PCI Express Cards . MADE by RME





72-Channel ADAT/AES PCI Express Card

24 Bit/192 kHz . Performance without compromises New features . Lowest latency . Lowest CPU load



The Hammer falls again.

HDSPe RayDAT is the newly developed PCI Express successor of the Hammerfall DSP 9652 which can be regarded as the studio standard for ADAT I/O cards. Some ten thousands of installations worldwide are proof that RME's ADAT solutions are the perfect partners for all software-based DAWs. Still based on the award-winning Hammerfall DSP technology, combining superb handling and stability with extremely low latency, the addition of PCI Express and several new features make RayDAT the ideal solution from recording up to the final mastering.

RayDAT offers no less than 4 x ADAT optical I/O, SPDIF I/O and AES/EBU I/O. All 36 inputs and 36 playback channels can be routed and mixed independently, including S/PDIF (phono) and AES/EBU (XLR), which are simultaneously operational due to separated hardware and record/playback devices. On top, there are 2 MIDII/Os and TotalMix, RME's unsurpassed DSPbased real-time mixer/router, with hardwarecalculated level metering and complete MIDI remote capability. RayDAT also supports the optional TCO Module for timecode support and word clock / video synchronization.

The card is equipped with SteadyClock[™], RME's own clock technology, combining professional features like maximum jitter suppression at full varipitch capabilities and software controlled sample rates.

RME's unique SyncCheck and AutoSync technology has evolved into the new Intelligent Clock Control of the HDSPe system. HDSPe RayDAT measures and displays the frequency of all clock sources - even word clock! Based on validity and current sample rate the system then decides which clock source should be used, fully automated and performed in hardware. With this the HDSPe system offers the most easiest handling of the present clocks, although having a lot digital inputs, plus the most advanced support when configuring the clock setup.

The included DIGICheck for Windows turns the HDSPe RayDAT into a Spectral Analyzer, provides professional level meters for 2, 8, or 36 channels, offers Vector Audio Scope, Global Record Function and various other audio analysis tools.

RME's secure flash update technology makes sure that firmware improvements, adjustments, and bugfixes can be installed easily at any time.

Some of the card's unique features are:

- All settings changeable in real time
- Automatic, intelligent master/slave clock control
- Enhanced Mixed mode: All inputs and outputs are simultaneously operational
- Unsurpassed Bitclock PLL (audio synchronization) in ADAT mode
- ZLM® (Zero Latency Monitoring) for latency-free submixes and perfect ASIO Direct Monitoring
- S/MUX in hardware: 16 channels @ 24bit/96 kHz or 8 channels @ 24 bit/192 kHz record/playback via ADAT optical
- DIGICheck[®] software for testing, measuring and analyzing digital audio streams
- TotalMix: 2592 channel mixer with 42bit internal resolution
- Extensive status windows showing mode and clock rates
- Super low jitter design: < 1 ns in all clock modes

RayDAT is the multi-channel, multiformat and multi-task tool that turns every computer into a powerful Digital Audio Workstation.

I/O Connectivity

36 Input / 36 Output channels 4 x ADAT I/O (optical) 1 x SPDIF I/O (coaxial) 1 x AES/EBU I/O (XLR)



optional: HDSP TCO Word Clock I/O, LTC I/O, Video In Sync In

optional: TEB - TDIF Module

optional: WCM - Word Clock Module

Specifications

2 x MIDI I/O

- 1-Lane PCI Express Endpoint device (no PCI Express to PCI Bridge), revision 1.1.
- 2.5 Gbps line speed Packet-based fullduplex communication (up to 500 MB/s transfer rate)
- Supported sample frequencies: Internally 32, 44.1, 48, 64, 88.2, 96, 176.4, 192 kHz. Externally 28 kHz - 200 kHz
- 8 buffer sizes/latencies available: 0.7, 1.5, 3, 6, 12, 23, 46, 93 ms
- ADAT inputs based on RME's reliable Bitclock PLL
- High-speed MIDI
- Breakout cable for coaxial SPDIF operation (included)
- Digital formats: SPDIF, AES/EBU, ADAT optical

Perfect Partners



Micstasy

8-Channel 192kHz Full Range Preamp & AD converter Analog . AES/EBU . ADAT . MADI



OctaMic II 8-Channel 192 kHz Mic Preamp & AD converter Analog . AES/EBU . ADAT



ADI-8 QSM 8-Channel 192 kHz High-End AD/DA converter Analog . AES/EBU . ADAT . MADI



ADI-192 DD 8-Channel 192 kHz

digital format / samplerate converter AES/EBU . ADAT . TDIF



Am Pfanderling 60 . 85778 Haimhausen . Germany Tel.: +49-08133-918170 Fax: +49-08133-9166

