



MKH 20 – MKH 800
condenser microphones

The truth
about
sound

 **SENNHEISER**





Sennheiser MKH series: ultra low noise, highly linear condenser microphones

The MKH series of RF condenser microphones from Sennheiser constitutes a unique, sophisticated class of condenser microphones. They fulfil the highest demands made on sound quality and versatility, and are renowned for their accurate sound reproduction, ruggedness, stable all-weather operation, wide frequency response and extremely low inherent noise.

With these microphones, Sennheiser has succeeded in creating a superb synthesis of sound aesthetics and engineering perfection. These microphones are designed for recording of the most exacting criteria. The same critical engineering and design principles are common to all models in the series covering the whole range of directional characteristics.

Features that make a difference

Extremely low inherent noise The inherent noise of microphones masks quieter sounds, and thus limits the dynamic range of sound recordings. The outstanding low noise performance of the MKH series represents a major advance in microphone technology in this respect. It is based on a special capsule design which closely reflects the frequency dependent response of the human hearing. This provides an excellent signal to noise ratio in the frequency range where the human ear is most sensitive to noise.

Flat frequency response The low-noise design is associated with a decreasing frequency response of the capsule at low and very high frequencies. The frequency response is corrected in the integrated amplifier circuitry providing a virtually ruler flat frequency response of the microphone in a wide frequency range. Unlike other condenser microphones with similar diaphragm diameters, the bass response of the MKH series is on par with that of large diaphragm microphones, but without the irregularities at high frequencies common to these microphones.

Extended high frequency response The acoustic properties of the MKH capsule design enable the high-frequency response to be extended beyond the limits of the standard audio CD format. This extension has been realised with the multi-pattern microphone MKH 800. With this microphone the potential of the SACD and the DVD-A recording formats can be fully utilised.

Accurate directional patterns The MKH series offers a variety of directional patterns. All types have been carefully designed for minimal deviations from the ideal patterns over a wide frequency range. The off-axis response shows no peaks at high frequencies and a smooth roll-off which is dictated by the natural pressure build-up. So the off-axis sound colouration is reduced to a minimum.

Tonal compatibility All microphones of the MKH series are based on the same electro-acoustic transducer and have essentially the same on-axis frequency response. This is the principle reason for the generic tonal qualities shared by this series of microphones. Thus, all microphone types can be used together, or replaced by each other, without introducing tonal inconsistencies. This enables the sound engineer to equip himself with microphones of the highest sound compatibility for use in various conditions.





High linearity The MKH capsules incorporate a symmetrical design, with identical electrodes located in front and behind the diaphragm. This design provides both acoustical and electrical symmetry and is the most powerful method to eliminate transducer non-linearity and accompanied harmonic and intermodulation distortion. Thus, even finest tonal structures can be recorded perfectly without sound colourations.

Transformerless balanced and floating output The RF technique provides a floating output of the capsule circuitry, while the capsule itself is electrically grounded. This enables a truly transformerless, balanced and floating microphone output.

Switchable features Switches for frequency response and pre-attenuation adjustment allow the microphone to be adapted to the specific recording conditions. For instance, the MKH 20 omnidirectional microphone can be adapted for direct and diffuse sound recordings. All other microphones feature a bass roll-off switch to compensate for the proximity effect.

Outdoor applications The RF principle reduces considerably the susceptibility to climatic conditions. This makes the MKH microphones especially suitable for outdoor use.

Documented quality The MKH microphones are produced to very tight tolerances and undergo careful quality tests. The on-axis frequency response is documented and delivered with the microphone.

Accessories Windshields with various levels of protection, particularly for mobile use, are available. Shock mounts made of highly durable materials, which remain elastic even at low temperatures, attenuate impact noise by over 20 dB. A useful facility for stereo recording is the MZD 30 dual clip which allows to connect the MKH 30 figure-8 microphone together with a second microphone for high quality M/S recordings.



Pick-up patterns

A wide range of pick-up patterns is required for sound recording. The range of pick-up patterns is illustrated by the photographs on this double page. These pictures give an imagination of the spatial sensitivity distribution of the different microphone types.

Apart from the omni-directional microphone, all other microphones show specific angles of minimal sensitivity. In the case of the super-cardioid and the figure-8 microphone, the rear part of the pattern is associated with inverse polarity of the microphone output signal.



Omni-directional The omni-directional pattern picks up the sound uniformly from all directions. It is the ideal characteristic for recording large sound sources. Even for close-miking techniques, there is no excess brilliance or proximity effect. If the acoustic ambience is not too reflective, this directional pattern provides very impressive recordings.



Wide-cardioid The wide-cardioid is a pattern halfway between omni-directional and cardioid. 10 dB rear attenuation causes a moderate off-axis sound reduction and a good reverberation balance at larger recording distances, especially in rooms with less than perfect acoustics. Like the omni-directional, the wide-cardioid pattern is ideal for large sound sources. It causes less bass emphasis when used for close-miking than the cardioid pattern.



Cardioid / Uni-directional This is the most frequently used directional pattern, suitable for almost any application. It considerably reduces the contribution of the reverberant room acoustic. This is helpful in rooms with poor acoustics or when disturbing sounds impinge mainly from the rear.

Super-cardioid The more acute directivity of the super-cardioid pattern gives higher attenuation of off-axis sound from the side than the cardioid pattern. It reduces the potential for acoustic feedback, for instance on stage where the monitoring loudspeakers are positioned near the cancellation angle of the super-cardioid (120°). Due to its high lateral attenuation (10 dB), the super-cardioid is often preferred for recording or highlighting soloists where the requirements for lateral acoustic separation are higher. The proximity effect is more pronounced than that of the cardioid pattern.



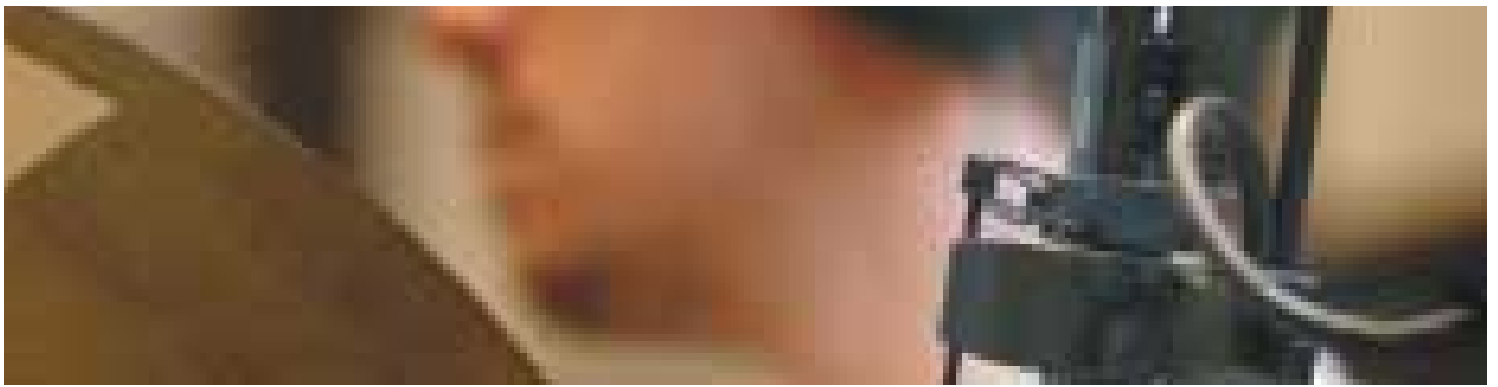


Figure-8 / Bi-directional With the complete cancellation of lateral sound, the figure-8 pattern is particularly well suited for separating and supporting adjacent sound sources, e.g. individual instruments or groups of instruments within an orchestra. Also, distorting primary echoes from the floor or ceiling and the associated comb-filter effects can be effectively reduced. Due to the symmetrical design of the acoustic MKH transducer, the figure-8 pattern, uniquely, is the most neutral characteristic available. However, the proximity effect is even more pronounced than with the super-cardioid pattern.



Lobar Even more acute directivity patterns can be achieved with the acoustic interference principle which is utilised with the “shotgun” microphones. The interference method operates well for medium and high frequencies depending on the length of the interference tube and thus the length of the microphone. At low frequencies the interference effect decreases, and the directivity passes over to the super-cardioid characteristic. The MKH series offers shotgun microphones with different length for all recording applications.

Pick-up patterns	Omni-directional	Wide-cardioid	Cardioid	Super-cardioid	Figure-8 / Bi-directional	Lobar
MKH 20	●					
MKH 30					●	
MKH 40			●			
MKH 50				●		
MKH 60						●
MKH 70						●
MKH 416						●
MKH 418 S					●	●
MKH 800	●	●	●	●	●	

Microphone types



MKH 20 The MKH 20 is a pure pressure microphone with an omni-directional directivity pattern. The low-frequency response is extended down to 12 Hz. In the upper frequency range, the natural pressure build-up causes a slight high-frequency roll-off for off-axis sound, which increases the directivity at high frequencies. This effect can be used to adjust the tonal balance of large sound sources, or can be compensated for, in three steps of 2 dB, by using the diffuse-field switch and/or the supplied attachable pressure build-up ring.



MKH 30 The MKH 30 is a pure pressure-gradient microphone with a bi-directional/figure-8 characteristic. Due to the symmetrical transducer design, the pattern is perfectly symmetrical. Unlike other bi-directional microphones, the MKH 30 shows a ruler-flat frequency response and no bass roll-off. Thus, this microphone is very versatile. It can be used, for instance, as a main microphone in combination with the MKH 20, which enables the adjustment of the direct/diffuse sound balance by mixing both signals. The high suppression of lateral off-axis sounds is particularly useful in supporting adjacent instruments in an orchestra or in suppressing structural reflections in unfavourable acoustics. This is also an ideal microphone for use in radio drama studios besides its classic use as the side microphone of an M/S pair.



MKH 40/MKH 50 These microphones are combined pressure/pressure-gradient microphones. The cardioid (MKH 40) and the super-cardioid (MKH 50) are widely used for standard recording applications. They provide good results in more reflective environments as they reduce the diffuse sound well. The more acute pattern in combination with the cancellation at 120° sound incidence of the super-cardioid makes this type particularly suitable for on-stage performance as it reduces the acoustical feedback. The off-axis attenuation of the super-cardioid pattern is identical (approx. 10 dB) at both 90° and 180° off-axis and achieves its maximum at 120°.



MKH 60/MKH 70 The shotgun microphones MKH 60/MKH 70 are interference tube microphones for sound recording under severe acoustic conditions or at large recording distances. According to the different lengths of the interference tubes, the directivity is high for the MKH 60 and very high for the MKH 70. The very low inherent noise of these microphones supports faithful recording even of extremely low sound levels. Individual sound sources are thus isolated from the carpet of sound and quiet sounds are highlighted.

MKH 416 This short shotgun microphone has been a standard in versatile outdoor recording for more than 30 years. The interference tube is shorter than that of the MKH 60 and thus provides a wider recording angle, but still narrower than a super-cardioid. The smaller diameter and the shorter length makes this microphone less obtrusive than the other shotguns. The MKH 416 is available for P48 phantom-feeding (MKH 416 P48) as well as for 12V A/B feeding (MKH 416 T).



MKH 418 S The MKH 418 S is the M/S stereo version of the legendary MKH 416 shotgun microphone. The properties of the M channel are identical to that of the MKH 416 microphone. An additional lateral oriented figure-8 capsule provides the S signal. Both M and S signals are separately available at the microphone output via a standard XLR-5 connector. The M/S format is the ideal choice for stereophonic recording of interviews or of original sound during movie and TV production. The advantage of the M/S technique is that the stereo effect can easily be balanced with the S signal level during the post-production process while the centre sound information from the M channel is maintained.



MKH 800 The MKH 800 features five switchable pick-up patterns. It contains two symmetrical transducers operating as an acoustical unit. Contrary to conventional twin-transducer microphones, the special design of the MKH capsule provides stable directivity patterns also at low frequencies. This improves, for instance, the colouration-free support of musical instruments in an orchestra. The twin transducer design provides an excellent omni-directional pattern due to the symmetrical sound pick-up from both front and rear directions. This enables most accurate recordings of the direct and diffuse sound fields in a natural room acoustic. The MKH 800 also includes the wide-cardioid pattern which is otherwise not available in the MKH series. Switchable pre-attenuation, treble emphasis and bass attenuation enable optimum adjustment for various recording situations. Uniquely, the high-end frequency response extends up to 50 kHz, making this the ideal microphone for SACD and DVD-A releases.



MKH 20

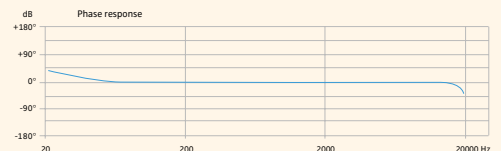
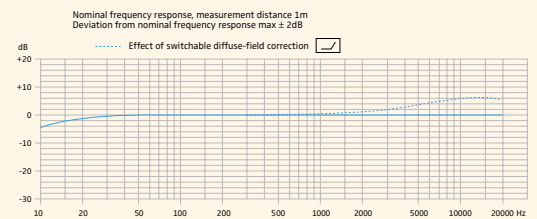
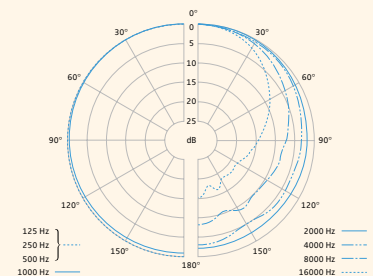
- Microphone with omni-directional pick-up pattern
- Exceptionally low inherent noise
- Exceptionally flat frequency response
- High sensitivity
- 1 Switchable pre-attenuation
- 2 Switchable for near and diffuse field applications
- High frequency response can be accentuated by means of a special pressure build-up ring
- Slightly increasing directivity at high frequencies to adjust tonal balance



Technical Data

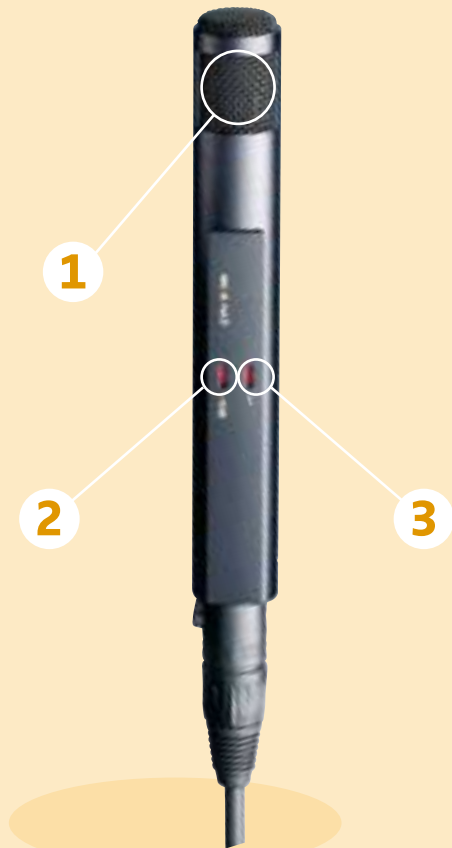
Acoustic principle	pressure microphone
Pick-up pattern	omni-directional
Frequency response	12–20.000 Hz (-3 dB)
Sensitivity (free field, no load) at 1 kHz	25 mV/Pa (8 mV/Pa ± 1dB)
Nominal impedance	150 Ω
Minimum load impedance	1000 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN/IEC 179)	10 dB (18 dB)
CCIR-weighted (CCIR 468-3)	20 dB (27 dB)
Max. sound pressure level at 1 kHz	134 dB (142 dB)
Maximum output voltage	2.5 V
Phantom power supply	48 ± 4V
Supply current	2 mA
Connector	XLR-3
Dimensions	Ø 25 mm x 153 mm
Weight	approx. 100 g

Values in parenthesis apply when pre-attenuation is activated (-10 dB)



MKH 30

- Pressure gradient microphone with figure-8 pick-up pattern ① Highly symmetrical transducer
- Frequency independent pick-up pattern ● High rejection of lateral sounds ● Wide, flat frequency response
- Exceptionally low inherent noise ② Switchable pre-attenuation
- ③ Switchable roll-off filter to compensate for proximity effect at a distance of approx. 0.5 m

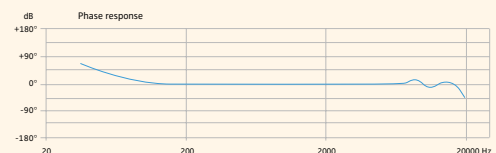
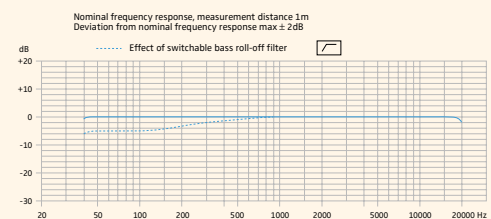
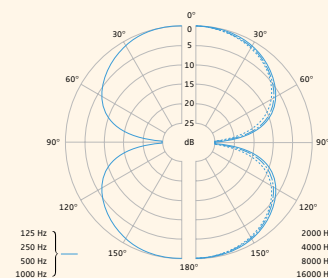


Included accessories

- ① MZS 80
- ② MZQ 31
- ③ MZW 41

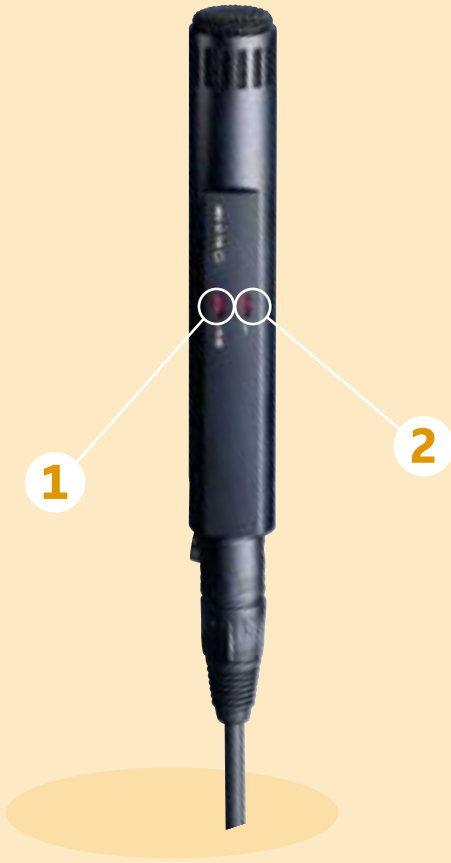
Technical Data

Acoustic principle	pressure gradient microphone
Pick-up pattern	figure-8
Frequency response	40–20.000 Hz (-3 dB)
Sensitivity (free field, no load) at 1 kHz	25 mV / Pa (8 mV / Pa ± 1dB)
Nominal impedance	150 Ω
Minimum load impedance	1000 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN / IEC 179)	13 dB (18 dB)
CCIR-weighted (CCIR 468-3)	22 dB (27 dB)
Max. sound pressure level at 1 kHz	134 dB (142 dB)
Maximum output voltage	2.5 V
Phantom power supply	48 ± 4V
Supply current	2 mA
Connector	XLR-3
Dimensions	Ø 25 mm x 174 mm
Weight	approx. 110 g
Values in parenthesis apply when pre-attenuation is activated (-10 dB)	



MKH 40

- Pressure gradient microphone with cardioid pick-up pattern ● Maximum front-to-back ratio
- Exceptionally low inherent noise ● High sensitivity ① Switchable pre-attenuation
- ② Switchable roll-off filter to compensate for proximity effect at a distance of approx. 0.5 m



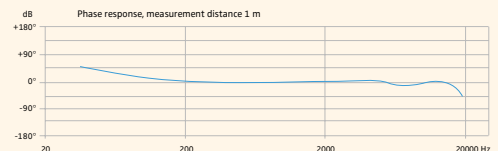
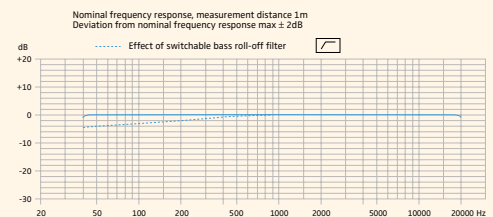
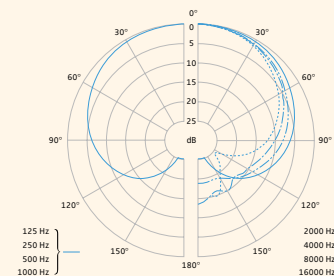
Included accessories

- ① MZS 40
- ② MZQ 40
- ③ MZW 41

Technical Data

Acoustic principle	pressure gradient microphone
Pick-up pattern	cardioid
Frequency response	40–20.000 Hz (-3 dB)
Sensitivity (free field, no load) at 1 kHz	25 mV/Pa (8 mV/Pa ± 1dB)
Nominal impedance	150 Ω
Minimum load impedance	1000 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN/IEC 179)	12 dB (18 dB)
CCIR-weighted (CCIR 468-3)	21 dB (27 dB)
Max. sound pressure level at 1 kHz	134 dB (142 dB)
Maximum output voltage	2.5 V
Phantom power supply	48 ± 4V
Supply current	2 mA
Connector	XLR-3
Dimensions	Ø 25 mm x 153 mm
Weight	approx. 100 g

Values in parenthesis apply when pre-attenuation is activated (-10 dB)



MKH 50

- Pressure gradient microphone with super-cardioid pick-up pattern ● High rejection of lateral sounds
- Constant directivity over the whole frequency range ● Exceptionally low inherent noise ● High sensitivity
- ① Switchable pre-attenuation ② Switchable roll-off filter to compensate for proximity effect at a distance of approx. 0.5 m

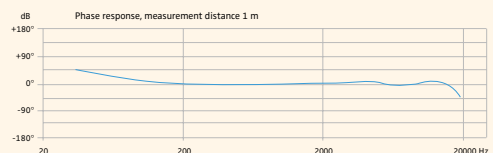
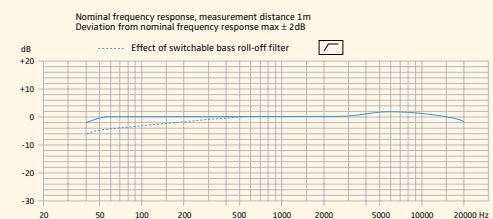
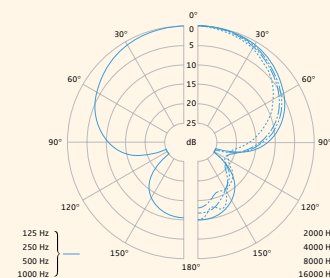


Included accessories

- ① MZS 80
- ② MZQ 31
- ③ MZW 41

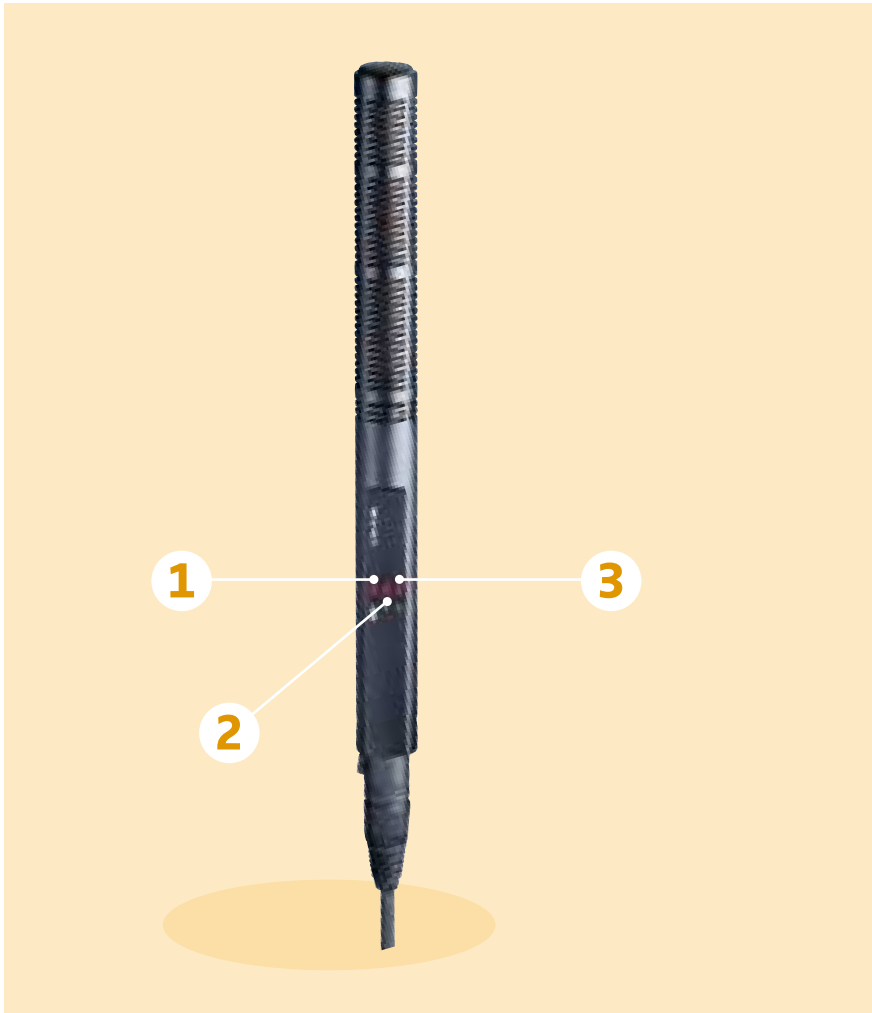
Technical Data

Acoustic principle	pressure gradient microphone
Pick-up pattern	super-cardioid
Frequency response	40–20.000 Hz (-3 dB)
Sensitivity (free field, no load) at 1 kHz	25 mV / Pa (8 mV / Pa ± 1dB)
Nominal impedance	150 Ω
Minimum load impedance	1000 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN / IEC 179)	12 dB (18 dB)
CCIR-weighted (CCIR 468-3)	21 dB (27 dB)
Max. sound pressure level at 1 kHz	134 dB (142 dB)
Maximum output voltage	2.5 V
Phantom power supply	48 ± 4V
Supply current	2 mA
Connector	XLR-3
Dimensions	Ø 25 mm x 153 mm
Weight	approx. 100 g
Values in parenthesis apply when pre-attenuation is activated (-10 dB)	

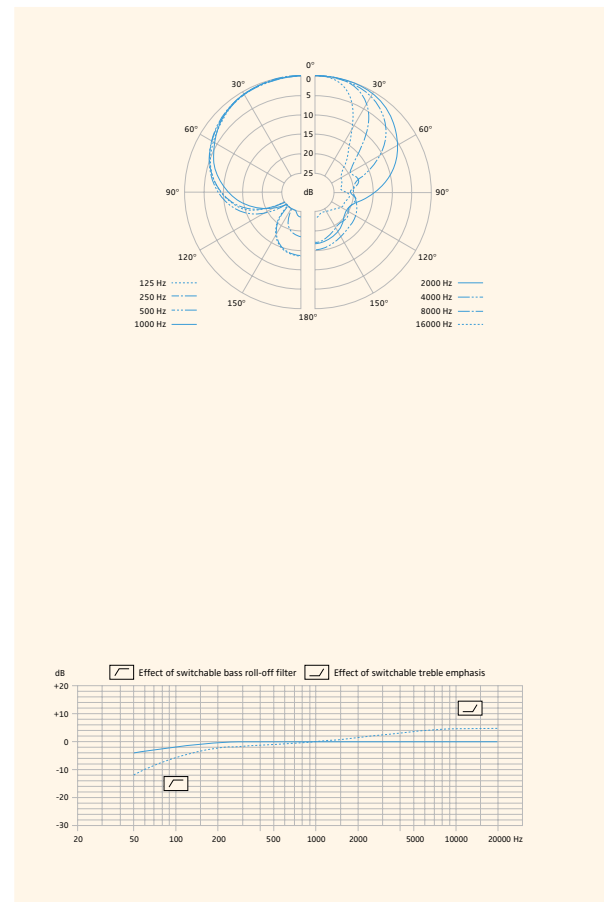


MKH 60

- Interference tube (shotgun) microphone with super-cardioid/lobar pick-up pattern
- High directivity ● Exceptionally low inherent noise ● High sensitivity
- 1 Switchable pre-attenuation 2 Switchable roll-off filter 3 Switchable treble emphasis
- Infrasonic cut-off filter (-18 dB/oct.) ● Very lightweight



Included accessories
1 MZQ 40

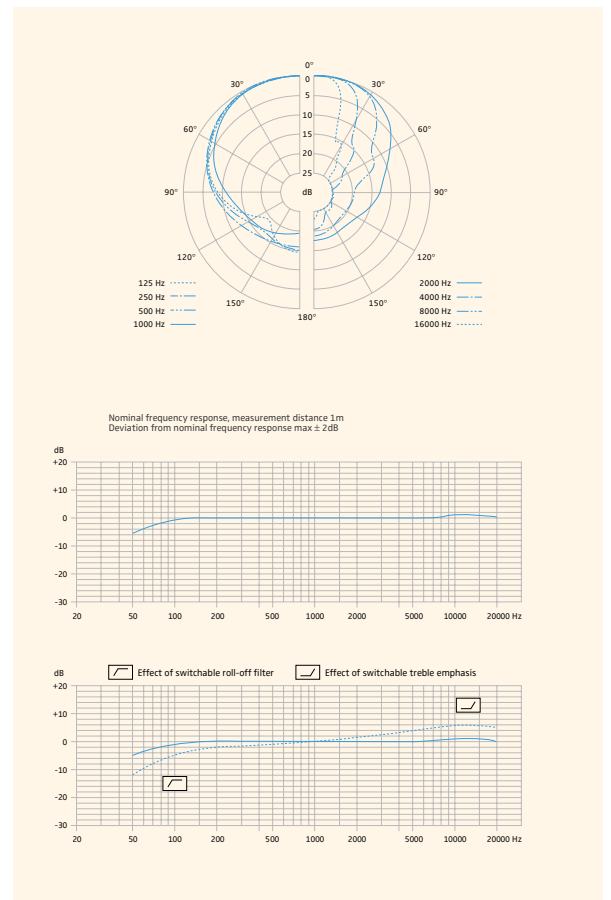
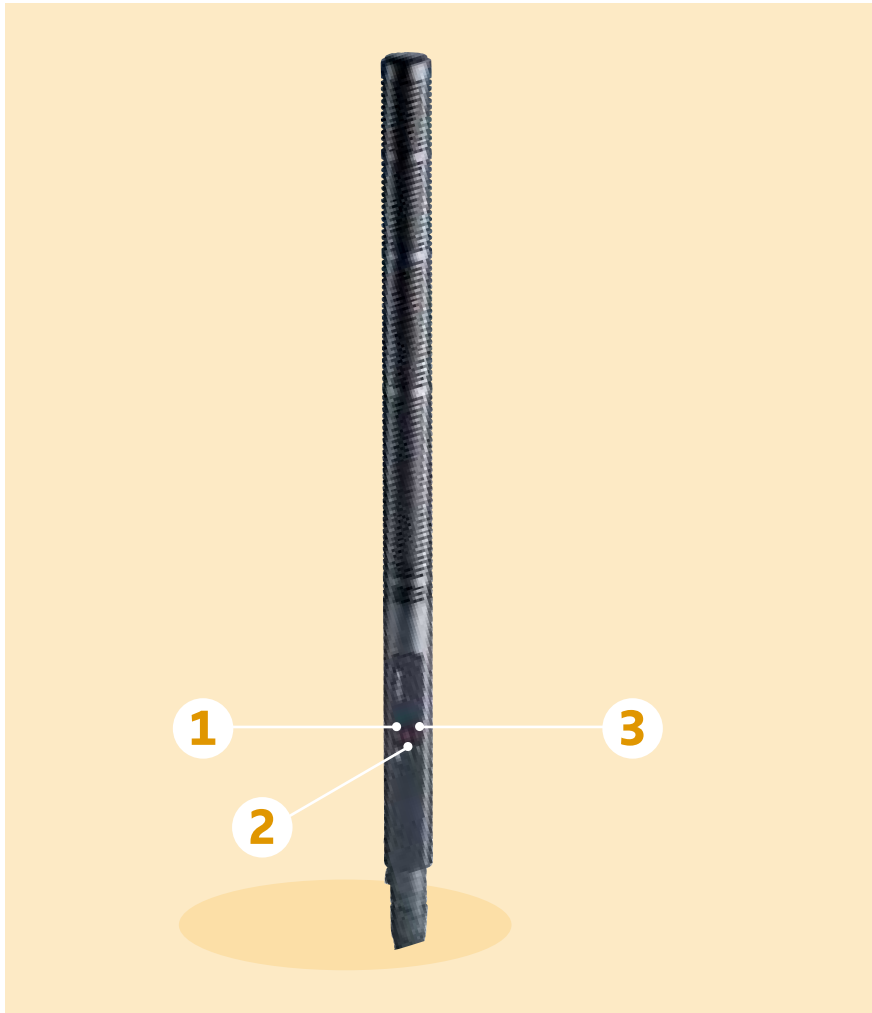


Technical Data

Acoustic principle	interference tube microphone
Pick-up pattern	super-cardioid/lobar
Frequency response	50–20.000 Hz (-3 dB)
Sensitivity (free field, no load) at 1 kHz	40 mV/Pa (12.5 mV/Pa)
Nominal impedance	150 Ω
Minimum load pressure level	1000 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN/IEC 179)	8 dB (15 dB)
CCIR-weighted (CCIR 468-3)	18 dB (26 dB)
Max. sound pressure level at 1 kHz	125 dB (134 dB)
Bass attenuation	5 dB at 70 Hz, switchable
Treble emphasis	5 dB at 10 kHz, switchable
Pre-attenuation	10 dB, switchable
Phantom power supply	48 ± 4V
Supply current	2 mA
Connector	XLR-3
Dimensions	Ø 25 mm x 280 mm
Weight	approx. 160 g
Values in parenthesis apply when pre-attenuation is activated (-10 dB)	

MKH 70

- Interference tube (long shotgun) microphone with lobar pick-up pattern ● Very high directivity
- Exceptionally low inherent noise ● Very high sensitivity
- ❶ Switchable pre-attenuation ❷ Switchable roll-off filter ❸ Switchable treble emphasis
- Infrasonic cut-off filter (-18 dB/oct.) ● Lightweight



Technical Data

Acoustic principle	interference tube microphone
Pick-up pattern	lobar
Frequency response	60–20.000 Hz (-3 dB)
Sensitivity (free field, no load) at 1 kHz	50 mV / Pa (15 mV / Pa)
Nominal impedance	150 Ω
Minimum load pressure level	1000 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN / IEC 179)	5 dB (13 dB)
CCIR-weighted (CCIR 468-3)	16 dB (24 dB)
Max. sound pressure level at 1 kHz	123 dB (132 dB)
Bass attenuation	5 dB at 70 Hz, switchable
Treble emphasis	5 dB at 10 kHz, switchable
Pre-attenuation	10 dB, switchable
Phantom power supply	48 ± 4V
Supply current	2 mA
Connector	XLR-3
Dimensions	Ø 25 mm x 410 mm
Weight	approx. 190 g
Values in parenthesis apply when pre-attenuation is activated (-10 dB)	

MKH 416

- Interference tube (short shotgun) microphone with super-cardioid / lobar pick-up pattern
- High directivity ● Very low inherent noise
- Rugged, suitable for adverse climatic conditions

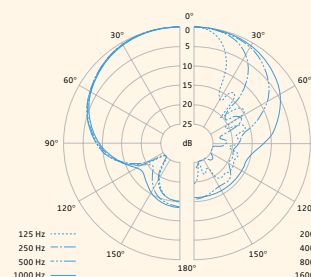


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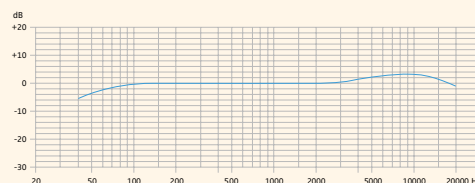
- 1 MZQ 100
- 2 MZW 415

Technical Data

Acoustic principle	interference tube microphone
Pick-up pattern	super-cardioid / lobar
Frequency response	60–20.000 Hz (-3 dB)
Sensitivity (free field, no load) at 1 kHz	25 mV / Pa ± 1dB
Nominal impedance	25 Ω
Minimum load pressure level	800 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN / IEC 651)	13 dB
CCIR-weighted (CCIR 468-3)	24 dB
Max. sound pressure level at 1 kHz	130 dB
Phantom power supply	48 ± 4V
Supply current	2 mA
Dimensions	Ø 19 mm x 250 mm
Weight	approx. 165 g

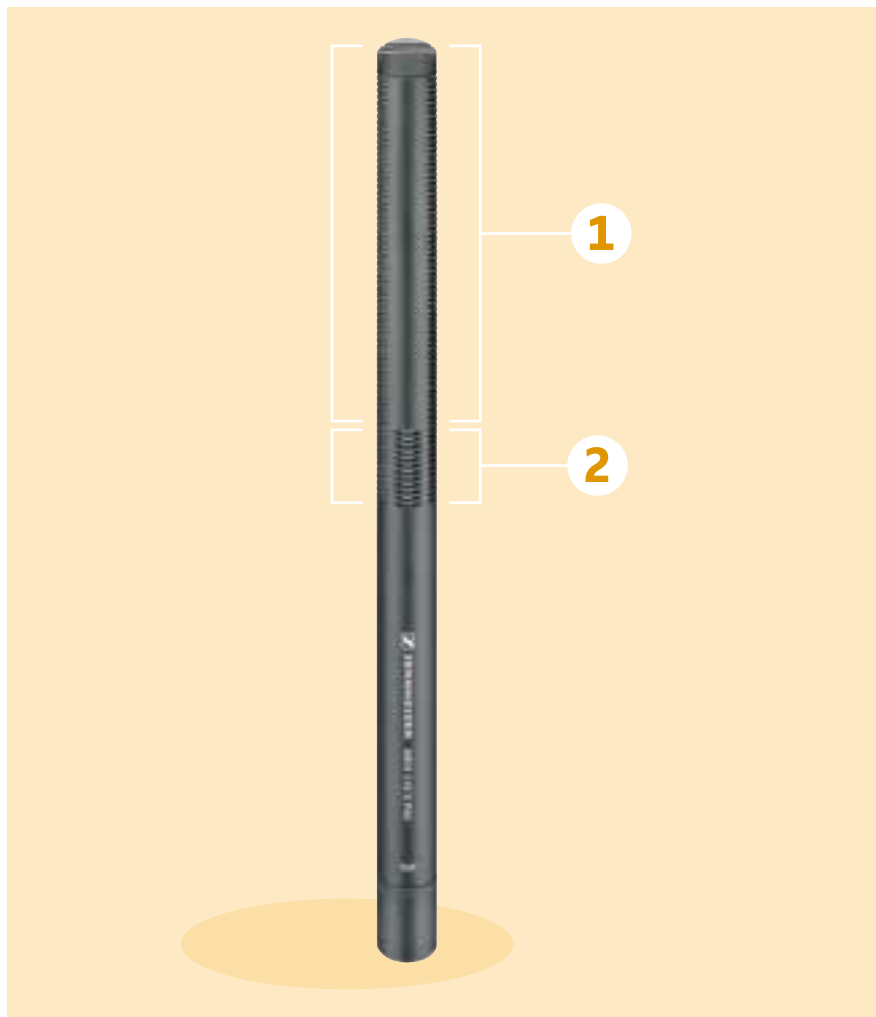


Nominal frequency response, measurement distance 1m
Deviation from nominal frequency response max ± 2dB

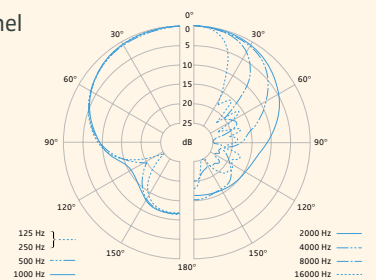


MKH 418 S

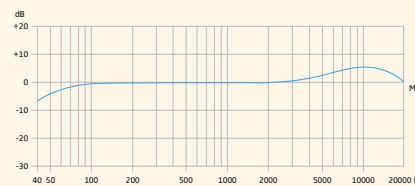
- M/S stereo microphone ● Increased directivity due to interference system (M)
- ① M channel compatible to MKH 416 ② S channel with figure-8
- Convincing spatial representation
- Universal application due to M/S format ● Sturdy and very weather-resistant



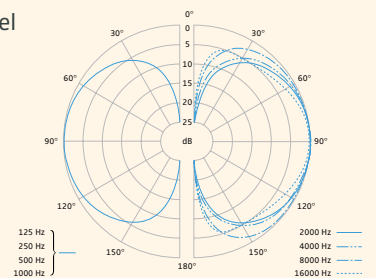
M channel



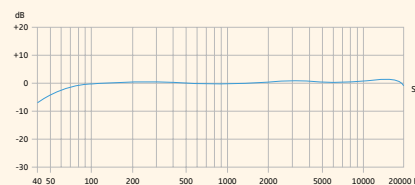
Nominal frequency response, measurement distance 1m
Deviation from nominal frequency response max ± 2dB



S channel



Nominal frequency response, measurement distance 1m
Deviation from nominal frequency response max ± 2dB

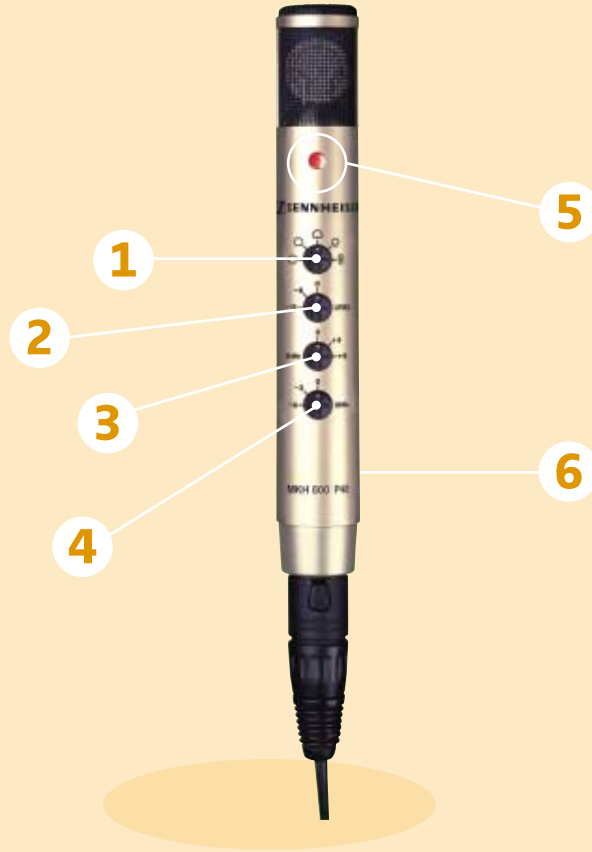


Technical Data

Acoustic principle	M/S stereo interference tube microphone
Pick-up pattern	super-cardioid/lobar (M) figure-8 (S)
Frequency response	60–20.000 Hz (-3 dB)
Sensitivity (free field, no load) at 1 kHz	25 mV/Pa ± 1dB (M) 10 mV/Pa ± 1dB (S)
Nominal impedance	25 Ω
Minimum load pressure level	800 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN / IEC 651)	14 dB (M), 22dB (S)
CCIR-weighted (CCIR 468-3)	26 dB (M), 34 dB (S)
Max. sound pressure level at 1 kHz	130 dB
Phantom power supply	48 ± 4V
Supply current	2 x 2.3 mA
Dimensions	Ø 19 mm x 280 mm
Weight	approx. 220 g

MKH 800

- 1 Switchable directivity pattern
- 2 Exceptionally low inherent noise
- 3 Switchable pre-attenuation
- 4 Switchable treble emphasis
- 5 LED for on-axis alignment
- 6 Anodised light metal body
- Extended frequency response up to 50 kHz
- Wide, flat frequency response
- Wide dynamic range
- Switchable roll-off filter



Technical Data

Acoustic principle	twin transducer microphone
Pick-up pattern	omni-directional, wide-cardioid, cardioid, super-cardioid, figure-8
Frequency response	30 – 50.000 Hz
Sensitivity (free field, no load) at 1 kHz	40 mV / Pa ± 1 dB
Nominal impedance	150 Ω
Minimum load pressure level	1000 Ω
Equivalent sound pressure level due to inherent noise	
A-weighted (DIN / IEC 651)	10 dB
CCIR-weighted (CCIR 468-3)	20 dB
Max. sound pressure level at 1 kHz	136 dB (142 dB)
Bass attenuation	3/6 dB at 100 Hz, switchable
Treble emphasis	3/6 dB at 8 kHz, switchable
Pre-attenuation	6/12 dB, switchable
Phantom power supply	48 ± 4V
Supply current	3 mA
Connector	XLR-3
Dimensions	Ø 26.7 mm x 176 mm
Weight	approx. 135 g

Values in parenthesis apply when pre-attenuation is activated



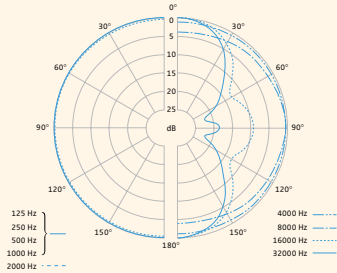
Included accessories

- 1 MZS 80
- 2 MZQ 80
- 3 MZW 80

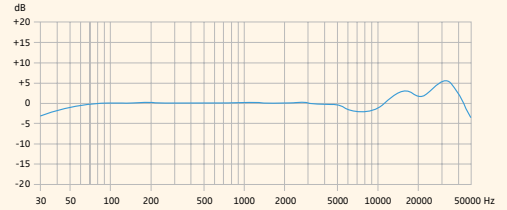
MKH 800

pick-up-patterns and nominal frequency response curves

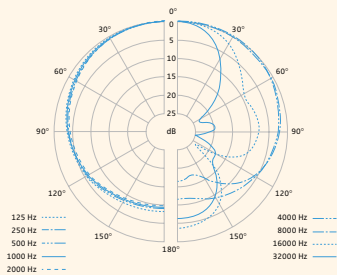
Omni-directional



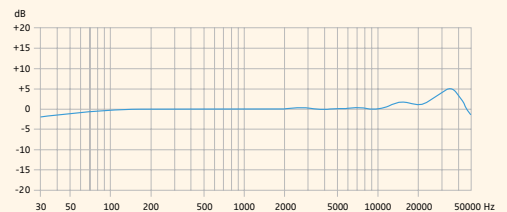
Nominal frequency response, measurement distance 1m
Deviation from nominal frequency response max ± 2 dB



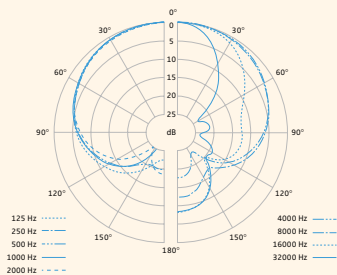
Wide-cardioid



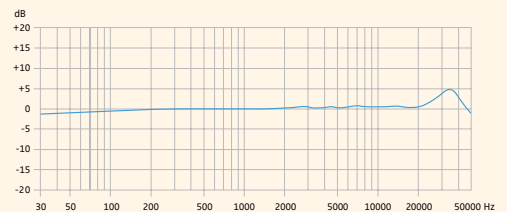
Nominal frequency response, measurement distance 1m
Deviation from nominal frequency response max ± 2 dB



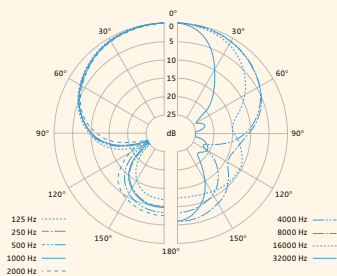
Cardioid



Nominal frequency response, measurement distance 1m
Deviation from nominal frequency response max ± 2 dB



Super-cardioid



Nominal frequency response, measurement distance 1m
Deviation from nominal frequency response max ± 2 dB

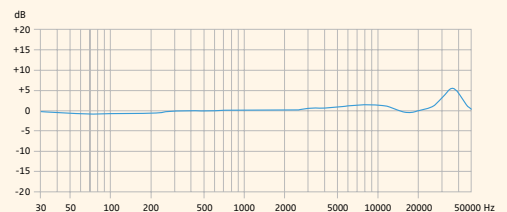
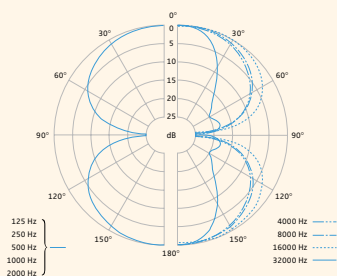
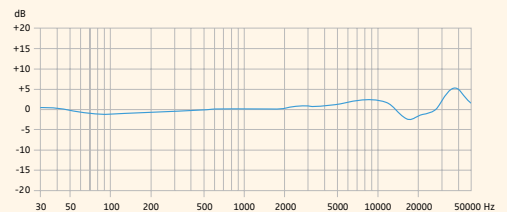


Figure-8



Nominal frequency response, measurement distance 1m
Deviation from nominal frequency response max ± 2 dB



The extensive range of MKH accessories

MZT 441

Table stand

Sturdy metal table stand with 3/8" fixing screw.



MZA 14 P 48

Phantom power supply unit

48 V battery phantom power supply for a single MKH microphone. It will operate for about 25 hours from a single 9 V, IEC 6 LF 22 (PP3 size) alkaline manganese battery. It incorporates: Switchable bass attenuation of 8 or 14 dB at 50 Hz, level attenuation of 10 or 20 dB, maximum output voltage 550 mV for 1% distortion and minimum load impedance 1 kOhm. Dimensions: 140 x 46 x 76 mm.



MZP 40

Pop protection

The MZP 40 is a stand mounted "popper-stopper" to attenuate explosive breath noises, especially useful for vocal recording.



MZS 80

Shock mount

Special shock mount for the MKH 30 and MKH 800. The microphone can be turned in any direction.



MZD 30

Dual Clip

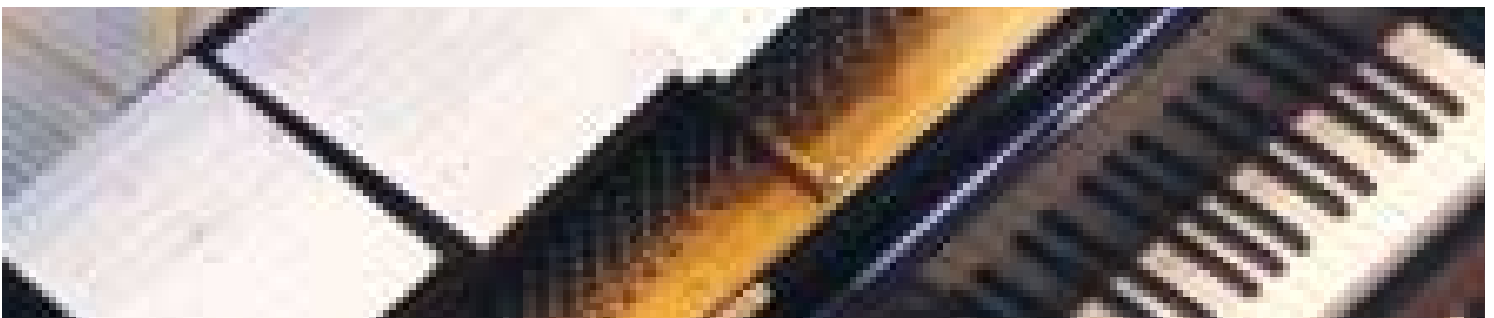
The MZD 30 is a dual clip for attaching a second MKH microphone to the MKH 30 figure-8 microphone for M/S stereo recording. Manufactured from highly durable Hytrel.



MZS 40

Shock mount

Flexible suspension for MKH 20/40/50 or the MKH 30 plus MKH 20, 30, 40, 50 used as an M/S pair. Stronger rubber O-rings are supplied with the shock mount for fitting the MKH 60 or 70. Effectively suppresses the transmission of structure-borne noise.





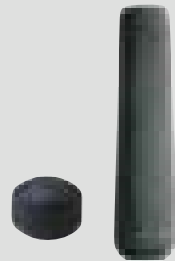
MZW 61

MZW 71



MZW 80

MZW 415



Windshields

These windshields are made of an open cell foam material that represents the best compromise between minimal effects on the frequency response and maximum protection against wind and pop noise. The MZW 61 and 71 are particularly effective due to the special treatment applied to the surface and can be colour-coded for improved identification.



MZS 20-1

Shock mount

This shock mount is needed when using the MKH 20, MKH 40–MKH 70 or the MKH 416 microphones with basket windshields. The pistol grip can be replaced, if required, with the supplied adaptor for use on microphone stands or boom poles. Manufactured from fibreglass reinforced plastic and Hytrel, which remains flexible even at low temperatures, this unit is extremely reliable and lightweight.



MZW 20-1

MZW 60-1

MZW 70-1

Basket windshields

Manufactured in three sizes to accommodate different microphone lengths, these sturdy, lightweight basket windshields offer the greatest protection against many of the problems experienced during outdoor applications.



MZH 20-1

MZH 60-1

MZH 70-1

Hairy covers

Used in conjunction with the basket windshields shown above, these long fibre polyester fleece covers give the maximum protection against strong wind interference noise.

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