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Alertex

Wireless Critical Alert System

- NXISB / NXESB
- NXICSB / NXECSB

Internal and External Wireless Sounders with optional Call-Points for Fire Alert and Lockdown

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Important Notes

1. The Alertex system requires a 6 minute rest period after activation or test due to this being a wireless system
2. Units are set to NOT be Call Repeaters by default. On larger sites, it is recommended that at least one unit is set to Call Repeat
3. After the Alertex system is reset from a Master unit, the initially activated call-point will still continue to flash and needs to be physically reset using the black plastic key that comes supplied inside the unit
4. On very large sites, the Master unit may need to be used more than once to fully reset the system. In this case, wait for 1 minute after the initial reset request has been sent and perform the reset action again
5. Please take care when removing the lid of the Alertex unit as excessive force may disconnect the wires from the sounder or annunciator / beacon
6. Please take care when removing the top of the sounder or annunciator / beacon to change the sound pattern or volume as excessive force my disconnect the wires within the unit

To initiate a silent test:

1. Insert the silver master key into a ALERTEX master unit
2. Turn the key clockwise for 10 seconds until the LED lights and then return it anticlockwise to the neutral position
3. Wait until the LED on the callpoint starts to flash once a second. The system is now in silent test mode
4. Activate a call point. This can be the one on the master unit or any other callpoint on the system
5. All the beacons on the system will now flash
6. Reset the call point that was activated by using the plastic cross key
7. After a while the beacons will turn off. Wait until all beacons are off
8. Wait until the LED on the master unit or other callpoints returns to flashing once a second. This will take a minute or so
9. When the LED returns to flashing once a second another callpoint can be tested
10. To test another call point go back to number 6
11. To take the system out of silent test mode turn master unit key clockwise for 3 seconds and return to the neutral position
12. Wait for the LED on the master unit to go out. The system is now operating normally

How to Stop and Reset the Alarm

After the system has been activated, you need to use a Alertex Master unit to reset it:

1. Insert the silver master key provided into a Alertex master unit
2. Turn the key clockwise for 3 seconds and then return it to the neutral position
3. All units on the same site will begin to reset
4. Depending on the size of the site, the system may require an additional reset. In this case, wait 3 minutes and then reset the system from the master unit again

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System Overview

Alertex is a wireless critical alert system that comprises a combination of master and slave units that work together to create a mesh network. Up to 64 units can operate together per site and each unit is totally wireless and battery-powered. Each unit has the ability to act as a repeater and can relay the transmission up to 16 times outside the initial wireless range in order to navigate large or difficult sites.

Alertex can be used as a standalone system or can be monitored and controlled from one centralised location by incorporating a Genesis IP Masthead Receiver, allowing the use of the Alertex PC App.

When a Alertex call-point, keyfob or smoke/heat detector is activated, the Alertex sounder and annunciator units will sound an alert and flash a beacon light. Sounder units can play one of 32 different alert sounds, and annunciator units can play a standard lockdown message or a bespoke lockdown message that is chosen at the time of ordering.

Master Units

Every Alertex system requires at least one Master unit per site. The Master unit allows the system to be reset post-activation, as well as to be silently tested. Without a Master unit, the Alertex system cannot be reset. The Master unit comes with a reset key which should be kept in an easily accessible place to authorised staff members.

Slave Units

Alertex Slave units will be activated after a call-point is pressed, and will relay the wireless transmission across the Alertex mesh network. Most Alertex units act as repeaters and have up to a 1km wireless transmission range. The wireless transmission can 'hop' up to 16 times to units that are out of the initial 1km wireless transmission zone, giving the system a maximum potential range of 16km line of sight. Alertex call-points only, keyfobs, and smoke and heat detectors do not act as repeaters.

Quick Start

1. Remove the lid using a screwdriver to undo the push and quarter-turn screws
2. Taped inside the lid you will find a black plastic reset key (for units with a fitted call-point) along with the power jumper (JP2). The black reset key is used for resetting the call-point post-activation but does not reset the entire Alertex system
3. Insert the Lithium D cell batteries into the battery holders. Polarity is displayed on the PCB board, with positive facing towards the aerial at the top of the unit
4. Connect the JP2 jumper to the pins on the left-hand side of the PCB board
5. The LED screen will light up with 'HI' to indicate that it is powered on
6. You can set-up the units easily using the buttons underneath the LED screen (see page 6 for details)
7. Replace the lid and tighten the screws

No	Sound Frequencies & Patterns	Code	Description
1	800 Hz to 950 Hz swept at 120 Hz	DDDDD	Banshee Buzz LF
2	800 Hz to 950 Hz swept at 9 Hz	UDDDD	Banshee Fast Sweep LF
3	800 Hz to 950 Hz swept at 3 Hz	DUDDD	Banshee Slow Sweep LF
4	Continuous at 900 Hz	UUDDD	Banshee Continuous LF
5	830 Hz to 970 Hz swept at 9 Hz	DDUDD	Banshee Fast Sweep LF (New)
6	830 Hz to 970 Hz swept at 1 Hz	UDUDD	Medium Sweep LF
7	Continuous at 950 Hz	DUUDD	Continous LF
8	Intermittent at 950 Hz 1 sec on, sec off	UUUDD	Back Up Alarm LF
9	Alternating 800Hz/100 Hz at 1 Hz	DDDUD	Alternate LF
10	800 Hz to 100 Hz swept at 0.5 sec	UDDUD	Medium Sweep LF
11	Alternating Tones 800Hz/950 Hz at 3 Hz	DUDUD	Alternate LF
12	2400 Hz to 2900 Hz at 120 Hz	UUDUD	Banshee Buzz HF
13	2400 Hz to 2900 Hz at 9 Hz	DDUUD	Banshee fast Sweep HF
14	2400Hz to 2900 Hz at 3 Hz	UDUUD	Banshee Slow Sweep HF
15	Continuous 2900 Hz	DUUUD	Banshee Continuous HF
16	2450 Hz to 3100 Hz swept at 9 Hz	UUUUD	Banshee Fast Sweep HF (New)
17	Intermittent at 2900 Hz 1 sec on, 1 sec off	DDDDU	Back Up Alarm HF
18	Alternating Tones 2400Hz/2900 Hz at 3 Hz	UDDDU	Alternate HF
19	500 Hz rising to 1200 Hz over 3.5 sec, silence 0.5 sec	DUDDU	Slow Whoop
20	1200 Hz falling to 500 Hz over 1 sec, silence 10mS	UUDDU	Din Tone (DK)
21	554 Hz for 100 mS and 440 Hz over 1 sec, silence 10mS	DDUDU	French Fire Sounder
22	420 Hz reapeting 0.625 sec on, 0.625 sec off	UDUDU	Australian Alert Signal
23	500 Hz to 1200 Hz sweeping 3.75 secs on, 0.25 secs off	DUUDU	Australian Evacuation Signal
24	950 Hz for 0.5 sec on, 0.5 sec off for 3 phases, silence for 1.5 secs	UUUDU	US Temporal Tone LF
25	2900 Hz for 0.5 sec on, 0.5 sec off for 3 phases, silence for 1.5 secs	DDDUU	US Temporal Tone HF
26	Intermittent 660 Hz 150 mS on, 150 mS off	UDDUU	Swedish Tone (Fire)
27	Continuous 660 Hz	DUDUU	Swedish Tone (All Clear)
28	Intermittent 970 Hz 500 mS on, 500mS off	UUDUU	ISO8201 LF
29	Intermittent 2900 Hz 500 mS on, 500mS off	DDUUU	ISO8201 HF
30	Yodel 800 Hz /100 Hz, 0.25 sec	UDUUU	BT Banshee (FP1063.1)
31	Continuous 100 Hz	DUUUU	BT Banshee (FP1063.1)
32	Bell Tone	UUUUU	Bell Tone

*** U = Up, D = Down** ****Sound table for Vimpex Sounders**

Initiate a Silent Test

*Only Master units can initiate Silent Tests across the Alertex system

**Please note that Annunciator units cannot initiate a silent test

Change the Sounder Volume and Pattern

On Sounder variants, the sound volume and sound pattern can be adjusted using the dip-switches on the back of the sounder. On Annunciator variants, only the sound volume can be adjusted. Sound files for the Annunciator must be provided at the time of ordering and cannot be changed once the unit has been sent out.

Adjusting the Volume

Unscrew the sounder beacon. You will see 8 dip switches. Switches 1 to 5 are concerned with the alert sound and switches 7 and 8 are to adjust the volume

- When both switches are in the UP position this is the maximum sound level
- Switch 7 UP and switch 8 DOWN will reduce the sound by 10 decibels
- Switch 7 DOWN and switch 8 UP will reduce the sound by 20 decibels

Changing the Sound

There are 32 different sounds to choose from and you can adjust these using dip switches 1 to 5. All 5 switches DOWN will give you the regular banshee sound. All 5 in the UP position gives a bell tone. Here is a full list of all 32 variants.

How to Program the Unit

Name	Range	Default	Description
SI	1 - 32	1	Site Number
SU	1 - 8	1	Subnet Number
Un	1 - 64	1	Unit Number
Cr	0 / 1	0	Call Repeater: 1 = Enabled, 0 = Disabled
CP	3 - 99	99	Call Period: Value increases in 1 minute increments up to 50 minutes. After 50 minutes, value increases in 5 minute increments, ie. 55, 60, 65, etc.
MU	0 / 1	0	Master Unit: 1 = Enabled, 0 = Disabled
SP	0 / 1	1	Serial Port: 1 = Enabled, 0 = Disabled (not used)
ts	0 - 30	10	Time Set: Values in minutes (0 means infinite)

Site Number

Site codes separate one site from another. The site is the area covered by all the Alertex units on one system. Choose a number between 1 and 32 and set this on all units in the system. Nearby units will be detected by the system but as long as they are on a different site code, they cannot active your system.

Subnet

Currently Alertex is set to default subnet 1. This is a future feature which is not currently used and should be left on the default setting.

Unit Number

Unit numbers identify individual Alertex units on the site. There are 64 unit numbers available which is the maximum number of Alertex units per site. If an IP Masthead is used with the system then this must have the

same site number. Although it cannot be set with a unit number, it counts as one of the 64 units and reduces the total available units to 63.

Call Repeat

Enables or disables which units can act as a repeater to relay the wireless transmission across longer distances. Call repeating is disabled by default and should only be enabled on units that are required to create a larger mesh network as battery life is affected. Alertex sounder or annunciator / beacon units have a wireless transmission range of up to 1km. Units set to call repeat can relay the transmission up to 16 times out of the initial 1km radius, providing a maximum line of sight transmission range of up to 16km.

Call Period

Determines how frequently the units will check in with the IP Masthead to give their status and provide updates such as low battery or poor signal notifications. The frequency of the call period can be set from 3 to 99 minutes and is set to 99 minutes by default. From 3 to 50 minutes, the value can be increased and decreased in 1 minute increments (ie. 4, 5, 6, 7, etc...). From 50 to 99 minutes, the value can be increased and decreased in 5 minute increments (ie. 55, 60, 65, etc...). More frequent call periods can affect the battery life of Alertex units.

Master Unit

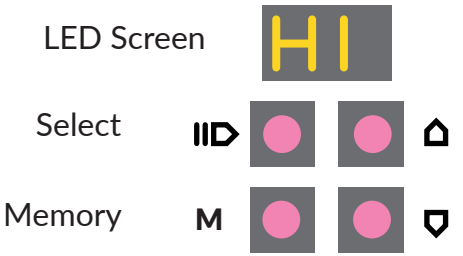
Enables or disables which units are identified as Master units. Master units are the only units that are able to reset the system post-activation and are fitted with a master reset key.

Time Set

Determines how long the sounder or annunciator / beacon will produce an audible alert. By default, it is set to 10 minutes. This means that after the initial 10 minute period is over, the units will stop creating an audible alert but will continue to produce a visible alert. The beacon can be set to produce an audible alert from 1-30 minutes. Setting the TS to 0 will cause the beacon to produce an audible alert indefinitely until the system is reset.

How to Program the Unit

For the Alertex system to work correctly, the units need to be on the same Site and Subnet but have unique Unit numbers. Use the pink buttons in the lower right corner of the PCB to program the unit.



1. Press and hold Select until the LED screen displays - - at the top of the screen
2. Press Select to first change the SITE value
3. Use the Up and Down buttons to change the SITE value (SI)
4. Press Select again to save the value and move on to the SUBNET value (SU)
5. Use the Up and Down buttons to change the SUBNET value
6. Press Select again to save the value and move on to the UNIT value (UN)
7. Use the Up and Down buttons to change the UNIT number value
8. Press Select again to save the value and move on to the CALL REPEAT value (Cr)
9. Use the Up and Down buttons to change the CALL REPEAT value
10. Press Select again to save the value and move on to the CALL PERIOD value (CP)
11. Use the Up and Down buttons to change the CALL PERIOD value
12. Press Select again to save the value and move on to the MASTER UNIT value (MU)
13. Use the Up and Down buttons to change the MASTER UNIT value
14. Press Select again to save the value and move on to the TIME SET value (ts)
15. Use the Up and Down buttons to change the TIME SET value
16. To save the values, press and hold the Memory button until the LED screen displays - - at the bottom of the screen