





Instruction manual



Delivery includes

- e 965
- MZQ 800 microphone clamp
- pouch
- quick guide
- safety guide

Product overview



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



Installation

Attaching the microphone

- \triangleright Screw the microphone clamp to a stand.
- ▷ Place the microphone with its back end into the microphone clamp.
- $\,\triangleright\,\,$ Orient the microphone together with the microphone clamp.



Connecting the microphone

Connect the XLR-3 socket of the microphone cable (optional accessories) to the XLR-3 socket of the microphone.



Using the windshield

▷ Place the MZW 4032 (optional accessories) windshield over the microphone head.





Operation

Holding the microphone

If you cover the microphone head during transmission, this will change the pick-up pattern of the microphone and consequently the sound.

 \triangleright Only hold the microphone by its body.



Positioning the microphone

 \triangleright It is vital to observe the following notes:

Position	Resulting sound	Commentary
А	High proximity effect (large bass boost) Powerful, direct sound	Very little crosstalk from other sound sources
В	Less proximity effect (less bass boost) Some room ambience, natural, balanced sound	More crosstalk from other sound sources
С	Very little proximity effect (minimal bass boost) More room ambience, indirect sound	Higher crosstalk from other sound sources



If sibilance occurs:

 \triangleright Position the microphone slightly to the side and not directly in front of the mouth.



Positioning the monitor loudspeakers

▷ To prevent feedback and crosstalk, postion your monitor loudspeakers in the angle area of the highest cancellation of the microphone (cardioid: 180°; super-cardioid: 135°).









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.

- \triangleright Only operate the switches on the microphone using your fingers.
- ▷ Unscrew the sound inlet basket.

Adjusting the pick-up pattern

▷ Set the directivity switch to the desired position:

Pos.	Pick-up pattern
Ω	Cardioid 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.
Q	Super-cardioid A super-cardioid pickup pattern reduces pick-up from the sides. This pattern is there- fore 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 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

 $\,\triangleright\,\,$ Set the low-cut/roll-off switch to the desired position:

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



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.
- \triangleright Do not use any solvents or cleansing agents.
- Disconnect the products from the power supply system and remove rechargeable batteries and batteries before you begin cleaning.
- \triangleright Clean all products only with a soft, dry cloth.

Cleaning the sound inlet basket of the microphone module

- $\,\triangleright\,\,$ Unscrew the sound inlet basket.
- $\triangleright\;$ Remove the foam insert from the sound inlet basket.
- \triangleright Use a slightly damp cloth to clean the sound inlet basket from the inside and ouside.
- ▷ If necessary, clean the foam insert with a mild detergent or replace the foam insert.
- \triangleright Dry the foam insert.
- \triangleright Reinsert the foam insert.
- \triangleright Replace the sound inlet basket on the microphone head and screw it tight.





Specifications

Transducer principle	externally polarized dual-diaphragm 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) with preattenuation	7 mV/Pa 2.3 mV/Pa
Nominal impedance (at 1 kHz)	50 Ω
Min. terminating impedance	1 kΩ
Max. sound pressure level (at 1 kHz) with preattenuation	142 dB 152 dB
Equivalent noise level	21 dB(A)
Phantomspeisung	48 V / 3.5 mA
Connector	XLR-3
Temperature range	0 °C to +40 °C
Dimensions	Ø 48 x 199 mm
Weight	396 g

Polar pattern



125 Hz	
250 Hz	
500 Hz	
1,000 Hz	
2,000 Hz	
4,000 Hz	
8,000 Hz	
16,000 Hz	



90°

120°



S	E	N	J	N	J	ŀ	ł	E	I	S	E	R	2
---	---	---	---	---	---	---	---	---	---	---	---	---	---



Frequency response







Overview of applications

- Primary application
- Secondary application

				11×1	ب	¢	\$			F				*				\square	\bigcirc
e 602 II					٠		٠		٠	•		•			٠			•	
e 604					٠								•	•	•	•		•	
e 608					•								٠	٠		٠			٠
e 609 silver								•					٠	٠	٠	٠			٠
e 614			•	•		•	٠				٠					•	•		•
e 835	•	•																•	
e 845	•	•																	٠
e 865	•	•																	٠
e 901											٠	•						•	
e 901 e 902									•	•	•	•			•			•	
e 901 e 902 e 904					•				•	•	•	•	•	•	•	•		•	
e 901 e 902 e 904 e 906					•			•	•	•	•	•	•	•	•	•		• • •	
e 901 e 902 e 904 e 906 e 908					•			•	•	•	•	•	•	•	• • • •	•		• • •	
e 901 e 902 e 904 e 906 e 908 e 914			•	•	•		•	•	•	•	•	•	•	•	• • •	•	•	• • • •	
e 901 e 902 e 904 e 906 e 908 e 914 e 935	•		•	•	•		•	•	•	•	•	•	•	•	•	•	•	• • • •	
e 901 e 902 e 904 e 906 e 908 e 914 e 935 e 945	•		•	•	•		•	•	•	•	•	•	•	•	• • •	• • •	•	• • • •	•