lucid

SRC9624

Real-time, asynchronous sample rate conversion.

Solve countless compatibility problems when transferring, sync'ing, or reformatting digital audio.

In the digital audio studio, combining digital streams at different sample rates is a perennial challenge. Whether you're working with unknown sample rates, jittery clocks, mysterious connectors, or all of the above, you need a foolproof method to patch things together and get on with the job. The Lucid SRC9624 Sample Rate Converter provides just that solution for all your current and future interface needs.

The SRC9624 supports a range of sample rates and 16-, 20-, and 24-bit word sizes. Using asynchronous conversion algorithms, it handles any input rate from 30kHz to 100kHz, including varispeed and common pull-up and pull-down rates. The SRC9624 also supports both types of I/O connections used in 96kHz (high-resolution) digital audio. Finally, AES11 and word clock external sync capabilities, along with a wide range of industry-standard internally generated clocks, ensure easy synchronization between almost any digital audio equipment, whether it's professional or consumer.

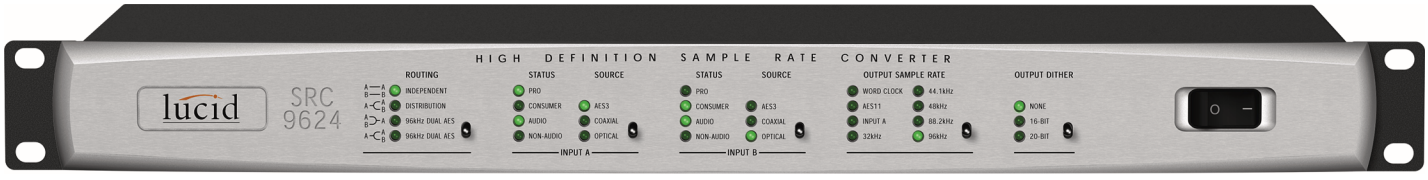
Key Features

- Supports single-wire and double-wire 96kHz input and output, plus sample rate conversion of two single-wire stereo streams
- Easy synchronization using five internal and three external master clock options
- Locks to all common pull-up and pull-down rates, as well as standard rates
- Dithering from 24-bit to 20-bit or 16-bit word lengths

ONE VERY LUCID BOX, TWO PERFECT CONVERTERS.

The SRC9624 is the only sample rate converter that solves the hardware compatibility problems unique to 96kHz digital audio. Currently, there are two industry approaches to transmitting and receiving 96kHz audio. The first is "single-wire" AES3, which uses a single 96kHz wire to transmit and a single 96kHz wire to receive. The second is "dual-wire" AES3, which breaks the digital stream into left and right channels at 48kHz and uses two wires to send and receive in stereo.

With the SCR9624, you can interface gear using either format. If the input audio is single-wire, the output can be dual-wire — or vice versa. Thus you can interface a unit like the single-wire TC Electronics DBMAX to the dual-wire Sadie workstation without ever leaving the digital domain. In addition, the SRC9624 converts two single-wire stereo streams at rates up to 96kHz to any standard common output rate, essentially providing you with two sample rate converters in a single box.



Extensive options for sample rate and format conversion.
The SRC9624 supports real-time sample rate conversion at five sampling frequencies: 32kHz, 44.1kHz, 48kHz, 88.2kHz, and 96kHz. The SRC9624 also handles both transmission formats of 96kHz digital audio. And a full selection of AES3, coaxial AES3-S/PDIF, optical S/PDIF, word clock, and AES11 connectors chart any audio path across vintage and state-of-the-art equipment.

Easy synchronization between practically any gear.
Mixing multiple audio sources with different sample rates always results in sync problems. Even if the sources run at the same nominal sample rate, when they're mixed, jittery internal clocks can produce digital distortion in the form of audible pops or clicks. To eliminate this, the SRC9624 offers five internal clock rates (32kHz – 96kHz) and three external sources (AES11, word clock, or an input signal), any of which can act as the master clock to control connected equipment. Video post engineers can lock to word clock or AES11 for sync'ing to all common pull-up and pull-down rates. Any way you use it, the SRC9624's highly stable internal clocks and the unit's low-jitter PLL circuitry produce the lowest possible jitter at the selected output sample rate.

Selectable dithering that eliminates truncation distortion.
The SRC9624 minimizes noise in the signal path through triangular PDF-based dithering, which increases dynamic range for 20-bit or 16-bit output from source data of a higher resolution. The toggle-switch dither selection is global for all outputs. As a result, you can store high dynamic range audio on a 16-bit DAT tape, CD, or 20-bit digital multitrack or workstation.

Performance

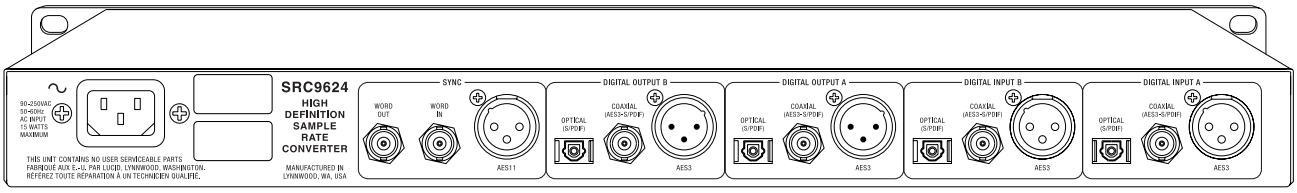
- Digital Audio Input Sample Rate Range: 32kHz – 100kHz
- Digital Audio Output Sample Rates: Internal Sync: 32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz
  External Sync: 32kHz – 100kHz
- External Sync Input Range (Word Clock and AES11): 32kHz – 100kHz
- Conversion Range Ratio (Fso/Fsi): 1:3 to 3:1
- Input Resolution: Up to 24 bits
- Output Resolution: 24 bits
- Signal-to-Noise ratio: 120dB min, 128dB typical
- Dynamic Range: 120dB min, 128dB typical
- THD+Noise:
  1kHz, -1dBFS, 0.33 < Fso/Fsi <1.7 : -117dB max
  1kHz, -1dBFS, 0.33 < Fso/Fsi < 3.0 : -112dB max

Connectors

- Digital Audio Input and Output Connectors:
  XLR/AES3 (110 Ohm)
  RCA/Coaxial (75 Ohm)
  Optical (TOSLINK)
- Word Clock Sync Input and Output Connectors: BNC (75 Ohm)
- AES11 Input Sync Connector: XLR (110 Ohm)

Physical

- 1U Chassis: 1.72(H) x 19(W) x 6(D) in.
- Weight: 7.4 lb. (net)



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