

dCS 905 ADC

DSD – 24/384, 24/192, 24/96

The dCS 905 is a 2-channel 24 bit A/D converter, for conventional digital audio interfaces. It covers all standard PCM sample rates from 32kS/s to 384kS/s (including 352.8kS/s for DXD) and also DSD at 2.822MS/s.

It uses the patented dCS Ring DAC architecture which offers exceptional linearity, without the need for gain ranging, and which gives the sound quality a naturalness and transparency previously only associated with the very best analogue electronics.

The user interface on the dCS 905 makes it very easy to set up and use. A large vacuum fluorescent display enables all the key unit parameters to be confirmed at a glance, and also facilitates both bar and numerical level meter displays. A simple menu system gives access to a wide range of extra functions such as anti-imaging filter selection, self test, sync source selection and a digital signal generator.

Extensive use is made of programmable logic, allowing performance enhancements and new features to be added by PC download via the rear panel RS 232 port, or by a ROM chip change. This extends the product's useful service life and reduces the overall ownership cost.



PCM Mode

Output Sample Rates (kS/s):

32, 44.1, 48, 88.2, 96, 176.4, 192, 352.8 & 384

Output Word Lengths: from 24 to 16 bits in one bit steps

Anti-Aliasing Filters: 4 user selectable filters for each sample rate.

Noise Shapers: 1st order to 10th order and Auto.

Digital Outputs:

4 AES/EBU outputs

1 SDIF-2/3 output group (inc Word Clock out)

AES/EBU Output Formats:

Single AES: 32, 44.1, 48, 88.2 and 96 kS/s

Dual AES : 88.2, 96, 176.4 and 192 kS/s

Quad AES: 176.4, 192, 352.8 and 384 kS/s.

Synchronisation: In PCM mode the unit may be sync'd to a Word Clock or AES3 Reference, or operated in Master mode.

DSD Mode

Output Format: DSD at 2.822MS/s

Digital Inputs: SDIF-2, SDIF-3, DSD-4 and P3D.

DSD-4: Packs 2 channels of DSD into 4 AES3 data streams, enabling recording onto any digital recorder offering 8 channels of 16 bit 44.1kS/s storage.

P3D: Packs 2 channels of DSD into 3 AES3 data streams. P3D enables 8 channels of DSD to be recorded onto any digital recorder offering 24 tracks of 24 bit 44.1kS/s storage.

Digital Filters: 7 user selectable modulators allow the significant choice in modulator performance.

Synchronisation: In DSD mode the unit may be sync'd to a Word Clock, or operated in Master mode.

Easy to read bar graph level meters with user selectable peak reading or VU type ballistics. A numerical display mode is also available to allow easy precision alignment.

Rapid lock-up and excellent jitter rejection is provided by a dual band PLL with a very low turn over frequency, if external sync is used

Versatile synchronisation capability allows the unit to take its sync from a house Word Clock or AES Reference source. Output word clock is aligned to input word clock, allowing many units to operate in parallel for multichannel operation.

A high stability clock with auto frequency calibration ensures exceptional clock stability in master mode.

A high quality signal generator further simplifies unit line-up. It covers the range 0dB0 to -120dB0 in 0.1dB steps and offers 1Hz resolution in the range 1Hz to 60kHz.

A dCS Universal Remote allows any combination of up to six dCS converters to be controlled from a single PC COM port. It provides access to all of the dCS 905's functions. The software runs under Windows 95, 98, 2000, NT and XP operating systems and provides a highly intuitive and easy to operate user interface, with additional functions to those supported by the front panel.

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| Analogue inputs | Balanced, AES14-1992 (XLR female x 2) |
| Level for full scale | +20dBu \pm 6dB |
| PCM output sample rates | 32, 44.1, 48, 88.2, 96, 176.4, 192, 352.8 & 384 kS/s |
| DSD output data rate | 2.822MS/s |
| Digital output interfaces | AES/EBU x 4 useable as Single AES, Dual AES & Quad AES inputs SDIF x 1 set (SDIF-2 or SDIF-3) |
| Output AES formats | Single AES: 32, 44.1, 48, 88.2 & 96 kS/s Dual AES : 88.2, 96, 176.4 & 192 kS/s Quad AES: 176.4, 192, 352.8 & 384 kS/s |
| Digital sync inputs | AES Reference & Word Clock |
| Digital sync outputs | AES Reference & Word Clock |
| Power consumption | 25 Watts nominal |
| Dimensions | 430mm W x 52mm H x 390mm D 16.9" W x 2" H x 15.6" D The unit fits 1U in a standard 19 inch rack |
| Weight | 6.8kg (15lbs) |

For details of this and other dCS products, please see the dCS web site at www.dcsLtd.co.uk, or contact:

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