

Array Ring 32 (LN) Ring array with 32 channels for applications in the acoustic lab





The ring array is a 32 channel measurementsystem designed for applications in acoustic labs. The "LN" version can be used to measure very faint noises. Depending on the signal's spectral composition, the measurement distance should be between 0.7 and 5 meters.

Longer ranges are possible for measurement frequencies above 1 kHz. The ring array is equipped with studio microphones and MicBus microphone connectors, similar to all other arrays.

The array is acoustically transparent and "looks" equally well in forward and backward direction. Thus, the array should be used in front of a sound-absorbing or sounddiffusing background to reduce disturbances.

After a special calibration, qualitative ultrasonic recordings up to 50 kHz can be performed. The design effectively minimizes partial reflections and resonance between the measured object and the array. The ring layout minimizes aliasing effects.

The system comprises an integrated USB camera.

High quality acoustic images can be acquired within seconds.

The microphones used are carefully selected (+/- 0.5 dB) and have an extremely linear frequency response.

They are connected to the data-recording device via the MicBus connector system. The microphone array can be set up at the optimum angle using the included tripod. The system can be easily and instantly calibrated on location using a test sound generator (so-called "clicker"). This makes the system ideally suited for engine-related measurements in automotive applications. The system is sufficiently lightweight to facilitate pivoting above engines.

Characteristics

USB camera (up to 1280 x 1024), fix focus lens Mapping from 100 Hz...7 kHz (> 6dB) Typical measurement distances 3...300 m Length 2 m (when folded) Weight ca. 10 kg Backward attenuation up to -21 dB MicBus microphone connectors Dynamic range of microphones: 35...130 dB, 30 Hz...20 kHz (50 kHz)

Compontents

- Array mounted on camera quick release plate
- 3 m tripod with 3 way head and bag
- Protective transport cover available on request