

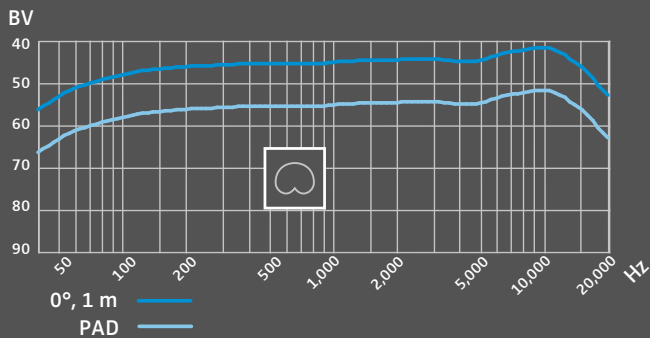
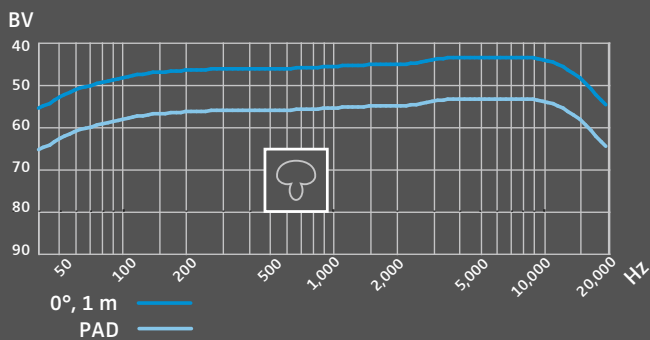
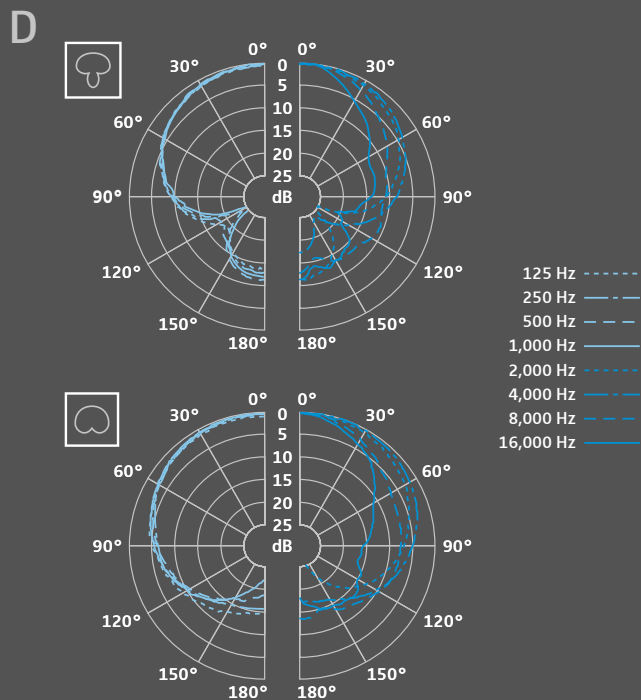
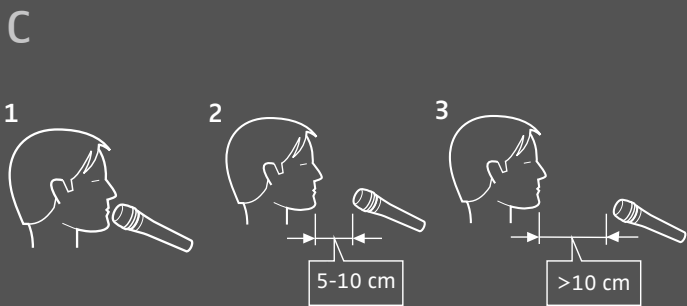
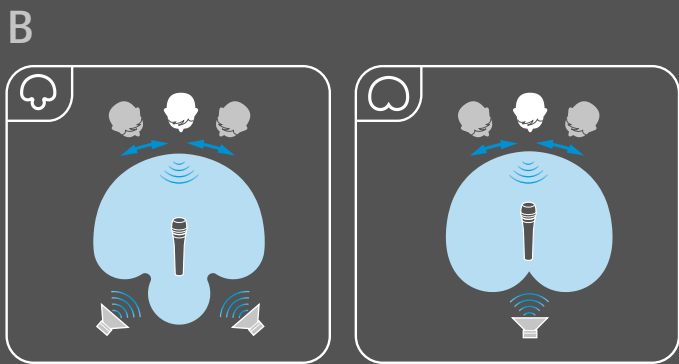
# e 965



Bedienungsanleitung  
Instruction manual  
Notice d'emploi  
Istruzioni per l'uso  
Instrucciones de uso  
Manual de utilização  
Gebruiksaanwijzing  
Инструкция по эксплуатации  
使用说明

**Evolution**  
Stage Microphones

**SENNHEISER**  
The Pursuit of Perfect Sound



## Important safety information

- Please read this instruction manual carefully and completely before using the product.
- Make this instruction manual easily accessible to all users at all times.
- Always include this instruction manual when passing the product on to third parties.

### Before operation

- Only connect the product to microphone inputs or power supply units which provide 48 V phantom power as per IEC 61938 ( $48 \pm 4$  V, at least 3.5 mA per channel).
- Never open the housing of the product. If products are opened by customers in breach of this instruction, the warranty becomes null and void.
- Only use attachments, accessories or spare parts specified by Sennheiser.

### During operation

- Liquids entering the product can short-circuit the electronics or damage the mechanics. Keep all liquids away from the product.
- Solvents or cleansing agents can damage the surface of the product. Only use a soft, slightly damp cloth to clean the product.
- Do not expose the product to extreme temperatures.

### After operation

- Handle the product with care and store it in a clean, dust-free environment.

### Intended use

Intended use includes:

- having read this instruction manual, especially the chapter "Important safety information",
- using the product within the operating conditions and limitations described in this instruction manual.

"Improper use" means using the product other than as described in this instruction manual, or under operating conditions which differ from those described herein.

## The e 965

Live sound on the highest level

The advantages of high-end studio and stage microphones are perfectly combined in the e 965: high-resolution, multifaceted sound supplemented by high feedback rejection and an extremely rugged design. The flagship of the evolution series is a true condenser, large-diaphragm microphone that has been developed for professional stage use.

Its balanced sound is marked by clarity and sophistication; it gives the high-end a silky gloss and reproduces the lower mids in a warm, well-defined manner. The e 965 responds extremely quickly and transmits even the finest nuances in impressive detail. Depending on the stage setting, the pick-up pattern can be switched between gentle cardioid and more direct super-cardioid. This top model leaves no wishes unanswered in terms of sound, ruggedness and handling.





### Features

- Large-diaphragm true condenser microphone
- Uniquely forceful, high-resolution sound
- High-definition for finest nuances, rich in detail
- Switchable pick-up pattern (cardioid/super-cardioid)
- Low-cut and pre-attenuation options
- Low sensitivity to handling noise
- Pop and wind protection
- Extremely rugged metal housing

### Package contents

- 1 e 965 microphone
- 1 MZQ 800 microphone clamp
- 1 pouch
- 1 instruction manual

### Product overview A\*

- 1 Sound inlet basket
- 2 XLR-3 connector
- 3 Directivity switch  
- 4 Sensitivity switch -10 dB 0 dB
- 5 Bass roll-off switch  

\* Diagrams can be found on the cover pages.

## Using the microphone

### Caution **Danger of damage to the microphone!**



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

- ▶ Only operate the switches on the microphone using your fingers.

- ▶ Unscrew the sound inlet basket ①.

### Adjusting the pick-up pattern

- ▶ Set the directivity switch ③ to the desired position:

Pos.	Pick-up pattern
	<b>Cardioid</b> A cardioid pick-up pattern also picks up sound from the sides. This pattern is good for picking up several vocalists at once, e.g. a choir or ensemble.
	<b>Super-cardioid</b> A super-cardioid pickup pattern reduces pick-up from the sides. This pattern is therefore good for picking up individual an individual sound source in a noisy environment. Crosstalk from other instruments on stage is drastically reduced.



### Adjusting the attenuation

- ▶ Set the pad switch ④ to the desired position:

Pos.	Attenuation
0 dB	No attenuation
-10 dB	Reduces the sensitivity of the microphone capsule by 10 dB, increases the maximum sound pressure level.

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

- ▶ Set the low-cut/roll-off switch ⑤ to the desired position:

Pos.	Low-cut/roll-off filter
	Off, linear frequency response
	Eliminates low-frequency noise such as impact sound, fan noise, etc.

## Positioning the microphone C

Pos.	Resulting sound	Commentary
C.1	<ul style="list-style-type: none"><li>• High proximity effect (large bass boost)</li><li>• Powerful, direct sound</li></ul>	Very little crosstalk from other sound sources
C.2	<ul style="list-style-type: none"><li>• Less proximity effect (less bass boost)</li><li>• Some room ambience, natural, balanced sound</li></ul>	More crosstalk from other sound sources
C.3	<ul style="list-style-type: none"><li>• Very little proximity effect (minimal bass boost)</li><li>• More room ambience, indirect sound</li></ul>	Higher crosstalk from other sound sources

If sibilance occurs:

- ▶ Position the microphone slightly to the side and not directly in front of the mouth.

## Positioning the monitor loudspeakers B

- ▶ In order to prevent feedback and crosstalk, position your monitor loudspeakers in the angle area of the highest cancellation of the microphone (cardioid: 180°; super-cardioid: 135°).

## Cleaning and maintaining the e 965

### Caution

**Liquids can damage the electronics of the product!**

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

- ▶ Keep all liquids away from the product.
- ▶ Do not use any solvents or cleansing agents.

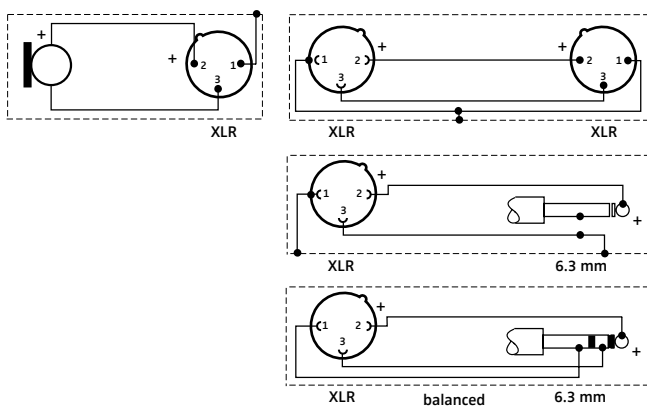
- ▶ Unscrew the sound inlet basket ①.
- ▶ Remove the foam insert from the sound inlet basket ①.
- ▶ Use a slightly damp cloth to clean the sound inlet basket ① from the inside and outside.
- ▶ Reinsert the foam insert into the sound inlet basket ① and replace the sound inlet basket on the microphone and screw it tight.

## Specifications

Transducer principle	externally polarized dual diaphragm AF condenser microphone
Membran diameter	25.4 mm/1"
Frequency response	40 ... 20,000 Hz
Pick-up pattern	cardioid/super-cardioid, switchable
Sensitivity (free field, no load at 1 kHz)	7 mV/Pa
with preattenuation	2.3 mV/Pa
Nominal impedance (at 1 kHz)	50 $\Omega$
Min. terminating impedance	1 k $\Omega$
Maximum sound pressure level (passiv)	142 dB
with preattenuation	152 dB
Equivalent noise level	21 dB (A)
Phantom powering	48 V/3.5 mA
Connector	XLR-3
Temperature range	0 °C to +40 °C
Dimensions	$\varnothing$ 48 x L 199 mm
Weight	396 g

The polar diagram and the frequency response curve D can be found on the cover pages.

## Connector assignment



# Manufacturer Declarations

## Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on this product.

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 Australia Pty Ltd, Unit 3, 31 Gibbes Street Chatswood NSW 2067, AUSTRALIA.

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

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)



Please dispose of this product at the end of its operational lifetime by taking it to your local collection point or recycling center for such equipment.

## CE Declaration of Conformity

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

The declaration is available at [www.sennheiser.com/download](http://www.sennheiser.com/download).







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