



# D1

## CD/SACD Unit

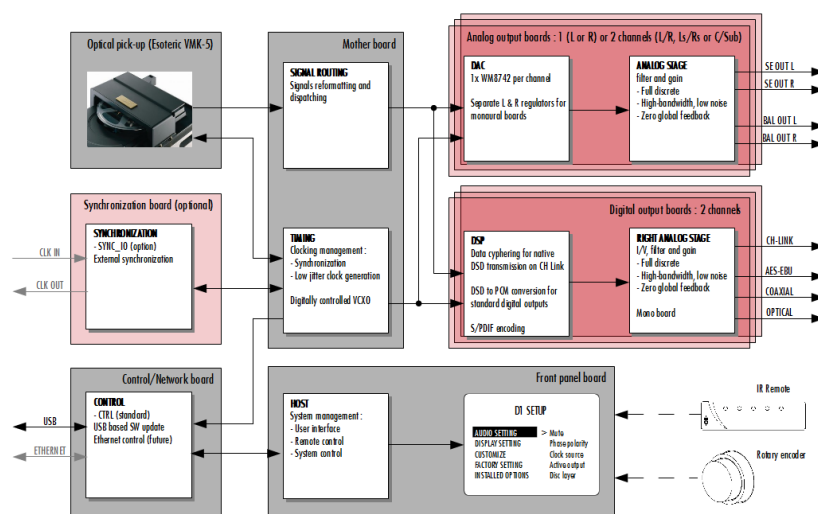
### Product Brief

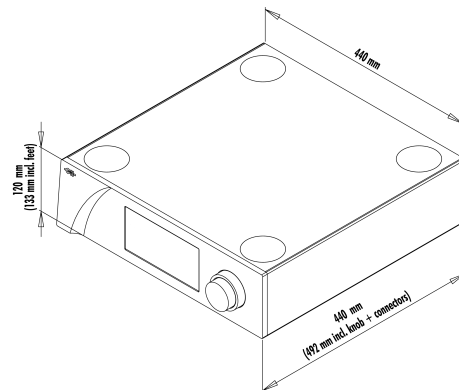
CH's D1 Reference grade CD/SACD unit exemplifies state-of-the-art Swiss precision and utmost dedication to faithful musical reproduction. Built around the Esoteric VMK-5 VRDS CD/SACD pick-up mechanism, the D1 offers a fully modular and evolutive architecture based on optional slot-in boards for its audio outputs. Each audio board supports two channels of audio output, either digital (DIGITAL\_OUT board) or analog (ANALOG\_OUT board), allowing almost any configuration ranging from a simple stereo analog only player to a multi-channel purely digital drive. Mono analog output boards are available for the front L and R channels.

Whereas the DSD signal is down-converted to 16bits/44.1kHz (using in-house algorithms) for standard digital outputs, the D1 also integrates the proprietary CH Link interface which not only supports cyphered transmission of native DSD data but also phase compensated synchronization when the D1 is used with one or more C1 digital to analog converter(s). Analog outputs are based on a differential dual mono converter topology coupled to a fully discrete output stage. Both balanced and single-ended outputs are provided. External synchronization capabilities can be added by the SYNC\_IO optional slot-in board. This board provides standard wordclock input and output on BNC connectors for synchronization with an external clock generator.

The user interface is based on an ergonomically designed dual concentric rotatory knob with push function and feedback is given by a 24bits RGB color programmable high-definition AMOLED display. A custom infrared remote control allows access to the D1's most common functions. An oversized, multi-regulated linear power supply and meticulous attention to mechanical design, construction and assembly ensure optimal operating conditions for all circuits, especially the clocking section which benefits from its own dedicated power supply.

The block diagram below shows the architecture of the D1 CD/SACD units. Optional boards are marked in red.





## Specifications

General	
Supported discs	SACD (stereo and multi-channel), CD, CD-RW
Display	480 x 272 24bits RGB AMOLED
Power supply	Selectable 100V, 115V or 230V AC, 47Hz to 63Hz, <1W in Standby
Dimensions	440mm x 440mm x 120mm, 32kg
Remote control / software update	IR remote control, RC5 codes / USB port for software update
Digital output (DIG_OUT board)	
CH Link	HD link, PCM (up to 768kHz/32bits) / DSD (cyphered)
AES-EBU	XLR, 2.5Vpp, 110 Ohms, 16bits/44.1 kHz
Coaxial (S/PDIF)	RCA, 0.5Vpp, 75 Ohms, 16bits/44.1 kHz
Optical (S/PDIF)	Optical, 16bits/44.1 kHz
Analog outputs (ANALOG_OUT board) – optional mono analog output boards available for L and R channels	
Outputs	Balanced (XLR) and single-ended (RCA) connections
Output level	2Vrms (Single-ended and Balanced), 4Vrms Balanced with mono analog output
Frequency response	DC-50kHz (SACD), DC-20kHz (CD)
Dynamic range (DNR)	120dB (SACD), 96dB (CD)
Signal to noise ratio (SNR)	121 dB (SACD and CD)
Total harmonic distortion + noise (THD+N)	0.0015% (SACD), 0.002% (CD)
Synchronization (optional SYNC_IO board)	
Wordclock input	BNC, 0.5Vpp to 5Vpp, 75 Ohms or Hi-Z, 44.1 kHz
Wordclock output	BNC, 2Vpp, 75 Ohms, 44.1 kHz

Specifications subject to change without notice. Illustrations are informative only.