

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)
- 2 x MIDI I/O
- optional: HDSP TCO

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

HDSPe RayDAT is the newly developed PCI Express successor of the DIGI 9652 (known as Hammerfall) 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. 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 MIDI I/Os and TotalMix, RME's unsurpassed DSP-based real-time mixer/router, with hardware-calculated level metering and complete MIDI remote capability. RayDAT also supports the optional TCO Module for LTC timecode and video clock synchronization.

The latest 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 @ 24-bit/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 42-bit internal resolution
- Extensive status windows showing mode and clock rates
- Super low jitter design: < 1 ns in all clock modes

Differences to HDSP 9652

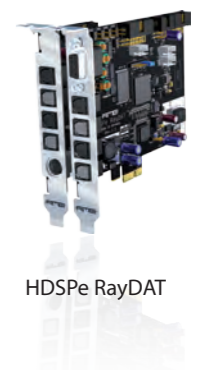
- PCI Express interface
- Additional (fourth) ADAT I/O
- S/PDIF and AES/EBU simultaneously operational
- Sample rates up to 192 kHz
- even lower latencies
- Greatly enhanced TotalMix
- direct support of HDSP TCO
- Word Clock I/O via optional expansion board
- No ADAT Sync port (D-sub)

Specifications

- 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

Optional Add-Ons

- HDSP TCO: Timecode Option Module with enhanced sync capabilities for HDSPe cards. 1 x word clock I/O, 1 x video sync input (switchable from WC in), 1 x LTC I/O
- Word Clock Module (WCM): provides a word clock input and two word clock outputs via BNC jacks.
- TEB: HDSPe RayDAT can provide up to two TDIF interfaces when using the TDIF Expansion Boards.



HDSPe RayDAT