



U500DC

Ultra Fidelity Audiophile Power Amplifier.

The U500DC effortlessly delivers a huge 500W @ 4 Ohms stereo, and the all-new passive cooling system guarantees that the only thing you'll ever hear is the music as it was originally intended.

Our team of engineers have been working at the top level of the audio design industry for nearly 3 decades and have supplied amplification to countless studios, stages, theatres, festivals, stadiums, and nightclubs. Drawing on this experience and with access to the latest technology, we have created the ultimate amplifier.

See reverse for Technical Specification >





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U500DC: Technical Specifications

Highly Engineered Power Supply

An oversized linear/toroidal design has been implemented here to achieve the ultimate delivery of power. A low noise custom wound 500VA transformer ensures that the U500DC is never stressed and has next to no losses.

It operates as two monoblocs with the ability to provide huge peak power, which is delivered into two 27,000uF storage capacitor banks, ensuring ultimate stereo separation and powerful low-end propagation.

Ultra-Sigma Design Topology

A completely new push/pull output stage was developed over three years and refined through multiple listening tests. Our modern take on the class D topology is based on Sigma-Delta modulation, with supersonic switching techniques 20 times higher than the human hearing range. It reduces resistive losses 100 fold compared to class AB designs and totally eliminates crossover distortion (similar to a class A amplifier). Overall control of the output stage is accomplished by a single feedback loop which helps the U500DC deliver it's open, transparent, and expansive sonic signature.

Sonically Pure Input Stage

The input driver stage is a high-end, class A design which is complemented by full DC coupling from input to output. No Interstage coupling capacitors are used, only direct copper tracks or wires, any DC input errors (if present) are eliminated by a single overall outer servo loop. This ensures total alignment of transients and unparalleled low-end response.

NOTE Driving loads with a nominal impedance below 4R is not recommended as it may cause overheating, but driving speakers with 2-ohm impedance dips that only occur at specific frequencies, will not cause any problems. The Ultrafide U500DC remains stable into any load including a dead short however shutdown protection will occur if the output current exceeds 35A which is very likely at impedances below 2-ohms.

Audio Channels (quantity)	2	2 RCA (Single Ended)
Audio Inputs	4	2 XLR (Balanced)
NOTE: Both input types are always active; thus 2 sources can be summed if desired		
Input Impedance	10k	RCA and XLR
Input RFI Filtering Capacitance	550pF	RCA and XLR
Audio Outputs	4 pairs	Binding Post
NOTE: Double channel connectors allow separate Tweeter and Woofer cables if desired		
Output Impedance	25mR	
Maximum Voltage	70V	
Maximum Current	30A	(pulsed testing)
Voltage Gain	26dB (standard factory setting)	29dB
Current Gain	50,000	94dB
Sensitivity	2.2 Volts	
Dynamic Range	115dB	Un-Weighted 22-22kHz
Inter-stage Coupling	DC Coupled	
Frequency Response	5 to 20kHz	+-0.3dB
Distortion	0.003% at 5W	0.008% at 200W
Rise/Fall Time	10uS	
Stability	Unconditional	
RMS Power into 4R	500W	600W at high gain setting
RMS Power into 6R	333W	400W at high gain setting
RMS Power into 8R	250W	300W at high gain setting
RMS Power into 12R	166W	200W at high gain setting
NOTE: Amplifier is stable into 2 ohm loads but with no increased power.**		
Power Supply Connector	10A Furutech C13 IEC	
Fuse	10A	
Nominal Power Supply Voltage	230Vac (50Hz)	or 120Vac (60Hz)
Power Voltage Selector	Internal	
Power Isolation Switch	On Rear Panel	
Standby Switch	On Front Panel	
Remote Standby	Connector on Rear Panel	
Power Consumption operational	200W average	1,000W max
Power Consumption Idle	15W	
Power Consumption Standby	1W	
Current Consumption	230v – 1A nominal (5A max)	120v – 2A nominal (10A max)
Power Indicator	Green for Out of Standby	
Fault Indicator	Red Led illuminates if clipping or protection is active	
Product size / weight (packed)	590(L) x 405(W) x 152(H)mm	14.65kg (GROSS)
Product size / weight (unpacked)	382(L) x 325(W) x 97(H)mm	13.05kg (NET)

