

DiGiCo and the ultimate 'Stadius' Mic Pre-Amp



Twenty years ago, converters changed from 16 or 18-bit to a new, improved resolution of 24-bit. This additional 8 bits of converter resolution was instantly audible and created a demand for 24-bit quality.

At Prolight+Sound 2017, DiGiCo will show and, more importantly, allow attendees the opportunity to hear, a newly designed 32-bit 'John Stadius' Mic Pre-Amp for the first time.

John and his team have been designing Pre-Amps for over 40 years. Now, this new improvement in converter technology has allowed them to develop a Pre-Amp with audio qualities that they have long aspired to achieve.



The specifications of the 32-bit SD Mic Pre-Amp Card include:

- Fully differential audio path from input to converter
- Twin 32-bit ADC conversion per channel
- Lightning quick conversion time; 73uS
- Dynamic punch and increased audio depth; Dynamic range of 123dBA
- Incredibly low noise; 128dB EIN
- Transparency and clarity of audio; 20-22kHz <0.002% THD+N
- Class leading frequency response; 20-44.5kHz $\hat{A}\pm 0.1$ dB
- Open and clear audio reproduction; 12dB harmonic weighting improvement

- 8 channels of temporal perfection; 0deg phase shift 20-22kHz
- Dedicated analogue, ultra-low noise linear power supplies; including +48V phantom power
- Only one, phantom power blocking, capacitor in the audio path; Gold Nichicon "MUSE" acoustic series
- Fully shielded analogue stage
- Precision clipping with no artefacts
- Reduced operating temperature (Sounds cooler)
- Roadworthy metal XLR connectors

Mic Pre-Amp	Leading Competitor A	Leading Competitor B	DiGiCo 32 Bit
THD+N% (0dB 1k)	0.007	0.006	0.002
Dynamic Range A-D	114dBA	115dBA	123dBA
Noise A-A	-83dBu	-86dBu	-90dBu
Noise A-D	-110dBFS	-110dBFS	-120dBFS
EIN (0dB Gain)	124dB	126dB	128dB
A-A FQ Resp	20-20kHz $\hat{\pm}0.25$ dB	20-20kHz $\hat{\pm}0.20$ dB	20-20kHz $\hat{\pm}0.15$ dB
A-D 48k FQ Resp	20-22.5kHz $\hat{\pm}0.1$ dB	20-22.5kHz $\hat{\pm}0.1$ dB	20-22.5kHz $\hat{\pm}0.1$ dB
A-D 96k FQ Resp	20-44.5kHz $\hat{\pm}0.1$ dB	20-44.5kHz $\hat{\pm}0.1$ dB	20-44.5kHz $\hat{\pm}0.1$ dB
CMR @ 1kHz	73dB	63dB	77dB
Zin	3k	2k	2k

Significant audible improvements and transparency delivered!