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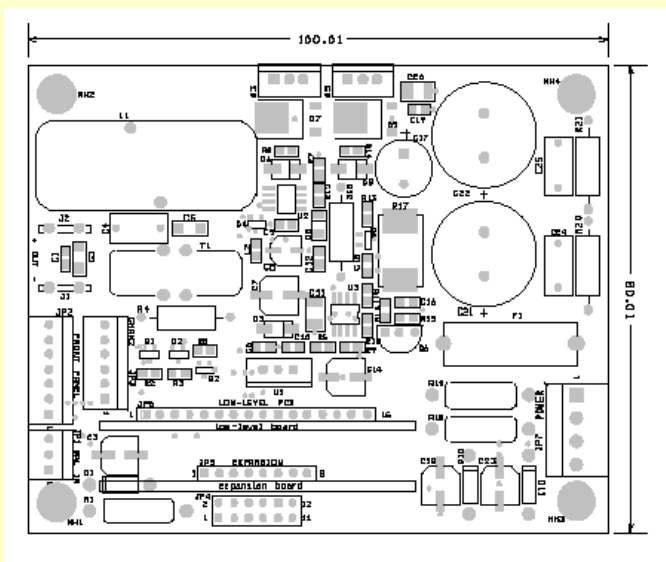


D500A PWM Amplifier



D500A specs

Rated power 4 ohms	500W
Power supply max.	2 x 65V DC
Aux. supply	16V DC
Freq. Range (+0, -1dB)	20 - 20.000 Hz
THD + N	0.02% typ.
Dynamic Range	110 dB typ.
Max. output current	32A
Min. load impedance	4 ohms
Damping Factor	400 typ.
Input voltage	1V - 10 k - balanced
Operation	Half bridge amplifier
Plugin/expansion header	yes
Peak limiter	yes
Dimensions	100 x 80 x 25mm
Heatsink	external (small)
Available as sample	yes
Available as OEM design	yes



D500A is a PWM /Class-D amplifier designed to give very high performance in audio quality and to deal with all aspects of amplifier use and applications including amplifier + power supply combination, multichannel use , active crossover use, etc.

Power output is 500 W into 4 ohms, overcurrent protection is likely to operate with continuous high power levels into 2 ohms.

D500A is a full bandwidth module (20 kHz power bw) and can be used for a broad range of applications from HIFI, Home Cinema to Pro Audio, Active Speakers, Installation... Sound quality is very good indeed and THD + N is 0.02% or better.

The D500A can be powered from a linear supply , a switch-mode supply , a D500ASW or a D2000ASW module.

D500A has these connections:

- * Balanced input header (3-pin molex)
- * Expansion header (8-pin molex) with input/output + power for external signal processing, crossover, eq,...
- * Front panel header (7-pin molex) with volume control in/out + output to led meter and power for this.
- * Channel-2 link (6-pin molex) with clock and audio connection to additional channel module.
- * Mode selector (2x6 pin molex) selects fullrange, high or low for both main module and ch-2.
- * Power input (4-pin connector) 2 x 65VDC + 15VDC

Connectors.

Power Input – JP7

1	+65V
2	GND
3	-65V
4	+15_FL

Speaker Output.

J1 - + out
J2 - -out

Audio Input – JP2

1	GND
2	+IN
3	-IN

Expansion Header – JP5

1	HI out
2	LO out
3	
4	input
5	
6	+15V
7	GND
8	-15V

CH2 LINK – JP1

1	CLK out
2	GND
3	CLK in
4	GND
5	From JP6
6	GND

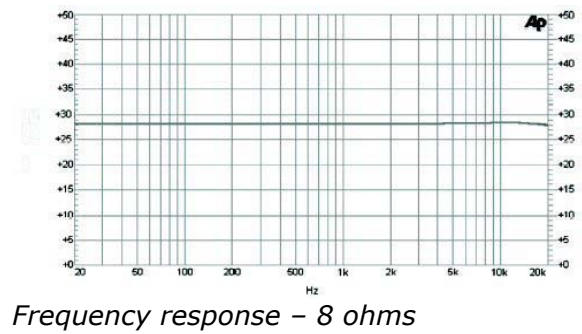
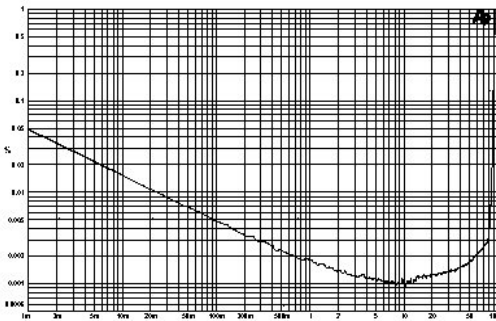
Mode selector – JP6

1-2	HI to CH2
3-4	LO to CH2
5-6	FR to CH2
7-8	HI to CH1
9-10	LO to CH1
11-12	FR to CH1

Front Panel – JP2

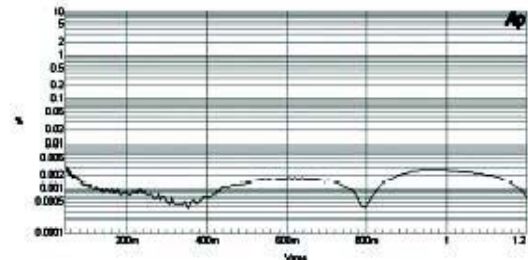
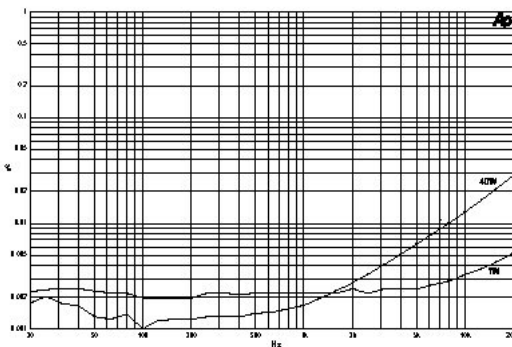
1	SD led
2	Clip led
3	+12V
4	GND
5	To Vol
6	From Vol
7	GND

Performance Graphs.



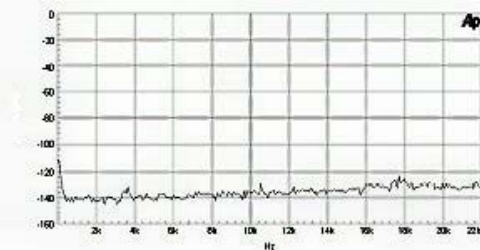
Frequency response – 8 ohms

THD vs. Power Output

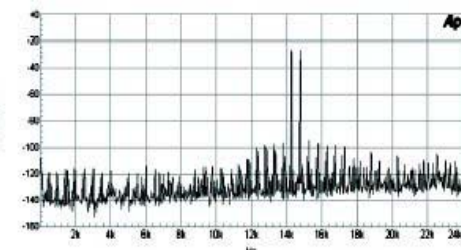


CCIF & IMD distortion – 14 kHz and 15 kHz

THD vs. Power Output and frequency



Noise Floor



CCIF & IMD distorti

