
KLIPPEL MEASUREMENT SYSTEM

Amplifier Connection Guide

Dedicated to the Klippel R&D Measurement Devices

Distortion Analyzer

and

Power Monitor

and to the Klippel QC Measurement Device

Production Analyzer

April 17, 2009

Copyright © 2000-2009 Klippel GmbH

Mendelssohnallee 30, 01309 Dresden, Germany

www.klippel.de

How to connect my power amplifier?

There are different wiring schemes required for the power amplifier connection depending on the amplifier you are using.

Please select the amplifier type from the list below and connect the amplifier according to the specific chapter below.

- Stereo Amplifier with Stereo Speakon Connectors , proceed with section *Stereo Amplifier with Stereo SPEAKON Output Connector* below.
All Amplifiers distributed by Klippel are conform to this setup!
- Stereo Amplifier with 2 Mono SPEAKON Connectors, proceed with section *Stereo Amplifier with 2 Mono SPEAKON Output Connectors* below.
- Stereo Amplifier with Cable Terminals, proceed with section *Stereo Amplifier with Cable Terminals* below.
- Mono Amplifier with Cable Terminals, proceed with section *Mono Amplifier with Cable Terminals* below.

NOTE: We strongly recommend to use professional power amplifiers with balanced audio input only. Only this kind of amplifier is described below. If your application requires a different type of amplifier, please contact Klippel for details. In the following sections, it is assumed, that the amplifier input is an XLR connector.

Stereo Amplifier with Stereo SPEAKON Output Connector

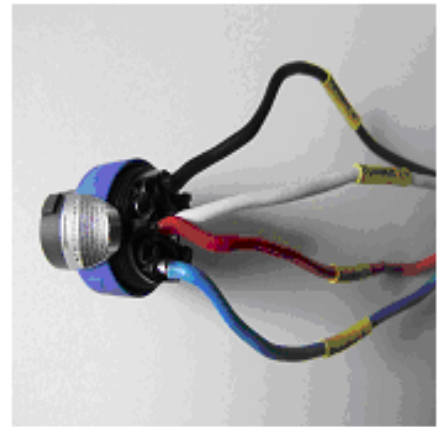
- Connect the Amplifier Input to OUT1 of the measurement device with the XLR-cable.
- If you have an Amplifier distributed by Klippel, the settings are already done. You don't need to adjust anything.
Just connect the Amplifier Cable to the Output 1 of the power amplifier and to the KLIPPEL measurement device amplifier input.
- In all other cases:
Connect both inputs of the Stereo Amplifier in parallel. This could either be done by a switch at the Amplifier or by a patch cable. This depends on the particular Amplifier you are using, please check the Amplifier manual.
- Check in the Amplifier manual, that the Speakon Output of the Amplifier as assigned as following:

Cable Terminal output at Amplifier	Signal
Speakon Output: 1+	Hot (+) Ch. 1
Speakon Output: 1-	Cold (-) Ch. 1
Speakon Output: 2+	Hot (+) Ch. 2
Speakon Output: 2-	Cold (-) Ch. 2

- Mount one Speakon Cable Connector to the Amplifier Cable:

Cable Terminal output at Amplifier	Connect to: (see Label at Amplifier Cable)
Speakon Output: 1+	Speaker 1+
Speakon Output: 1-	Speaker 1-
Speakon Output: 2+	Speaker 2+
Speakon Output: 2-	Speaker 2-

After Mounting it should look like this:



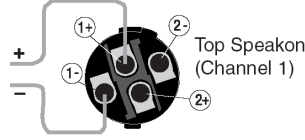
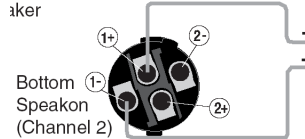
- Connect the Amplifier Cable to the Stereo Output of the power amplifier and to the KLIPPEL measurement device amplifier input.

Stereo Amplifier with 2 Mono SPEAKON Output Connectors

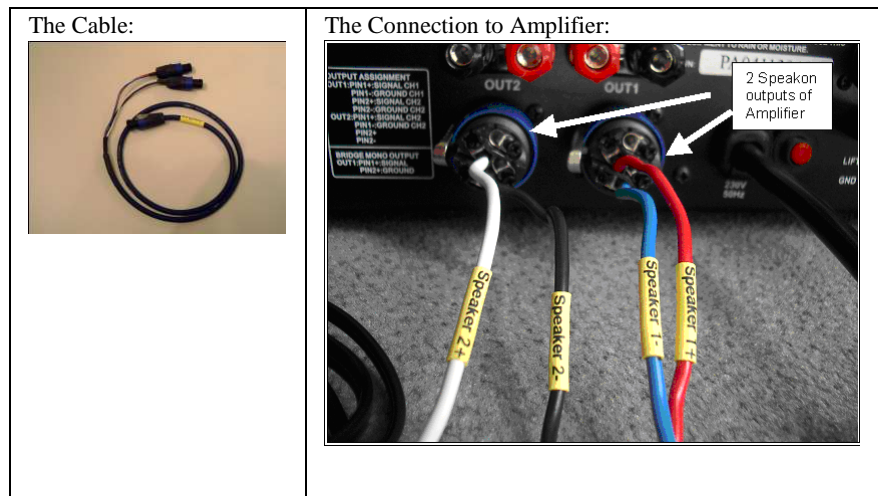
- Connect the Amplifier Input to OUT1 of measurement device with XLR-Cable.
- Connect both inputs of the Stereo Amplifier in parallel. This could either be done by a switch at the amplifier or by a patch cable. This depends on the particular amplifier you are using, please check the amplifier manual.
- Check in the Amplifier Manual, that the Speakon Outputs of the Amplifier as assigned as following:

Cable Terminal output at Amplifier	Signal
Speakon Output 1: 1+	Hot (+) Channel 1
Speakon Output 1: 1-	Cold (-) Channel 1
Speakon Output 2: 1+	Hot (+) Channel 2
Speakon Output 2: 1-	Cold (-) Channel 2

- Mount two Speakon Cable Connector to the Amplifier Cable. You will get a Y-cable with 3 Speakon connectors.

Cable Terminal output at Amplifier	Connect to: (see Label at Amplifier Cable)
 <p>Top Speakon (Channel 1)</p>	
Speakon Output: 1+	Speaker 1+
Speakon Output: 1-	Speaker 1-
 <p>Bottom Speakon (Channel 2)</p>	
Speakon Output: 2+	Speaker 2+
Speakon Output: 2-	Speaker 2-

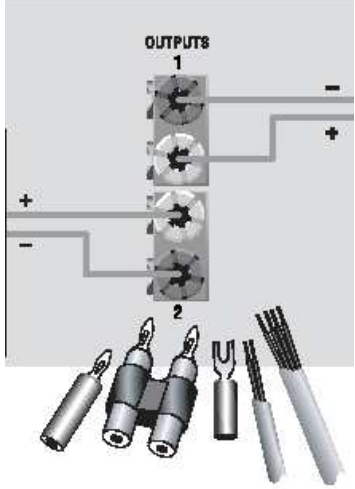

After Mounting it should look like this:



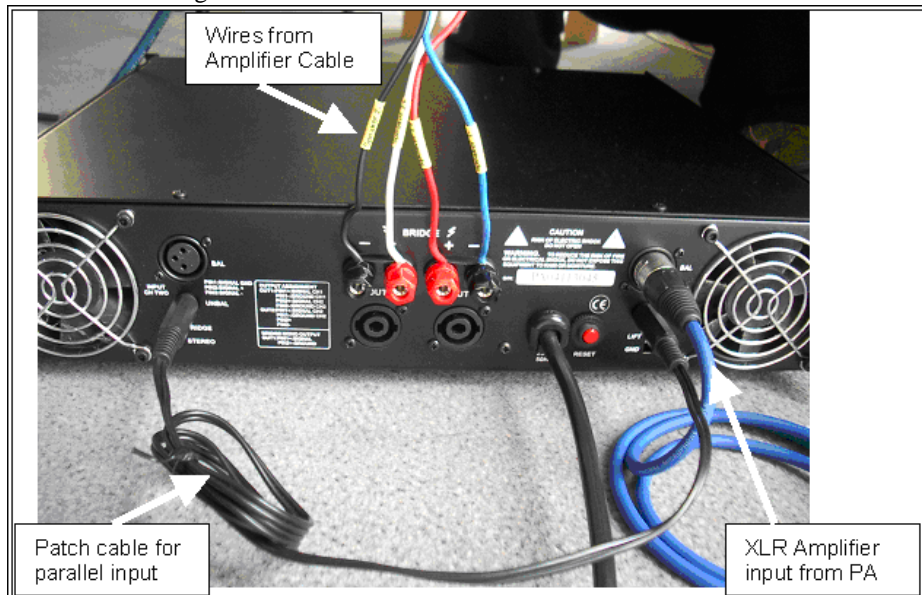
- Connect the prepared Amplifier Cable to the two outputs of the power amplifier and to the KLIPPEL measurement device Amplifier input.

Stereo Amplifier with Cable Terminals

- Connect the Amplifier Input to OUT1 of the measurement device with the XLR-cable.
- Connect both inputs of the Stereo Amplifier in parallel. This could either be done by a switch at the amplifier or by a patch cable. This depends on the particular amplifier you are using, please check the amplifier manual.
- Use Amplifier-Cable with crimped ferrules (open wires).
- Connect wire labelled Speaker 1+ to Amplifier OUT1 HOT (+)
Connect wire labelled Speaker 1- to Amplifier OUT1 COLD (-)
Connect wire labelled Speaker 2+ to Amplifier OUT2 HOT (+)
Connect wire labelled Speaker 2- to Amplifier OUT2 COLD (-)

Cable Terminal output at Amplifier	Connect to: (see Label at Amplifier Cable)
 <p>The diagram shows two sets of amplifier outputs labeled '1' and '2'. Each set has a '+' and '-' terminal. Below the diagram are several crimped ferrules and a crimping tool.</p>	 <p>A photograph of a blue amplifier cable with four wires: red, black, blue, and orange. The cable has a blue XLR connector on one end and crimped ferrules on the other.</p>
Terminal Output: 1+ (red, hot)	Speaker 1+
Terminal Output: 1- (black, cold)	Speaker 1-
Terminal Output: 2+ (red, hot)	Speaker 2+
Terminal Output: 2- (black, cold)	Speaker 2-

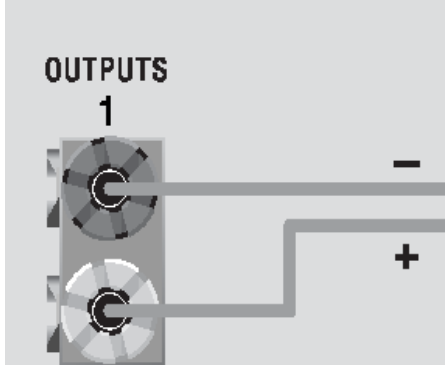

After Connecting it should look like this:



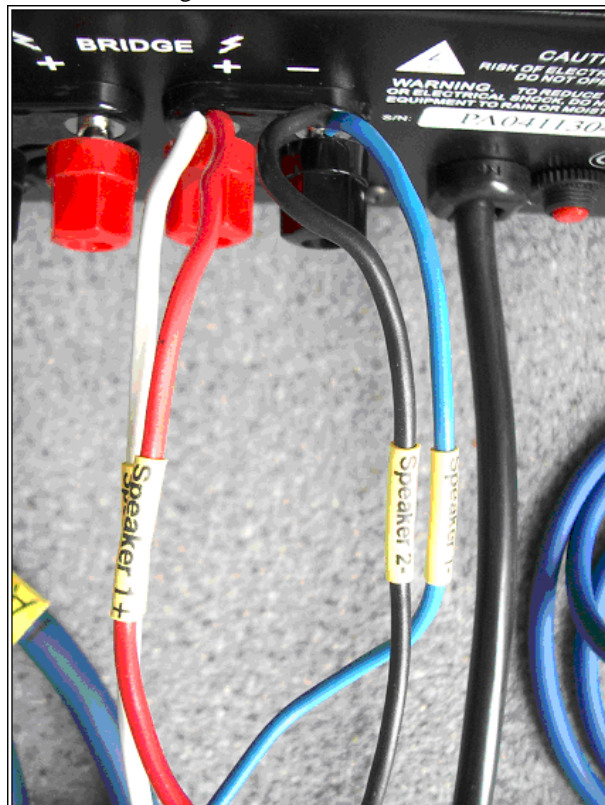
- Connect the other end of the Amplifier Cable to the KLIPPEL measurement device Amplifier input.

Mono Amplifier with Cable Terminals

- Connect the Amplifier Input to OUT1 of the measurement device with the XLR-Cable.
- Use Amplifier-Cable with crimped ferrules (open wires).
- Connect wire labeled Speaker 1+ and Speaker 2+ to Amplifier HOT (+) output.
- Connect wire labeled Speaker 1- and Speaker 2- wire to Amplifier COLD (-) output.

Cable Terminal output at Amplifier	Connect to: (see Label at Amplifier Cable)
	
Terminal Output: 1+ (red, hot)	Speaker 1+ and Speaker 2+
Terminal Output: 1- (black, cold)	Speaker 1- and Speaker 2-

After Connecting it should look like this:



- Connect the other end of the Amplifier Cable to the KLIPPEL measurement device Amplifier input.