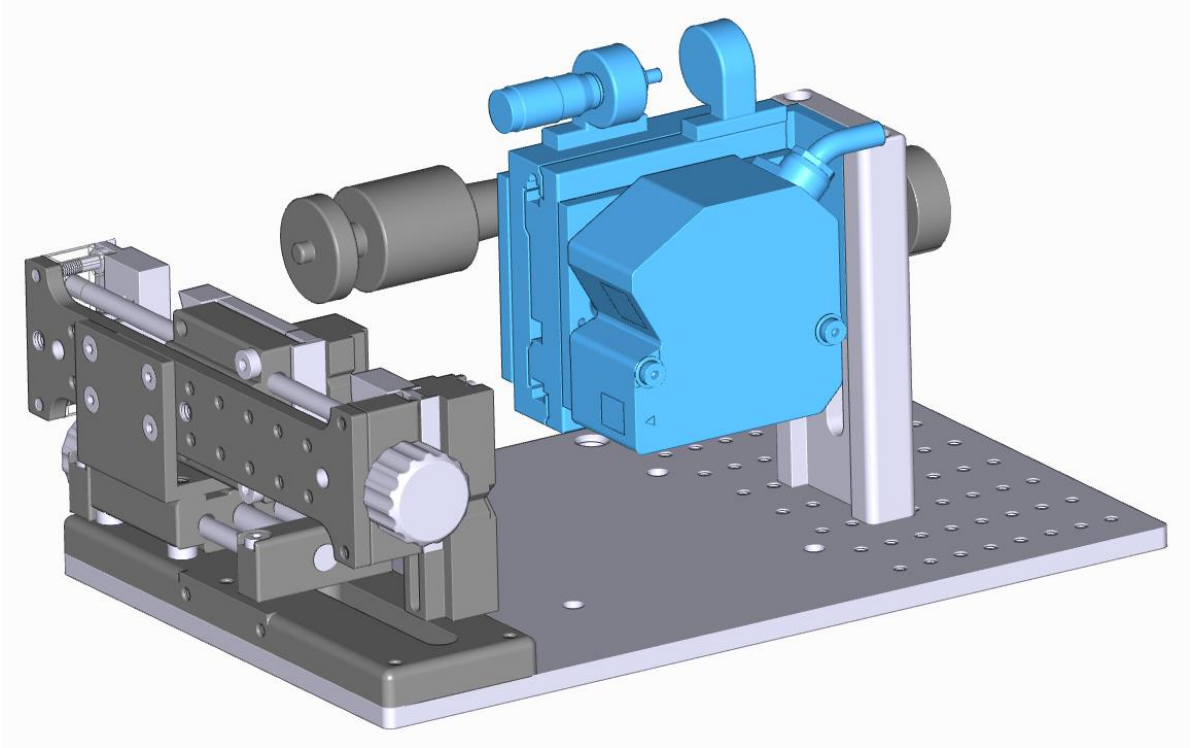
Micro Speaker Clamping A10

Hardware Device for the KLIPPEL ANALYZER SYSTEM (Revision 1.4)

FEATURES



- Compact, transportable, multifunctional transducer measurement platform
- For Micro Speaker, Headphones, Tweeter and any transducer up to 100 g
- Solid but adjustable mounting of laser displacement sensors and measurement microphones
- Different DUT clamping options available with different brackets
- Could easily be modified to own applications, many additional mounting threads are present
- Optimized for KEYENCE LK-H052 Laser sensor, could be used with a wide range of other laser sensors
- Horizontal laser measurement position on the DUT can be continuously accurately positioned by manual linear adjustment.
- Vertical laser measurement position on the DUT can be continuously positioned on the laser mounting slider
- Distance between DUT and laser sensor can be continuously accurately adjusted by optional available TRANSLATION STAGE with MICROMETER SCREW (shown in blue) or on the 10 mm grid on the ground plate.
- Can be modified to a Vacuum Stand to fix loudspeakers during measurement and

adjust its height close to the glass cover of the vacuum chamber

- Can be used to fix loudspeakers at the SCN turntable during Scanning Vibrometer measurements or other RnD measurement tasks

PLEASE NOTE: the TRANSLATION STAGE with micro adjustment and Laser Sensor Head illustrated in blue are not included in the MICRO SPEAKER CLAMPING package.

Article numbers	2211-003; 2211-004

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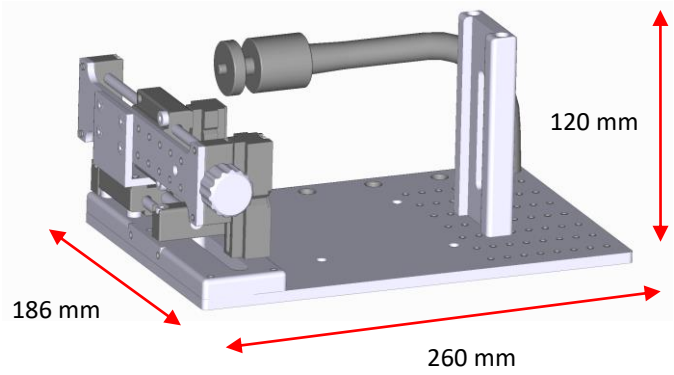
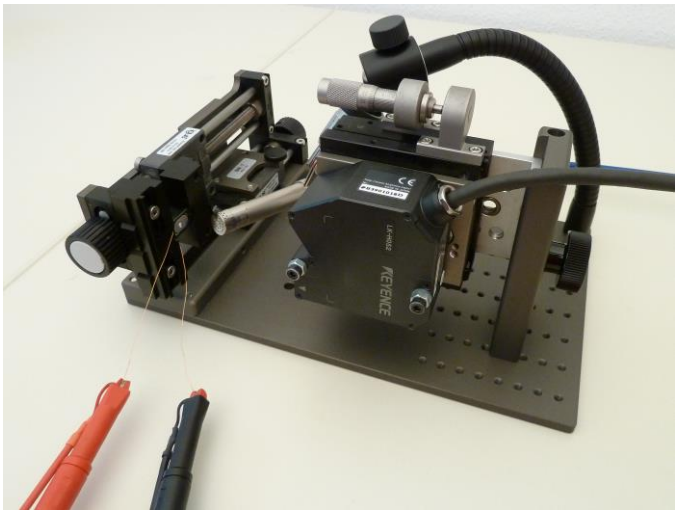
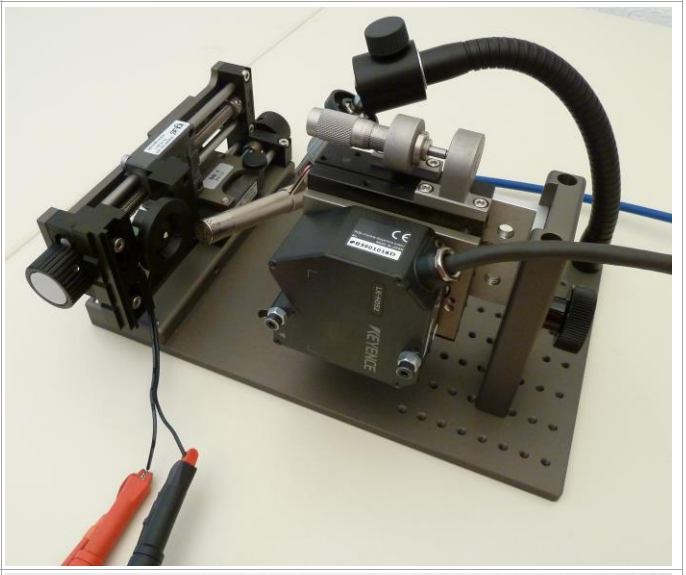
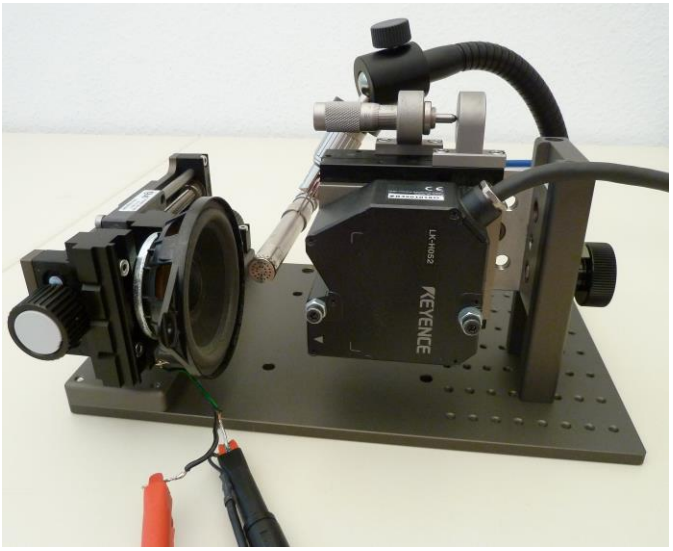
1 Function

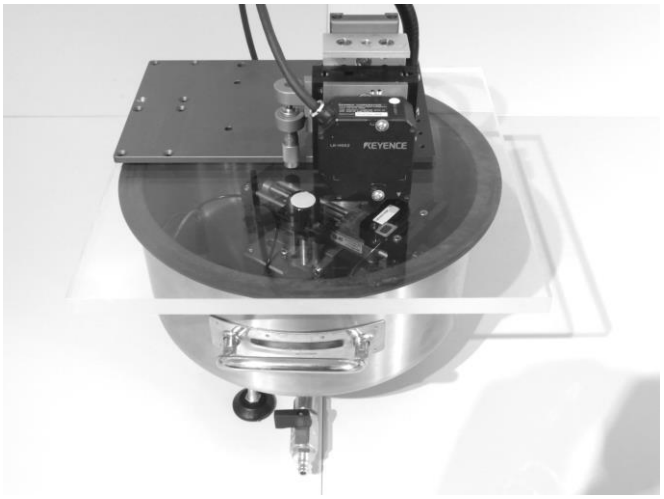
Dimensions (without laser, mic and DUT)	260 x 185 x 120 mm (10.24 x 7.28 x 4.72 inch)			
Weight (without laser, mic and DUT)	< 1.80 kg			
Finish	anodized aluminum & plastics			
Material	• aluminum • stainless steel • POM – plastic (Polyoxymethylene) for brackets • SHT-Polymer plastic for linear actuator			
Clamping travel	0 – 135 mm			
External dimensions	width depth height without laser max. height with laser	260 mm 186 mm 120 mm 170 mm		
Accessories (included)	3/8” Gooseneck (mic holder)		Klippel article number	2400-217
	Swivel Head / Ball Joint		Klippel article number	2400-216
	Included accessories are shown in the picture above.			
Accessories (not included)	Keyence LK-H052 Laser Sensor Set		Klippel article number	2103-200
	Keyence LK-H022 Laser Sensor Set		Klippel article number	2103-100
	Keyence LK-H082 Laser Sensor Set		Klippel article number	2103-300
	The Micro Speaker Clamping is optimized for LK-H052 usage, but works with LK-H022, LK-H082 and others as well.			
	Translation Stage		Klippel article number	2100-001
	Microphone		Different microphones can be used depending on the application. See specification “A4 – Microphones” for available microphones.	
	Microphone Clamp		All Klippel offered mic sets have the dedicated mic clamp included. For separate mic clamps see specification “A4 – Microphones”.	
	Not included accessories are marked blue in the picture at the first page.			

2 Application field for Micro speaker clamping

Micro Speaker Clamping with: • Microspeaker • Microphone • Laser KEYENCE LK-H052 • Translation Stage	
Micro Speaker Clamping with: • Speaker (∅ 3,8 cm, 35 g) • Microphone • Laser KEYENCE LK-H052 • Translation Stage	
Micro Speaker Clamping with: • Speaker (∅ 8 cm, 105 g) • Microphone • Laser KEYENCE LK-H52 • Translation Stage Depending on size, shape, material, and weight of the DUT customized clamping brackets could be helpful. The brackets can be easily exchanged.	

Micro Speaker Clamping with Vacuum Chamber:

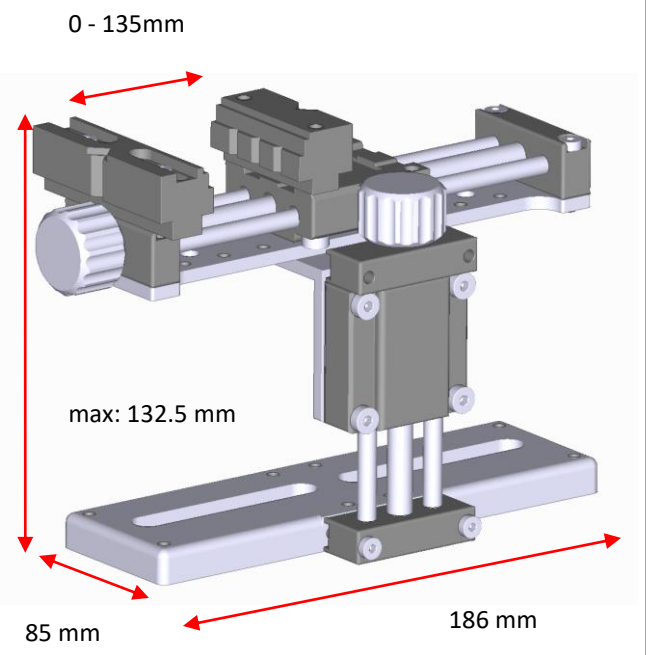
- The Vacuum Stand can be used to adjust the distance between DUT inside the Vacuum Chamber and the glass plate (Laser Sensor outside).
- The platform from the Micro Speaker Clamping can be used to place the laser sensor above the DUT at the Vacuum Chamber.



3 Vacuum Stand

(Modification of the Micro Speaker Clamping or available on its own)

Function		
Dimensions (without DUT)	185 x 85 x 135 mm (7.28x 3.35 x 5.31inch)	
(without DUT)	< 0.65 kg	
Finish	anodized aluminum & plastics	
Material	• aluminum • stainless steel • POM – plastic (Polyoxymethylene) for brackets • SHT-Polymer plastic for linear actuator	
Clamping travel	0 – 135 mm	
Height travel	58 to 132.5 mm over ground	
External dimensions	width min. depth max. depth min. height max. height	186 mm 72 mm 92 mm 116 mm 132.5 mm



4 Application field for Vacuum Stand

Vacuum Stand in the vacuum pot with: • Micro Speaker Height adjusted to glass plate for laser measurements from outside	
Vacuum Stand mounted on the Scanning Vibrometer turntable: • For DUT clamping during Scanning Measurements and • All other RnD measurements for small sized speaker if the Scanning Vibrometer is used as Laser stand.	

Find explanations for symbols at:

http://www.klippel.de/know-how/literature.html

Last updated: January 04, 2021