



by Honeywell

INSTALLATION INSTRUCTIONS FOR WALL MOUNTED LOOP POWERED ADDRESSABLE SOUNDERS, SOUNDER STROBES AND STROBE ONLY

MODELS

NFX-WS-** = Sounder Non Isolation

NFXI-WS-** = Sounder Isolation

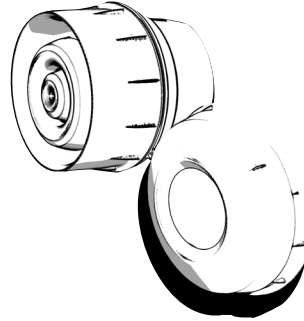
NFX-WSF-** = Sounder Strobe Non Isolation

NFXI-WSF-** = Sounder Strobe Isolation

NFX-WF-** = Strobe Non Isolation

NFXI-WF-** = Strobe Isolation

** = Denotes colour



GENERAL

The range of intelligent AV devices are designed to be connected to analogue addressable fire alarm systems.

These devices must only be connected to control panels that use a compatible proprietary analogue addressable communication protocol.

These devices receive their power from the loop, and can be controlled via the communication protocol(s).

The sounders have three volume levels and 32 tone sets. Models (NFXI-WS-**, NFXI-WSF-**, NFXI-WF-**) containing the character 'I' prior to the Customer ID code include in built isolation providing short circuit protection of the loop.

Up to 159 addresses are available. (consult the panel instructions to confirm compatibility)

These are selected via the two rotary switches. The 'tens' digits go from 0 to 15 and the 'units' from 0 to 9.

Note: if the control equipment is not capable of taking more than 99 module addresses, a fault condition will be generated for every address over 99.

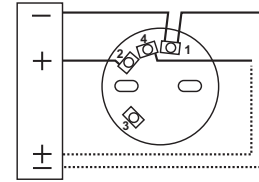
| SPECIFICATIONS | NFX-WS-** NFXI-WS-** | NFX-WSF-** NFXI-WSF-** | NFX-WF-** NFXI-WF-** |
|--|--|---------------------------|-------------------------|
| Signaling Line Supply Voltage (non isolation) | 15 to 29VDC (24VDC typical) | | |
| Signaling Line Supply Voltage (isolation) | 15 to 29VDC (24VDC typical) | | |
| Max current consumption (non isolation) (High Volume Tone 13 @24V) | 4.95mA | 8.90mA | N/A |
| Max current consumption (isolation) (High Volume Tone 13 @24V) | 5.14mA | 9.09mA | N/A |
| Max peak power | 146.2mW | 239.8mW | 99.12mW |
| Sound Output to EN54-3 (High Volume Tone 13 @24V) | 99dB(A) ± 3dB | | N/A |
| Beacon flash rate | N/A | 1Hz | 1Hz |
| Max current consumption at 24V (non isolation) NFX*-WF-** | N/A | N/A | 3.94mA |
| Max current consumption at 24V (isolation) NFX*-WF-** | N/A | N/A | 4.13mA |
| Quiescent Current | 450uA | | |
| Operating temperature range | -25 to +70°C | | |
| Relative humidity | up to 93% (± 3%) - non condensing | | |
| Terminal Size | Terminal Size 2.5mm ² - maximum | | |

Note: This product is classified as a category 'O' device to EN54:23 standard for visual alarm devices. Only variants supplied with a clear lens will be approved to 'O' Class (WSS-PC-*** and WST-PC-****)

At an installation height of 2.4m and any given orientation, the specified light coverage shape and value is achieved. This is approximately a cone of light projected at 60° base angles from the device centre with a depth and diameter of 2.0m. An exact coverage shape can be seen by downloading the following drawing from the KAC website, 132962-IAV-O-CLASS-EN54:23-WST.pdf, 133005-IAV-O-CLASS-EN54:23-WSS.pdf

Model types using a translucent red or amber lens are not EN54-23 approved. These model types must not be used as visual alarm devices to provide a primary warning notification of fire.

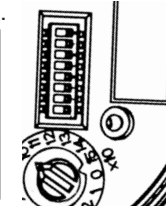
TERMINAL CONNECTIONS



VOLUME SETTINGS

Volume setting is selected by SW6 and SW7 of the 8 way DIP switch. The appropriate tone set is selected by SW1 to SW5 of the 8 way DIP switch (see table 1) The 2nd stage tone (related to the 1st stage tone) is controlled by the fire panel via the protocol.

| SW6 | SW7 | Volume Setting |
|-----|-----|----------------|
| OFF | OFF | HIGH |
| OFF | ON | MEDIUM |
| ON | OFF | LOW |
| ON | ON | LOW |



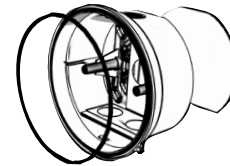
BASES/IP RATING



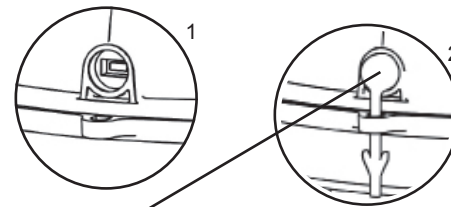
B501AP (IP 21C)



Deep Back box (IP 33C)



If the deep back box option is required then the wall gasket must be fitted behind the deep base, and the sealing o-ring fitted after attaching the low profile base.



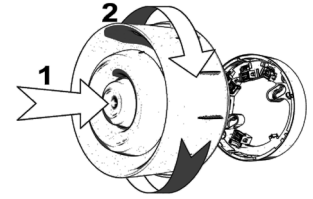
Note: Bung seal must be fitted with the deep back box.

INSTALLATION

Affix B501AP to a suitably flat wall. Terminate the cable to the appropriate terminals. For surface mount wiring the cable can enter the B501AP base via the break outs provided.

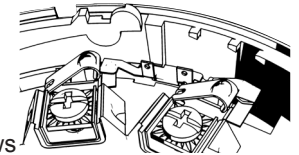
Select the appropriate Tone and Volume setting: via the DIP switch.

Locate the main assembly on to the base by rotating until it locks into place.



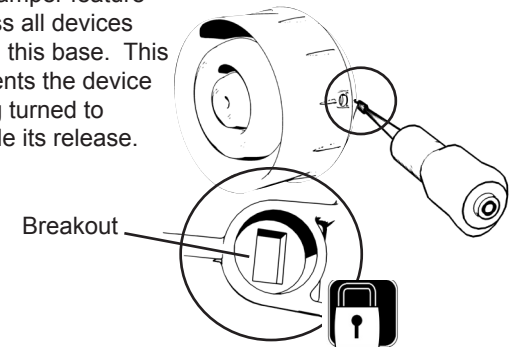
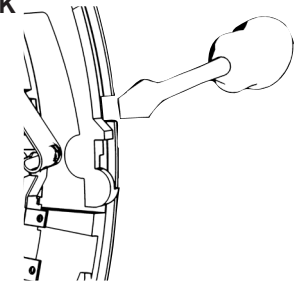
CONTINUITY SPRING

The B501AP incorporates a continuity spring between terminals 2 and 4. This allows the continuity of the field wiring to be checked without the need for the device to be present. Inserting the device will disengage the spring. Removing the device will close the loop.



ANTI TAMPER LOCK

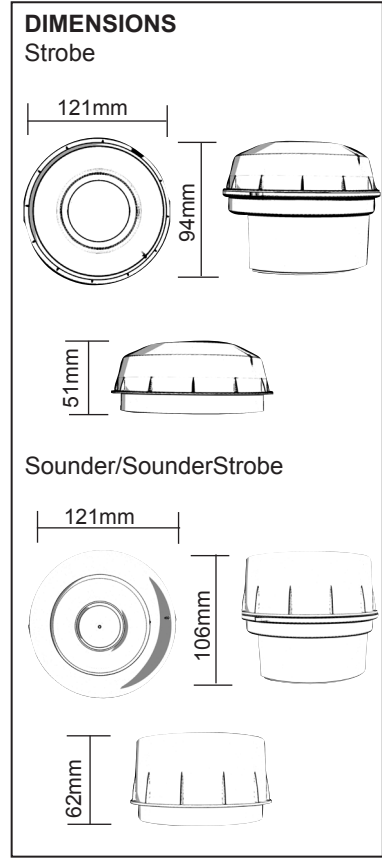
The B501AP also includes a tamper resistant feature that when activated prevents removal of the unit without the use of a special tool. This method is consistent with the anti tamper feature across all devices using this base. This prevents the device being turned to enable its release.



For isolator specification refer to document SP11-2848 available on request

Table 1 - VERSION 8C

| DIP setting 0=Off/1=On SW 1,2,3,4,5 | No | Pattern | Nominal Frequency | Maximum consumption (mA) | | | Switching Frequency | Description | Market | Standard | 2nd Stage Tone |
|---|----|--------------|----------------------|--------------------------|---------------------|------------------|---|---|-------------|----------------------|-------------------|
| | | | | (WSO-WSS) High | (WSO-WSS) Medium | (WSO-WSS) Low | | | | | |
| 0,0,0,0,0 | 1 | Alternating | 525/440 | 5.13 / 9.1 | 2.41 / 6.4 | 1.45 / 5.4 | 2Hz (100ms/400ms) | French Fire Sound AFNOR | France | NFS 32-001 | 7 |
| 1,0,0,0,0 | 2 | Alternating | 800/922 | 4.42 / 8.4 | 1.98 / 5.9 | 1.38 / 5.3 | 1Hz | | UK | BS5839 Pt1 | 8 |
| 0,1,0,0,0 | 3 | Alternating | 800/922 | 4.38 / 8.3 | 1.98 / 5.9 | 1.37 / 5.3 | 2Hz | Alternating tone telecoms | UK | BS5839 Pt1, FP1063.1 | 8 |
| 1,1,0,0,0 | 4 | Alternating | 2400/2900 | 4.21 / 8.2 | 3.45 / 7.4 | 1.61 / 5.6 | 3Hz | Alternating High Frequency | | | 10 |
| 0,0,1,0,0 | 5 | Alternating | 2500/3100 | 5.49 / 9.4 | 4.09 / 8.0 | 1.56 / 5.5 | 2Hz | Security Alarm | | | 10 |
| 1,0,1,0,0 | 6 | Alternating | 988/645 | 5.61 / 9.6 | 2.21 / 6.2 | 1.49 / 5.4 | 2Hz | | | | 8 |
| 0,1,1,0,0 | 7 | Continuous | 630 | 5.19 / 9.1 | 1.81 / 5.8 | 1.12 / 5.1 | | All clear | Sweden | | 1 |
| 1,1,1,0,0 | 8 | Continuous | 922 | 5.10 / 9.0 | 2.08 / 6.0 | 1.44 / 5.4 | | | | BS 5839 Pt 1 | 2 |
| 0,0,0,1,0 | 9 | Continuous | 1200 | 4.98 / 8.9 | 2.10 / 6.0 | 1.74 / 5.7 | | | | | 2 |
| 1,0,0,1,0 | 10 | Continuous | 2810 | 4.96 / 8.9 | 3.00 / 6.9 | 1.42 / 5.4 | | HF Continuous | | | 4 |
| 0,1,0,1,0 | 11 | Sweep | 150-1000 | 5.90 / 9.8 | 2.10 / 6.0 | 1.55 / 5.5 | Rising from 150Hz to 1000Hz in 10 seconds, then 40 seconds at 1000Hz, then falling from 1000Hz to 150Hz in 10 seconds, then 20 seconds at 150Hz, then repeating. Total period 80 seconds. | *Gasalarm* Tone | | | 22 |
| 1,1,0,1,0 | 12 | Intermittent | 420 | 5.86 / 9.8 | 2.40 / 6.3 | 1.42 / 5.4 | 0.625s on, 0.625 sec off | AS2220 alert tone | NZ, Aus | AS2220 | 13 |
| 0,0,1,1,0 | 13 | Sweep | 500-1200 | 4.95 / 8.9 | 2.76 / 6.7 | 2.31 / 6.3 | 0.25 sec off, 3.75 sec on | AS2220 evacuate tone | NZ, Aus | AS2220 | 12 |
| 1,0,1,1,0 | 14 | Intermittent | 630 | 4.36 / 8.3 | 2.00 / 5.9 | 1.03 / 5.0 | 3.33Hz 150ms on, 150ms off | Swedish alarm tone | Sweden | | 7 |
| 0,1,1,1,0 | 15 | Intermittent | 922 | 3.96 / 7.8 | 1.76 / 5.7 | 1.27 / 5.2 | 0.8Hz 0.25s on, 1s off | Intermittent Tone | UK | BS 5839 Pt 1 | 8 |
| 1,1,1,1,0 | 16 | Intermittent | 922 | 3.97 / 7.9 | 1.73 / 5.7 | 1.29 / 5.2 | 0.5Hz 1s on, 1s off | Back up alarm LF & BS5839 Pt 1 | UK | BS5839 Pt 1 | 8 |
| 0,0,0,0,1 | 17 | Intermittent | 2810 | 3.65 / 7.6 | 2.97 / 6.9 | 1.43 / 5.4 | 1Hz | Back up alarm HF & BS5839 Pt 1 2nd tone | UK | BS5839 Pt 1 | 10 |
| 1,0,0,0,1 | 18 | Intermittent | 922 | 3.97 / 7.9 | 1.73 / 5.7 | 1.29 / 5.2 | 1Hz 500ms on, 500ms off | LF BS5839 Pt 1 | UK | BS5839 Pt 1 | 8 |
| 0,0,0,0,1 | 19 | Intermittent | 950 | 4.38 / 8.3 | 1.76 / 5.7 | 1.32 / 5.3 | 0.22Hz (0.5s on, 0.5s off) rptx3, 1.5s off | | Australia | ISO8201 | 12 |
| 1,1,0,0,1 | 20 | Continuous | 800 | 4.51 / 8.5 | 1.98 / 5.9 | 1.37 / 5.3 | | | | BS 5839 Pt 1 | 22 |
| 0,0,1,0,1 | 21 | Sweep | 400-1200 | 5.00 / 8.9 | 2.31 / 6.3 | 1.52 / 5.5 | (0.5s on, 0.5s off)*3, 1.5s off | Temporal 3 Evacuation tone | Australia | ISO8201 Temporal 3 | 12 |
| 1,0,1,0,1 | 22 | Sweep | 1200 - 500 | 4.89 / 8.8 | 2.44 / 6.4 | 1.62 / 5.6 | 0.99Hz 1s on, 0.01s off | Evacuate, DIN tone & PFEER | Germany | DIN, PFEER | 20 |
| 0,1,1,0,1 | 23 | Sweep | 2400 - 2850 | 4.28 / 8.2 | 3.36 / 7.3 | 1.56 / 5.5 | 7Hz | Fast sweep VdS | Germany | VdS | 10 |
| 1,1,1,0,1 | 24 | Sweep | 500 - 1200 | 4.98 / 8.9 | 2.73 / 6.7 | 2.33 / 6.3 | (0.5s off, 3.5s on) | Slow whoop evacuate | Netherlands | NEN 2575 | 8 |
| 0,0,0,1,1 | 25 | Sweep | 800 - 970 | 4.65 / 8.6 | 2.13 / 6.1 | 1.35 / 5.3 | 50Hz | LF Buzz BS5839 Pt 1 | UK | BS5839 Pt 1 | 8 |
| 1,0,0,1,1 | 26 | Sweep | 800 - 970 | 3.48 / 7.4 | 1.85 / 5.8 | 1.41 / 5.4 | 7Hz | Fast sweep LF BS5839 Pt 1 | UK | BS5839 Pt 1 | 8 |
| 0,1,0,1,1 | 27 | Sweep | 800 - 970 | 3.40 / 7.3 | 1.99 / 5.9 | 1.42 / 5.4 | 1Hz | Medium sweep LF, BS5839 Pt 1, VdS | UK, Germany | BS5839 Pt 1 VdS | 8 |
| 1,1,0,1,1 | 28 | Sweep | 2400 - 2850 | 4.26 / 8.2 | 3.37 / 7.3 | 1.71 / 5.7 | 50Hz | High frequency buzz | | | 10 |
| 0,0,1,1,1 | 29 | Sweep | 500 - 1000 | 4.20 / 8.1 | 1.71 / 5.7 | 1.19 / 5.1 | 7Hz | Fast whoop | | | 8 |
| 1,0,1,1,1 | 30 | Sweep | 500 - 1200 - 500 | 5.02 / 9.0 | 2.58 / 6.5 | 1.96 / 5.9 | 0.166Hz rise 1s, stable 4s, fall 1s | Siren style tone | | | 8 |
| 0,1,1,1,1 | 31 | Sweep | 800 - 1000 | 4.61 / 8.6 | 3.31 / 7.3 | 1.44 / 5.4 | 2Hz | | | | 8 |
| 1,1,1,1,1 | 32 | Sweep | 2400 - 2850 | 4.31 / 8.3 | 3.54 / 7.4 | 1.61 / 5.6 | 1Hz | | | | 10 |



CE
0832

For CPD/CPR Data on all relevant devices please request D974.

IMPORTANT NOTES:
For Isolated variants add 0.19mA to high, medium, low values above.

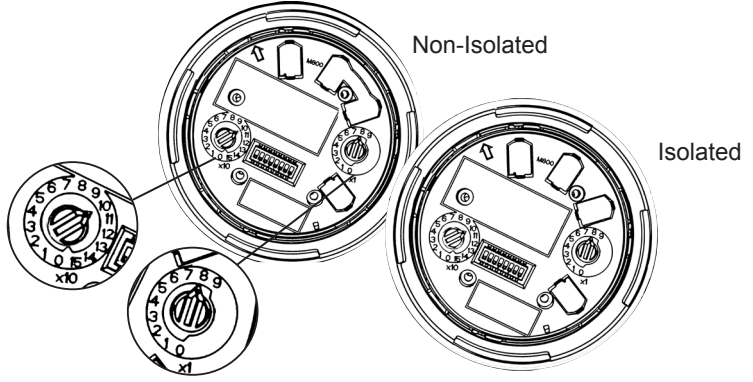
We reserve the right to amend the content of this document without prior notice.

Sounder Output data, in accordance with EN54-3, is available on Document Ref: D 1022.

ADDRESS SETTING

To set one of the 159 available addresses for the device use the two rotary switches located either side of the dip switch unit. The 'tens' digits go from 0 to 15 and the 'units' from 0 to 9.

Example A (Address setting 108)



Example B (Address setting 98)

