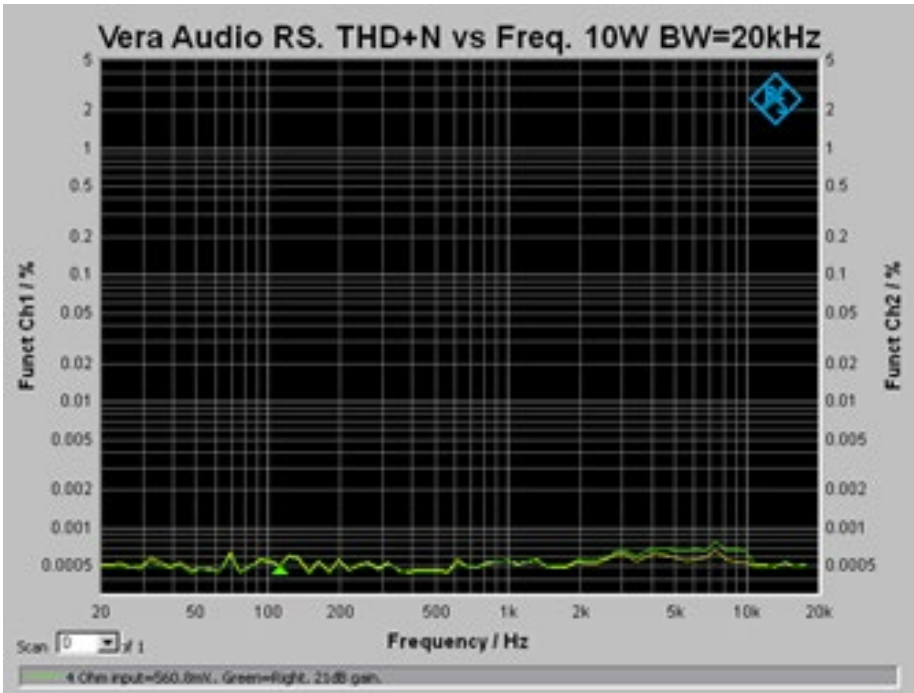
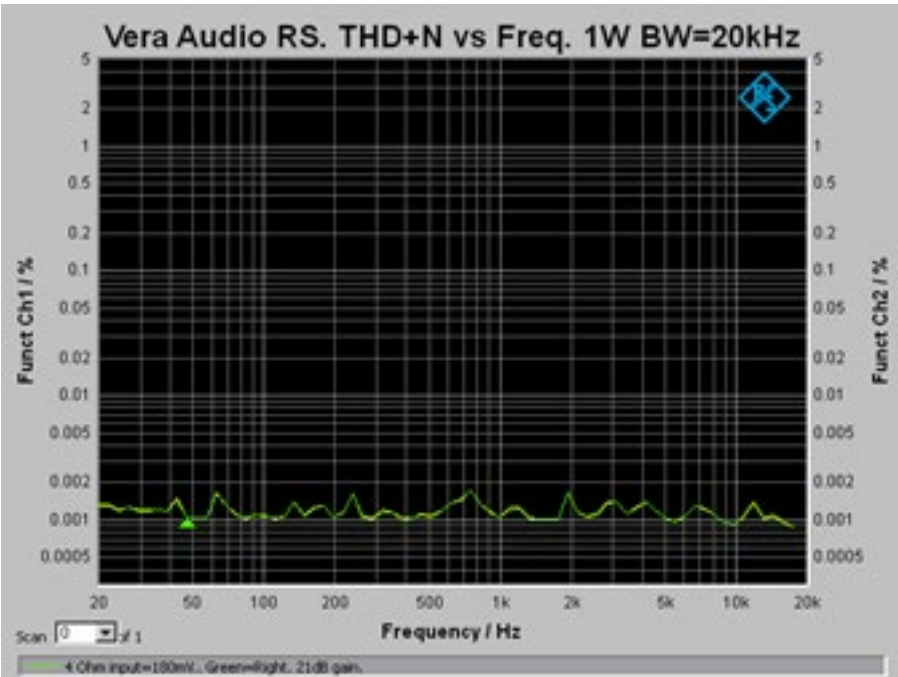
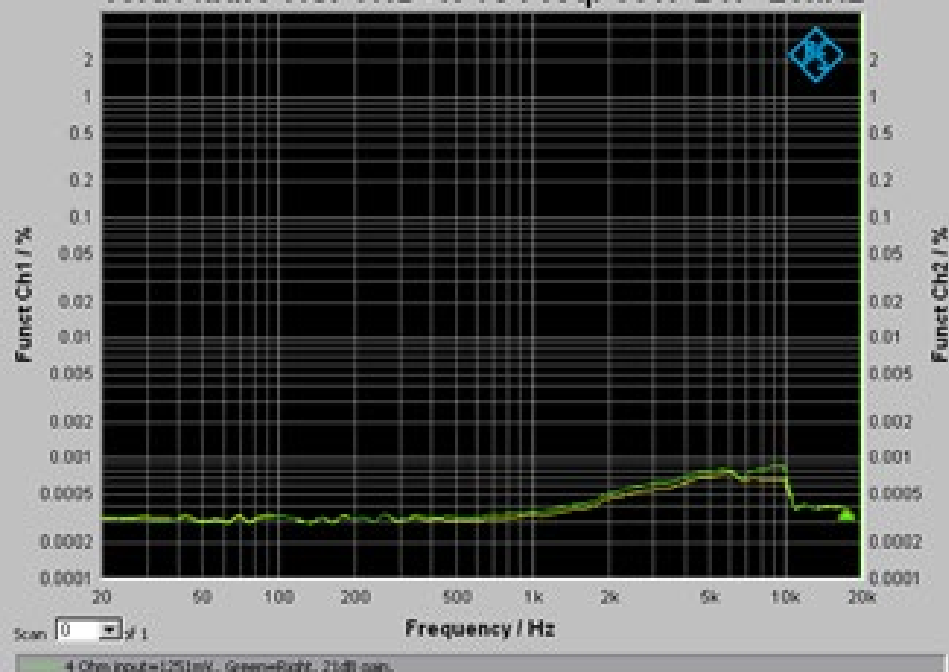


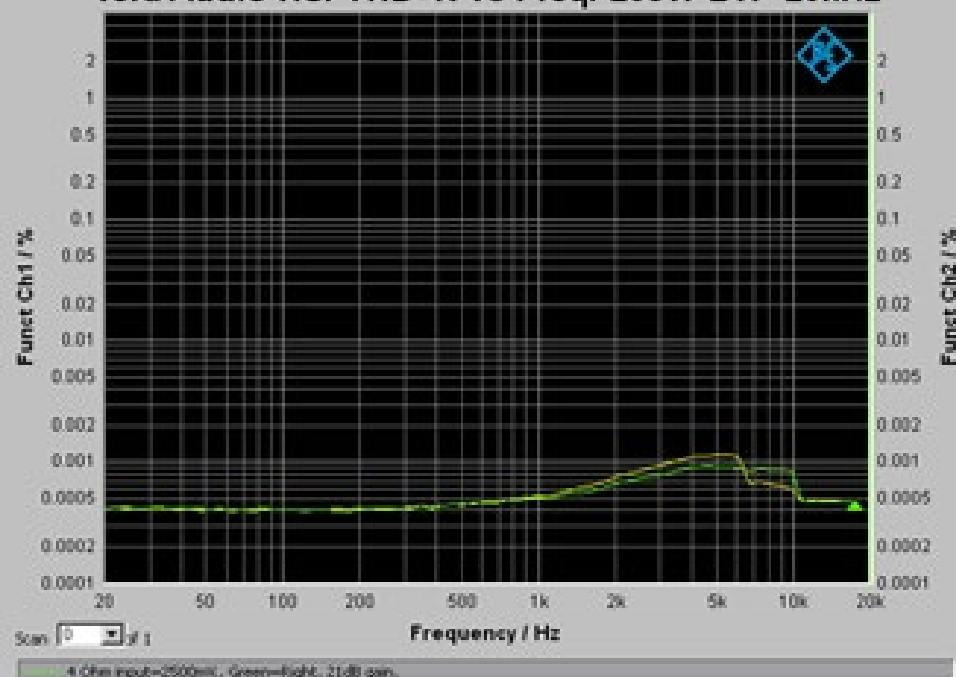
Preliminary datasheet for Vera Audio P150/600 RS power amplifier

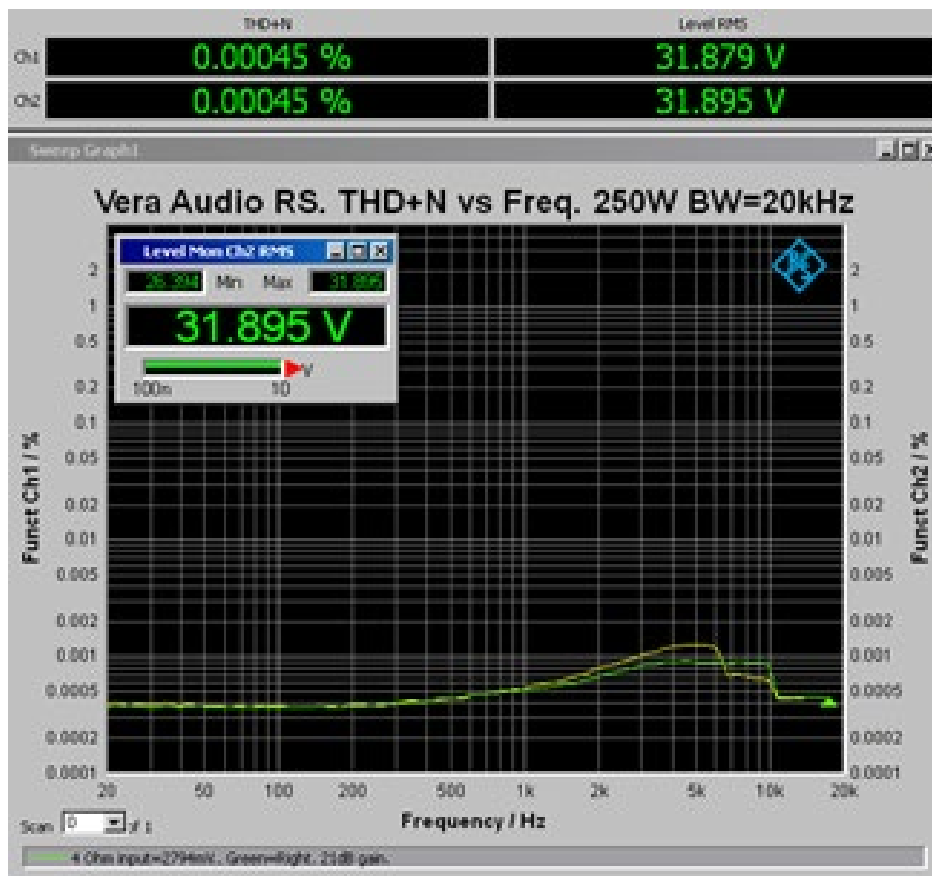


Vera Audio RS. THD+N vs Freq. 50W BW=20kHz

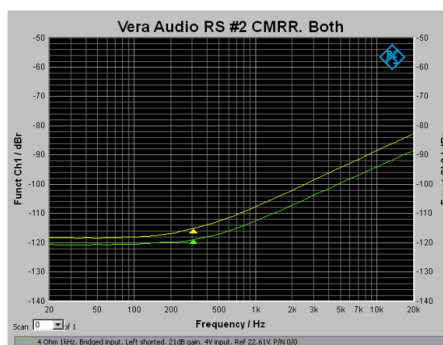


Vera Audio RS. THD+N vs Freq. 200W BW=20kHz

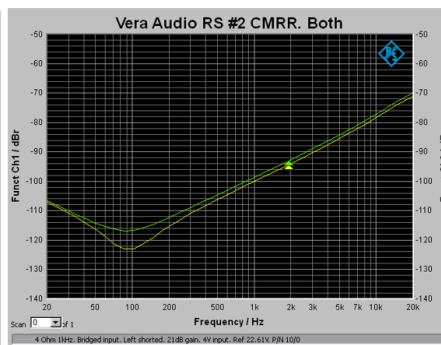




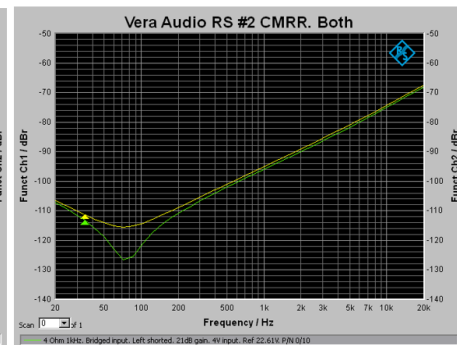
CMRR



Zero source diff.

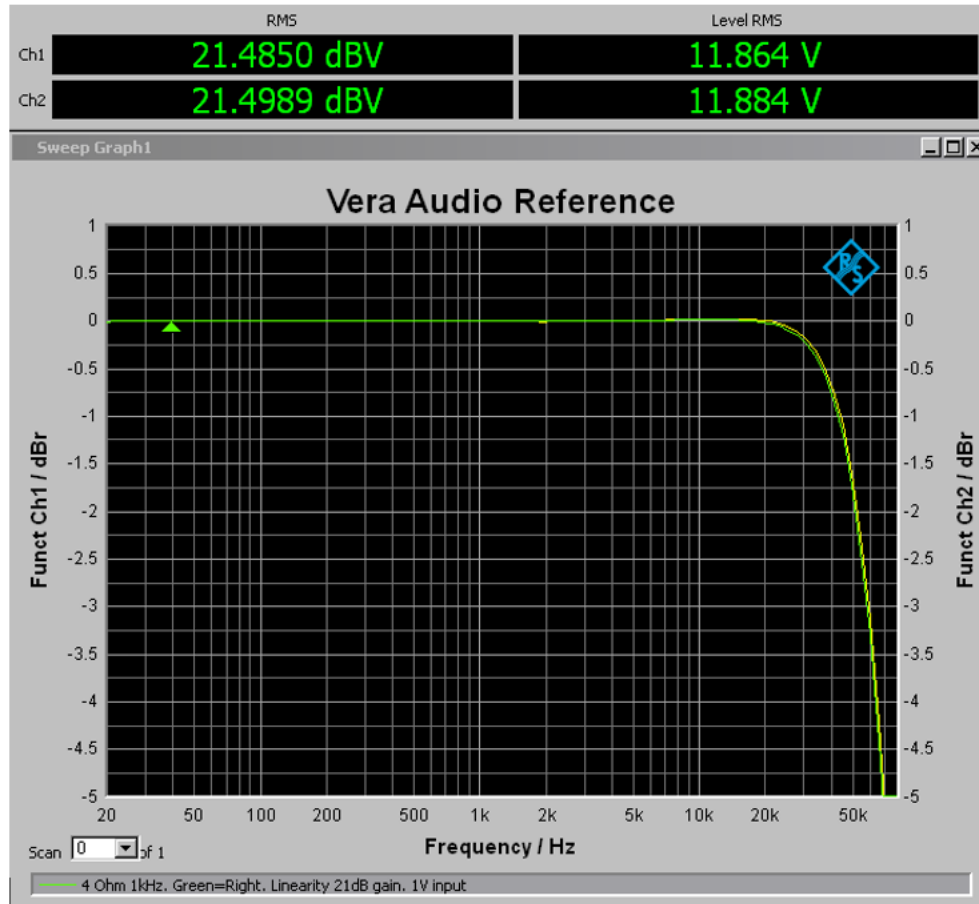


10Ω more on positive phase.

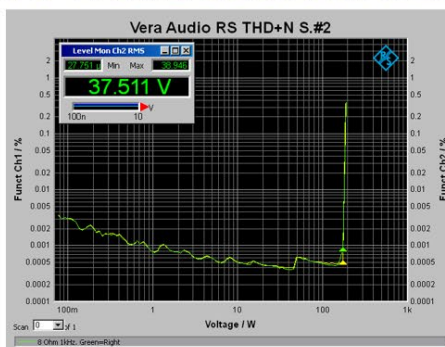


10Ω more on negative phase.

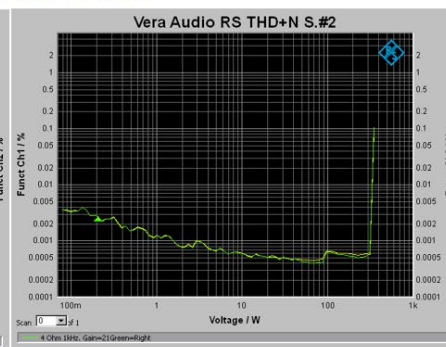
Linearity



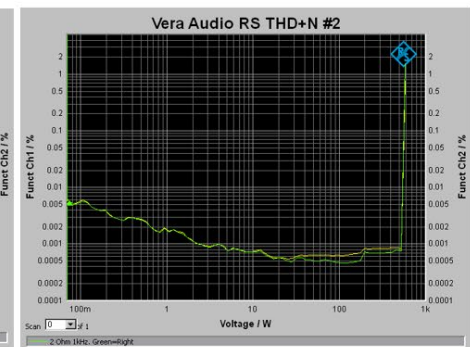
THD+N. 1kHz. Stereo. Both channels driven



8 Ohm



4 Ohm



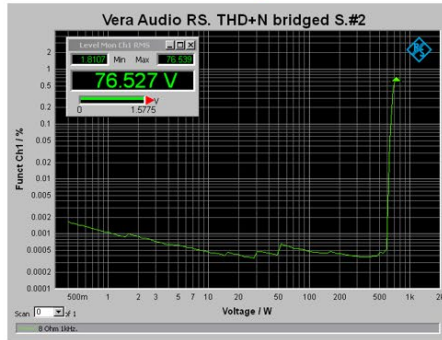
2 Ohm

Stereo 8 Ohm is 175W with less than 0,001% distortion. (150W with less than 0,0005%)

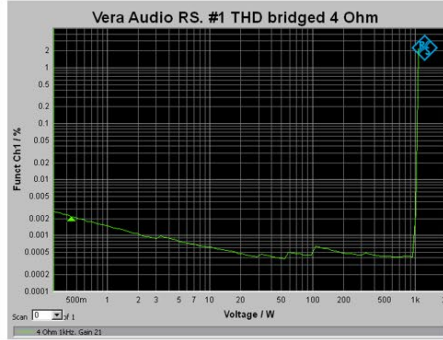
Stereo 4 Ohm is 310W with less than 0,0006% distortion.

Stereo 2 Ohm is 520W with less than 0,0008% distortion.

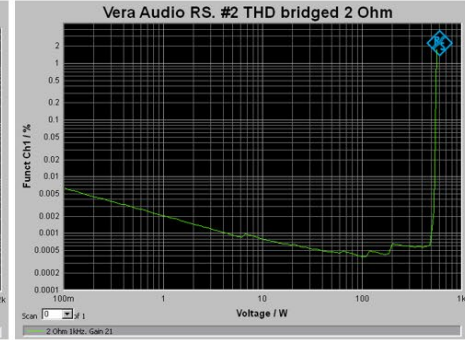
THD+N. 1kHz. Bridged.



Stereo 8 Ohm



Bridged 4 Ohm



Bridged 2 Ohm

Bridged 8 Ohm is 600W with less than 0,0005% distortion.

Bridged 4 Ohm is 950W with less than 0,0004% distortion.

Bridged 2 Ohm is 500W with less than 0,0006% distortion.

SPECIFICATIONS

Technical data is measured with 240V current on 10 random units. Minimum values are stated.

Output impedance (20Hz-1kHz measured at terminals)	< 0.6mΩ
Output impedance (20kHz measured at terminals)	< 6mΩ
Damping factor 20Hz-1kHz	> 13000 with 8Ω speakers
Damping factor 20kHz	> 1400 with 8Ω speakers
Input impedance Stereo	94kΩ
Input impedance Bridge	47kΩ
Noise ()	< 18uV (A-weight)
Frequency response DC-20kHz =	+/-0.05dB
-3dB	60kHz
Signal-to-Noise Ratio stereo	> 125dB
Signal-to-Noise Ratio bridged	>128dB
Standby power	0.25W

Power

Stereo, both channels driven at 8Ω
 220W with maximum 1% THD+N
 180W with maximum 0.01% THD+N
 140W with maximum 0.0005% THD+N

Stereo, both channels driven at 4Ω
 420W with maximum 1% THD+N
 340W with maximum 0.01% THD+N
 270W with maximum 0.0007% THD+N

Bridged 8Ω

800W with maximum 1% THD+N
 680W with maximum 0.01% THD+N
 600W with maximum 0.0005% THD+N

Bridged 4Ω

920W with maximum 1% THD+N

900W with maximum 0,0007% THD+N

Sensitivity

Describes current on input to maximum before clipping (1% THD). This depends on the gain settings.

Maximum input voltage is 10,3V RMS before the input stages will clip the signal (+22.5dBu)

Gain	Sensitivity
12dB (3,98x)	14V (Note the 10,2V RMS maximum input voltage in this setting)
15dB (5,62x)	10V
18dB (7,94x)	7V
21dB (11,22x)	5V
24dB (15,85x)	3,6V
27dB (22,39x)	2,5V
30dB (31,62x)	1,8V

An example of how to calculate the output power on an 8Ω speaker if the signal is 2V and the gain is set to 24 dB.

2V on the input will produce a $2V \cdot 15.85 = 31.7V$ on the output. With a 8 Ohm speaker this will generate $31.7 \cdot 31.7 / 8 = 125W$ of power.

31.7V on the output will give the following power on an 8Ω speaker: $\frac{31,7^2}{8} = 125W$.

This is well below the limit of clipping, hence one can increase the gain to 27dB without the amplifier clipping if the signal in is maximum 2V.