Live on stage –
with the world's first digital vocal microphones
KMS 104 D + KMS 105 D

The sound of the well established KMS 104 and KMS 105 analogue microphones is now also available in the digital domain. The D-version of these microphones is based on the AES42 standard and is an ideal choice for live and on-stage applications.

Three particularly useful functions in these applications are:

- Easy to change the maximum SPL that the microphone can handle in 4 steps, switchable to over 150 dB SPL.
- A fast look-ahead peak limiter can be used to prevent overloads further down the audio chain, caused by unexpected high-level sound events.
- Easy to change High Pass filter in 4 steps for adaptation to the microphone distance and the recording environment.

Features of KMS 104 D and KMS 105 D

- First class condenser microphones with high acoustic transparency, a wide frequency range and a fine resolution of transients
- Digital vocal microphones, available with 2 directional characteristics (KMS 104 D = cardioid; KMS 105 D = supercardioid)
- Storage of pre-programmed settings in the microphone using a separate Digital Microphone Interface (DMI-2, DMI-8), controlled by the included Remote Control Software (RCS)
- Switchable presets for pre-attenuation, gain adjustment, high-pass filter, etc. using the RCS (see general features of Solution-D)
- Low self-noise
- Robust, thick-walled metal housing
- Light weight

Application Hints

- Vocals and speech on stage
- Announcer's mic for broadcasting/dubbing
- Especially suited for in-ear-monitoring
- For feedback-prone environment

General Features of Solution-D

Interface:
- AES42

Remote controlled functions:
- Low-cut: flat, 40, 80, 160 Hz
- Pre-attenuation: 0, –6, –12, –18 dB
- Gain: 0...63 dB in 1 dB steps, clickless
- Test signal: 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
- 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)