3 minutes	13	21 minutes
2	20 seconds	8	4 minutes	14	24 minutes
3	30 seconds	9	5 minutes	15	27 minutes
4	45 seconds	10	10 minutes		
5	1 minute	11	15 minutes		

LOCATION 19:	AC Fail and Restore Time (Default = 1)

If the AC power should fail, the panel will wait for this period before reporting the mains failure to the base station or logging the event to the event log. If the AC power is restored after the time out period has ended the same time out period will apply before the restoral event is reported and logged.

If the AC power is restored during the delay period neither the power failure, nor the power restoral will be reported or logged to the event log. This delay eliminates unnecessary reporting if the AC power to the panel is accidentally removed for a short period (provided the backup battery is in good condition, short AC power failures will not affect the functioning of the alarm system).

Select the appropriate value from the table above.

Value	Delay	Value	Delay	Value	Delay
0	1 minute	6	7 minutes	12	13 minutes
1	2 minutes	7	8 minutes	13	14 minutes
2	3 minutes	8	9 minutes	14	15 minutes
3	4 minutes	9	10 minutes	15	16 minutes
4	5 minutes	10	11 minutes		
5	6 minutes	11	12 minutes		

LOCATION 20:	Primary Entry Delay (Default = 3)

This is the period allowed to enter and disarm the panel before an alarm condition is registered. The entry delay begins after the violation of a primary Entry/Exit zone. During this period, it is permissible to violate Follower zones without causing an alarm condition provided that an Entry/Exit zone was violated first. If a Follower zone is violated without a prior Entry/Exit zone violation, it will be treated as an Instant zone. If an Instant zone is violated during this period, the alarm condition will immediately be registered. Select the appropriate value for the primary entry delay from the table below.

Value	Delay	Value	Delay	Value	Delay
0	0.25 seconds	6	2 minutes	12	18 minutes
1	10 seconds	7	3 minutes	13	21 minutes
2	20 seconds	8	4 minutes	14	24 minutes
3	30 seconds	9	5 minutes	15	27 minutes
4	45 seconds	10	10 minutes		
5	1 minute	11	15 minutes		

LOCATION 21:	Hardware Reset Switch Enable/Disable (Default = 15)

WARNING:
Make certain that the new installer code has been correctly entered before disabling the reset switch.

Value	Action
10	Disable
15	Enable

For the correct operation of this switch, refer to Section 8: Hardware Reset Switch.

LOCATION 22-38:	Programmable Output Controls

SEE: LOCATIONS 158 - 170 for Additional Programmable Outputs

These locations control the functioning of the 5 onboard programmable outputs. If a smoke detector, strobe light (or any other device requiring power) is connected to a programmable output, a relay board must be used to provide the high current.

Multiple events may be programmed to a single output. The output may be programmed to function as follows:
➢   Output pulsed for two seconds.
➢   Output may be latched high.
➢   Output may be latched low.

NOTE:
If multiple events are programmed to the same output, the last event to trigger will overrides previous events.

Table 6: Output Options

Programmable Output	Program Value		
	Pulsed	**Set Port High**	**Set Port Low**
Output 1	1	6	11
Output 2	2	7	12
Output 3	3	8	13
Output 4	4	9	14
Output 5	5	10	15

➢   The strobe and fire-detect outputs may only be programmed with **[0]** to **[5]** i.e. a pulsed output.

Table 7: Output Options Default Values

Loc.	Event	Value	Default Action
22	Alarm	2	Pulse prog. O/P 2
23	Audible priority	1	Pulse prog. O/P 1
24	Low battery	0	Disabled
25	Auto test	0	Disabled
26	Duress	1	Pulse prog. O/P 1
27	AC / 24V DC fail	0	Disabled
28	Close/Arm	8	Set prog. O/P 3 High
29	Open/Disarm	13	Set prog. O/P 3 Low
30	AC / 24V DC restore	0	Disabled
31	Cancel	0	Disabled
32	Fire	0	Disabled
33	Medical	0	Disabled
34	Strobe	0	Disabled
35	Tamper per zone	0	Disabled
36	Silent priority	1	Pulse prog. O/P 1
37	Fire detector power	0	Disabled
38	Chime	0	Disabled
39	Comms fail	0	Disabled

Programming Example

Program output No. 2 to report open and close, with close HIGH and open LOW:

It will be noted from Table 7 that output No. 2 is already assigned as the alarm output. This condition first needs to be disabled from output 2 before a new condition may be assigned otherwise CLOSE, OPEN and ALARM will all be programmed to Programmable Output 2. To do this a **[0]** should be programmed into location 22.

The location for a close instruction is location 28. From Table 6 it will be noted that a value of **[7]** programmed into this location will cause output 2 to go high. This output will remain high until the appropriately programmed value gives the instruction for this output to be set low. It will be noted that location 29 corresponds to an open condition. From Table 6 it will be noted that a value of **[12]** will drive output 2 low. Therefore, if a value of **[12]** is programmed into location 29 output 2 will be set low system is disarmed.
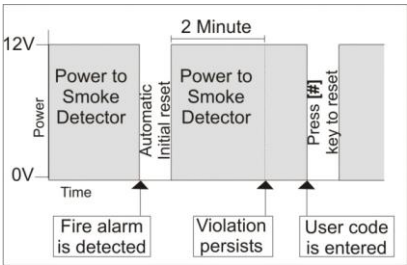
If an output is programmed as a strobe output, the output will follow the sequence illustrated in Figure 5: Strobe Output Sequence.

Figure 5: Strobe Output Sequence
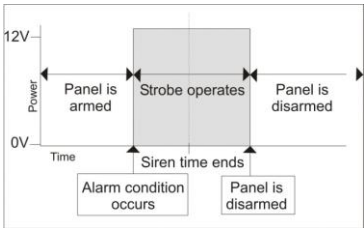
Similarly, a fire detect output follows the sequence illustrated below Figure 6: Fire Detect Output Sequence

Figure 6: Fire Detect Output Sequence

NOTE:

Since multiple conditions may be programmed to a single output, it is essential to ensure that no unwanted conditions are assigned to the same output.

LOCATION 43-46:	Account Code

The four-digit account code for the communicator is programmed into these locations. The panel is identified at the receiver by this account number.

➢ The account code *must* be four digits long. Any account number shorter than four digits *must* be preceded with "0"s.

The following table provides the conversion between the hexadecimal value and the value programmed into a location.

Numerical Value	0	1	2	3	4	5	6	7	8	9	11	12	13	14	15
Hexadecimal Value	0	1	2	3	4	5	6	7	8	9	B	C	D	E	F

Programming a primary communicator code into the 806 alarm:

Example 1: (805 method): The desired account code is 14 (i.e. 0014)

1. Enter **[0]** into location 43.
2. Enter **[0]** into location 44.
3. Enter **[1]** into location 45.
4. Enter **[4]** into location 46.

LOCATION 48:	DTMF Communication Number to be Dialed

Note: The DTMF dialler must not be connected to a telephone line!

This location contains a telephone number that must be dialled by the optional DTMF module to connect to the 3rd party communication transmitter connected. When the 3rd party communicator answers this with a "KISS-ON" tone, the panel will then send Contact ID packets to be reported to the security company.

To program the telephone number, enter the complete number into location 48. The telephone number can be up to 10 digits long. Values that can be entered are 0 to 9.

EXAMPLE:

If the communication device requires a dialed number of "1234".

- Enter installer mode, **9999**.
- Enter location **48***.
- Enter the complete number to be dialed, **1234***.
- Enter **#** to exit installer mode.

Deleting location 48, DTMF number to be dialed.

1. Enter installer mode, **9999**.
2. Enter location **48***.
3. Enter, **Mode 0***.
4. Enter **#** to exit installer mode.

LOCATION 64:	Dial Attempts (Default = 4)

Determines the maximum number of dial attempts the panel will make to contact communication device.
 NOTE: Entering [**0**] into this location will <u>disable</u> the DTMF module.
Values that can be entered: 0 to 6

LOCATION 65:	Delay between Dial Attempts (Default = 5s)

This location sets the time the panel would wait before dialling again if the previous attempt failed to contact the DTMF communication device and location 64 is set to 2 or more dial attempts.
Values that can be entered: 1 to 15.

Reporting

All reporting is done in contact ID format and all the following reporting locations are to enable or disable reporting.
Locations 80 to 132 require either:
0 = Disable reporting   1 = Enable reporting

LOCATION 80:	**Duress Reporting (Default = 1)**

This location will enable a duress to be reported if the panel is disarmed using the duress code (User 15 is the duress code – see the User Manual).

LOCATION 82:	**Keypad Panic Reporting (Default = 1)**

When enabled a keypad panic will be reported if the panic button **[P]** on the keypad is pressed and held for 3 seconds.

LOCATION 84:	**Keypad Tamper Reporting (Default = 1)**

A keypad tamper will be reported if multiple attempts are made to disarm the panel using the wrong user code. The keypad tamper will be reported after 16 incorrect keystrokes i.e. four incorrect user codes.

LOCATION 86-100:	**Zone Reporting (Default = 1)**

Zone reporting will take place if a violation of a zone causes an alarm condition. Various conditions will apply as to when an alarm condition will be registered. Conditions are determined by the zone characteristics as programmed into locations 1 to 8.

Locations	Reporting Code		Locations	Reporting Code
86	Zone 1		94	Zone 5
88	Zone 2		96	Zone 6
90	Zone 3		98	Zone 7
92	Zone 4		100	Zone 8

LOCATION 102:	**AC Fail Reporting (Default = 1)**

The AC fail will only be reported if the AC power is lost for a period longer than the delay programmed into location 19.

LOCATION 104:	**AC Restoral Reporting (Default = 1)**

The AC restoral will be reported if the AC power was lost for a period longer than the delay programmed into location 19 and only after the AC power has been restored for the same period.

LOCATION 106:	**Siren Tamper Reporting (Default = 1)**

The siren tamper condition will be reported if the siren wire is open or short circuited.

LOCATION 108:	**Arm & Away Arm Reporting (Default = 1)**

The close code will be reported when the system is armed in the AWAY mode indicated by lit ARMED and AWAY LED's on the keypad.
NOTE:
- If the system is armed using the quick arm "AWAY" key, the system will report a close by user 1.
- If the system is armed by means of a remote using an arm/disarm zone the system will report, close by user 13.

LOCATION 109:	Disarm Reporting (Default = 1)

A disarm will be reported when the system is disarmed.

NOTE:

- Disarm will not be reported if the system was armed in the stay mode.
- If the system is disarmed by means of a remote using an arm/disarm zone the system will report open by user 13.

LOCATION 110:	Stay Arm Reporting (Default = 1)

A stay arm will be reported when the system is armed in the stay mode indicated by a lit Stay Armed icon on the keypad.

LOCATION 111:	Auto Test Reporting (Default = 1)

An auto test will be reported at regular intervals as programmed into location 147.

LOCATION 113:	Keypad Fire Reporting (Default = 1)

A fire will be reported, if the fire button **[F]** on the keypad is pressed until the keypad beeps (approximately 1 second).

LOCATION 115:	Keypad Medical Reporting (Default = 1)

A medical emergency will be reported if the medical button **[M]** on the keypad is pressed until the keypad beeps repeatedly (approximately 1 second).

LOCATION 117:	Bypassed Zone Reporting (Default = 1)

A zone bypass message will be reported if the panel is armed with a bypassed zone.

LOCATION 118:	Tamper Zone Reporting (Default = 1)

The zone tamper message will only be reported if the zone tamper function has been enabled, see location 11.

LOCATION 119:	Zone Shutdown Reporting (Default = 1)

The zone shutdown message will be reported if the system is armed and a zone is automatically bypassed as a result of multiple violations of that zone while the panel is armed. The number of permissible violations is dependent on the value programmed into location 140.

LOCATION 120:	Cancel Reporting (Default = 1)

If the siren is sounding and the siren is cancelled by either a valid user code or remote, a cancel message will be reported. A silent alarm or silent panic will not cause the cancel code to be reported.

LOCATION 121:	Zone Restoral Reporting (Default = 1)

If the panel is armed and a violation of a zone occurs followed by the zone returning to the normal (non-alarm) state, a zone violation followed by a zone restoral will be reported. The zone restoral message indicates that the zone has returned to the ready condition.

Note:

This location affects all zones

LOCATION 122:	Download Complete Reporting (Default = 1)

This message will be sent once a successful download to a panel has been completed.

LOCATION 124:	DTMF Fail Reporting (Default = 1)

This code will be sent if telephone line monitoring is enabled and the line voltage drops below 9V. A failure condition will be logged in the event log and if armed in the away mode the siren will sound.

NOTE:

A TLM failure indicates that the telephone line is either not functional or not present. This reporting option should only be used in conjunction with a radio linked to the dialler.

LOCATION 126:	DTMF Restore Reporting (Default = 1)

This code will be sent once the line voltage has been restored.

LOCATION 128:	Low Battery Reporting (Default = 1)

The low battery condition will be reported if the battery voltage drops below 11.2 volts or when a battery test is executed, and a battery is not detected.

LOCATION 130:	Low Battery Restoral Reporting (Default = 1)

This message will be sent once the battery voltage has been restored. The battery voltage has to rise to above 11.9V for the panel to register a restoral.

LOCATION 132:	Box Tamper Reporting (Default = 1)

A box tamper will be reported if the tamper switch goes open circuit.

LOCATION 136 - 139:	Installer ID Code (Default = 9999)

The installer's ID code is used by the installer to enter the program mode. This may be changed by entering a new 4-digit code into these locations.

LOCATION 140:	Swinger Shutdown Count Value (Default = 0)

Determines the number of times a zone may be violated during an arm cycle before it is automatically bypassed. The count will be twice the value entered. The maximum value of 15 may be entered, corresponding to 30 violations required to force the zone to bypass. Disable swinger shutdown by entering **[0]** in this location.

LOCATION 141:   **Zone Loop Response**

Value	Action		Value	Action	
0	Response time	- 100ms	8	Response time	- 96ms
1	Response time	- 12ms	9	Response time	- 108ms
2	Response time	- 24ms	10	Response time	- 120ms
3	Response time	- 36ms	11	Response time	- 132ms
4	Response time	- 48ms	12	Response time	- 144ms
5	Response time	- 60ms	13	Response time	- 156ms
6	Response time	- 72ms	14	Response time	- 168ms
7	Response time	- 84ms	15	Response time	- 180ms

The zone loop response is the period of time for which the zone must be violated before a violation is registered. A value of **[0]** provides a loop response time of 100ms.

LOCATION 142:   **Zone Trip Count (Default = 0)**

This feature is to prevent false alarms while the panel is armed. If the panel is armed and a Follower zone is violated the number of times programmed into this location within the time period programmed into location 143, then an alarm condition will be registered. Program a value from **[0]** to **[15].** A **[0]** will disable the location. Please note that this only applies to Follower zones and Instant zones remain instant.

LOCATION 143:   **Zone Trip Count Time Delay (Default = 0)**

This time delay period applies to location 142. If the panel is armed and the number of violations programmed into location 142 occurs within this time delay, an alarm condition will register. Program a value from **[0]** to **[15].** Multiply the value of the entry by 10 seconds to calculate the delay time.

LOCATION 144:   **Programmable Trouble Display 1**

Value	Display of DTMF Module Fail	Display of Siren Tamper
0	●	●
1	✱	●
2	●	✱
3	✱	✱

     ✱ Enabled   ● Disabled

This location determines if the DTMF module failing and siren tampers are displayed as trouble conditions. Should the display be disabled no trouble condition will be shown i.e. the power LED will not flash and no trouble condition shown when entering trouble-viewing mode. However, reporting codes, if programmed, will be reported.

	LOCATION 145:	Programmable Trouble Display 2	

Value	Display of Comms. Fail	Display of Keypad Tamper	Display of Eng. Reset
0	●	●	●
1	✶	●	●
2	●	✶	●
3	✶	✶	●
4	●	●	✶
5	✶	●	✶
6	●	✶	✶
7	✶	✶	✶

✶ Enabled   ● Disabled

This location determines whether a communication fail via the DTMF module, keypad tamper, or engineers reset are displayed as trouble conditions. Should the display be disabled no trouble condition will be shown i.e. the power LED will not flash and no trouble condition shown when entering trouble-viewing mode. However, reporting codes, if programmed, will be reported.

NOTE:
- ➢ Low battery and AC fail trouble condition displays cannot be disabled.
- ➢ If Engineer reset is enabled (see location 12), but the trouble condition display is disabled, the panel will not show a trouble condition if an alarm condition has been registered but the system will not arm until an Installer code has been entered.

	LOCATION 146:	Keypad Sleep Delay	

Value	Delay		Value	Delay		Value	Delay
0	Disabled		6	96 seconds		12	192 seconds
1	16 seconds		7	112 seconds		13	208 seconds
2	32 seconds		8	128 seconds		14	224 seconds
3	48 seconds		9	144 seconds		15	240 seconds
4	64 seconds		10	160 seconds			
5	80 seconds		11	176 seconds			

This location programs the period of time that the keypad's backlighting will remain on without activity. **[0]** disables this function resulting in constantly lit keys. The location can have a value from **[0]** to **[15].**

LOCATION 147:	Auto Test Delay

Value	Action
0	Reports every 24 hours
1	Reports every 48 hours
6	Reports every 7 days i.e. once a week

The time period between auto test reports is programmed using this location. The time period is incremented in 24-hour increments with the shortest time period being 24 hours.
The maximum value which may be programmed into this location is 6

LOCATION 149:	Keypad Buzzer Options

Value	Action
0	No beep
1	Beep on trouble

The keypad can be programmed to beep intermittently (on/off) to provide an audible indication of a trouble condition. The beeping can be silenced by pressing **[#]**. For a list of trouble conditions refer to the section headed "**Trouble Condition Summary**" on pg 38.

LOCATION: 150:	Enable DTMF Module, Siren & Box Tamper Monitoring

Value	DTMF Line Monitoring	Siren Tamper Monitoring	Box Tamper Monitoring
0	●	●	●
1	✳	●	●
2	●	✳	●
3	✳	✳	●
4	●	●	✳
5	✳	●	✳
6	●	✳	✳
7	✳	✳	✳

✳ Enabled   ● Disabled

This location allows the permanent enabling/ disabling of DTMF Module line, box and siren tamper monitoring and if any of the tampers occur and monitoring is enabled, the tamper will be reported.

LOCATION 158-165:	Programmable Output Controls - Zones

SEE LOCATIONS 22 - 44 and TABLE 6

Loc.	Event	Value	Default Action
158	Zone 1 output	0	Disabled
159	Zone 2 output	0	Disabled
160	Zone 3 output	0	Disabled
161	Zone 4 output	0	Disabled
162	Zone 5 output	0	Disabled
163	Zone 6 output	0	Disabled
164	Zone 7 output	0	Disabled
165	Zone 8 output	0	Disabled

A programmable output will be activated when a zone is violated.

LOCATION 166:	Low Battery Restoral PGM (Default = 0)

This output will be triggered once the battery voltage has been restored i.e. the voltage risen to above 11.9V.

LOCATION 167:	DTMF Fail Programmable Output (Default = 0)

The output will trigger once the DTMF line monitoring is enabled and the line voltage drops below 9V for more than 10 seconds.

LOCATION 168:	DTMF Restore Programmable Output (Default = 0)

The output will trigger once the DTMF line voltage has been restored to 9V for more than 10 seconds.

LOCATION 169:	Siren Tamper PGM (Default = 0)

The siren tamper output will be triggered if the siren wire is open or closed circuited.

LOCATION 170:	Box Tamper PGM (Default = 0)

The box tamper output will be triggered if the panel box is opened.

LOCATION 196:	HYYP Pairing

This location pairs the 806 to the HYYP communication device if one is connected via serial or plugged into the onboard plug-on port. See Figure 2: Connection Diagram - without tamper per zone**.**

To pair the 806 with a HYYP unit:

1. Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2. Enter **[LOCATION NUMBER]** e.g. 196 followed by **[*].**
3. Enter **[1][2][3][4][5][6] [*]** and the 806 will pair with the HYYP Unit.
4. Press **[#]** to exit.

Wireless Zones

All 8 wired zones can be configured into wireless zones.

NOTE:

Any wired zones that are changed into wireless zones will no longer work as wired zones so if a wired detector is connected it no longer will violate that zone.

LOCATION 260:	**Xwave Wireless Add, Delete & Signal Strength**

This location is used to; Add, delete and view the signal strength of a detector.

To Add, View or change values in these locations:

5. Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
6. Enter **[LOCATION NUMBER]** e.g. 260 followed by **[*].**
7. The zones with LEDs that are on have Xwave wireless devices configured and all other zones do not.
8. Enter the **[Zone Number] [*]** to learn a wireless detector into and all LED's will be off and ready to receive the new Xwave devices serial number.
9. Tamper the Xwave device. (See the detector manual for tamper information.)
10. The keypad will beep to indicate serial number receipt from Xwave detector and the zone LEDs will indicate signal strength. (Please make sure signal strength is "Acceptable", see table below.
11. Press **[*]** to save the Xwave device into the zone.

Table 5: Signal Strength Explanation

Zones	Definition
8	Extremely weak move detector and try again
8, 7	Extremely weak move detector and try again
8, 7, 6	Very weak move and try again
8, 7, 6, 5	Acceptable
8, 7, 6, 5, 4	More Acceptable
8, 7, 6, 5, 4, 3	Good
8, 7, 6, 5, 4, 3, 2	Better
8, 7, 6, 5, 4, 3, 2, 1	Best

Checking Signal Strength:

1. Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2. Enter **[LOCATION NUMBER]** e.g. 260 followed by **[*].**
3. The zones with LEDs that are on have Xwave wireless devices configured.
4. Enter the **[Zone Number]** followed by **[*]** to check the signal strength.
5. Tamper the Xwave device.
6. The zone LEDs will indicate signal strength. (Please make sure signal strength is "Acceptable" or better, see signal table above.
7. Press **[#]** to exit the zone and return to location 260.

Deleting a Wireless Zone:
1. Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2. Enter **[LOCATION NUMBER]** e.g. 260 followed by **[*].**
3. The zones with LEDs that are on have Xwave wireless devices configured.
4. Enter the **[Zone Number]** you want to delete followed by **[*].**
5. Enter **[1][0]** followed by **[*]**.
6. The keypad will beep to indicate the wireless device has been deleted.
7. Press **[#]** to exit location 260.

LOCATION 261:	Xwave Wireless Zones Supervision Time (Default = 2)

Each Xwave wireless detector is supervised therefore each wireless detector has to contact the 806 alarm panel after a set time. This setting is a global setting and affects all wireless zones.

How to set or change the supervision time:
1. Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2. Enter **[LOCATION NUMBER]** e.g. 261 followed by **[*].**
3. Enter the **[Supervision Option]** for time required for each detector followed by **[*]**.
    a. Supervision options:
        i. Zone 1 = 3 hours
        ii. Zone 2 = 24 hours
4. Press **[#]** to exit location 261.

Set System Time, Auto Test Time, Automatic Arm Time

All time values must be entered as a 4-digit value in hours and minutes in a 24-hour format i.e. 1.00pm is entered as 1300. To view and change values in these locations:
1. Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2. Enter **[LOCATION NUMBER]** e.g. **[800]** followed by **[*].**
3. The value displayed by the LED's will be the hour value.
4. Press **[*]** and the LED's will display the minutes value.

It is necessary to display the hours and minutes separately as it is not possible to display 4 digits on the keypad simultaneously.

LOCATION 800:	System Time (Default = 0010)

This location is used for setting the system clock time.

To change values in this location:
1. Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2. Enter **[800]** followed by **[*].**
3. Enter the time in 24Hr format **[1346]** followed by **[*]**.
4. Press **[#]** to exit.

LOCATION 801:	Auto Test Time (Default = 0010)

This location is used for setting the time of day at which the auto test will be reported.

1.   Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2.   Enter **[801]** followed by **[*].**
3.   Enter the time in 24Hr format **[1400]** followed by **[*]**.
4.   Press **[#]** to exit.

EXAMPLE:

If a value of 6 was programmed into location 147 and 1400 was programmed into location 801, the auto test would be sent every seven days at 2:00pm.

LOCATION 802:	Auto Arm Time (Default = 9999)

This location sets the time at which the panel will automatically arm every day (if enabled).

NOTE:

The auto arm feature is disabled by entering an invalid time greater than 2400 e.g. 9999.

1.   Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2.   Enter **[802]** followed by **[*].**
3.   Enter the time in 24Hr format **[1846]** followed by **[*]**.
4.   Press **[#]** to exit.

LOCATION 803:	Date (Default = 000000)

This location is to set the date manually for the event log to track events. The format is **DDMMYY**. When the system powers up from a complete shut down due to power loss the default date will be 000000.

1.   Enter programming mode by entering a valid **[INSTALLER CODE]** followed by **[*]**.
2.   Enter **[803]** followed by **[*].**
3.   Enter the time in 24Hr format **[110519]** followed by **[*]**.
4.   Press **[#]** to exit.

NOTE: If any of HYYP GSM or IP/WIFI modules are connected the time and date will be automatically updated.

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Arm/Disarm	**[#]** + **[USER CODE]**
Quick Away Arm	Hold down **[1]** for 1 second
Quick Stay Arm	Hold down **[5]** for 1 second
Quick Stay Arm & Go	Hold down **[6]** for 1 second
Panic	Hold down **[P]** for 1 second
Fire	Hold down **[F]** for 1 second
Medical Emergency	Hold down **[M]** for 1 second
Alarm Memory	Hold down **[0]** for 1 second
Change Stay Profile	**[MODE]** + **[9]** + **[PROFILE NUMBER]** + **[*]**
Bypass a zone	**[*]** + **[ZONE NUMBER]**
Program chime zone	Hold down **[2]** for 1 second + **[ZONE NUMBER]** + **[*]**
Program stay zone	Hold down **[3]** for 1 second + **[ZONE NUMBER]** + **[*]**
Program buzz zone	Hold down **[4]** for 1 second + **[ZONE NUMBER]** + **[*]**
View Trouble Status	Hold down **[7]** for 1 second
Duress	**[#]** + **[DURESS CODE]**

Trouble Condition Summary

The table below indicates the trouble conditions. Hold down **[7]** to view the trouble status.

Table 10: Trouble Conditions

Indicator	Trouble Condition	
1	Wireless Zone Trouble (To see more information enter [1][*] Zone LEDs will show which wireless zones are in trouble, enter [Zone] followed by [*] to see trouble indicator). **** No zone LEDs on, indicates a signal jamming condition ****	
	Zone	**Trouble Description**
	1	Wireless detector battery low
	2	Supervision fail
	3	Tamper occurred
2	Failure to communicate to monitoring company	
3	Mains power failure	
4	Low alarm system battery	
5	DTMF Line Fault	
6	The siren wire has been cut or the fuse has blown	
7	Keypad has experienced a tamper	
8	Installers code must be entered to clear an alarm condition	

Warranty

Inhep Electronics Holdings (Pty) Ltd guarantees all IDS Control Panels against defective parts and workmanship for 24 months from date of purchase. Inhep Electronics Holdings shall, at its option, repair or replace the defective equipment upon the return of such equipment to any Inhep Electronics Holdings branch. This warranty applies ONLY to defects in components and workmanship and NOT to damage due to causes beyond the control of Inhep Electronics Holdings, such as incorrect voltage, lightning damage, mechanical shock, water damage, fire damage, or damage arising out of abuse and improper application of the equipment.

NOTE: Wherever possible, return only the PCB to Inhep Electronics Holdings Service Centres.

Returning the enclosure is not necessary for warranty replacements of the electronics

The **X-Series Products** are a product of **IDS (Inhep Digital Security)**
and is manufactured by
Inhep Electronics Holdings (Pty) Ltd

WARNING
For safety reasons, only connect equipment with a
telecommunications compliance label. This includes
customer equipment previously labeled permitted
or certified.

**This is a professional product, and due
to the nature of the product, should only be installed
by an accredited professional Alarm Installer.**

Help Desk Number: 0860 705137*
*Please note that this is NOT a toll free number

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