



ZE:908 Acoustic Interface

Data Sheet



Features

- Acoustic interface and power supply for 1/2" microphone preamplifiers
- Ideal for interfacing noise level measurements into external data logging systems, signal analysers and data recorders
- 4-20mA current loop output
- User selectable output options of AC or DC voltage outputs
- dB(A) & dB(Z) frequency weightings
- Fast & Slow time weightings

ZE:908 Acoustic Interface

The simple way to integrate noise measurements

Integrate noise measurements into your existing Process Monitoring and Control Systems.

The ZE:908 is a small and lightweight power supply and acoustic conditioning unit for the Cirrus MV:200 microphone preamplifiers and MK:170 Outdoor microphone units.

Many industrial plants have a variety of process sensors strategically placed around their site so that safety, environmental impact and efficiency can be monitored and managed, in real time, from one or more control rooms.

The ZE:908 is also ideal for use as a front-end for data logging and analysis systems where a simple and accurate acoustic input is required and as an interface between an acoustic transducer and a process monitoring system.

A range of input options

The ZE:908 can be used with either the Cirrus MV:200 microphone preamplifier or the MK:170 outdoor microphone.

The MV:200 is a standard 1/2" unit that can be used with any of the Cirrus Class+ microphone capsules, allowing the input to be either Class 1 or Class 2 with a choice of frequency limits and noise floors.

The MK:170 is a compact outdoor microphone that provides weather protection for the microphone capsule and allows for noise measurements to be made outdoors over short periods.

For long term outdoor noise measurement, the MK:427 NoiseSensor is the ideal solution.

Please refer to the MK:427 datasheet for more information.

Output levels to suit your application

A choice of output signals is provided by the ZE:908 including 4-20mA alongside AC and DC voltage outputs.

The output levels can be user set to either AC or DC (25mV/dB) with dB(A) or dB(Z) frequency weightings.

The 4-20mA current loop output is also provided with the level factory set to 10dB = 1mA.

Up to 50m of microphone input cable and up to 50m of AC/DC output cable is supported with opto-isolated outputs. The front panel indicators show the configuration and output status.

Live Noise Data to SCADA or DCS Systems

Unlike a conventional Sound Level Meter, the ZE:908 converts the noise level in decibels into an industry standard 4-20mA output, which can in turn be

fed directly into a SCADA-type control system.

The ZE:908 also provides either an AC or DC voltage output along with a threshold triggered relay that can be used to control other systems or equipment.

Live noise levels can then be displayed and stored using your own system software, eliminating the need to install third party software where the complexity of extra software systems or security could be an issue.



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Specification and Options

Specification	
Dimensions	140mm x 78mm x 45mm (excludes any external cables or connectors)
Performance	The ZE:908 has been designed to meet the electrical requirements of IEC61672:2002-1 where appropriate.
Measurement Range	Dynamic range of 60dB(A) Measurement range factory set to 60dB(A) to 120dB(A)
Gain Settings	This upper limit can be adjusted up to a maximum of 134dBA using the CAL and GAIN2 adjustments on the rear panel.
Inputs	6 Pin Hirose Socket to match Cirrus Research plc MV:200 Series Preamplifiers The input socket supports up to 50m of microphone extension cable.
Output 1 AC & DC Output	Female Chassis Mount BNC providing a user selectable output from the following options: 1. Amplified A-weighted AC output 2. Amplified Z-weighted AC output 3. DC Voltage proportional to SPL A weighted SLOW response 4. DC Voltage proportional to SPL A weighted FAST response 5. DC Voltage proportional to SPL Z weighted SLOW response 6. DC Voltage proportional to SPL Z weighted FAST response The DC Voltage output is nominally 25mV/db. The output condition is indicated by the front panel LED's.
Output 2 4-20mA Current Loop	4-20mA Loop output via 15 Pin High Density D Connector
Output Level	Nominally set to 10dB = 1mA This output is powered from the receiving circuitry and requires a voltage across its terminals of at least 7 volts.
Power	External power via the rear power 2.1mm input socket via 1. Cirrus Research plc CU:195A Power Supply 2. External power source in the Range 15VDC to 30VDC at 200mA

CIRRUS RESEARCH PLC
ACOUSTIC HOUSE
BRIDLINGTON ROAD
HUNMANBY
NORTH YORKSHIRE
YO14 0PH
UNITED KINGDOM

T: +44 1723 891655
E: SALES@CIRRUSRESEARCH.COM
W: WWW.CIRRUSRESEARCH.CO.UK



Cirrus
Research plc
dedicated to noise measurement



FM 531001

EMS 552104