



The ANS04 is an IP65 rated Ambient Noise Sensor designed to work with the whole range of ASL Public Address and Voice Alarm 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 ANS04 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 speech-band 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, and 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 ANS04 is housed in an IP65 rated die-cast aluminium enclosure, with the electronics and microphone being mounted on the front plate.

The connection to each ANS04 is a simple 3-wire link from the ANS04 and a BMB01 Remote I/O Unit.

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

SPECIFICATION

General

Supply Voltage Range21 – 40 V DC
Current Consumption 35 mA @ 24 V DC supply
Output Current 4 – 20 mA nominal
Ambient Noise
Measurement Range¹ 65 – 95dBA (High Range)
55 – 85 dBA (Low Range)²
Number of ANS SensorsMax. 12 per PA zone
(Sensors for each zone must be connected
to the same BMB01 Remote I/O Unit)
Enclosure die-cast aluminium
Finish Grey NCS S1002-B 20% GLOSS LSOH
Low Smoke and Fume, Zero Halogen

Dimensions and Weight

Dimensions (H x W x D)..... 160 mm x 100 mm x 81 mm
Gland/ Conduit Hole 25 mm
Weight 980 g

Environmental

Temperature (storage and operating) –5 °C to +50 °C
±1 dB accuracy
Humidity Range 0% to 93% Non-condensing
Ingress Protection IP65

Safety and EMC

EMC EN55103-1/E1, EN55103-2/E5,
EN50121-4, ENV50204
Safety..... EN60065

¹ Ambient Noise Measurement Range is selectable via internal switch.
Note that the ANS range is fixed in legacy ANS03 units:

- ANS03: 65 dBA to 95 dBA
- ANS03L: 55 dBA to 85 dBA

² Low range ANS is not supported by all Router software versions. Please refer to Application Solutions Limited for further details.



This equipment is designed and manufactured to conform to the following EC standards:

EMC: EN55103-1/E1, EN55103-2/E5, EN50121-4, ENV50204

Safety: EN60065

This product is RoHS compliant.

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