PowerBox 6*pro*

by magicLX521.com

- All you need between CD-player and your speakers
- Preamp / ADC / DSP / 6 DACs / 6 Hypex **NCore** power amplifiers
- Tailored performance: 2x100W, 2x125W, 2x250W, all 2Ohms capable!
- Slim & light & quiet, fan-less design. **Massive 3mm full aluminum** case with stainless steel front plate: ca. 44 x 36 x 5,5 cm
- Error proof multichannel output with **professional, high current SpeakON** plugs: Two SpeakONs **replace 16 (!) "banana" plugs**
- High End DSP @93kHz sample rate**, carefully designed clock-, DAC- and analogue output stages.**
- Balanced signal from input to output, remote volume control.
- LXspeaker owners get preloaded filter sets (LXmini, LXmini+2, LXstudio). LX521.4 needs two of these PowerBoxes.

- IN: analog balanced XLR, digital RCA, optical, AES XLR & RJ45, **USB for individual filter, gain, delay and inv. programming! Free Hypex Filter Design software for any speaker project.**

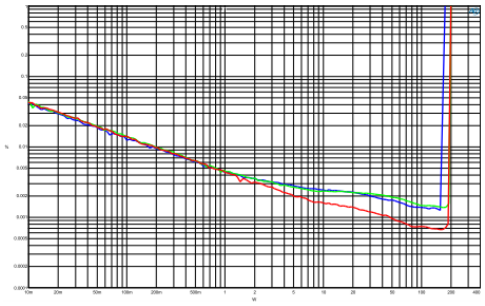
- Available worldwide Nov. 2016 by **www.magicLX521.com**

3.4 Ncore Amplifier Specifications

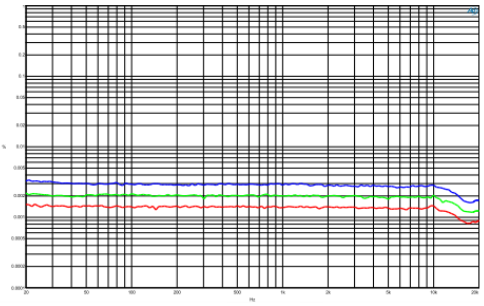
Parameter	Conditions	Symbol	Min	Typ	Max	Unit	Note
Peak Output Power	1KHz, THD=1%, All channels driven. Per channel.	$P_{R,2\Omega}$	-	-	180	W	
		$P_{R,4\Omega}$	-	-	250	W	
		$P_{R,8\Omega}$	-	-	200	W	
Continuous Output Power	Per channel, 25ºC ambient temperature.	$P_{R,cont}$	-	50	-	W	1)
Distortion	<10Hz-20kHz AES17 Pout<P_R/2	THD+N	-	0.00 15	0.00 24	%	2)
	<10Hz-20kHz AES17 Pout=1W		-	-	0.00 15	%	2)
CMRR			-	71	-	dB	
Signal-to-Noise Ratio	<10Hz-20kHz AES17		-	121	-	dB	
Output Noise	Unwtd, <10Hz-20kHz AES17, 0Ω termination	U_N	-	-	30µ	V	
Output Impedance	f<1kHz	Z_{OUT}	-	-	1.5	mΩ	
	f<20kHz		-	-	3.5	mΩ	
Power Bandwidth		PBW		20-35k		Hz	
Frequency Response	+0/-3dB. All loads.		10	-	50k	Hz	
Voltage Gain		A_V	25	25.5	26	dB	
Efficiency	Full power	η		92	-	%	
Idle Losses	Per channel	P_0	-	3.5		W	
Current Limit per Ch	Hiccup after limiting 40ms		-	17.5	-	A	

Note 1: Typically this is 1/5 of the peak output power. Apply sufficient cooling.
Note 2: An Audio Precision AES17 20 kHz is used during this measurement.

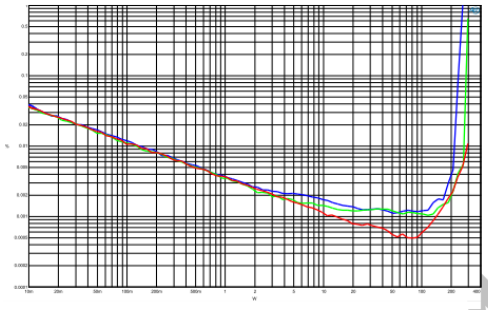
Typical Performance Graphs



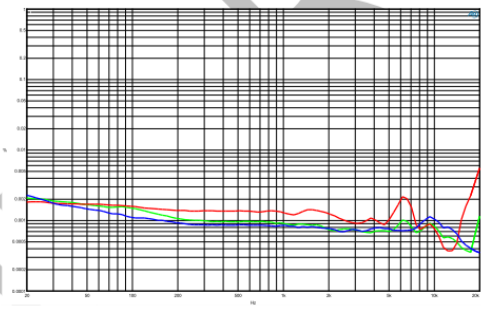
THD+N vs. power at 100Hz (blue), 1kHz (green) and 6kHz (red) (2Ω).



THD+N vs. Frequency at 1W in 2Ω (blue), 4Ω (green) and 8Ω (red).



THD+N vs. power at 100Hz (blue), 1kHz (green) and 6kHz (red) (4Ω).



THD+N vs. Frequency at P_R/2 in 2Ω (blue), 4Ω (green) and 8Ω (red).