ANS04E
IP65 Ambient Noise Sensor (Extended Temperature Range)

The ANS04E is an IP65 rated Ambient Noise Sensor designed to operate under extreme temperatures, from -40°C to +50°C. The ANS work with the whole range of ASL Public Address and Voice Alarm systems and VIPA IP-based systems.

The purpose of an Ambient Noise Sensor (ANS) system is to adjust the level of public address announcements based on a measure of the ambient noise in the PA zone. This will maintain a set volume of public address audio above the ambient noise, in order to guarantee that the announcement is intelligible, yet at a comfortable level.

Each Public Address or Voice Alarm system is able to support the connection of multiple ANS04E units, each of which interfaces to an analogue input of a BMB01 Remote I/O Unit. The ANS sensor detects ambient noise using its built-in microphone. The detected signal is weighted with a speechband response for the best system performance, and is then translated to a value of measured ambient noise in dBA. This value is used to proportionally adjust the Public Address or Voice Alarm system output gain for the configured output channel or channels.

The system is set up for the maximum broadcast volume without the ANS sensor, and the ANS system then reduces the gain from this level when the zone is quiet.

Two ambient noise measurement ranges are selectable, depending on the required system volume and expected ambient noise level:

- High Range from 65 dBA to 95 dBA
- Low Range from 55 dBA to 85 dBA

The ANS range is selectable via internal switch, and is identified by external LEDs. These LEDs also provides a useful visual indication of the unit's operation, as their brightness varies with the ambient noise level. There are also two internal status LEDs, for use in installation and fault finding. A green LED indicates the presence of power when lit, and an amber LED illuminates in the event of a microphone capsule open or short circuit fault.

The ANS04E is housed in an IP65 rated die-cast aluminium enclosure, with the electronics and microphone being mounted on the front plate. A wall mount bracket with swivel is provided for precise positioning of the ANS sensor. A cover is also provided in order to protect the built-in microphone from adverse weather conditions including rain, sleet, and snow. The connection between the ANS04E and a BMB01 Remote I/O Unit is simple 3-wire link.

For further details, and for information on other products, please visit www.asl-control.co.uk.

ASL Document Ref.: U-0511-0081.doc
Issue: 02 complete, approved - Date: 30/07/09

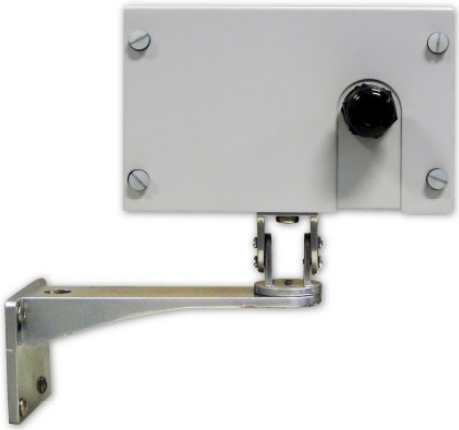
SPECIFICATION

General

Supply Voltage Range ..... 21 – 40 V DC
Current Consumption ..... 35 mA @ 24 V DC supply
Output Current ..... 4 – 20 mA nominal
Ambient Noise Measurement Range[1] ... 65 – 95dBA (High Range)
55 – 85 dBA (Low Range)[2]
Number of ANS Sensors
Routers ..... max. 12 per PA zone
(sensors for one zone must be
connected to the same BMB01 Remote I/O Unit)
VIPA Systems ..... any number of ANS sensors
configured on the unit
Enclosure ..... die-cast aluminium
Grey NCS S1002-B 20% GLOSS LSOH
Weather Cover ..... steel
Grey NCS S1002-B 20% GLOSS LSOH
Bracket ..... aluminium / silver

Environmental

Temperature (storage and operating) ..... –40°C to +50°C
(±3 dB accuracy)
Humidity Range ..... 0% to 93% non-condensing
Ingress Protection IP65



Dimensions and Weight

Enclosure
Dimensions (H x W x D) ..... 160 mm x 100 mm x 81 mm
Gland / Conduit Hole ..... 20.2 mm
Weight ..... 1020 g (with internal components)
Weather Cover
Dimensions (H x W x D) ..... 101.4 mm x 162.8 mm x 163 mm
Weight ..... 500 g
Bracket
Dimensions (H x W x D) ..... 113 mm x 64 mm x 165 mm
(approx.)
Cable Pass-Through Hole ..... 14 mm
Weight ..... 150 g

[1] Ambient Noise Measurement Range is selectable via internal switch.
[2] Low range ANS is not supported by all Router software versions. Please refer to ASL.

CE

This equipment is designed and manufactured to conform to the following EC standards:
EMC: EN55103-1/E1:1997, EN55103-2/E5:1997, EN50121-4:2006, ENV50204:1996
Safety: EN 60065:2002

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CERTIFICATE NUMBER 96-LON-AQ-041

Link-up