

# AD9624 and DA9624

## First-class converters for recording, mastering, and post-production.

Take your digital recording system to the next level with the addition of the AD9624 and DA9624. Each of these converters bridges the gap between analog and digital equipment with transparent audio conversion. True 24-bit resolution is the best way to record and process all the detail the human ear can hear. Both units support sample rates of 96kHz, 88.2kHz, 48kHz, 44.1kHz, and 32kHz. What's more, the AD9624's noise shaping function enhances the clarity of lowlevel material for superior imaging and realism when creating 16-bit masters.



- Stereo 24-bit, precision A/D conversion
- · Internally generated sample rates of 96kHz, 88.2kHz, 48kHz, 44.1kHz, and 32kHz and external sync via Word Clock
- User-selectable, 16-bit noise shaping
- · Simultaneous AES/EBU (XLR) and S/PDIF (coaxial and TOSLINK) digital outputs
- · 20-segment input level LED ladders with peak hold and clip indicator



## · Separate headphone volume control and front panel output

- True 24-bit resolution using high-precision converters
- · Digital input via AES/EBU (XLR), S/PDIF (coaxial), or S/PDIF (TOSLINK) connectors
- · 20-segment output level LED ladders

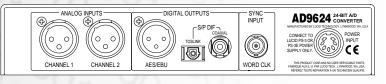
#### Multiple connections for flexible operation.

The AD9624 accepts analog input via XLR connectors and outputs its digital bit stream simultaneously through professional AES/EBU and consumer S/PDIF (coaxial and optical TOSLINK) connectors. For maximum flexibility, the DA9624 receives input via these same three connector types, and it delivers analog output through XLR and <sup>1</sup>/<sub>4</sub>" connectors for interfacing with balanced or unbalanced equipment. A front panel headphone output provides a convenient way to monitor audio levels.

#### Finishing touches make all the difference.

Easy-to-read, 20-segment LED ladders on both converters show you exactly where to set I/O controls for optimal A/D and D/A conversion. Rack the AD9624 next to the DA9624 using a Lucid RM-4 rack mount tray, or use either unit on its own for your specific interface requirements.





## AD9624 24-Bit A/D Converter

Frequency response:

- For sample rates of 88.2kHz and 96kHz: 20Hz – 40kHz (+/-1dB)
- For sample rates of 44.1kHz and 48kHz: 20Hz – 20kHz (+/-0.5dB)
- For 32kHz sample rate: 20Hz – 15kHz (+/-0.5dB)

Internally generated sample rates: 32, 44.1, 48, 88.2, and 96kHz and external sync via Word Clock

Dynamic range: >115dB, A-weighted, input level at full CCW

THD+Noise: <0.003% (-1dBFS out, 1kHz)

Analog input impedance:  $20k\Omega$  balanced,  $10k\Omega$  unbalanced

Maximum analog input level at full CCW: +25dBu balanced

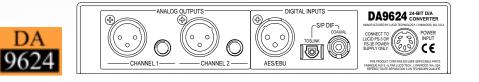
Maximum analog input level at full CW: -5dBu balanced

Analog input connectors: Balanced XLR

Digital output connectors: AES/EBU (XLR) and S/PDIF (coaxial and TOSLINK optical)

Word Clock connector: BNC

Power supply: External AC (Lucid PS-3 or PS-3E) via 7-pin DIN connector



### DA9624 24-Bit D/A Converter

#### Frequency response:

- For sample rates of 88.2kHz and 96kHz: 20Hz – 40kHz (+/-1dB)
- For sample rates of 44.1kHz and 48kHz: 20Hz – 20Hz (+/-0.5dB)
- For 32kHz sample rate: 20Hz – 15kHz (+/-0.5dB)

Dynamic range: >114dB, A-weighted

THD+Noise: <0.003% (-1dBFS in, 1kHz)

Analog output impedance: 100Ω balanced, 50Ω unbalanced Floating balanced line driver

Maximum analog output level: +25dBu (+/-1dB)

Maximum headphone output level: 20V peak to peak into 2000 $\Omega$ , 80 $\Omega$  output impedance

Analog output gain range:  $-\infty$  to +25dBu (+/-2dB)

Digital input connectors: AES/EBU (XLR) and S/PDIF (coaxial and TOSLINK optical)

Analog output connectors: Balanced XLR, balanced and unbalanced ¼" TRS, and front panel-mounted headphone output: stereo ¼" TRS

Power supply: External AC (Lucid PS-3 or PS-3E) via 7-pin DIN connector