# LINNENBERG

#### Owner's Manual



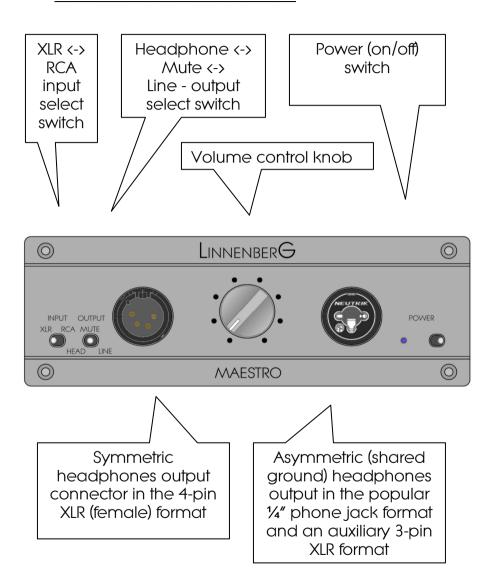
## MAESTRO SE

#### **Introduction**



The MAESTRO SE is a direct descendant of the critically acclaimed spa1 headphones amplifier. Serving the demands of discerning headphone aficionados, the unit was designed for an outstanding listening experience with any type of dynamic and planar-magnetic headphones. Furthermore, the MAESTRO SE is the heart of any HIGH END stereo system by providing a state of the art line – level preamp function.

#### Controls and connections - front



#### Basic operation

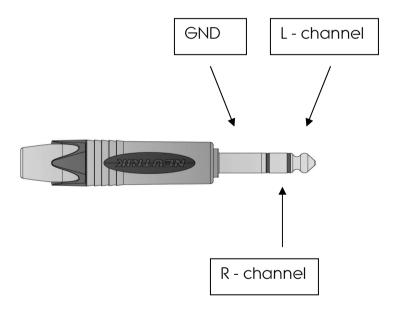
Place the unit on a solid, flat level surface such as a shelf where it is convenient to operate.

When plugging your headphones into the MAESTRO SE, please make sure that the volume control is set at minimum. Adjust the level for the first time, when some music is playing. Listening to music through headphones at much higher levels than normal is a common phenomenon: be aware that exposing your ears to high sound pressure levels for an extended amount of time damages your hearing permanently.

The volume control works simultaneously for all outputs. The control range spans from -90 ... +10dB in increments of 0.5dB, allowing fine adjustment of the listening loudness. The circuit features 4x independent, tightly matched stepped attenuator resulting in perfect channel and phase balance. The outstanding quality of this attenuator is preserved over the entire control range.

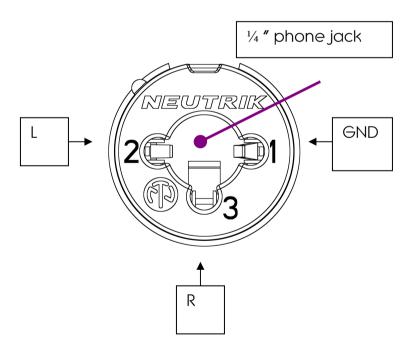
#### Headphones - connections

Over the years, a variety of headphones connection schemes have been established. By far the most popular way of connecting a set of headphones is the phone jack, mostly in the  $\frac{1}{4}$  " = 6.35 mm size.

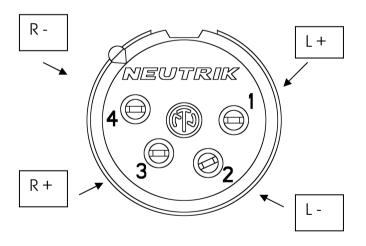


Please, do not connect a mono phone jack to the MAESTRO SE, since this shortens the right channel output to ground.

Although rarely seen, you can connect your headphone to the MAESTRO SE with a 3 pin XLR jack. Both the phone jack and the 3 pin XLR connection use a shared ground for both channels. The only advantage of the XLR connection is the avoidance of shorts when plugging in and out a phone jack. Moreover, this is the reason why one should place the MAESTRO SE or any other headphones amplifier with low output impedance in the "MUTE" mode when changing the headphone connection.



Whenever possible, consider the symmetric connection. This scheme overcomes the shared ground used for left and right channel. Unfortunately there are a number of upper class headphones on the market that do not allow rewiring in to the symmetric balanced mode. Keep that in mind when buying a set of new headphones. From the manufacturers point of view we strongly recommend using a 4 wire recabled headphone driven by the symmetric output; since the MAESTRO SE is internally strictly balanced, this is the perfect match.



#### **Specifications**

Frequency	DC - 300kHz -3dB (HF -		
response	blocking filter)		
Distortion and	<0.001% 10Hz - 20kHz		
noise			
Channel balance	0.05dB		
Channel	130dB @ 100Hz, 110dB @		
seperation	1kHz, 90dB @ 10kHz		
Gain	+10dB		
Input impedance	47kΩ per phase		
Dynamik range :	130dB		
Output power	4W continuous, $32\Omega$ , both		
	channels driven, 1A peak		
	current capability		
Output level	16V rms max. balanced,		
	8V rms unbalanced		
Output impedance	1Ω per phase		
on headphones			
output:			
Output impedance	$22\Omega$ per phase		
on line output:			
Power	15W, < 0.5W turned off		
consumption :			
Dimensions (H x W	60 x 170 x 230 mm		
x D) :			

#### CE declaration of conformity

Product Type: Headphones amplifier

Model: MAESTRO SE

Linnenberg-Elektronik declares that this product complies with the Low Voltage Directive 2006/95/EG and the Electromagnetic Compatibility Directive 2004/108/EG.

The unit meets all currently valid regulations only in its original condition. The original, unaltered factory serial number must be present on the outside of the unit and must be clearly legible! The serial number is an essential part of our conformity declaration and therefore of the approval for operation of the MAESTRO SE. The serial numbers on the unit and in manual, must not be removed or modified, and must correspond.

Furthermore, the unit has been found to comply with the limits for a Class B digital device, pursuant to Part 15, subpart B (unintentional radiators) of the FCC rules.

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### Warranty Certificate

LINNENBERG ELEKTRONIK warrants this product, under normal use, to be free of defects in materials and workmanship for a period of <u>2</u> <u>years</u> from date of purchase, as long as the product is owned by the original purchaser.

In the event that LINNENBERG ELEKTRONIK receives, from an original purchaser and within the warranty coverage period, written notice of defects in materials or workmanship, LINNENBERG ELEKTRONIK will replace the product, repair the product, or refund the purchase price at its option.

In the event repair is required, all shipment costs to and from LINNENBERG ELEKTRONIK shall be covered by the purchaser. In the event that repair is required, a return authorization must be obtained from LINNENBERG ELEKTRONIK. After this authorization is obtained, the unit should be shipped back to LINNENBERG ELEKTRONIK in a protective package with a description of the problem.

In the event that LINNENBERG ELEKTRONIK determines that the product requires repair because of user misuse or regular wear, it will consider a fair repair or replacement fee. The customer will have the option to pay this fee and have the unit repaired and returned, or not pay this fee and have the unit returned not repaired.

Serial No.	:		

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