

PoS100

**Kit PoS 100
Power Attenuator**

Content

Introduction.....	3
General Warning Informations.....	4
Specification.....	5
Controls, Inputs and Outputs.....	5
Connection example.....	7
Settings / Impedance.....	8



Introduction

From a technical point of view, the PoS100 is an adjustable attenuator which converts excess electrical power into heat.

The PoS100 is specially designed for use with tube amplifiers for guitar and bass and gets connected between the amplifier output and speaker input. The attenuator makes it possible to drive the output stage into light clipping and regulate the excess output power down with the PoS, making it an ideal addition for so-called “none master volume” amplifiers, amplifiers with only one volume control for the preamp which usually have to be set quite loud to get the desired overdrive.

The PoS can be universally connected to 4, 8 or 16 ohm amp outputs and offers in addition to the volume control a range switch to set the basic attenuation (Lo / Hi). With the “character” switch the behavior of the volume control can be switched between linear and logarithmic. With some amplifiers the linear behavior works better whereas with other amplifiers the logarithmic control suits better.

With the load selector switch the connected load has to be set. E.g. for an 8 ohm loudspeaker cabinet the selector must be set to 8 ohms and the PoS must be connected to the 8 ohms output of the amp. An impedance matching, e.g. 4 ohm speaker to 8 ohm amplifier output, is not possible with the PoS. The loudspeaker output of the PoS offers a second output jack, which is internally connected in parallel with the main output jack, this makes it possible to connect two cabinets in parallel to the PoS. The correct load setting must be taken into consideration: e.g. two 16 Ohms cabinets in parallel provide a total load of 8 ohms. In this case the PoS selector must be set to 8 ohms and must be connected to the 8 ohms output of the amplifier. Two 8 ohms cabinets in parallel result in a total load of 4 ohms, in which case the 4 ohms output of the amplifier must be used and the PoS selector must be set to 4 ohms.

The built-in signal lamp on the front serves as an optical feedback for the applied power. The higher the power, the brighter it lights, even if the final output volume of the PoS is set very low.

On the backside is also an unbalanced line-out, where the amplifier signal can be taken for further processing. The signal can be used for mixer consoles or for recording purposes for example, however, depending on the application, a speaker simulation is still necessary.

General Warning Informations

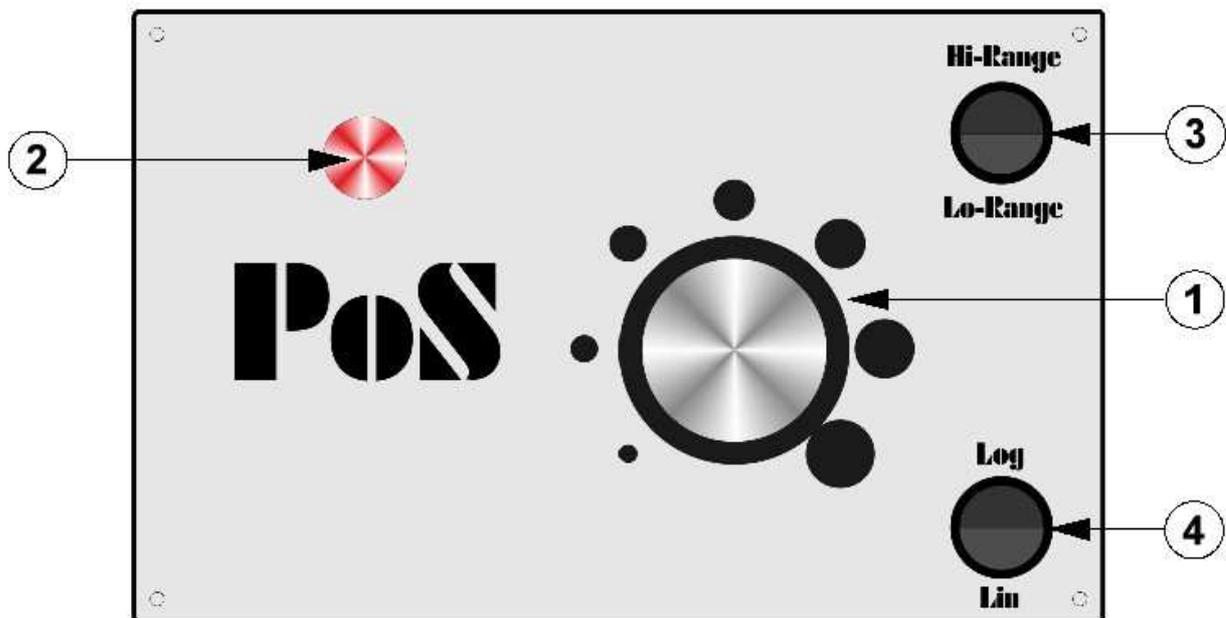
- Manufacturers and distributors are not liable or responsible for the consequences of inappropriate use, installation errors or operation errors of this product due to disregard of the manual. The building and installation should only be completed by qualified personnel.
- The contents of this manual are subject to change without notice.
- The attenuator can get hot after longer use!
- Always choose the matching impedance of the amp output, the cabinet and the PoS (e.g. 8 ohm amp output, 8 ohm cab and 8 ohm at the impedance selector of the PoS)
- Only use the attenuator with a valve amp!
- Attention: if the amp is used at maximum power and a high attenuation is dialed in at the PoS the wear of the power tubes and the stress for the parts inside the amp (e.g. the output transformer) will rise and can lead to damages
- Adjust the attenuation with care!
- To get the best sound results it is not always necessary to dial in maximum volume on the amp, this is a common mistake
- Use the PoS always in combination with a speaker cabinet, the PoS is no dummy load
- The maximum continuous power of 100 Watt must not be exceeded, otherwise it may lead to damages or even destruction of the unit

Specification

Power:	max. 100 Watt RMS
Attenuation:	up to 100 %
Impedance:	4, 8 or 16 ohm
Line-Out:	unbalanced, adjustable

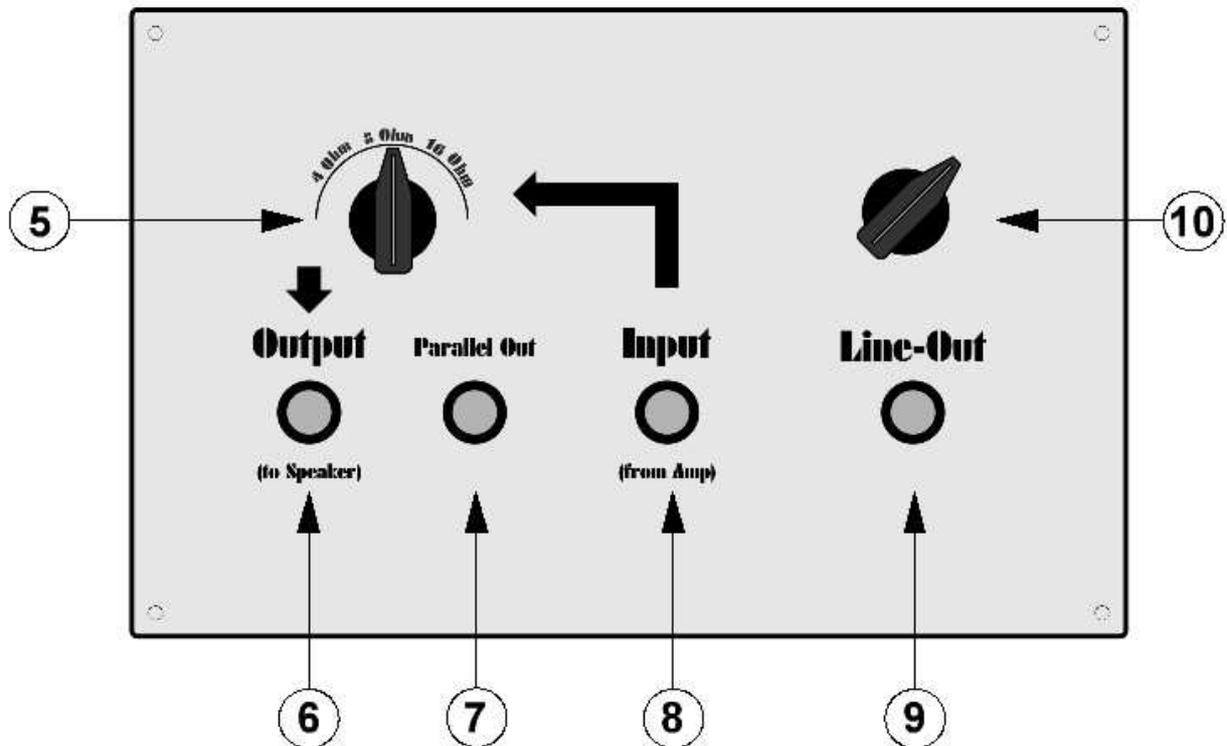
Controls, Inputs and Outputs

front



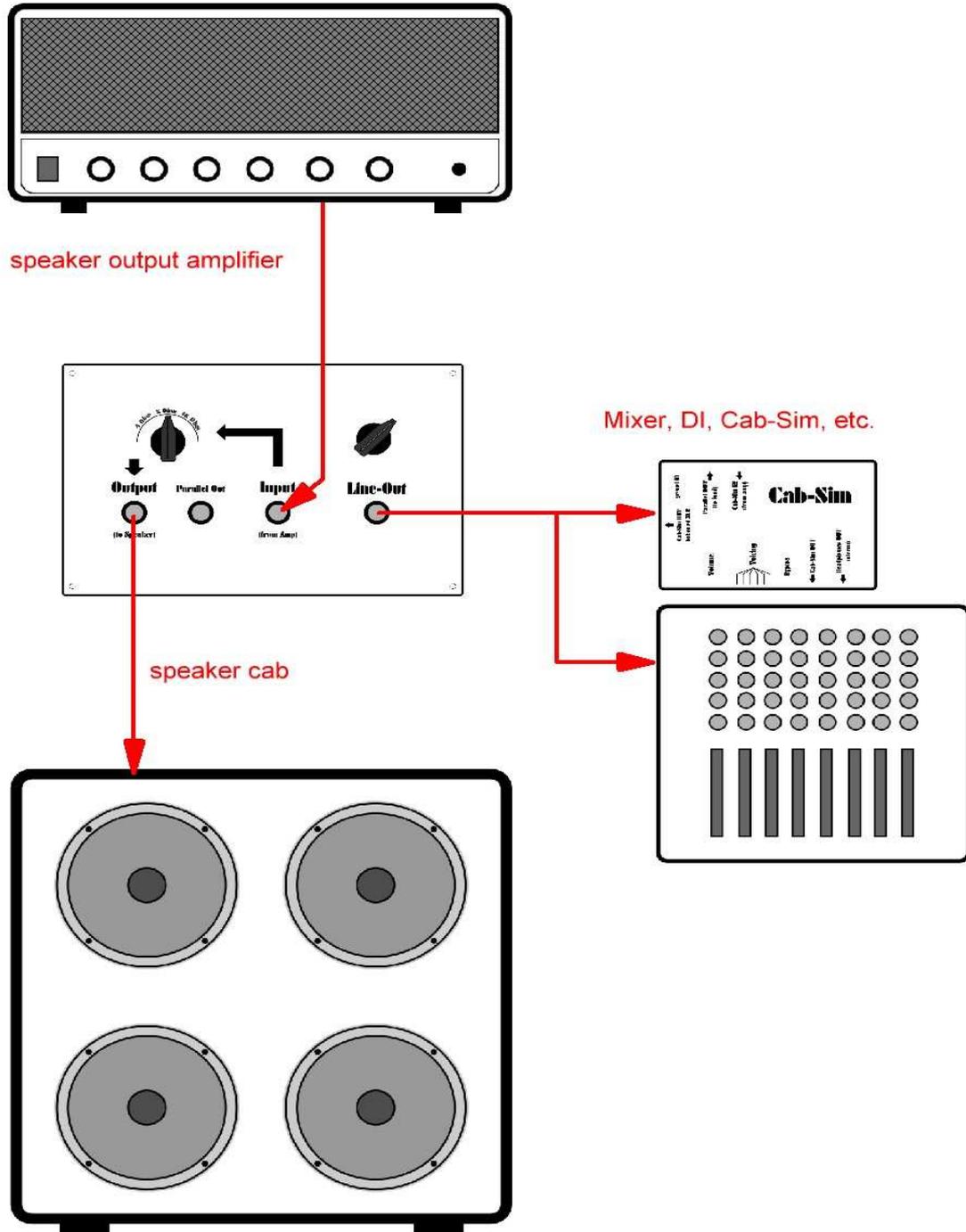
1. Attenuation: range of adjustment up to 100 %
2. Signal lamp: illuminates in dependence of the input signal, with a low signal or without any signal the bulb won't illuminate
3. Basic attenuation, select between Hi and Lo
4. Volume control characteristic, select linear or logarithmic

back



5. Impedance selector: select the impedance of the amp output and the cabinet impedance (4, 8 or 16 ohms)
6. Speaker output
7. Speaker output for a second cab (parallel, pay attention to the total impedance)
8. Input: connect the input of the PoS with the speaker output of the amplifier
9. Unbalanced line out: the amp output signal can be send to mixer consoles, cab-sim, DI, etc.
10. Line-Level: adjust the level of the line-out signal

Connection example



Settings / Impedance

Amplifier Output	Settings PoS 100	Speaker cab
4 ohm	4 ohm	4 ohm (optional two 8 ohm cabinets if the parallel output is used)
8 ohm	8 ohm	8 Ohm (optional two 16 ohm cabinets if the parallel output is used)
16 ohm	16 ohm	16 ohm