

# Cable Production Guide

For Klippel R&D System and for Klippel QC System

NOTE: If you intend to manufacture your own cables, please follow these instructions exactly. Damages caused by wrong cable configurations are not covered by warranty! Using wrong pin outs can easily damage your measurement hardware.

## 1 Amplifier-Cable

NOTE: For Distortion Analyzer Hardware Rev. 1.0 – 2.0 and for Power Monitor Rev. 1.1 fused cables must be used to protect the hardware. Later hardware versions have built in fuses.

### 1.1 Fuses (external, in cable)

Hardware	Fuse	Fuse
Distortion Analyzer Rev.1.0 – 1.1 “Default” variant	CH1 = 10A	CH2 = 5A
Distortion Analyzer Rev.1.2 – 2.0 “High Power” and “High Current” variant	CH1 = 25A	CH2 = 5A
Distortion Analyzer Rev.1.2 – 2.0 “Default” variant	CH1 = 15A	CH2 = 5A
Distortion Analyzer Rev.1.2 – 2.0 “High Sensitivity” variant	CH1 = 15A	CH2 = 1A
Distortion Analyzer Rev.1.2 – 2.0 “Very High Sensitivity” variant	CH1 = 1A	CH2 = 0.5A
PM8 Rev. 1.1 “High Power” and “High Current” variant	CH1 – 8 = 25A	
PM8 Rev. 1.1 “Default” variant	CH1 – 8 = 15A	
PM8 Rev. 1.1 “High Sensitivity” variant	CH1 – 8 = 1A	

### 1.2 Fuses (internal, in measurement device)

Hardware	Fuse Type and Rating
Distortion Analyzer Rev. $\geq$ 2.1	see DA specification
Power Monitor 8 Rev. $\geq$ 2.0	see PM8 specification
Production Analyzer Rev. $\geq$ 1.1	See PA specification

### 1.3 Speakon – crimped

(If your Amplifier has no Speakon Output)

#### 1.3.1 Material

	Pcs / m	Manufacturer	Part
Cable	no restriction in length, sufficient diameter required.	van Damme 4x2.5mm <sup>2</sup> LC or Klotz AIS 4x2.5mm <sup>2</sup> LSCF or LappkabelSILFLEX-SIHF 4x2,5mm <sup>2</sup>	OFC 268 LSCF425BL High temperature range
Plug	1	Neutrik	Speakon NL4FX or NL4FC

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Klippel GmbH  
Mendelssohnallee 30  
01309 Dresden, Germany

www.klippel.de  
info@klippel.de

TEL: +49-351-251 35 35  
FAX: +49-351-251 34 31

Fuse holder	2 (if applicable)	Littlefuse	No. 0153003
Fuse	5A Type (if applicable)	Littlefuse	No. 0297005
Fuse	10A Type (if applicable)	Littlefuse	No. 0297010
Fuse	15A Type (if applicable)	Littlefuse	No. 0297015
Fuse	25A Type (if applicable)	Littlefuse	No. 0297025

### 1.3.2 Connections

Pin	Description
1+	Hot / Driving Speaker 1 (fused, if external fuse required, see above)
1-	Cold / Driving Speaker 1
2+	Hot / Driving Speaker 2 (fused, if external fuse required, see above)
2-	Cold / Driving Speaker 2

## 1.4 Speakon – Speakon

(If your power amplifier has Speakon Output)

### 1.4.1 Material

Position	Pcs / m	Manufacturer	Part
Cable	no restriction in length, sufficient diameter required.	van Damme 4x2.5mm <sup>2</sup> LC or Klotz AIS 4x2.5mm <sup>2</sup> LSCF or Lappkabel SILFLEX-SIHF 4x2,5mm <sup>2</sup>	OFC 268 LSCF425BL High temperature range
Plug	2	Neutrik	Speakon NL4FX or NL4FC
Fuse holder	2 (if applicable)	Littlefuse	153003.ZA000
Fuse	5A Type (if applicable)	Littlefuse	297005.LN000
Fuse	10A Type (if applicable)	Littlefuse	297010.LN000
Fuse	15A Type (if applicable)	Littlefuse	297015.LN000

### 1.4.2 Connections of **Amplifier** Input to Klippel Hardware

Pin	Description
1+	Hot / Driving Speaker 1 (fused, if external fuse required, see above)
1-	Cold / Driving Speaker 1
2+	Hot / Driving Speaker 2 (fused, if external fuse required, see above)
2-	Cold / Driving Speaker 2

If your amplifier has a different pin out than listed above, you cannot use a 1:1 Speakon cable. Please refer to the manual of your Power Amplifier. Wire the Amplifier cable as indicated in this guide.

## 2 Speaker-Cable

### 2.1 Material

Position	Pcs / m	Manufacturer	Part
Cable	no restriction in length, sufficient diameter required.	van Damme 4x2.5mm <sup>2</sup> LC or Klotz AIS 4x2.5mm <sup>2</sup> LSCF or Lappkabel 4x2,5mm <sup>2</sup> Silflex-EWKF	OFC 268 LSCF425BL High temperature range
Plug	1 pcs	Neutrik	Speakon NL4FX or NL4FC

### 2.2 Connections of **SPEAKER** output of Klippel Hardware



#### ATTENTION!

1+ AND 2+ MUST BE CONNECTED NEAR THE DRIVER TERMINALS  
1- AND 2- MUST BE CONNECTED NEAR THE DRIVER TERMINALS

If you do not follow the configuration instructions, the measurement may fail and / or the hardware unit may be damaged!