

D-01 Specifications

Acoustic transducer: K 07 large double-diaphragm capsule,
diameter 30 mm with protected internal electrodes
Directional characteristic: 15 remote controllable polar patterns,
from omni to cardioid to figure-8

Frequency response: 20 Hz to 20 kHz

Free-field sensitivity^{1) 2)}: -44 dBFS

Equivalent noise level, CCIR³⁾: 19 dB

Equivalent noise level, A-weighted³⁾: 8 dB-A

Signal-to-noise ratio²⁾, CCIR³⁾: 75 dB

Signal-to-noise ratio²⁾, A-weighted³⁾: 86 dB

Maximum SPL at 0 dBFS: 138 dB SPL

Dynamic range, A-weighted³⁾: 130 dB

Latency:

44,1/48 kHz: 52 samples

88,2/96 kHz: 61 samples

176,4/192 kHz: 121 samples (AES 3)

Supply voltage range: +6 V to +10.5 V

Current consumption: max. 220 mA

Weight: approx. 700 g, Diameter: 63.5 mm, Length: 185 mm

General Specifications of the Solution-D microphones

Interface: AES42

Remote controlled functions:

- Polar pattern⁴⁾
- Low-cut: flat, 40, 80, 160 Hz
- Pre-attenuation: 0, -6, -12, -18 dB
- Gain: 0...63 dB in 1 dB steps, clickless
- Testsignal: 1 kHz, pink noise, white noise
- Sampling rates: 44.1, 48, 88.2, 96, 176.4, 192 kHz
- Parametric compressor/limiter (incl. de-esser function)
- Independent peak limiter avoiding any clipping
- Switch functions: soft muting, phase reverse, signal lights
- Signal lights: red⁴⁾ and blue LEDs
- System functions, firmware download

A/D conversion: Neumann process (patented),
28-bit internal word length

Digital signal processing: Fixed-point,
variable internal word length 28 bits to 60 bits

Synchronization:

- Asynchronous operation (free-running, AES42 - Mode 1), basic frequency accuracy: ± 25 ppm
- Synchronous operation (AES42 - Mode 2), pulling range: Min. ± 100 ppm

Power supply (phantom power complying with AES42)

Output: XLR3M, 24 bits as per AES/EBU (AES3)

All data with respect to 0 dB pre-attenuation and 0 dB gain.

1) at 1 kHz

2) re 94 dBSPL

3) according to IEC 60268-1;

CCIR-weighting according to CCIR 468-3, quasi peak;

A-weighting according to IEC 61672-1, RMS

4) D-01 only