



# MKH 8070

Instruction manual

**SENNHEISER**

## Important safety instructions

1. Read these safety instructions and the instruction manual of the product.
2. Keep these safety instructions and the instruction manual of the product. Always include all instructions when passing the product on to third parties.
3. Only use attachments, accessories and spare parts specified by the manufacturer.
4. Caution: The protective basket and pop shield must be completely dry when you mount them on the microphone. Moisture can cause malfunctions or damage to the capsule.
5. Connect the microphone only to microphone inputs and supply units that provide 48V phantom powering in accordance with IEC 61938.
6. Do not attempt to open the product housing on your own. The warranty is voided for products opened by the customer.
7. Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, liquid has been spilled or objects have fallen into the product, when the product has been exposed to rain or moisture, does not operate normally, or has been dropped.
8. Use the product only under the conditions of use listed in the specifications.
9. Let the product come to ambient temperature before switching it on.
10. Do not operate the product if it was damaged during transportation.
11. Always run cables so that no one can trip over them.
12. Keep the product and its connections away from liquids and electrically conductive objects that are not necessary for operating the product.
13. Do not use any solvents or aggressive cleaning agents to clean the product.
14. Caution: Very high signal levels can damage your hearing and your loudspeakers. Reduce the volume on the connected audio devices before switching on the product; this will also help prevent acoustic feedback.

### Intended use

The product is designed for indoor use.

It is considered improper use when the product is used for any application not named in the corresponding instruction manual.

Sennheiser does not accept liability for damage arising from improper use or misuse of this product and its attachments/accessories.

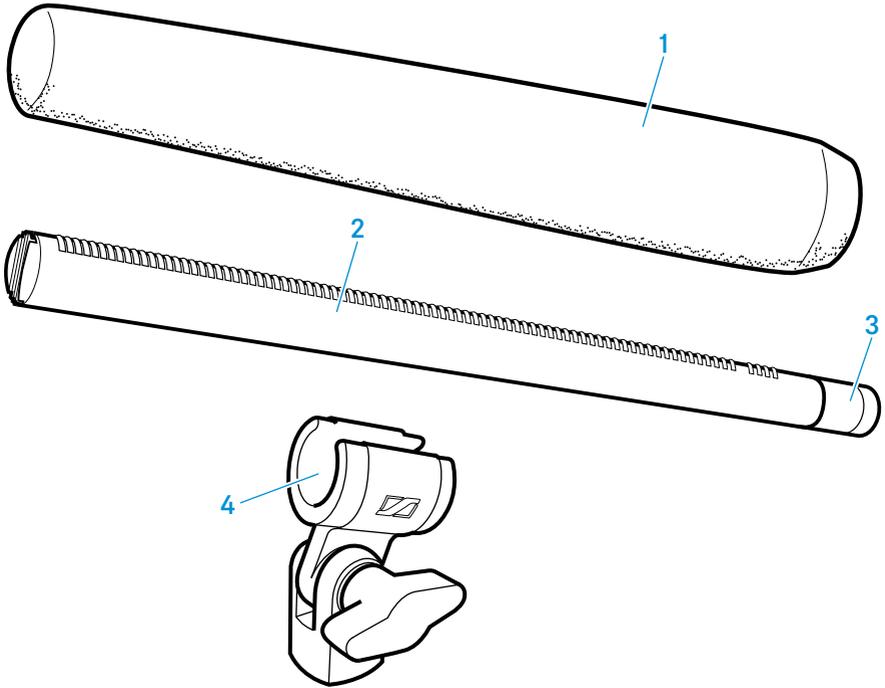
Before putting the products into operation, please observe the respective country-specific regulations!

Delivery includes

## Delivery includes

- Microphone, consisting of the MKH 8070 microphone head and the MZX 8000 XLR module
- MZQ 8070 microphone clamp
- MZW 8070 foam windshield
- Instruction manual
- Frequency response sheet
- Threaded transport tube

## Product overview



1 Foam windshield

2 Microphone head

3 XLR module

4 Microphone clamp (thread adaptor included for 3/8" and 5/8" threads)

# Putting the MKH 8070 into operation

## Connecting the microphone

Connection data of the MKH 8070:

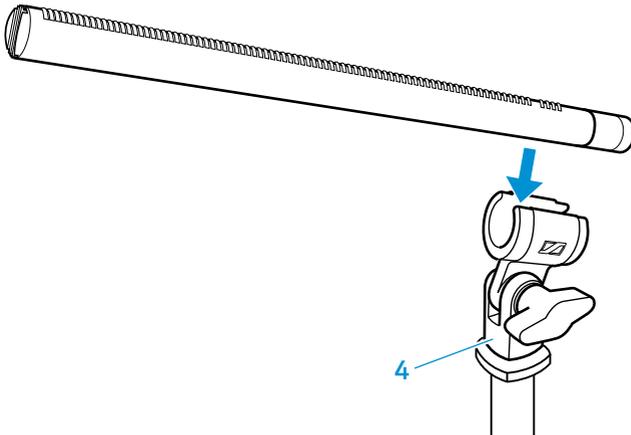
- 48 V  $\pm$  4 V phantom powering (P48, as per IEC 61938)
- XLR-3 connector, balanced

To connect the MKH 8070 to a mixing console or recording device:

- ▷ Connect the socket of the microphone cable to the microphone.
- ▷ Connect the connector of the microphone cable to the mixing console or recording device.

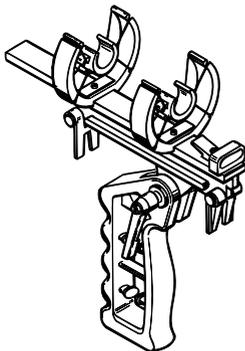
## Attaching the microphone

- ▷ Select the suitable mounting thread:
  - Without thread insert: 5/8" thread
  - Thread insert: 3/8" thread
- ▷ Screw the microphone clamp 4 to a stand.
- ▷ Place the microphone with its back end into the microphone clamp: Make sure that the lateral slots are **not** covered.
- ▷ Orient the microphone together with the microphone clamp and fix them by screwing the wing screw tight.



## Using optional modules

To suppress structure-borne noise, you can use the optional shock mount.

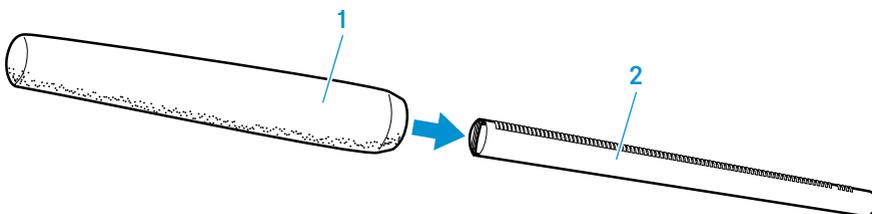


Sennheiser MZS 20-1

## Using the windshield

The windshield changes the sound only slightly, but attenuates wind noise by approx. 25 dB.

- ▷ Place the MZW 8070 foam windshield **1** over the microphone head **2** so that all lateral slots are covered.



**i** Alternative windshields are available as accessories and can be found on the MKH 8070 product page at [www.sennheiser.com](http://www.sennheiser.com).

## Using optional modules

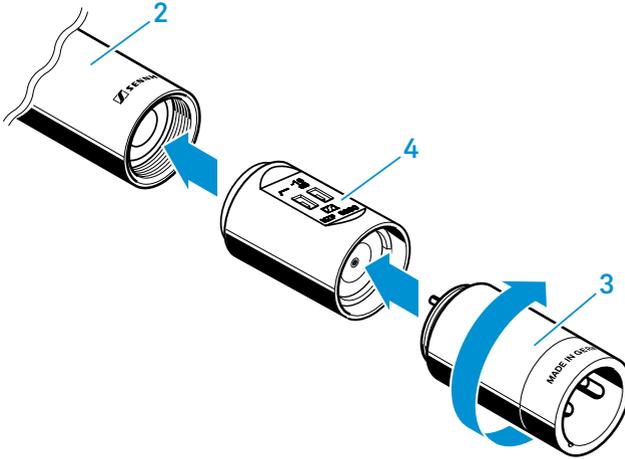
You can retrofit and extend the microphones of the modular MKH 8000 microphone series by using optional modules.

### The MZF 8000 filter module

The MZF 8000 filter module has been specially designed for broadcast and film applications. It effectively filters out interference caused by infrasound, such as low-frequency wind and handling noise.

- ▷ If necessary, disconnect a connected XLR cable in order to not distort the cable and to avoid short-circuits.

- ▷ Unscrew the microphone head **2** from the XLR module **3**.
- ▷ Screw the MZF 8000 filter module **4** at a suitable place in the audio signal chain between microphone head and XLR module.

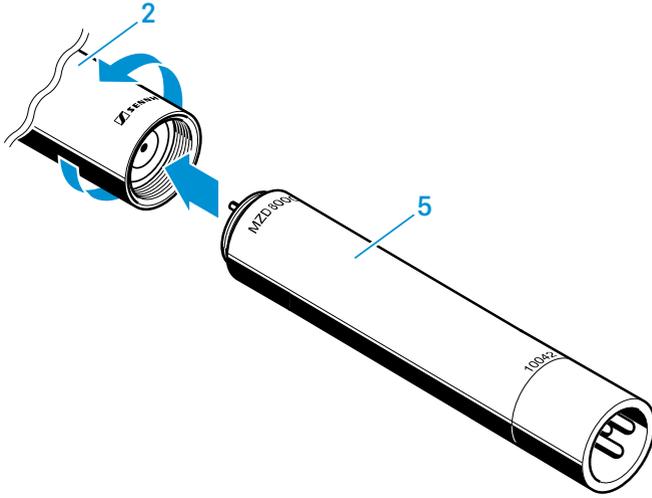


## The MZD 8000 digital module

The MZD 8000 digital module is an A/D converter for all microphone heads of the MKH 8000 series. The sound of the MKH 8000 series is converted to digital directly at the microphone head, ensuring that the warm, natural, yet clear and powerful sound of the microphones is maintained in full quality along the entire signal chain. The MZD 8000 digital module eliminates cable losses and, most importantly, features a converter and surrounding circuitry that have been optimally matched to the microphone.

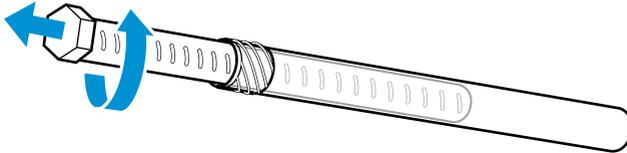
- ▷ If necessary, disconnect a connected XLR cable in order to not distort the cable and to avoid short-circuits.
- ▷ Unscrew the microphone head **2** from the XLR module **3**.
- ▷ Screw the MZD 8000 digital module **5** to the microphone head.

## Transporting the microphone



## Transporting the microphone

- ▷ Let the microphone dry if you used it under extreme climatic conditions.
- ▷ If necessary, remove the windshield or take the microphone out of the basket windshield.
- ▷ Slide the microphone into the transport tube.



## Cleaning and maintaining the microphone

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### CAUTION

#### DAMAGE TO THE PRODUCT DUE TO LIQUIDS!

Liquids entering the product can short-circuit the electronics or damage the mechanics. Solvents or cleansing agents can damage the surface of the product.

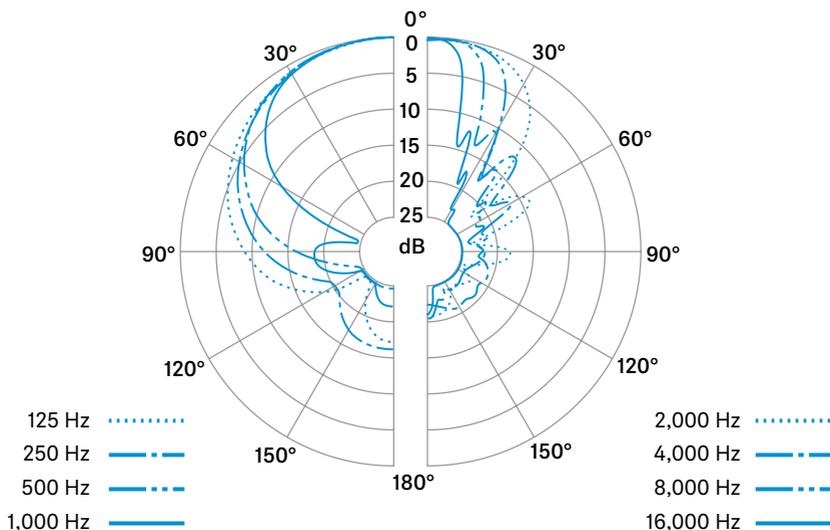
- ▷ Keep all liquids away from the product.

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- ▷ Only use a soft, slightly damp cloth to clean the product.

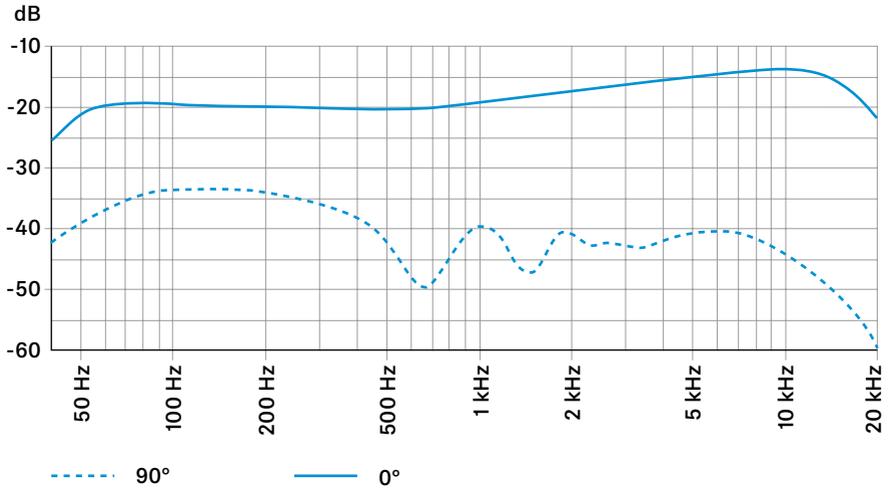
# Specifications

Pick-up pattern	lobar
Frequency response	45 Hz to 20,000 Hz
Sensitivity	-19 dBV/Pa (112 mV/Pa)
Max. sound pressure level	124 dB SPL
Equivalent noise level	8 dB(A) (DIN-IEC 651) 21 dB (CCIR 268-3)
Nominal impedance	25 $\Omega$
Min. terminating impedance	2 k $\Omega$
Phantom powering	48 V $\pm$ 4 V (P48, IEC 61938)
Current consumption	3,3 mA
Diameter	19 mm
Length	432 mm
with MZX 8000 XLR module	465 m
Weight	300 g
with MZX 8000 XLR module	332 g
Operating temperature	-10 $^{\circ}$ C to +60 $^{\circ}$ C

## Polar pattern



# Frequency response



# Manufacturer declarations

## Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on these products.

For the current warranty conditions, please visit our website at [www.sennheiser.com](http://www.sennheiser.com) or contact your Sennheiser partner.

### FOR AUSTRALIA ONLY

Sennheiser goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is in addition to other rights or remedies under law. Nothing in this warranty excludes, limits or modifies any liability of Sennheiser which is imposed by law, or limits or modifies any remedy available to the consumer which is granted by law.

To make a claim under this warranty, contact

Sennheiser Technical Services and Spare Parts Sales  
c/o Linfox, Gate 3, 1 Fox Lane, Erskine Park, 2759, NSW  
Australia

Phone: (02) 9910 6700, email: [au-service@sennheiser.com](mailto:au-service@sennheiser.com)

All expenses of claiming the warranty will be borne by the person making the claim.

The Sennheiser International Warranty is provided by Sennheiser Australia Pty Ltd (ABN 68 165 388 312), Unit 3, 31 Gibbes Street Chatswood NSW 2067 Australia.

## In compliance with the following requirements

- WEEE Directive (2012/19/EU)



### Notes on disposal

The symbol of the crossed-out wheeled bin on the product, the battery/rechargeable battery (if applicable) and/or the packaging indicates that these products must not be disposed of with normal household waste, but must be disposed of separately at the end of their operational lifetime. For packaging disposal, please observe the legal regulations on waste segregation applicable in your country.

Further information on the recycling of these products can be obtained from your municipal administration, from the municipal collection points, or from

## Manufacturer declarations

your Sennheiser partner.

The separate collection of waste electrical and electronic equipment, batteries/rechargeable batteries (if applicable) and packagings is used to promote the reuse and recycling and to prevent negative effects caused by e.g. potentially hazardous substances contained in these products. Herewith you make an important contribution to the protection of the environment and public health.

### EU Declaration of conformity

- RoHS Directive (2011/65/EU)
- EMC Directive (2014/30/EU)

The full text of the EU declaration of conformity is available at the following internet address: [www.sennheiser.com/download](http://www.sennheiser.com/download).

### Statements regarding the FCC and Industry Canada rules

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# Compliance

Europe		EN 55032 EN 55035
USA		FCC 47 CFR 15 subpart B
Canada		Industry Canada ICES_003
China		
Australia/New Zealand		



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