

Certificate of conformity

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|-----------------------|--|
| Item | Audio Magnetic 1D Field Probe AM1DV2 |
| Type No | SP AM1 001 A |
| Series No | 1001 ff. |
| Manufacturer / Origin | Schmid & Partner Engineering AG Zurich, Switzerland |

Description of the item

The Audio Magnetic Field Probe AM1DV2 is a fully RF shielded magnetic field probe for the frequency range from 100 Hz to 20 kHz. The signal from the pickup coil is amplified in a symmetric 40dB low noise amplifier and fed to a 3 pin connector at the side. Power is supplied via the same and monitored via the LED near the connector. The single sensor in the probe is arranged in a tilt angle allowing measurement of 3 orthogonal field components by rotating the probe around its axis.

Handling of the item

The probe is manufactured and designed for operation in air and shall not be exposed to humidity or liquids. In order to keep the performance and alignment, the probe must not be disassembled. The full performance can only be achieved using the SPEAG provided accessories and following the corresponding manual.

Tests

| Test | Requirement | Details | Units tested |
|--------------------|---|--|------------------------|
| Sensor angle | Probe configuration data for alignment with field | see corresponding probe certificate | all |
| Dimensions | according to corresponding probe certificate | verified at delivery / light beam alignment prior to measurement usage | all / in setup by user |
| Frequency response | within +/- 0.5 dB of ideal differentiator from 100 Hz to 10 kHz | Coil current of AMCC measured with R&S UPL, probe including amplifier and AMMI ADC input | First article |
| Dynamic range | max. + 21 dB A/m @ 1 kHz Noise level typ. -70 dB A/m @ 1 kHz ABM2 typ. -60 dB A/m | with AMMI | Samples / all |
| Linearity | within < 0.1 dB from 5 dB below limitation to 16 dB above noise level | tested between +15 dB A/m @ 1 kHz, to -70 dB A/m @ 10 kHz | Samples |
| Sensitivity | typ. -24 dBV / A/m @ 1 kHz at probe output | verified at delivery / calibrated in setup prior to measurement usage | all / in setup by user |
| RF shielding | immunity to AM modulated RF signal | 1 kHz 80 % AM | all |

Standards

[1] ANSI PC63.19-2006 Draft 3.12

Conformity

Based on the tests above, we certify that this item is in compliance with the requirements of [1].

s p e a g

Date 22.5.2006

Stamp / Signature

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