GENx192 ULTRA LOW JITTER STUDIO MASTER CLOCK

88192 A/D D/A CONVERTER

Two <u>New</u> Products from Lucid

Designed without compromise.

It's all about the sound.

Digital recording technology has completely changed the way audio engineers record and produce music. Quality standards for digital audio recordings are increasing every day, and these new standards require new tools. Lucid has been providing these tools for many years. We understand the phrase, *excellence in digital audio*.

Why do I need a master clock?

Every piece of digital gear has an internal clock. Allowing each unit to control its own clock can and will result in degraded audio performance which can be heard as "smearing" of the audio, loss of accuracy in the high end, degraded stereo imaging, and even clicks & pops. **Controlling multiple sample clocks from one master timing reference eliminates jitter (timing irregularities) and assures the integrity of the sample rate. Bottom Line? Better sounding audio.**

Introducing the Lucid GENx192, a multi-format master clock.

With eight (8) Word clock, four (4) AES clock, and two (2) S/PDIF clock outputs at internal sampling rates of up to 192 kHz (*it can also sync to external Word or AES clocks*), the Lucid GENx192 guarantees excellence in audio clocking and clock distribution for recording, post-production, and broadcast environments.

You want to sound better, right?

Even the most sophisticated digital editor can only do so much with poor quality raw materials. Lucid converters are designed to faithfully convert analog signals to digital information, and vice versa, with the highest fidelity and as much accuracy as possible.

Introducing the Lucid 88192, a multi-format audio converter.

Designed for rigors and complexities of today's hi-definition digital recording systems, the Lucid 88192 guarantees excellence in audio conversion and management for recording, post-production, and broadcast environments.

This new multi-format audio converter provides 8 channels of AES/EBU and 8 channels of SMUX^2 ADAT digital audio to and from the host.

Extremely low distortion and jitter, coupled with wide frequency response translates into clean, quiet, accurate, and stunning recordings. Adjustable gain and clip limiting on the analog input stage allows the user to optimize levels under a variety of circumstances. The simple user interface is designed for quick, efficient operation of all functions.

The Lucid 88192 guarantees excellence in audio conversion and management for recording, post-production, and broadcast environments.

An optional FireWire interface card for compatibility with Windows® and Macintosh® computers for native workstation recording applications is coming soon!

EXTREME DIGITAL MANAGEMENT TOOLS: ENGINEERED BY SYMETRIX

GENx192 ULTRA LOW JITTER STUDIO MASTER CLOCK

Applications
- Multitrack recording
- Mastering
- Broadcast
- DAWs or desktop recording interfaces

Features
- Eight Word clock outputs
- Four AES-11 (audio black) clock outputs
- Two S/PDIF (audio black) clock outputs
- Clock outputs divided between two banks allowing different clock multiples to be output simultaneously
- AES-3/11 input
- Word clock input
- Clock output range selectable from 44.1-192 kHz
- Automatic word clock termination sensing and indication
- Straightforward setup and operation via front panel - only three switches with clear LED status indication

Specifications
Controls
- SYNC SOURCE switch selects Internal, Word, or AES clock sources
- A OUTPUTS switch selects the clock multiplier for the A bank of outputs
- B OUTPUTS switch selects the clock multiplier for the B bank of outputs

LEDs
- LED indications for LOCK and SAMPLE RATE
- TERM indicators show under, over and proper termination on each Word clock input

Connectors
- 8x (two banks of four) Word clock outputs (female BNC)
- 4x (two banks of two) AES clock outputs (male XLR)
- 2x (two banks of one) S/PDIF clock outputs (female RCA)
- 1x Word clock input (female BNC)
- 1x AES clock input (female XLR)
- 1x Power (7-pin female DIN)

Performance
- Internal clock range: 44.1, 48, 88.2, 96, 176.4 and 192 kHz selectable
- External sync range: 30-200 kHz, +/- 100 ppm
- Input impedance: 75 Ohms, Word and S/PDIF; 110 Ohms, AES
- Output impedance: 20 Ohms

Electrical
- 100-240 VAC, 50-60 Hz, 25 Watts maximum

Physical
- Size: 1U (WDH: 48.26 cm x 20.96 cm x 4.369 cm /19 in x 8.25 in x 1.72 in), depth does not include connector allowance
- Shipping Weight: 3.48 kg / 7.68 lbs

88192 A/D D/A CONVERTER

Applications
- Multitrack recording
- Mastering
- Surround sound recording and monitoring
- Broadcast

Features
- Eight channels of high quality analog input and output
- Eight channels of high quality A/D and D/A conversion
- 24-bit audio conversion at samples rates up to 192 kHz
- Eight channels of single-wire AES/EBU I/O up to 192 kHz
- Eight channels of ADAT SMUX[2] I/O up to 96 kHz
- Analog and AES/EBU I/O uses XLR connectors
- Sync via internal, Word clock, AES, or ADAT inputs
- Straightforward setup and operation via front panel encoder and display
- Soft clip for peak limiting in the analog domain
- Option port for FireWire® host and future developments

Specifications
Analog-to-digital performance
- Conversion: 24-bit delta/sigma technology
- Sampling Frequency: 30-200 kHz, depending on clock source
- Analog input impedance: 20k Ohm balanced
- Maximum analog input level: +24 dBu balanced
- Dynamic range: >115 dB, A-weighted
- THD+Noise: < -105 dBA @ 1 kHz, -1 dBFS

Digital-to-analog performance
- Conversion: 24-bit delta/sigma technology
- Sampling Frequency: 30-200 kHz, depending on clock source
- Analog output impedance: 204 Ohms balanced, 102 Ohms unbalanced
- Maximum analog output level: +24 dBu balanced
- Dynamic range: >115 dB, A-weighted
- THD+Noise: < -95 dBA @ 1 kHz, -1 dBFS

System performance
- Dynamic range (D/D): > 144 dB (SRC off)
- Signal-to-noise ratio: >115 dBFS, A-weighted
- Frequency response: 10 Hz to 40 kHz @ sampling rates > 88 kHz (+/– 0.5 dB)

Connectors
- Analog input and output connectors: 8x balanced XLR
- AES-3 input and output connectors: 4x XLR
- Word clock I/O connectors: BNC
- ADAT connectors: 4x ADAT-optical

Electrical
- 100-240 VAC, 50-60 Hz, 45 Watts maximum

Physical
- Size: 2U (WDH: 48.26 cm x 22.86 cm x 8.81 cm / 19 in. x 9 in. x 3.47), depth does not include connector allowance
- Shipping Weight: 7.7 kg / 17 lbs

A CLEAR CHOICE IN DIGITAL AUDIO: ENGINEERED BY SYMETRIX