

Manufacturer Calibration Certificate

The following instrument has been tested and calibrated to the manufacturer specifications.
The calibration is traceable in accordance with ISO/IEC 17025 covering all instrument functions.

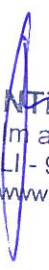
- Device Type: XL2 Audio and Acoustic Analyzer
- Serial Number: A2A-06530-E0

- Date of Calibration: 26 September 2016
- Certificate Number: 42639-A2A-06530-E0
- Results: PASSED
(for detailed report see next page)

Tested by: M. Frick

Signature:

Stamp:



NTi Audio AG
Im alten Riet 102
LI - 9494 Schaan
www.nti-audio.com

Calibration of: XL2 Audio and Acoustic Analyzer
 Serial Number: A2A-06530-E0
 Date: 26 September 2016

- Measurement Data on Receipt: in tolerance

- Detailed Calibration Test Results:

		reference	before	actual	unit	actual error	XL2 tolerance	calibration uncertainty ²
RMS Level @ 1kHz, XLR Input		0.1	0.100	0.100	V	≤0.1%	±0.5%	±0.10%
		1	1.000	1.000	V	≤0.1%	±0.5%	±0.09%
		10	9.989	9.989	V	-0.1%	±0.5%	±0.09%
Flatness, XLR Input ¹	20 Hz	1	0.997	0.997	V	-0.3%	±1.1%	±0.09%
	20 kHz	1	1.004	1.004	V	0.4%	±1.1%	±0.09%
Frequency		1000	1000.01	1000.01	Hz	≤0.003%	±0.003%	±0.01%
Residual Noise	XLR		< 2 uV	< 2 uV			<2 uV	±0.50%
THD+N @ 0 dBu, 1 kHz, XLR Input			-97.7	-97.8	dB		typ. -100 dB	±0.50%

- Test Conditions: Temperature: 24.1 °C
 Relative Humidity: 44.3 %

- Calibration Equipment Used:

- Agilent Multimeter, Typ 34401A, Serial No. MY 5300 4607
 Last calibration: 17.08.2016, Next calibration: 17.08.2017
 Calibrated by ELCAL to the national standards maintained
 at Swiss Federal Office of Metrology. SCS 002

- FX100 Audio Analyzer, Serial No. 10408
 Last Calibration: 04.05.2016, Next Calibration: 04.05.2017
 Manufacturer calibration based on Agilent 34410, Serial No. MY47014254,
 Last Calibration: 03.06.2016, Next Calibration: 03.06.2017
 which is calibrated by ELCAL to national standards maintained
 at Swiss Federal Office of Metrology. SCS 002

¹ The specified tolerance +/-0.1 dB @ 1V = +/- 1.1%

² The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with the regulations of the GUM.

Manufacturer Calibration Certificate

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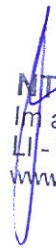
- Device Type: **M4260 Measurement Microphone**
- Serial Number: **3715**

- Date of Calibration: **26 September 2016**
- Certificate Number: **42639-3715-M4260**
- Results: **PASSED**
 (for detailed report see next page)

Tested by: **M.Frick**

Signature:

Stamp:



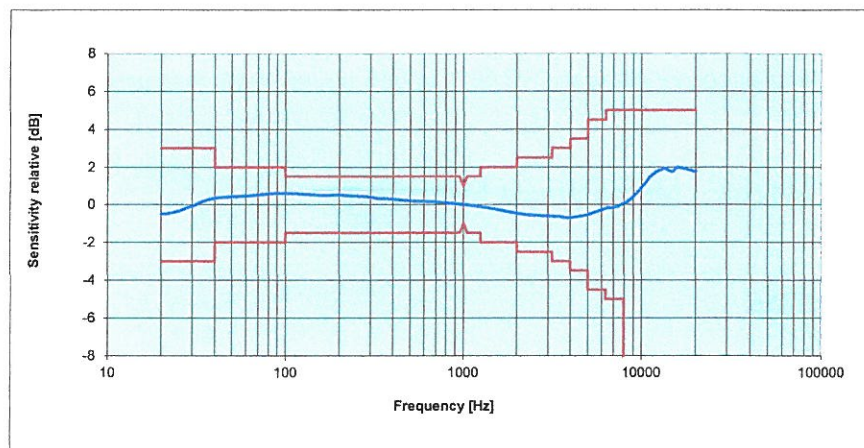
NTi Audio AG
Im alten Riet 102
LI - 9494 Schaan
www.nti-audio.com

Date: 26 September 2016
Calibration of: M4260
Serial Number: 3715

- Performance on receipt: in tolerance

- Detailed Calibration Test Results:

System calibration	before	actual	calibration uncertainty ¹
Sensitivity @ 1 kHz, 114 dB SPL	26.5 mv/Pa	27.0 mV/Pa	±2.85%
Frequency response	Class 2	acc. IEC 61672	



- Test Conditions: Temperature: 18.2°C ±0.5 °C
Relative Humidity: 57.0% ±2%
Air Pressure: 96.98 kPa ±0.25 kPa

- Calibration Equipment Used:

- Norsonic Sound Calibrator, Type 1251, S/No. 30930
Last Calibration: 03.12.2014, Next Calibration: 03.12.2016
Calibrated by Metas, Switzerland
- NTi Audio FX100, S/No. 11094
Last Calibration: 16.08.2016, Next Calibration: 16.08.2017
Calibrated by NTi Audio meeting product specifications
- MTG MV203, S/No. 0630 / Mic Capsule, MK221 S/No. 16502
Last Calibration: 30.11.2015, Next Calibration: 30.11.2017
Calibrated by MTG, Germany

¹ The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with the regulations of the GUM.