MK 4 & MK 8

PDF export of the original HTML instructions

Contents

1. Preface ... 3
2. Product information ... 4
    Studio microphone ... 4
        Studio microphon MK 4 ... 5
        Studio microphone MK 8 ... 7
    Areas of application ... 9
    Accessories ... 11
3. Instruction manual ... 13
    MK 4 ... 13
        Product overview ... 13
        Mounting the microphone ... 15
        Orienting the microphone ... 16
        Connecting the microphone ... 17
        Using the microphone ... 18
        Sound inlet areas ... 20
        Application examples ... 21
    MK 8 ... 23
        Product overview ... 23
        Mounting the microphone ... 25
        Orienting the microphone ... 26
        Connecting the microphone ... 27
        Using the microphone ... 28
        Sound inlet areas ... 30
        Application examples ... 33
        Operating the microphone ... 35
    If a problem occurs ... 38
    Cleaning and maintenance ... 40
4. Specifications ... 41
    Pin assignment of the XLR-3 connector ... 41
    MK 4 ... 42
    MK 8 ... 45
5. Contact ... 48

1. Preface

PDF export of the original HTML instructions

This PDF document is an automated export of an interactive set of HTML instructions. It may be the case that not all contents and interactive elements are contained in the PDF as they cannot be presented in this format. Furthermore, automatically generated page breaks may cause coherent contents to be moved slightly. We can therefore only guarantee the completeness of the information in the HTML instructions, and recommend that you use these. You can find these in the download section of the website under www.sennheiser.com/download.

2. Product information

All information about the product and available accessories at a glance.

Studio microphone
Areas of application
Accessories

Studio microphone

For information about the available **accessories**, see Accessories.

You can find technical **specifications** for the series and the individual products under Specifications.

You can find information about **starting up** and **operating** the products under Instruction manual.

Studio microphon MK 4

The MK 4 is a large diaphragm true condenser studio microphone for very detailed, professional studio recordings.

Its outstanding sound quality, easy handling and excellent value-for-money ratio make the MK 4 also ideal for project studios and home recording applications.

MK 4 | Art. no. 504298

Delivery Includes

- Microphone MK 4
- Microphone clamp MZQ 4
- Pouch
- Quick Guide
- Safety Guide

You can find more detailed information about the MK 4 in the following sections:

- **Startup**: MK 4
- **Specifications**: MK 4

Studio microphone MK 8

The MK 8 is a large diaphragm true condenser studio microphone for very detailed, professional studio recordings. The switchable pick-up pattern provides excellent flexibility.

The microphone offers outstanding sound quality, easy handling and an excellent value-for-money ratio.

MK 8 | Art. no. 506195

Delivery Includes

- Microphone MK 8
- Microphone clamp MZQ 4
- Pouch
- Quick Guide
- Safety Guide

You can find more detailed information about the MK 8 in the following sections:

- **Startup and operation**: MK 8
- **Specifications**: MK 8

Areas of application

Speech/Vocals

Acoustic guitars

Guitar amplifiers

Grand piano

Strings

Wind instruments

Drums and percussion

Accessories

MZQ 4

Microphone clamp |Art. no. 543627

MKS 4

Shock mount |Art. no. 504299

MKW 4

Windshield |Art. no. 504611

3. Instruction manual

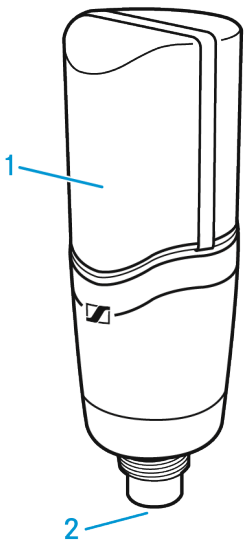
Starting up and operating the microphone MK 4 and MK 8.

MK 4
MK 8
If a problem occurs
Cleaning and maintenance

MK 4

Product overview
Mounting the microphone
Orienting the microphone
Connecting the microphone
Using the microphone
Sound inlet areas
Application examples

Product overview



1 Sound inlet basket

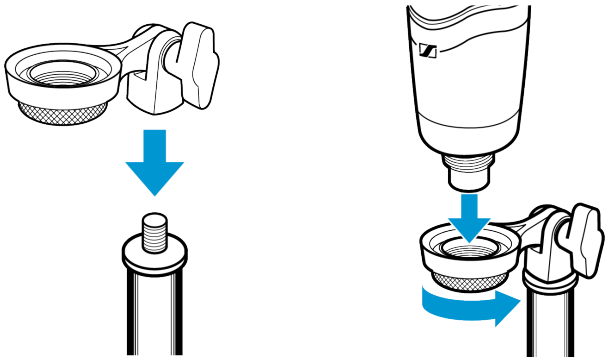
- see **Using the microphone**

2 XLR-3 socket

- see **Connecting the microphone**

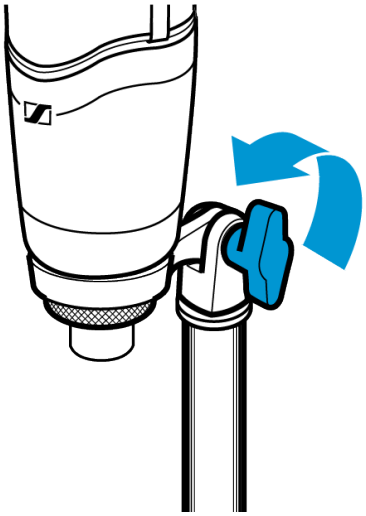
Mounting the microphone

- Screw the MZQ 4 microphone clamp to a solid and sturdy stand.
- Place the microphone from above into the microphone clamp and screw it tight.



Orienting the microphone

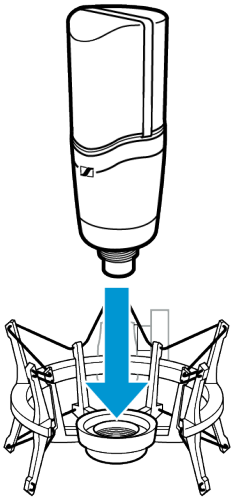
- To orient the microphone, always loosen the wing screw.

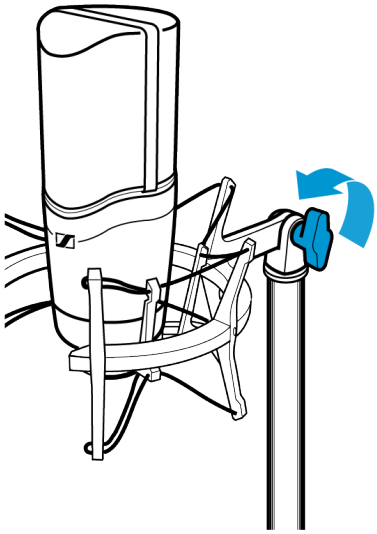


MKS 4 shock mount

> **i** To suppress structure-borne noise, you can optionally use the MKS 4 shock mount which is available as a Sennheiser accessory.

- Place the microphone from above into the inner shock mount cage and screw it tight.
- To orient the microphone, always loosen the wing screw.





Connecting the microphone

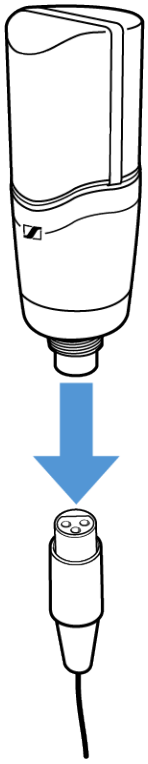
NOTICE

Damage to the product due to an unsuitable power supply!

An unsuitable power supply can cause damage to the product.

- Only connect the product to microphone inputs or power supply units which provide 48 V phantom powering as per IEC 61938.

- Use a microphone cable with XLR-3 female connector to connect the microphone's XLR-3 male connector to the microphone preamplifier (48 ± 4 V phantom powering as per IEC 61938, at least 3.5 mA per channel, see Pin assignment of the XLR-3 connector)



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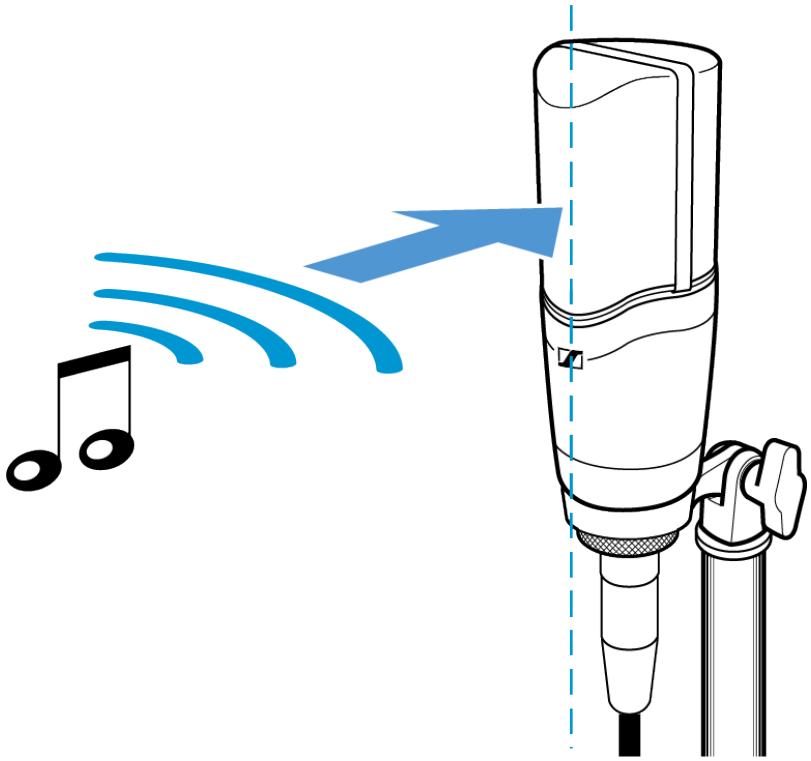
Using the microphone

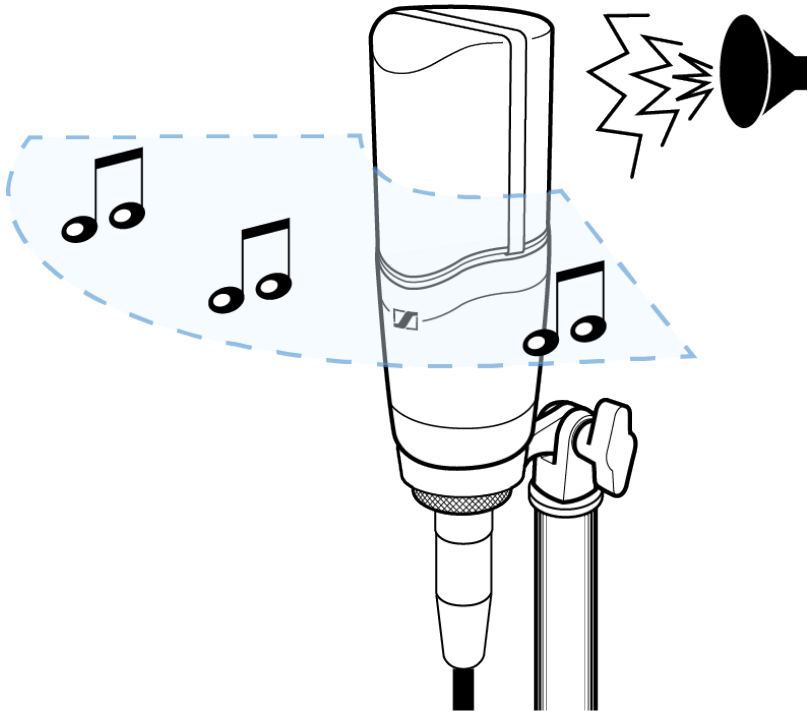
- Orient the microphone towards the mouth or sound source.



To eliminate disturbing noise as far as possible:

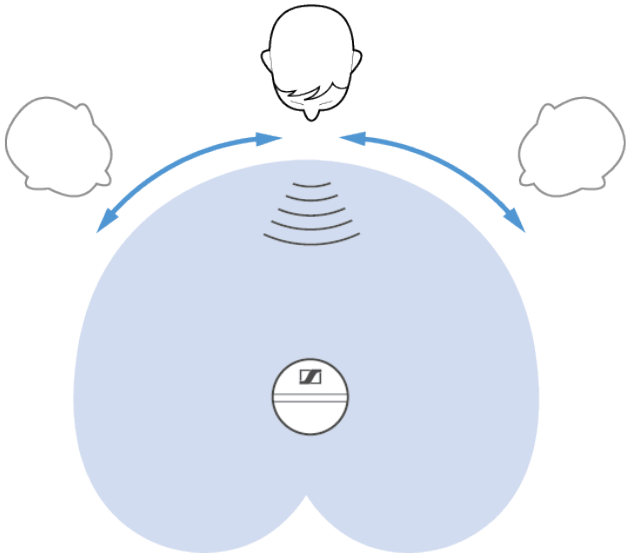
> **i** If sibilance occurs, position the microphone slightly to the side and not directly in front of the mouth.

- Make sure that there is no disturbing noise source (e.g. a PC fan) in the sound inlet area of the microphone.



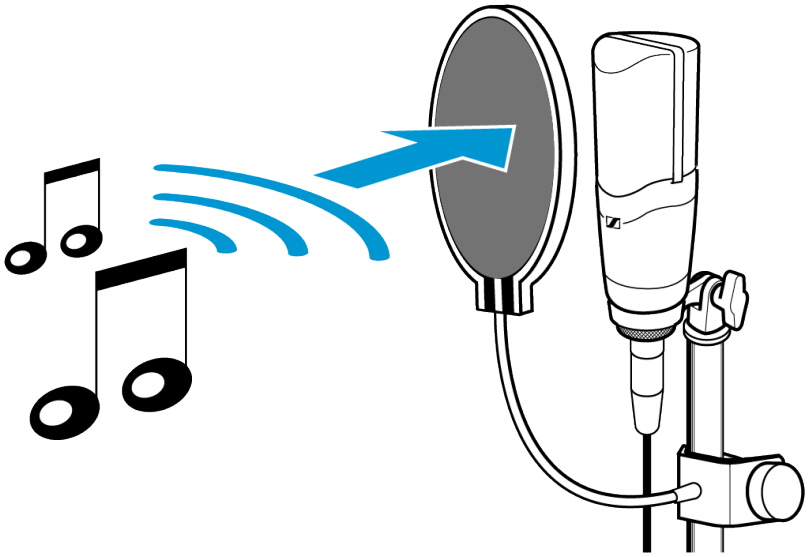
Sound inlet areas

Cardioid



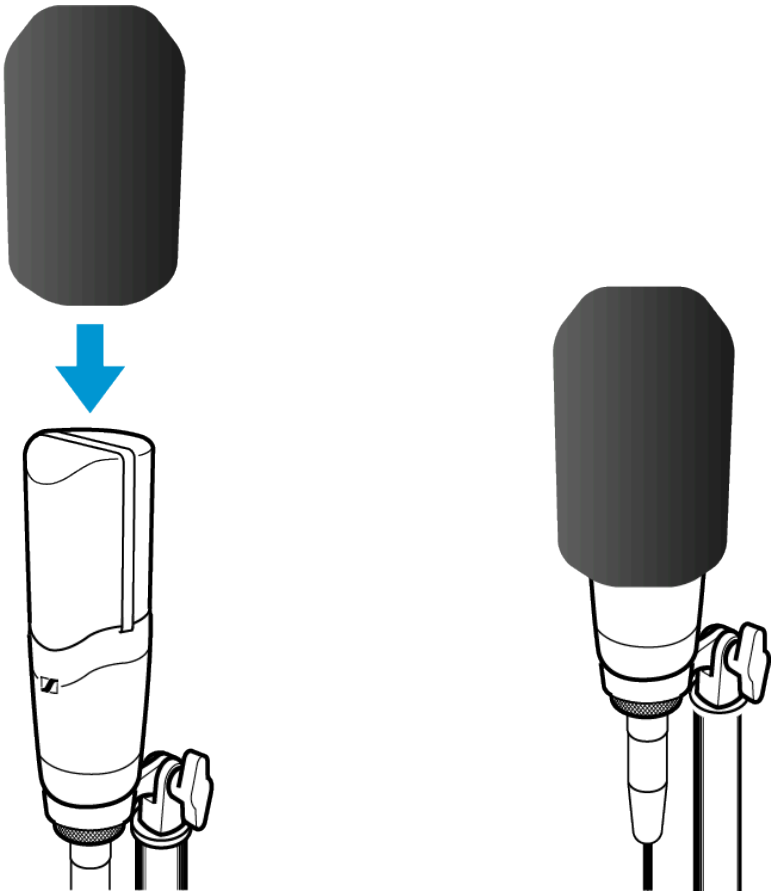
Application examples

Popshield (e.g. Sennheiser MZP 40



Windshield (e.g. Sennheiser MKW 4)

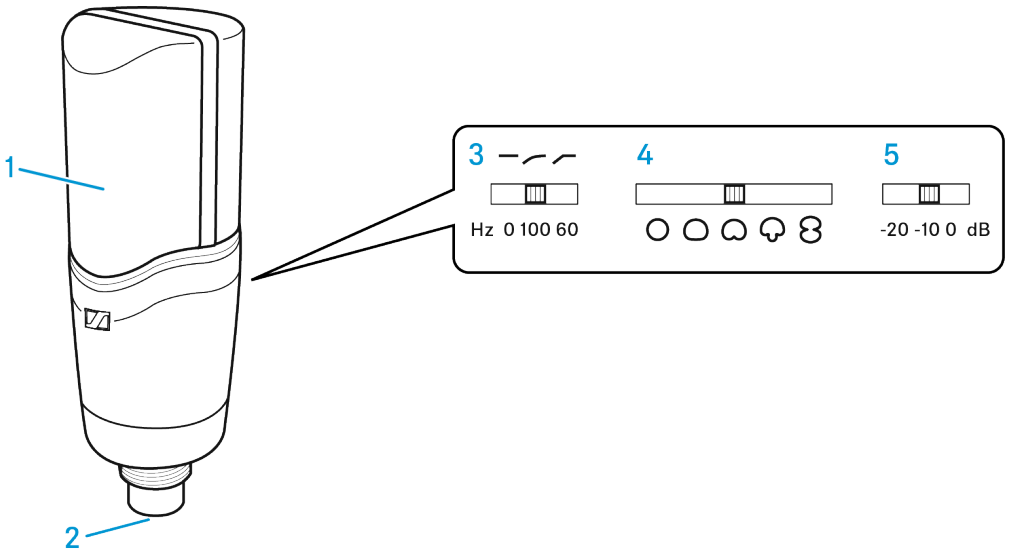
The windshield changes the sound only slightly, but attenuates wind noise by approx. 10 dB.



MK 8

Product overview
Mounting the microphone
Orienting the microphone
Connecting the microphone
Using the microphone
Sound inlet areas
Application examples
Operating the microphone

Product overview



1 Sound inlet basket

- see **Using the microphone**

2 XLR-3 socket

- see **Connecting the microphone**

3 Low-cut/roll-off switch

- see Adjusting the low-cut/roll-off filter

4 Directivity switch

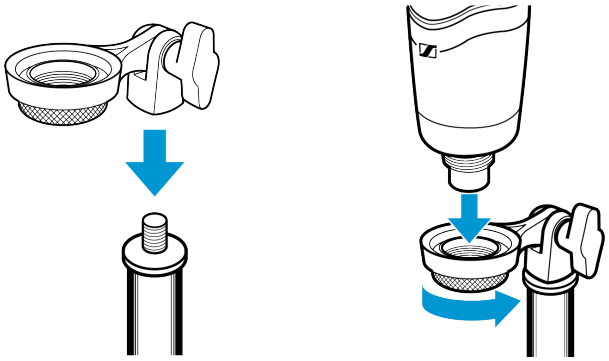
- see Adjusting the pick-up pattern

5 Pad switch

- see Adjusting the attenuation

Mounting the microphone

- Screw the MZQ 4 microphone clamp to a solid and sturdy stand.
- Place the microphone from above into the microphone clamp and screw it tight.



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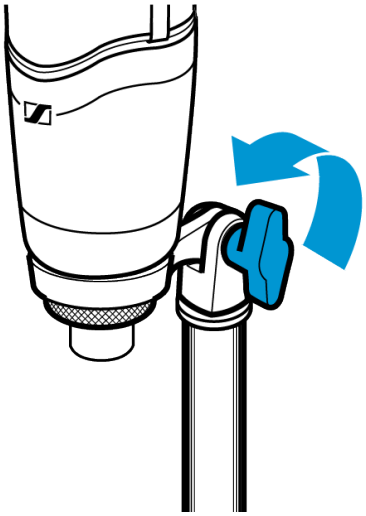

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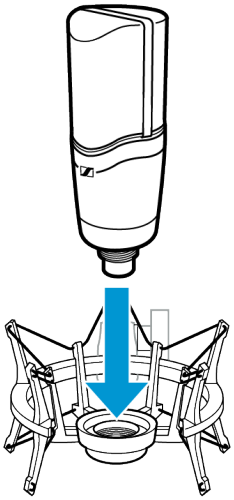

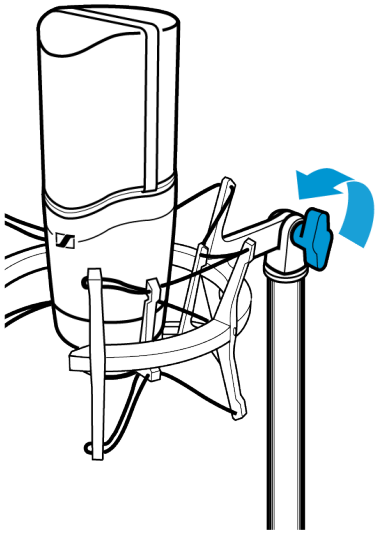

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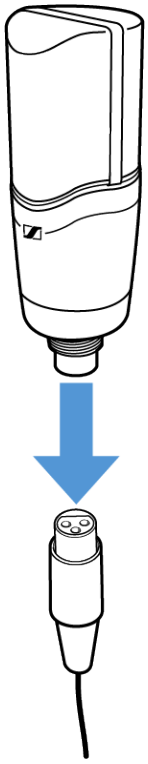

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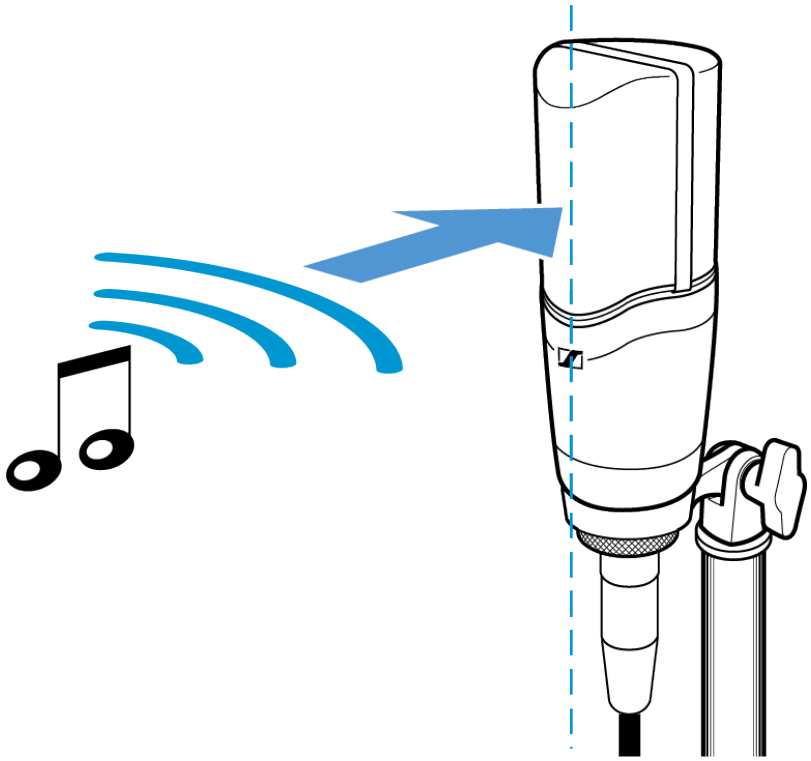
Using the microphone

- Orient the microphone towards the mouth or sound source.



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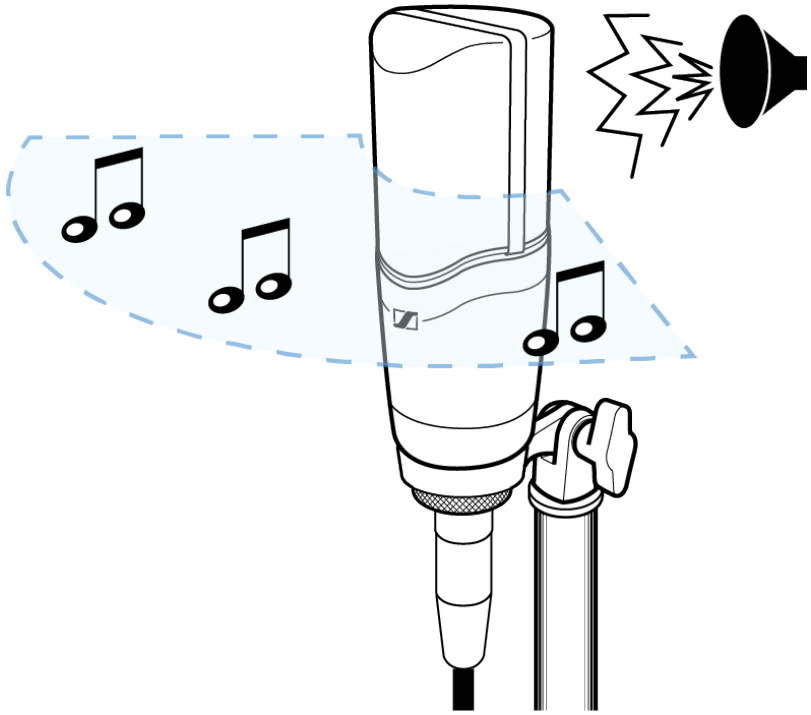
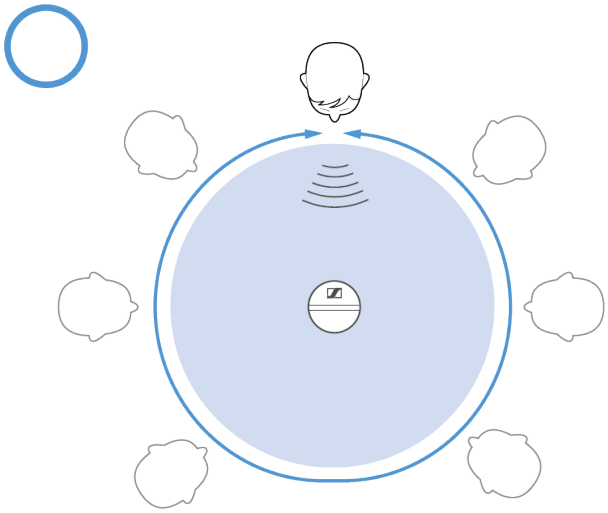
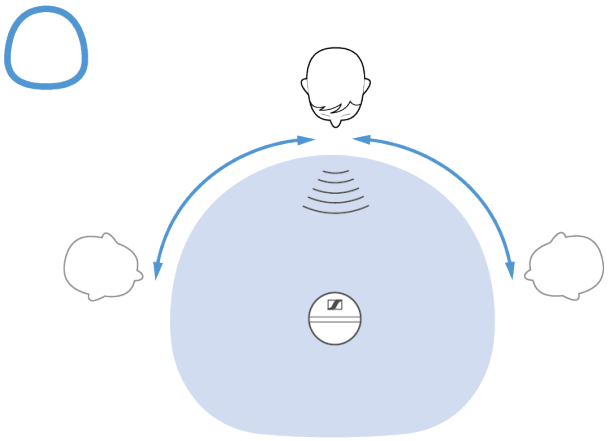


Sound inlet areas

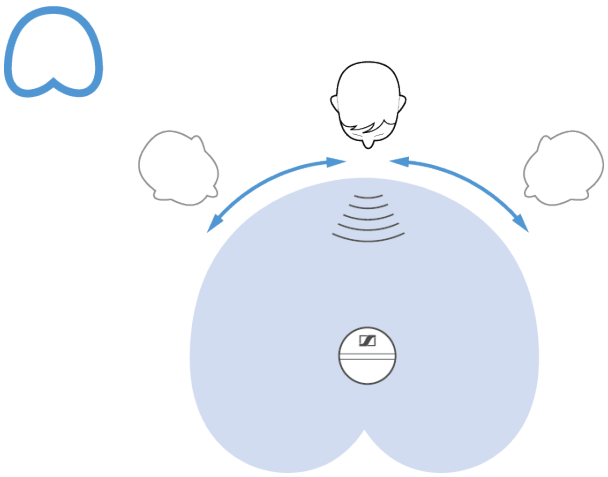
Omni-directional



Wide cardioid



Cardioid



Super-cardioid

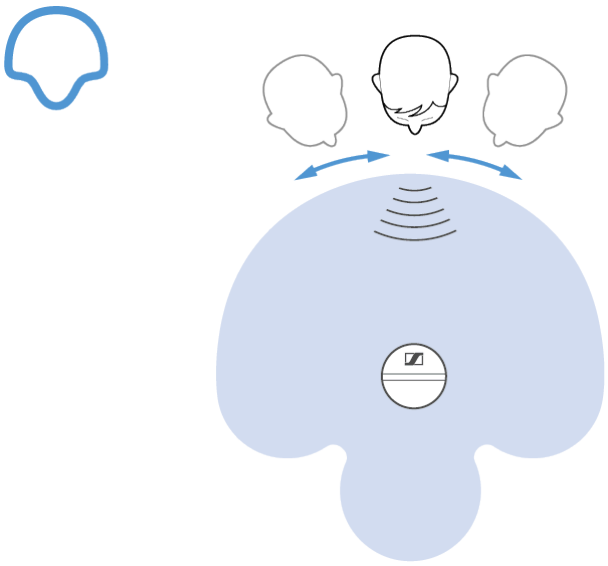
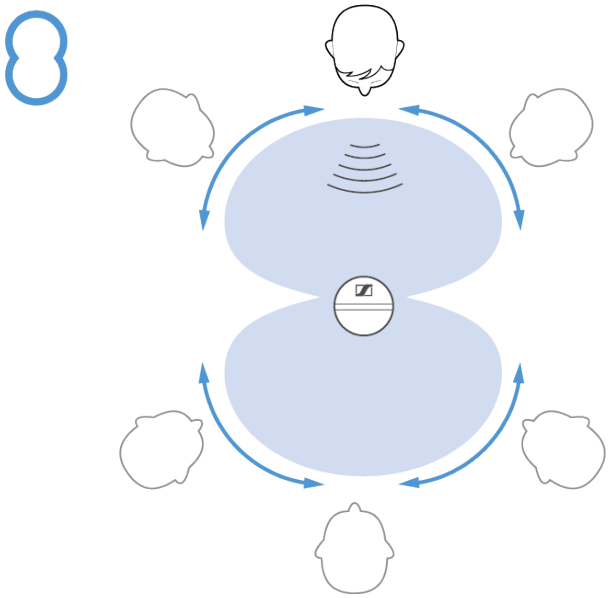
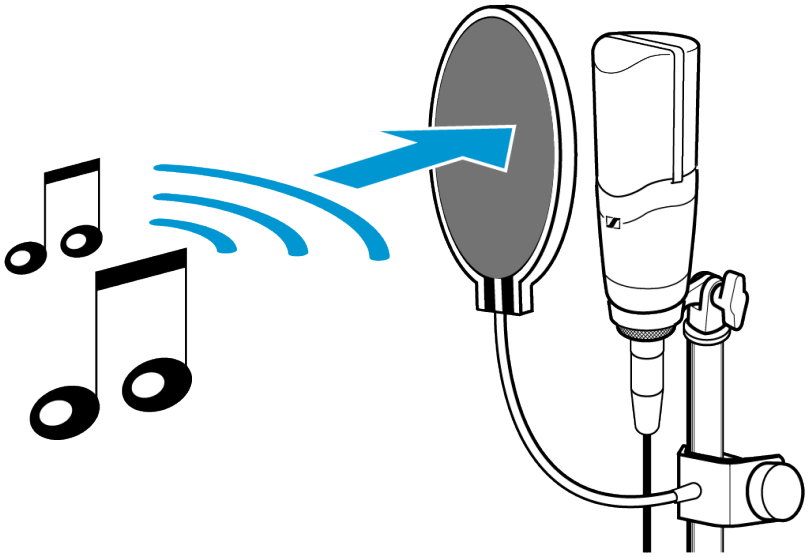


Figure-of-eight



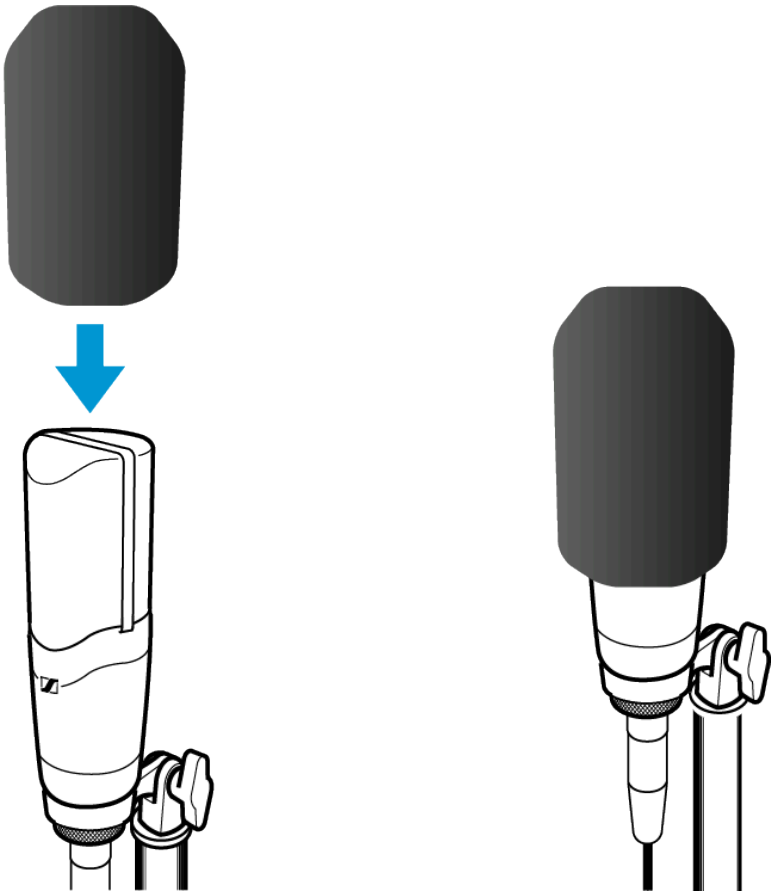
Application examples

Popshield (e.g. Sennheiser MZP 40



Windshield (e.g. Sennheiser MKW 4)

The windshield changes the sound only slightly, but attenuates wind noise by approx. 10 dB.



Operating the microphone

NOTICE

Danger of damage to the device!

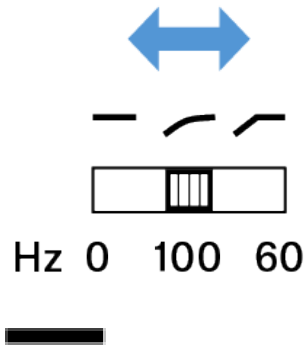
The switches on the MK 8 can be damaged if you try to operate them using tools.

- Only operate the switches on the MK 8 using your fingers.

i Actuating the switches directivity 4, pad 5 and low-cut/roll-off 3 can introduce noise into the audio signal of the microphone. Therefore, before actuating the switches, mute the microphone or reduce the volume.

Adjusting the low-cut/roll-off filtern

- Set the low-cut/roll-off switch 3 to the desired position:



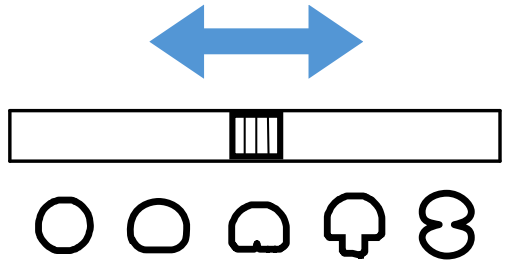
- off
  - linear frequency response

- Roll-off, -6 dB/oct., cut-off frequency: 100 Hz
  - compensates for the bass boost due to proximity effect

- Low-cut, -18 dB/oct, cut-off frequency: 60 Hz
  - eliminates low-frequency noise such as impact sound, fan noise, etc.

Adjusting the pick-up pattern

- Set the directivity switch 4 to the desired position:



omni-directional

wide cardioid

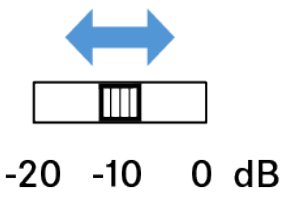
cardioid

super-cardioid

figure-of-eight

Adjusting the attenuation

- Set the pad switch 5 to the desired position:



0 dB

- No attenuation

-10 dB

- Reduces the sensitivity of the microphone capsule by 10 dB
    - increases the maximum sound pressure level

-20 dB

- Reduces the sensitivity of the microphone capsule by 10 dB
    - increases the maximum sound pressure level
- Additionally reduces the output level by 10 dB
    - avoids overloading the microphone amplifiers

If a problem occurs

No function

Phantom power is not switched on.

- Switch the phantom power on.

The phantom power on the mixing console or phantom power device is not switched on.

- Check the corresponding setting on the channel strip.

Phantom power device is not connected to the mains or no battery is inserted.

- Check the mains connection or the battery of the phantom power device.

No signal transmission

The microphone is connected to the wrong microphone amplifier input of the subsequent device.

- Check the signal path.
- If necessary, activate the appropriate input on the corresponding channel strip of the mixing console.

Sound distorted

Wind influence

- Use a suitable windshield.
    - see Accessories

Plosives

- Use a suitable popshield.
    - see Accessories

Structure-borne noise transmission

- Use a suitable shock mount.
    - see Accessories

MK 4

Wrong input sensitivity setting or wrong pre-amplification of the subsequent amplifier.

- Reduce the input sensitivity or pre-amplifiaction of the subsequent device so that sufficient gain reserve remains.

MK 8

Max. SPL is clipped due to a very loud sound source.

- Set the pad switch on the microphone to -10 dB.
  - see Adjusting the attenuation

Subsequent device is overloaded in spite of minimum sensitivity.

- Set the pad switch on the microphone to -10 or -20 dB.
  - see Adjusting the attenuation

Sound muffled, spatial

Pick-up pattern has been ignored.

- Check if the microphone is spoken into from the correct side. Make sure that the Sennheiser logo or the slanted front of the sound inlet basket faces your body.
  - see MK 4 Sound inlet areas
  - see MK 8 Sound inlet areas

Cleaning and maintenance

NOTICE

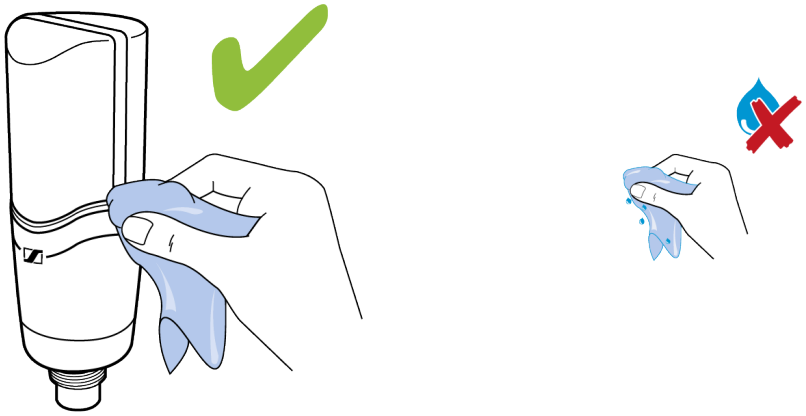
Liquids can damage the electronics of the product

Liquids entering the product housing can cause a short-circuit and damage the electronics.

- Keep all liquids away from the products.
- Do not use any solvents or cleansing agents.
- Disconnect the mains-operated products from the power supply system and remove rechargeable batteries and batteries (if present) before you begin cleaning.
- Clean all products only with a soft, dry cloth.

Cleaning

- Clean all products only with a soft, dry cloth.



When not using the microphone for extended periods of time:

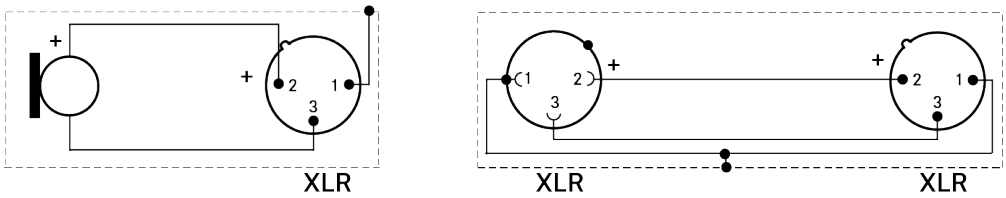
- Store the microphone in a dry, clean and dust-free place at room temperature.
- For this, use the supplied pouch or a lint-free, air-permeable packing material.

4. Specifications

All specifications at a glance.

Pin assignment of the XLR-3 connector
MK 4
MK 8

Pin assignment of the XLR-3 connector



MK 4

Specifications

Transducer principle

- externally polarized condenser microphone

Diameter of diaphragm

- 25.4 mm

Acoustic operating principle

- pressure gradient transducer

Pick-up pattern

- cardioid

Frequency response

- 20 to 20,000 Hz

Sensitivity

- 25 mV/Pa

Max. SPL

- 140 dB

Equivalent noise level

- A-weighted: 10 dB(A)
- CCIR-weighted: 20 dB

Dynamic range

- 130 dB

Nominal impedance

- approx. 50 Ω

Min. terminating impedance

- 1 kΩ

Power supply

- Phantom powering 48 V (P48)

Current consumption

- 3,1 mA

Diameter

- 57 mm

Length

- 160 mm

Weight

- 485 g

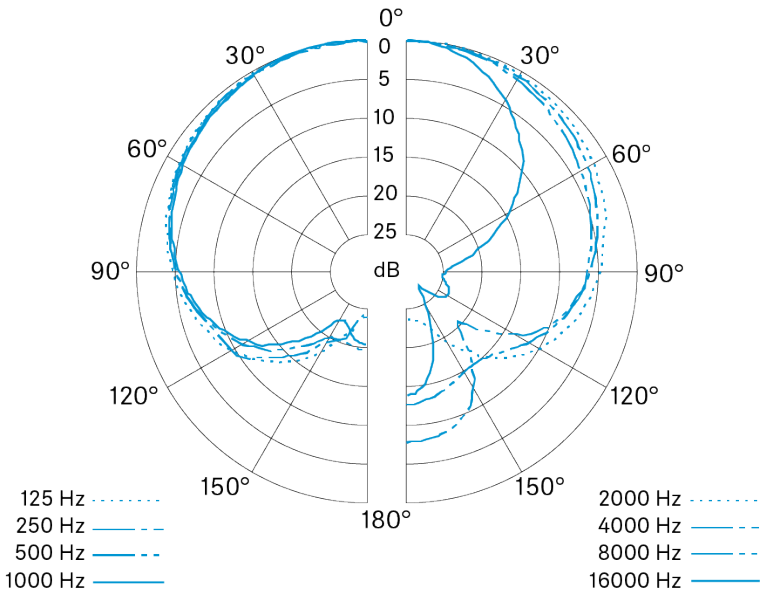
Operating temperature

- 0 °C to +40 °C

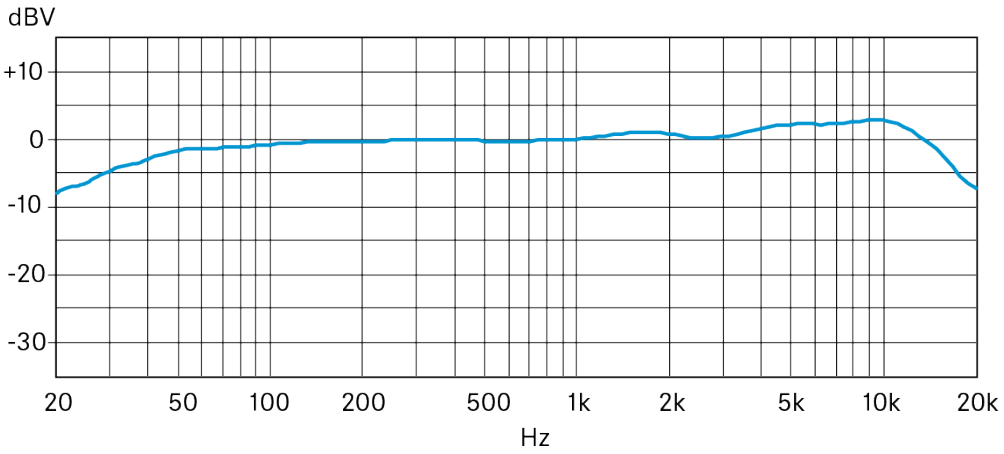
Storage temperature

- -20 °C to +70 °C

Polar pattern



Frequency response



MK 8

Specifications

Transducer principle

- externally polarized dual diaphragm condenser microphone

Diameter of diaphragm

- 25.4 mm

Acoustic operating principle

- pressure gradient transducer

Pick-up pattern, switchable

- omni-directional, wide cardioid, cardioid, super-cardioid, figure-of-eight

Frequency response

- 20 to 20,000 Hz

Sensitivity

- 14.1 mV/Pa (-37 dBV)

Max. SPL

- 142 dB SPL (attenuation: 0 dB)

Equivalent noise level

- A-weighted: 10 dB(A)
- CCIR-weighted: 16 dB

Dynamic range

- 132 dB

Nominal impedance

- approx. 50 Ω

Min. terminating impedance

- 1 kΩ

Power supply

- Phantom powering 48 V (P48)

Low cut/roll-off filter, switchable

- linear
- Roll-off: -6 dB/oct., cut-off frequency: 100 Hz
- Low-cut: -18 dB/oct., cut-off frequency: 60 Hz

Attenuation, switchable

- 0 dB, -10 dB, -20 dB

Current consumption

- 4.1 mA

Diameter

- 57 mm

Length

- 160 mm

Weight

- 485 g

Operating temperature

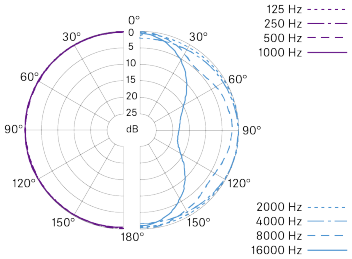
- 0 °C to +40 °C

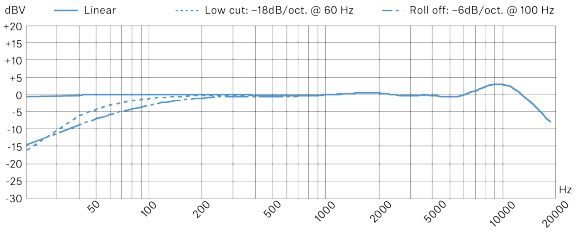
Storage temperature

- -20 °C to +70 °C

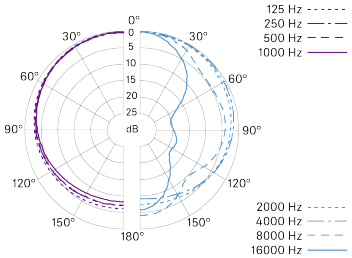
Polar pattern and frequency response

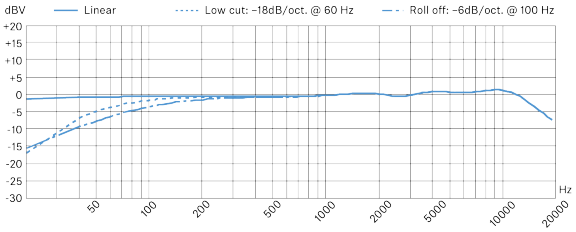
Omni-directional



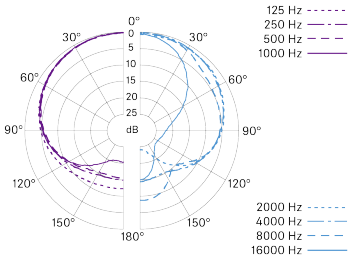


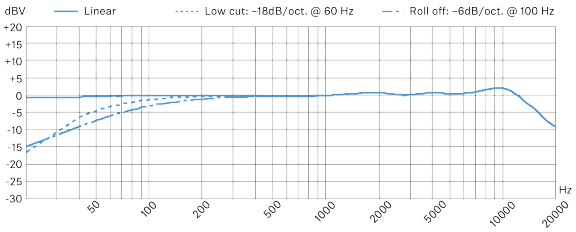
Wide cardioid



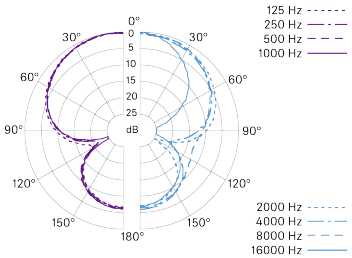


Cardioid





Super-cardioid



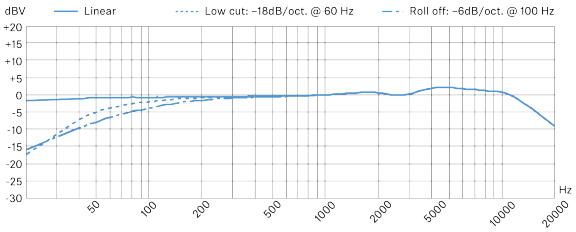
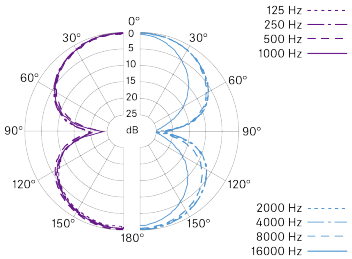
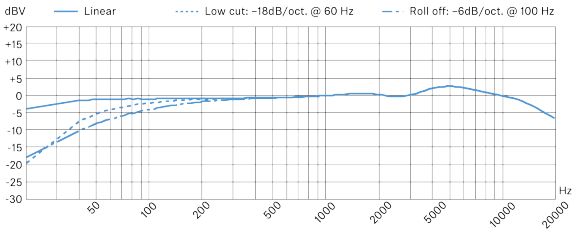


Figure-of-eight





5. Contact

Contact information in case of questions about our products and/or services.

Questions about the product / Help with technical issues
If you have any questions about our products and/or services, please do not hesitate to contact us at https://www.sennheiser.com/support.

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