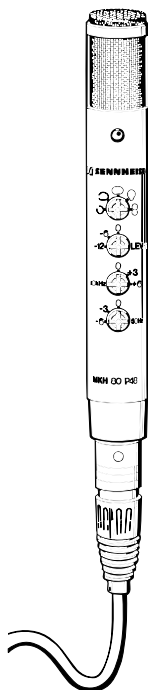


**GEBRAUCHSANLEITUNG
INSTRUCTIONS FOR USE
INSTRUCTIONS POUR L'USAGE
ISTRUZIONI PER L'USO
MODO DE EMPLEO
GEBRUIKSAANWIJZING**

MKH 80



Instructions for use

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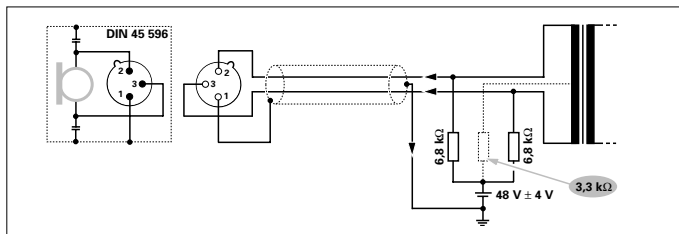
Brief description

The MKH 80 is a versatile studio condenser microphone with five different pick-up patterns. It incorporates a push-pull transducer featuring a high linearity.

- Extremely low inherent noise - no masking effects; the recording gets an extraordinary sense of space and depth
- Excellent sensitivity for interference-free sound reproduction and high signal strength. The inherent noise of following microphone amplifiers is negligible.
- The mic's frequency-independent directivity prevents coloration both in the near field and in the diffuse field.
- No negative acoustic effects caused by the housing or the sound inlet basket.
- The mic's slender design and small dimensions make it visually unobtrusive.

Connecting facilities/power supply

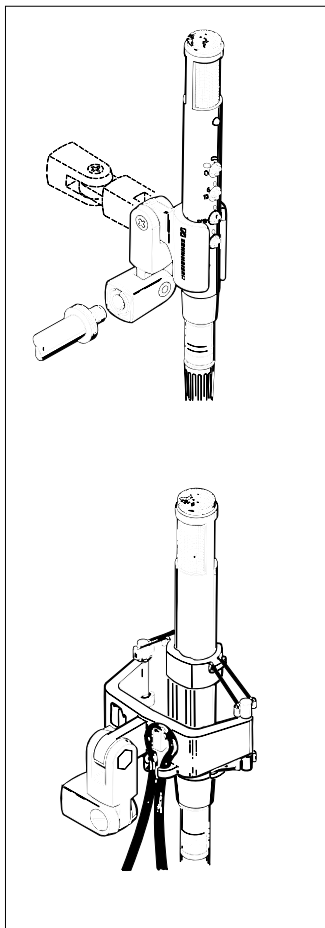
The MKH 80 is designed for 48 V phantom powering as per DIN 45596. For power supply units and connecting cables please see "Accessories".



Note well:

The extension cable is to be put between the power supply unit and the mixing console. The total length of the cable shall not exceed 200 m. For longer cables the line capacitance affects the frequency response of the microphone. Trebles are undesirably attenuated.

Stand mounting/acceptance angles



The MZQ 80 clamp (included) serves to fix the MKH 80 to a stand.

The proper acceptance angle is indicated by the red LED.

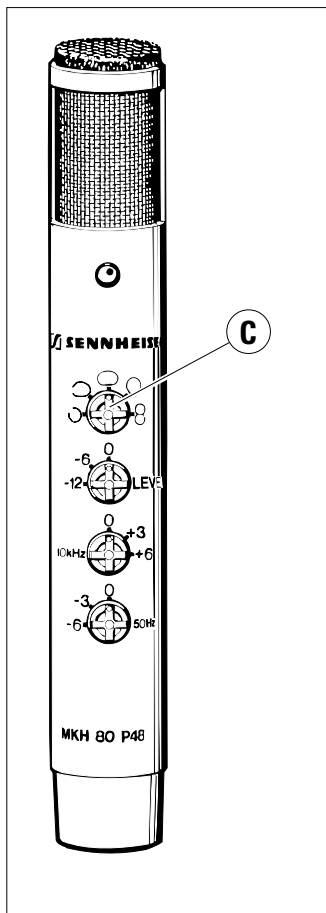
The MZS 80 shock mount provides better resistance to footfall (please see "Accessories").

Application tips

The MKH 80 is a versatile condenser microphone which is particularly well suited to applications in the studio recording environment.

- Its problem-free reproduction of high sound pressure levels makes it the perfect mic for soloist. It also works exceptionally well as a supporting mic.
- Its low inherent noise makes the MKH 80 the ideal principal microphone.
- If the microphone is set to the supercardioid pick-up pattern, the monitors in the studio need not be switched off in order to prevent feedback.
- The MZW 80-1 pop shield effectively suppresses pop noise during close miking. A special gauze pop shield is in preparation.

Selection of pick-up patterns



Switch **C** serves to set the mic to five different pick-up patterns:



Omnidirectional

The push-pull transducer incorporated into the MKH 80 reduces the mic's directivity to a minimum for high frequencies. The mic has a neutral response to direct and diffuse signals. This feature provides a sense of space and depth and allows large sound sources to be miked. For close-miking, sound reproduction does not become overbrilliant or shrill. No proximity effect.



Wide-angle cardioid

The wide-angle cardioid pick-up pattern is a combination of the omnidirectional and the cardioid pick-up pattern. A rear attenuation of 10 dB allows a moderate attenuation of diffuse signals from the rear and thus a good reverberation balance for longer distances to the sound source, even in rooms which are acoustically less perfect. Like the omnidirectional pick-up pattern, the wide-angle cardioid pick-up pattern is particularly well suited to mike large sound sources. For close-miking, the mic's bass emphasis is less high than with the cardioid pick-up pattern.



Cardioid

The cardioid pick-up pattern is acoustically neutral for large acceptance angles. Typical for the push-pull transducer is its high rear attenuation for low frequencies (typ. 30 dB), which allows signals from the rear to be effectively attenuated. The cardioid pick-up pattern is the most versatile characteristic. It is the ideal choice for speakers, soloists and smaller instrument groups.



Supercardioid

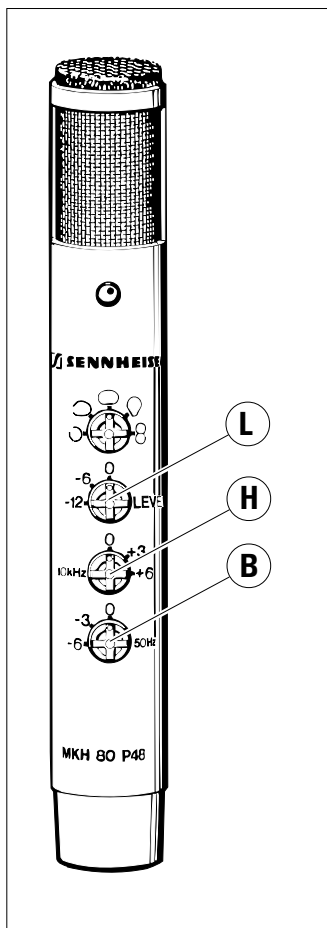
The supercardioid pick-up pattern features a higher directivity than the cardioid pick-up pattern, which results in efficient attenuation of diffuse signals and prevents feedback. Thanks to its good lateral attenuation (10 dB), the supercardioid pick-up pattern is particularly well suited to mike or support soloists in noisy environments, i.e. situations in which lateral sound is to be effectively suppressed. In this case, too, the transducer provides a frequency-independent directivity.



Figure-of-eight

The figure-of-eight pick-up pattern provides total attenuation of lateral sound, which makes it particularly well suited to separate or support adjacent sound sources such as single instruments or instrument groups in large orchestras. Annoying reflections from the floor and the resulting comb filter effects can be effectively reduced.

Preattenuation / tone control



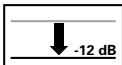
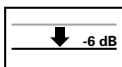
Switch L for preattenuation

If the output level of the MKH 80 is too high for the following mixing console, it can be reduced in two steps:

- 6 dB

or

- 12 dB



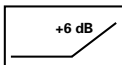
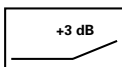
Switch H for treble emphasis

The treble emphasis can be adjusted in two steps. For 10 kHz the increase amounts to:

+ 3 dB

or

+ 6 dB



Switch B for bass attenuation

The bass response can be attenuated in two steps. For 50 Hz the attenuation amounts to:

- 3 dB

or

- 6 dB

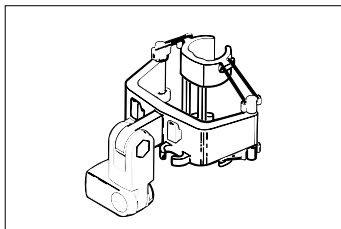


Accessories

MZS 80

Shock mount

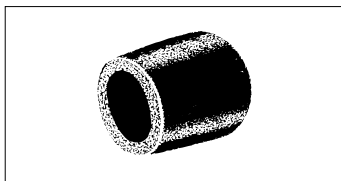
for the elastic suspension of the stand mounted mic. Effectively suppresses structure-borne noise.



MZW 80-1

Foam wind-shield

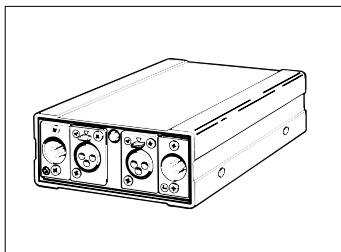
functions as a close-miking and pop shield.



MZN 16 P 48 U

Power supply unit

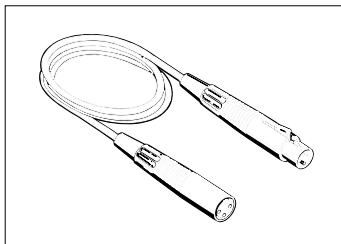
for 48 V phantom powering.
Allows two mics to be connected.
Required mains voltage:
95 - 265 V/50 - 60 Hz



KA 7 U

XLR connecting cable

Three-core cable with XLR/XLR connector. Length: 7.5 m. Usable as a connecting cable or an extension cable. Preattenuation/tone control

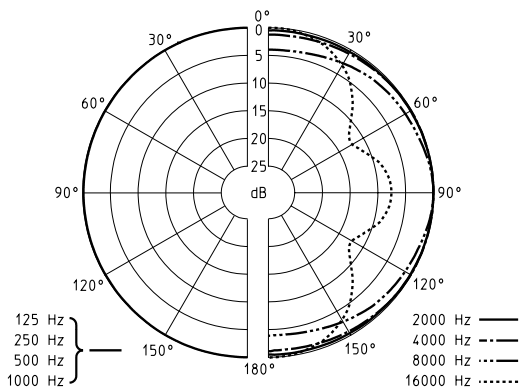
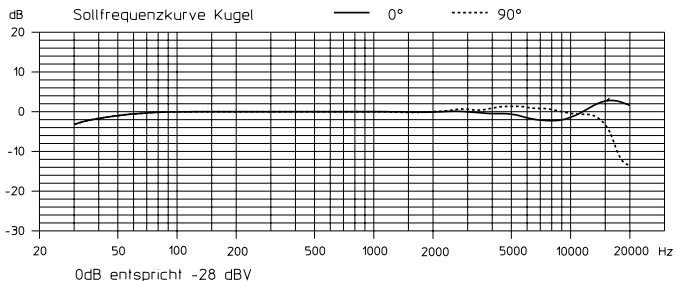
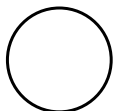


Technical Data

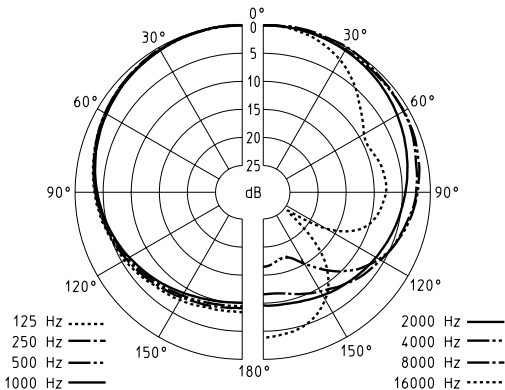
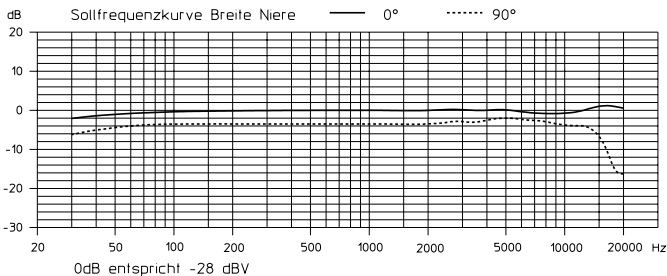
short description	high-frequency studio condenser microphone with 5 switchable directional characteristics
transducer type	double push-pull pressure-gradient transducer
directional characteristics	omnidirectional, wide-angle cardioid, cardioid, super cardioid, figure-8
frequency range	30 - 20000 Hz
sensitivity	40 mV/Pa \pm 1dB (-28 dB re IV/Pa)
output impedance	150 Ω
maximum SPL	136 dB SPL (142 dB SPL with 6/12 dB preattenuation)
maximum output voltage	5 V
equivalent SPL due to inherent noise	20 dB SPL (CCIR-weighted) 10 dB SPL (A-weighted)
output voltage due to inherent noise	8 μ V (CCIR-weighted) 2.5 μ V (A-weighted)
S/N ratio at 94 dB SPL (1 Pa)	74 dB (CCIR-weighted) 84 dB (A-weighted)
dynamic range	116 dB (CCIR-weighted) 126 dB (A-weighted)
switchable pre-attenuation	6/12 dB (20/10 mV/Pa)
switchable bass roll-off	3/6 dB at 50 Hz
switchable treble emphasis	3/6 dB at 10 kHz
feeding	phantom feeding P48
supply voltage / supply current	48 \pm 4 V / 3 mA
connector	XLR-3
diameter	26.5 mm
length	178 mm
weight	135 g

Subject to alterations.

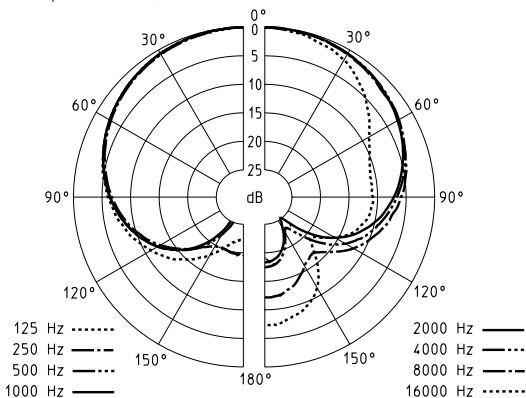
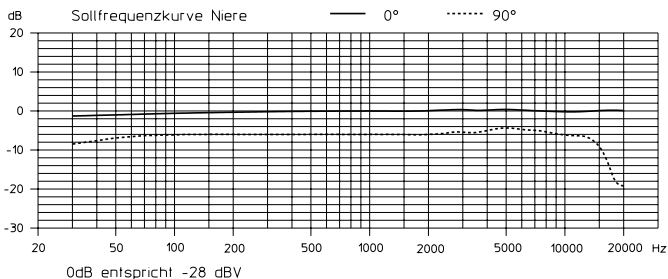
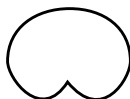
Soll-Frequenzgang mit Toleranzfeld / Polardiagramm
Nominal frequency response with tolerance field / Pick-up pattern
Réponse en fréquence / Diagramme de la directivité
Risposta in frequenza / Diagramma polare
Respuesta en frecuencia / Diagrama de la directividad
Ingestelde frequentiearakteristiek met tolerantie-velden / Pooldiagrammen



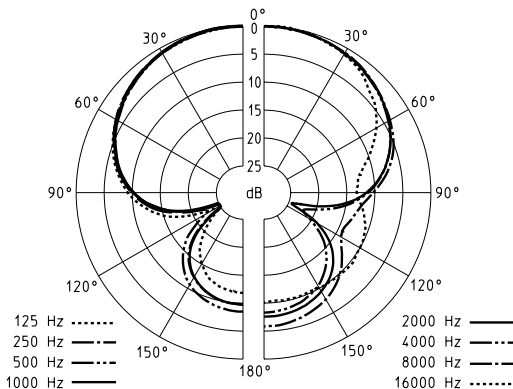
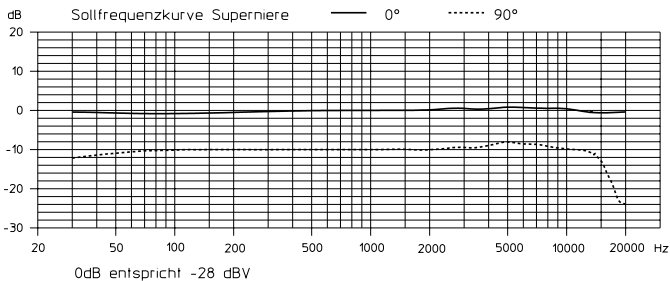
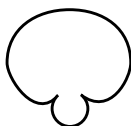
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Ingestelde frequentie karakteristiek met tolerantie-velden / Pooldiagrammen



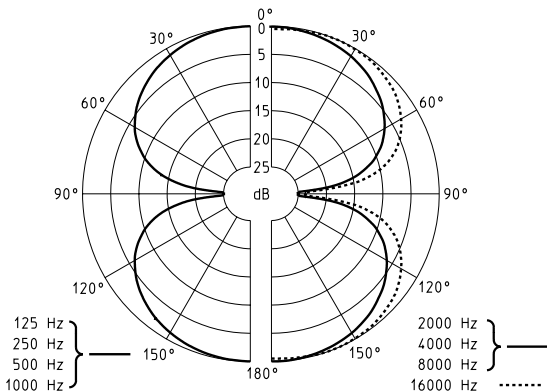
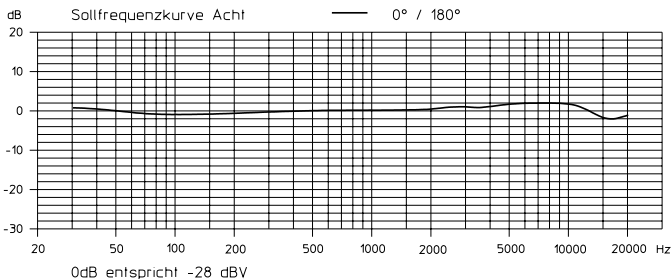
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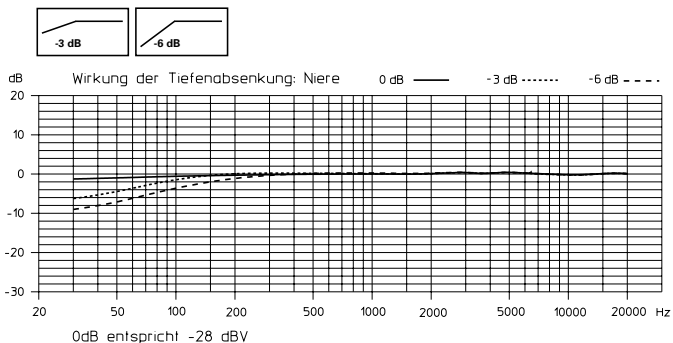
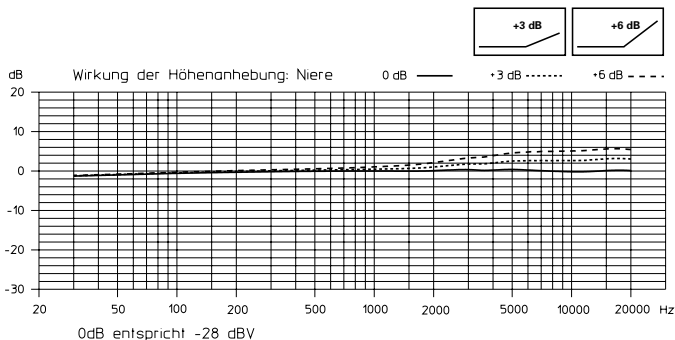
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Wirkung der schaltbaren Filter
Filter effects
Effet des filtres commutables
Effetto dei filtri commutabili
Efecto de los filtros conmutables
Werking van de regelbare filters



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