

DANS01 Dynamic Ambient Noise Sensor



- PA announcements dynamically and constantly adjusted to suit the current ambient noise
- Reduction of PA noise abatement problems
- Retrofittable to VAR12 and VAR20 Routers with software upgrade*

The DANS01 Dynamic Ambient Noise Sensor is designed to work with ASL VAR12 and VAR20 DSP Routers* as part of the ASL DANS Dynamic Ambient Noise Sensing System.

ASL Dynamic ANS System constantly maintains the volume of Public Address announcements just above the ambient noise, guaranteeing that announcements are always intelligible, and not excessively loud.

The DANS System employs digital signal processing technology to distinguish the ambient noise from the announcement. This enables adjustments of the broadcast volume level to reflect any variations in ambient noise, even while the announcements are being made. Consequently the overall intelligibility and comfort of announcements are improved over traditional ANS systems, and Public Address noise abatement problems are also improved.

A typical example of the benefit of this system is for a broadcast which starts when a train is approaching the platform, and which continues after the train has stopped. Conventional ANS systems set the broadcast volume at a constant level based on the ambient noise present just before the start of the announcement. In this case a conventional ANS would set the broadcast volume to be correct while the train was approaching, and the volume would then be excessively loud after the train had stopped. Instead of this the DANS System constantly adjusts the broadcast to reduce the volume as the train comes to a halt, and maintains the volume at intelligible and pleasant levels for the entire duration of the announcement.

The DANS Sensor uses a built-in microphone to detect the ambient noise, and the DANS System can process ambient noise levels between 55 dBA and 95 dBA.

The DANS01 is housed in an IP65 rated die-cast aluminium enclosure, with the electronics and microphone being mounted on the front plate. The sensor connects to an audio input of the VAR12 or VAR20 DSP Router, with field connections provided by internal screw-in terminals.

The DANS Sensor can be retrofitted to VAR12 and VAR201 systems with the appropriate software upgrade* which can then provide the Dynamic ANS functionality, provided that the system meets the DANS design requirements**.

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

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^{*} The DANS System requires VAR12 and VAR20 DSP Routers with MKII hardware. The DANS System is also intended to be developed for use with ASL Intellevac DAU and VIPA IP based PA systems, refer to ASL regarding any requirements based on these products. Refer to ASL for details of VAR12 and VAR20 software versions supporting the DANS System.

^{**}Refer to ASL for design requirements for the DANS System with the VAR12 and VAR20 DSP Routers.

Specification

General

Supply Voltage Range	18 – 40 V DC
	90 mA @ 24 V DC supply
Output	0 dBu balanced audio (nominal) / 66 Ω
Ambient Noise Measure	ment Range 55 – 95 dBA
Enclosure	die-cast aluminium
Finish	Grey NCS S1002-B 20% GLOSS LSOH
	Low Smoke and Fume, Zero Halogen

Environmental

Temperature Range	10 °C to +50 °C (±3 dB accuracy)
	(storage and operating)
Humidity Range	0% to 93% non-condensing
Ingress Protection	IP65

Dimensions and Weight

Dimensions (H x W x D)	. 160 mm x 100 mm x 81 mm
Gland / Conduit Hole	20 mm
Weight	980 g



This equipment is designed and manufactured to conform to the following EC standards: EMC: EN55103-1/E1:1996, EN55103-2/E5:1996, EN50121-4:2006, ENV50204:1995

Safety: EN 60065:2002

Manufacturer

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