

Article Summary:

"Studer V-Eight Digital 8-track Recorder" by Eddie Ciletti
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The Studer corporation recently released their 20-bit version of the popular ADAT format. A deep look into the mechanics and operations of this new machine was taken in my article for this week. As Studer is arguably the leading manufacturer of professional multi-track recorders, their foray into the ADAT format portends a lasting future for this means of digital recording.

The main company producing ADAT machines is company that originally developed this product, Alesis USA. Fostex also makes an ADAT compatible model, but most people own an Alesis version because of its generally better quality and history with this medium. As popular as this format has been with project studios and home recordists around the globe due to ADAT's exceptionally high sound quality for the price, the format has been a thorn in the side of many professionals who find themselves forced to work within this medium while being constrained by the semi-professional nature of the recorders. Alesis machines are notorious for a high-rate of breaking down also become a problem in professional studios by having only unbalanced analog inputs and outputs. The introduction of an ADAT compatible by Studer should be an answer to those professionals working in the field who enjoy the affordability and compactness of the ADAT format while preferring a more durable product overall.

Luckily, the Studer machine does deliver on the need for a higher quality ADAT product. While the main chassis and circuit boards are supplied by Alesis themselves (they own the patent on the design of ADAT), the tape transport itself has been replaced by a "reliable, proven medical-grade transport" which provides for a much quicker rewind/cue time (half that of the popular Alesis ADAT model M-20), as well as more solid handling of the tape itself.

Along with an increased quality in the tape path, Studer has upgraded the digital converters in their machine. Compared to Alesis's best converters which run at 24-bits/64x oversampling (A/D) and 20-bits/128x oversampling (D/A), Studer uses matched 24-bit/128x oversampling converters on both sides of the conversion chain. Not only are these converters better from a purely bit level/oversampling rate point of view, but the basic sound quality and design of the converters far exceeds those in the Alesis machines. The author, Ciletti, remarks that Studer's converters are comparable to high-quality standalone converters such as the Prism 24-bit models. In general, Alesis machines were found to be 10dB noisier, and Fostex machines 20dB noisier, when compared to the Studer V-Eight.

In summary, the Studer offering in the ADAT market represents a large leap in quality for the format. Although the price tag of the Studer (list \$8,495) far exceeds the price tag for even the most expensive Alesis (list \$4,500), three Studer V-Eights are still much more affordable than a 2-inch analog machine. Theoretically, the Studer V-Eight is thus the "most affordable, finest-sounding digital multi-track made to date."