

Imprint

**Current Microphones**

Current Accessories

Hist. Microphones

Hist. Accessories

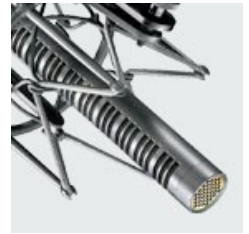
By Requirement Profile:

By Type:

Microphone Finder



Short version of the classic shotgun mic, with switchable filter and pre-attenuation functions. Excellent off-axis (lateral and rear) attenuation. Free of coloration.



Description

Features

Appl. Hints

Technical Data

Order Info

Accessories

Publications

Reports

Photos/Graphics

PR Info

Layoutfiles

Spareparts

The KMR 81 is a shotgun microphone with a high directivity that remains within the acceptance angle independent of the frequency.

The advantage is that a sound source, for example an actor on stage, will not change its apparent tonal balance when moving within this area.

**Applications**

Shotgun microphones are particularly useful in recording situations where a microphone cannot be positioned within the desired distance of the sound source to produce a sufficiently loud signal level.

Typical applications are film and video recordings, where the microphone should not appear in the picture.

The KMR 81 has been specifically designed for electronic news gathering.

**Acoustic features**

In principle, Neumann shotgun microphones use a combination of a pressure gradient transducer and an interference tube. If the wavelength of the frequency is longer than the tube length, the microphones work as pressure gradient transducers. At higher frequencies they operate as interference transducers for lateral sound. Off-axis sound sources are picked up with reduced level, but without coloration.

Therefore, the microphones are well suited to record individual instruments of an orchestra. The pickup areas of several shotgun microphones may even overlap as, for example, during recordings on a large stage, without causing any problem.

The KMR 81 is less sensitive to wind and pop noise when compared to the KM 150 miniature microphone with a similar high directivity. The shotgun microphone features extremely low self noise, good impulse response, and high output level.

**Polar patterns**



The KMR 81 is a shotgun microphones with a very directional characteristic.

The microphone capsule is positioned inside a housing tube that is acoustically open but has a high flow resistance. The directional pattern of the microphone is lobe shaped. The attenuation of lateral sound is practically independent of the frequency. The KMR 81 has a frequency independent directivity within a pickup angle of 90° for audio signals that determine the tonal balance of the program material.

#### **Filter and attenuation**

The microphone has a 10 dB attenuation switch to prevent the input of the following unit from overloading.

A second switch activates a 200 Hz high-pass filter. Toward the lower frequencies the sensitivity of the microphone is attenuated by approximately 15 dB at 50 Hz. The frequency range above 200 Hz is unaffected.

#### **Use on location**

The shotgun microphone features very high output capability and a remarkably low self-noise level.

Its low power consumption, light weight, and low sensitivity to wind and handling noise, makes it an ideal tools for news gathering on location.

Small dimensions, together with a balanced center of gravity, make handling easy without any whiplash effect.

However, when on location and during strong wind conditions, we recommend using an additional wind screen (included as standard accessory). The wind screen is made of polyurethane foam and also serves as soft padding of the microphone in its leather carrying case.

For mobile use a handle and an elastic suspension are available.

[B2B & Press Login](#)

