

APEX PLAYER



SPECIFICATIONS

Finish	Silver or Black Anodised Aluminium	MQA	Full decoding and rendering of MQA data from the Network and USB2 inputs. Final rendering of unfolded MQA data only from the other inputs
Type	Upsampling CD/Network Player	Residual Noise	16-bit data: Better than -96dB0, 20Hz-20kHz unweighted. 24-bit data: Better than -113dB0, 20Hz - 20kHz unweighted (6V output setting)
Dimensions	444mm x 435mm x 151mm 17.5" x 17.2" x 6.0" Allow extra depth for cable connectors	L R Crosstalk	Better than -115dB0, 20Hz – 20kHz
Weight	17.4kg / 38.3lbs	Spurious Responses	Better than -105dB0, 20Hz – 20kHz
Converter Type	dCS proprietary Ring DAC™ topology. Operates at 6MHz (Map 1 or 3) or 3MHz (Map 2)	Filters	PCM mode: up to 6 filters give different trade-offs between the Nyquist image rejection and the phase response. DSD mode: 4 filters progressively reduce out-of-audio band noise level, plus Filter 5 which has an improved transient response
Digital Inputs	- Ethernet network port on RJ45 connector, accepts 24-bit 44.1 – 384kS/s PCM, DSD/64 & DSD128 in DFF/DSF format - USB 2.0 interface on B-type connector, accepts 24-bit 44.1 – 384kS/s PCM, DSD/64 & DSD128 in DoP format - USB On-The-Go interface on A-type connector, accepts 24-bit 44.1 – 384kS/s PCM, DSD/64 & DSD128 in DFF/DSF format 2x AES/EBU inputs on 3-pin female XLR connectors, accepts 24-bit 44.1 – 192kS/s PCM, DSD/64 & DSD/128 in DoP format 1x Dual AES pair, accepts 24-bit 88.2 – 384kS/s PCM, DSD/64 & DSD/128 in DoP format 1x SPDIF on RCA Phono connector, accepts 24-bit 44.1 – 192kS/s PCM & DSD/64 in DoP format 1x SPDIF on BNC connector, accepts 24-bit 44.1 – 192kS/s PCM & DSD/64 in DoP format 1x SPDIF optical on TOSLINK connector, accepts 24-bit 44.1 – 96kS/s PCM	Conversions	User selectable PCM upsampling to DXD, DSD or DSDx2
Mechanism	Stream Unlimited JPL-2800 SilverStrike with aluminium tray	Software Updates	Loaded from CD-R or via PCM digital inputs or PC via USB input. Download and update functionality available via dCS Mosaic App
Analogue Outputs	1x pair balanced outputs on 2x XLR connectors. Output levels: 0.2V, 0.6V, 2V, 6V rms for a full-scale input, set in the menu. Output impedance: 3Ω. Maximum load: 600Ω (10k-100kΩ is recommended) 1x pair unbalanced outputs on 2x RCA connectors. Output levels: 0.2V, 0.6V, 2V, 6V rms for a full-scale input, set in the menu. Output impedance: 52Ω. Maximum load: 600Ω (10k-100kΩ is recommended)	Local Control	dCS Mosaic App for Unit Configuration and Music Playback. RS232 interface (controlled by a 3rd party automation system). IR remote control – dCS Universal Remote is supplied with Rossini Player
Worldclock I/O	2x Word Clock Inputs on 2x BNC connectors, accept standard Word Clock at 44.1, 48, 88.2, 96, 176.4 or 192kHz. The data rate can be the same as the clock rate or an exact multiple of the clock rate. Sensitive to TTL levels 1x Word Clock Output on 1x BNC connector. With Sync Mode set to Master, a TTL-compatible Word Clock is output	Power Supply	Factory set to either 100, 115/120, 220 or 230/240V AC, 50-60Hz
		Power Consumption	26 Watts typical / 35 Watts maximum
		Operating Systems	USB Audio Class 1 & 2 fully supported by Windows 10/11 & OSX 10.10 or later

APEX DAC



SPECIFICATIONS

Finish	Silver or Black Anodised Aluminium	MQA	Full decoding and rendering of MQA data from the Network and USB2 inputs. Final rendering of unfolded MQA data only from the other inputs
Type	Upsampling Network DAC	Residual Noise	24-bit data: Better than -113dB0, 20Hz - 20kHz unweighted. (6V output setting)
Dimensions	444mm x 435mm x 125mm 17.5" x 17.2" x 5.0" Allow extra depth for cable connectors	L R Crosstalk	Better than -115dB0, 20Hz - 20kHz
Weight	15.6kg/34.3lbs	Spurious Responses	Better than -105dB0, 20Hz - 20kHz
Convertor Type	dCS proprietary Ring DAC™ topology. Operates at 6MHz (Map 1 or 3) or 3MHz (Map 2)	Filters	PCM mode: up to 6 filters give different trade-offs between the Nyquist image rejection and the phase response. DSD mode: 4 filters progressively reduce out-of-audio band noise level, plus Filter 5 which has an improved transient response
Digital Inputs	- Ethernet network port on RJ45 connector, accepts 24-bit 44.1 - 384kS/s PCM, DSD/64 & DSD128 in DFF/DSF format - USB 2.0 interface on B-type connector, accepts 24-bit 44.1 - 384kS/s PCM, DSD/64 & DSD128 in DoP format - USB On-The-Go interface on A-type connector, accepts 24-bit 44.1 - 384kS/s PCM, DSD/64 & DSD128 in DFF/DSF format 2x AES/EBU inputs on 3-pin female XLR connectors, accepts 24-bit 44.1 - 192kS/s PCM, DSD/64 & DSD/128 in DoP format 1x Dual AES/EBU, accepts 24-bit 88.2 - 384kS/s PCM, DSD/64 & DSD/128 in DoP format 1x SPDIF on RCA Phono connector, accepts 24-bit 44.1 - 192kS/s PCM & DSD/64 in DoP format 1x SPDIF on BNC connector, accepts 24-bit 44.1 - 192kS/s PCM & DSD/64 in DoP format 1x SPDIF optical on TOSLINK connector, accepts 24-bit 44.1 - 96kS/s PCM	Conversions	User selectable PCM upsampling to DXD, DSD or DSDx2
Analogue Outputs	1x pair balanced outputs on 2x XLR connectors. Output levels: 0.2V, 0.6V, 2V, 6V rms for a full-scale input, set in the menu. Output impedance: 3Ω. Maximum load: 600Ω (10k-100kΩ is recommended) 1x pair unbalanced outputs on 2x RCA connectors. Output levels: 0.2V, 0.6V, 2V, 6V rms for a full-scale input, set in the menu. Output impedance: 52Ω. Maximum load: 600Ω (10k-100kΩ is recommended)	Software Updates	Loaded from CD-R via PCM digital inputs or PC via USB input. Download and update functionality available via dCS Mosaic App
Worldclock I/O	2x Word Clock Inputs on 2x BNC connectors, accept standard Word Clock at 44.1, 48, 88.2, 96, 176.4 or 192kHz. The data rate can be the same as the clock rate or an exact multiple of the clock rate. Sensitive to TTL levels. 1x Word Clock Output on 1x BNC connector. With Sync Mode set to Master, a TTL-compatible Word Clock is output	Local Control	dCS Mosaic App for Unit Configuration and Music Playback. RS232 interface (controlled by a 3rd party automation system). IR remote control - dCS Universal Remote available as an optional extra
		Power Supply	Factory set to either 100, 115/120, 220 or 230/240V AC, 50-60Hz
		Power Consumption	23 Watts typical / 28 Watts maximum
		Operating Systems	USB Audio Class 1 & 2 fully supported by Windows 10/11 & OSX 10.10 or later

CD/SACD TRANSPORT



SPECIFICATIONS

Finish	Silver or Black Anodised Aluminium	Worldclock I/O	1x Word Clock Input on BNC connector, accept standard Word Clock at 44.1, 88.2 or 176.4kHz. Sensitive to TTL levels. Lock range is +/-300ppm. 1x Word Clock Output on 1x BNC connector. With the Transport in Master mode, a TTL-compatible Word Clock is output
Type	Upsampling CD/SACD Transport	Clock Accuracy	The calibration accuracy when shipped is +/-10ppm, (not temperature compensated)
Mechanism	Dual laser CD/SACD mechanism	Software Updates	Updates are loaded directly from CD-R
Dimensions	444mm long x 435mm deep x 178mm high 17.5" long x 17.2" deep x 7.0" high Allow extra depth for cable connectors Allow space for air flow around the unit	Local Control	dCS Universal Remote (supplied with Rossini Transport as standard. Via the Mosaic app, RS232 app or a third party device)
Weight	20.6kg (45.3lbs)	Power Supply	Factory set to either 100, 115/120, 220 or 230/240V AC, 50/60Hz
Digital Outputs	1x Dual AES Pair on 2x 3-pin male XLR connectors (AES1+2). While an SACD is playing, the interface outputs encrypted DSD data. While a CD is playing, the Settings > Upsample Mode menu page sets the interface to output either encrypted DSD data (1 bit at 2.822MS/s) or DXD data (24 bits at 352.8kS/s) or DSDx2 data (1 bit at 5.644MS/s) 1x AES interface on 3-pin male XLR connector (AES3). Outputs 16/44.1 data, whether a CD or SACD is playing. 2x SPDIF interface on 1x RCA Phono and 1x BNC connectors. Each outputs 16/44.1 data, whether a CD or SACD is playing	Power Consumption	16W typical / 50W maximum. Consumes less than 0.5W when powered down from the front panel

MASTER CLOCK



SPECIFICATIONS

Finish	Silver or Black Anodised Aluminium
Type	Class 1 Master Clock
Product Dimensions / Weight	444mm x 435mm x 64mm 17.5" x 17.2" x 2.6" 8.3kg / 18.3lbs. Allow extra depth for cable connectors
Clock Frequencies	44.1kHz or 48kHz
Clock Accuracy	Better than +/-1ppm when shipped, over an ambient temperature range of 10°C to 30°C. Typically +/-0.1ppm when shipped and stabilised
Wordclock Outputs	3 independently buffered outputs on 75Ω BNC Connectors. Output 1: fixed at 44.1kHz. Output 2: fixed at 48kHz. Output 3: 44.1kHz, switchable to 48kHz via RS232
Startup Time	Typically 1 minute to rated accuracy
Local Control	RS232 (limited to Power and Clock 3 output frequency)
Power Supply	Factory set to either 100, 115/120, 220 or 230/240V AC, 50-60Hz
Power Consumption	3 Watts typical / 4 Watts maximum