

# Lina System Specifications



### Lina Network DAC Specifications

Product Dimensions / Weight	121.5mm (H) x 220mm (W) x 339mm (D) 7.4kg
Shipping Dimensions / Weight	320mm (H) x 360mm (W) x 530mm (D) / 10.3kg
Finish	Black machined aluminium with crystal LED display
Electronics	<ul> <li>dCS Ring DAC and Digital Processing Platform on flex rigid PCB</li> <li>Stream Unlimited S800</li> <li>Automatic voltage switching</li> </ul>
Digital Inputs	<ul> <li>2 x AES/EBU on 3 pin XLR 44.1-384kS/s</li> <li>1 x S/PDIF BNC Coax 44.1-192kS/s</li> <li>1 x S/PDIF on RCA 44.1-192kS/s</li> <li>1 x Toslink 44.1-96kS/s</li> <li>1 x USB Type B 44.1-384kS/s, PCM and DSD, DSDx2 in Async Mode</li> <li>1 x USB Type A connector for mass storage devices (navigated using Mosaic)</li> </ul>
Analogue Outputs	1 stereo balanced pair on 2x 3-pin male XLR connectors (pin 2 = hot, pin 3 = cold). These outputs are electronically balanced and floating, the signal balance ratio at 1 kHz is better than 40dB. Output impedance is 3 $\Omega$ , maximum load is 600 $\Omega$ (a $10k\Omega$ - $100k\Omega$ load is recommended).  1 stereo unbalanced pair on 2x RCA Phono connectors. Output impedance is $52\Omega$ , maximum load is $600\Omega$ (a $10k\Omega$ - $100k\Omega$ load is recommended).  Output levels are 0.2V, 0.6V, 2V, or 6V rms for a full-scale input, set in the menu.
Network Interface	RJ-45 connector
Streaming Compatibility Supports the following platforms and services:	<ul> <li>UPnP</li> <li>Qobuz</li> <li>Deezer</li> <li>Tidal</li> <li>Internet Radio</li> <li>Spotify</li> <li>Apple AirPlay 2 (support at 44.1 or 48kS/s)</li> <li>RoonReady</li> </ul>

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#### Sample frequencies and formats

Supports the following audio formats and sample rates

- 44.1-384kS/s up to 24 bits
- DSD/64, DSD/128
- Native DSD + DoP (input dependent)
- FLAC, WAV, AIFF, MQA

Upsampling	Multi-stage DXD oversampling with switchable DSD Upsaampling (1-bit 2.822 or 3.07MS/s) and DSDx2 Upsampling (1-bit 5.644 or 6.14MS/s).
Word Clock	<ul> <li>2 x Word Clock inputs on 75 Ω BNC connectors</li> <li>Will lock to 44.1-192kHz</li> </ul>
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
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Crossfeed Settings	<ul> <li>Standard crossfeed</li> <li>dCS Enhanced crossfeed (E1)</li> </ul>
	dCS Enhanced crossfeed (E2)
Power	• IEC inlet & power switch on rear panel
	• 90-127V / 220-240V, 50/60Hz, consumption 30W
	Automatic voltage switching
	Power synchronised with other dCS control link products (RJ45)
Frequency Response (set to filter 1)	• Fs = 44.1 or 48kS/s +/-0.1dB, 10Hz-20kHz

- Fs = 88.2 or 96kS/s +/-0.1dB, 10Hz-20kHz -3dB @ >38kHz • Fs = 176.4 or 192kS/s +/-0.1dB, 10Hz-20kHz -3dB @ >67kHz
- Fs = 352.8 or 384kS/s +/-0.1dB, 10Hz-20kHz -3dB @ >100kHz
- DSD64 +/-0.1dB, 10Hz-20kHz -3dB @ >90kHz
- DSD128 +/-0.1dB, 10Hz-20kHz -3dB @ >100kHz

#### Residual Noise (6v output setting)

- 16-bit data: Better than -96dB0, 20Hz-20kHz unweighted
- 24-bit data: Better than -113dB0, 20Hz-20kHz unweighted

#### **Spurious Responses**

Better than –105dB0, 20Hz-20kHz

#### L-R Crosstalk

Better than —115dB0, 20Hz-20kHz

#### Included with your Lina Streaming DAC

- 1 x mains cable
- 2 x XLR [0.5m]
- 1 x Ethernet cable [2m]
- 1 x Power Link cable [0.5m]

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### Lina Master Clock Specifications

Clock Type	Grade 1 Master Clock, with oven-controlled crystal oscillators
Product Dimensions / Weight	121.5mm (H) x 220mm (W) x 339mm (D) / 7kg
Shipping Dimensions / Weight	TBC
Finish	Black machined aluminium
Clock Accuracy	Better than +/-1 ppm when shipped over an ambient temperature range of +5°C to +45°C
Startup Time	Typically 10 minutes to rated accuracy
Word Clock Outputs	<ul> <li>2 x independently buffered TTL-compatible output on 75Ω BNC connectors</li> <li>Output 1: fixed at 44.1kHz</li> <li>Output 2: fixed at 48kHz</li> </ul>
Power Link (synchronising on/off state with other products)	2 x RJ45
Power	<ul><li>90-120v &amp; 220-240v, 50/60Hz nominal</li><li>Consumption 10W</li></ul>
Included with your Lina Master Clock	1 x Mains cable [2m] 1 x Power Link cable [0.5m] 2 x BNC [0.5m]

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## Lina Headphone Amplifier Specifications

Product Dimensions / Weight	121.5mm (H) x 220mm (W) x 356mm (D) / 7.5kg
Shipping Dimensions / Weight	320mm (H) x 360mm (W) x 530mm (D) / 9kg
Finish	Black machined aluminium
Electronics	<ul><li>Pure analogue design</li><li>Automatic voltage switching</li></ul>
Analogue Inputs	<ul> <li>1 x stereo pair unbalanced RCA, input impedance 48kΩ</li> <li>1 x stereo pair unbuffered balanced XLR, input impedance 16kΩ</li> <li>1 x stereo pair buffered balanced XLR, input impedance 96kΩ</li> </ul>
Headphone Outputs	<ul> <li>1 x dual 3-pin balanced XLR, right and left channel</li> <li>1 x single 4-pin balanced XLR</li> <li>1 x single ¼" (6.35mm) headphone jack</li> </ul>
Power Link (synchronising on/off state with other products)	2 x RJ45
Power	90-120v & 230-240v, 50/60Hz nominal
Frequency Response	1Hz-100kHz better than +0/-3dB
THD+N	<0.005% @ 1kHz 6V rms balanced output into $30\Omega$ (80kHz bandwidth)
Channel Separation	Balanced input to balanced output into $30\Omega.$ Better than 100dB @ 1kHz. Better than 80dB, 20Hz–20kHz.
Signal to Noise Ratio	110dB 20Hz-20kHz A-weighted (referenced to 6V rms balanced input and output)

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**Power Output** 

• 2x Balanced 2W into  $30\Omega\,$ 

• 2x Balanced 0.48W into  $300\Omega$ 

• 2x Unbalanced 1.6W into  $30\Omega$ 

• 2x Unbalanced 0.2W into  $300\Omega$ 

Included with your Lina Headphone Amplifier 1 x mains cable [2m]

1 x Power Link cable [0.5m]

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