

# AL100X Alarm Horn Sounder & Xenon Strobe Beacon

The AL100X features the 104dB(A) A100 alarm horn sounder combined with the L101X Xenon strobe beacon. The compact, robust enclosure is ideal for all general signalling applications including fire, security and process control.

The 5 Joule Xenon strobe generates over 200 candela of light output. DC versions have multiple flash rates selectable during installation. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

## Features

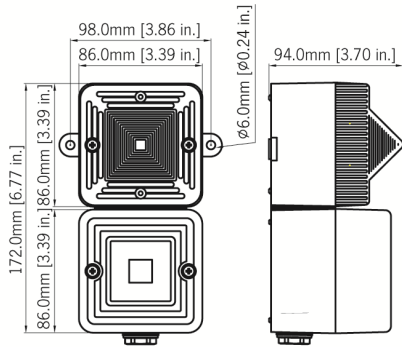
- Automatic synchronisation on multi-sounder system.
- High output Xenon beacon
- DC voltage units feature multiple flash rates.
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs or internal BESA compatible fixing positions.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
  - 45 alarm tones
  - 4 remotely selectable stages
  - Any tone can be assigned to any stage
  - User configurable continuous frequency tone

## Approvals

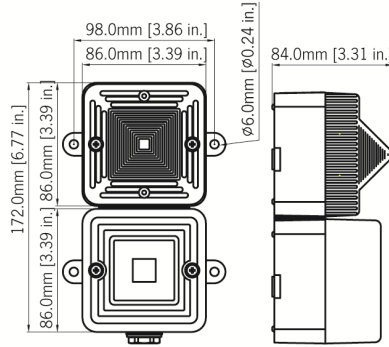
- VdS approved: EN54-3 & EN54-23 (CPR 305/2011/EU).
- UL & cULs approved: General signalling use.
- GOST-R approved. Cert: POCC GB-JB05-H00144.



AL100X - UL version



AL100X - standard version



## Specification

### Sounder:

|                  |  |
|------------------|--|
| Maximum output:  | 104dB(A) @ 1 metre [95dB(A) @ 10ft/3m]                   |
| Nominal output:  | 100dB(A) @ 1m +/- 3dB - Tone 2 [91dB(A) @ 10ft/3m]       |
| No. of tones:    | 32 (UKOOA / PFEER compliant)                             |
| No. of stages:   | 3  |
| Volume control:  | Max. 100dB(A); Min. 90dB(A) - Tone 2                     |
| Effective range: | 32m/105ft @ 1KHz   |
| Stage switching: | Negative - Reverse polarity stage switching on DC units. |

### Beacon:

|                      |  |
|----------------------|--|
| Energy:              | 5 Joules (5Ws)                                       |
| Flash rate:          | 1Hz (60 fpm)   |
| Peak Candela:        | 500,000 cd - calculated from energy (J)              |
| Effective Intensity: | 250 cd - calculated from energy (J)                  |
| Peak Candela:        | 86,935 cd* - measured ref. to I.E.S.                 |
| Effective Intensity: | 200 cd* - measured ref. to I.E.S.                    |
| Lens colours:        | Amber, Blue, Clear, Green, Magenta, Red & Yellow     |
| Tube life:           | Emissions are reduced to 70% after 5 million flashes |

### General:

|                     |  |
|---------------------|--|
| Voltages DC:        | 24V dc (10-30V dc); 48V dc (35-60V dc)<br>[DC units can use 24V ac for single stage applications.] |
| Voltages AC:        | 24V ac; 115V ac; 230V ac   |
| Ingress protection: | IP66   |
| Housing material:   | High impact UL94 V0 & 5VA FR ABS   |
| Colour:             | Red (RAL3000), grey (RAL7038) & white.   |
| Cable entries:      | 4 x M20 clearance gland entries in side & back   |
| Terminals:          | 0.5 to 1.5mm <sup>2</sup> cables.  |
| Operating temp:     | -25 to +55°C [-13° to +131°F]  |
| Storage temp:       | -40 to +70°C [-40° to +158°F]  |
| Relative humidity:  | 90% at 20°C [68°F]   |
| Weight:             | DC: 0.46kg/1.01lbs AC:0.57kg/1.25lbs   |

\*Candela measurements representative of performance with clear lens at optimum voltage.

\*SPL data +/-3dB(A). Measured at optimum voltage.

## Part Codes

| Version:              | Part code:  |
|-----------------------|---|
| 24V dc                | AL100XDC02 4[x]/[y]   |
| 48V dc                | AL100XDC048[x]/[y]  |
| 24V ac                | AL100XAC02 4[x]/[y]   |
| 115V ac               | AL100XAC115[x]/[y]  |
| 230V ac               | AL100XAC230[x]/[y]  |
| [x] = Housing colour: | G: Grey, R: Red, W: White   |
| [y] = Lens colour:    | A: Amber, B: Blue, C: Clear, G: Green<br>M: Magenta R: Red, Y: Yellow |

Suffix part number with 'P' for programmable, 4 stage, 45 tone version (not available with UL approval).

Suffix part number with 'UL' for UL approved version.

### CPR - EN54-3 & EN54-23:

|                      |  |
|----------------------|--|
| Part codes:          | AL100XDC02 4[x]/C, AL100XDC048[x]/C                          |
| Environmental class: | Type B - for outdoor use                                     |
| Visual range:        | Category W-2 .4-4.8 (24V dc)<br>Category W-2 .5-5.0 (48V dc) |
| Signal colour:       | Clear (1Hz)  |

## Alarm Sounder

| Version: |         | Voltage:  | Current: |
|----------|---------|-----------|----------|
| 24V dc   | □       | 10-30V dc | 25mA*    |
| 48V dc   | □       | 35-60V dc | 50mA*    |
| 24V ac   | 50/60Hz | +/-10%    | 40mA     |
| 115V ac  | 50/60Hz | +/-10%    | 20mA     |
| 230V ac  | 50/60Hz | +/-10%    | 15mA     |

\* current at nominal voltage on Tone 2

## Xenon Beacon

| Version: |         | Voltage:  | Current: |
|----------|---------|-----------|----------|
| 12V dc   |         | 10-14V dc | 500mA    |
| 24V dc   |         | 20-28V dc | 250mA    |
| 48V dc   |         | 42-54V dc | 175mA    |
| 24V ac   | 50/60Hz | +/-10%    | 300mA    |
| 115V ac  | 50/60Hz | +/-10%    | 70mA     |
| 230V ac  | 50/60Hz | +/-10%    | 35mA     |

### Tone table

| <b>S 1</b> | <b>Description</b>                              | <b>S 2</b> | <b>S 3</b> |
|------------|---|------------|------------|
| T 1        | 340 Hz Continuous                               | T 2        | T 5        |
| T 2        | 800/1000Hz @ 0.25 sec Alternating               | T 17       | T 5        |
| T 3        | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop           | T 2        | T 5        |
| T 4        | 800/1000Hz @ 1Hz Sweeping                       | T 6        | T 5        |
| T 5        | 2400Hz Continuous                               | T 3        | T 20       |
| T 6        | 2400/2900Hz @ 7Hz Sweeping                      | T 7        | T 5        |
| T 7        | 2400/2900Hz @ 1Hz Sweeping                      | T 10       | T 5        |
| T 8        | 500/1200/500Hz @ 0.3Hz Sweeping                 | T 2        | T 5        |
| T 9        | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.         | T 15       | T 2        |
| T 10       | 2400/2900Hz @ 2Hz Alternating                   | T 7        | T 5        |
| T 11       | 1000Hz @ 1Hz Intermittent                       | T 2        | T 5        |
| T 12       | 800/1000Hz @ 0.875Hz Alternating                | T 4        | T 5        |
| T 13       | 2400Hz @ 1Hz Intermittent                       | T 15       | T 5        |
| T 14       | 800Hz 0.25sec on, 1 sec off Intermittent        | T 4        | T 5        |
| T 15       | 800Hz Continuous                                | T 2        | T 5        |
| T 16       | 660Hz 150mS on, 150mS off Intermittent          | T 18       | T 5        |
| T 17       | 544Hz (100mS)/440Hz (400mS) - NF S 32-001       | T 2        | T 27       |
| T 18       | 660Hz 1.8sec on, 1.8sec off Intermittent        | T 2        | T 5        |
| T 19       | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | T 2        | T 5        |
| T 20       | 660Hz Continuous                                | T 2        | T 5        |
| T 21       | 554Hz/440Hz @ 1Hz Alternating                   | T 2        | T 5        |
| T 22       | 544Hz @ 0.875 sec. Intermittent                 | T 2        | T 5        |
| T 23       | 800Hz @ 2Hz Intermittent                        | T 6        | T 5        |
| T 24       | 800/1000Hz @ 50Hz Sweeping                      | T 29       | T 5        |
| T 25       | 2400/2900Hz @ 50Hz Sweeping                     | T 29       | T 5        |
| T 26       | Bell  | T 2        | T 15       |
| T 27       | 554Hz Continuous                                | T 26       | T 5        |
| T 28       | 440Hz Continuous                                | T 2        | T 5        |
| T 29       | 800/1000Hz @ 7Hz Sweeping                       | T 7        | T 5        |
| T 30       | 300Hz Continuous                                | T 2        | T 5        |
| T 31       | 660/1200Hz @ 1Hz Sweeping                       | T 26       | T 5        |
| T 32       | Two T chime.                                    | T 26       | T 15       |