



AKG.EMOTION EMOTION
MICROPHONE
SERIES

D 880

D 880 S



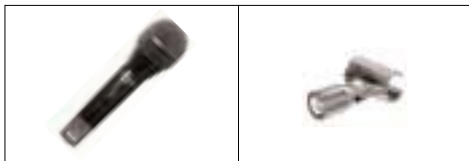
Bedienungshinweise	S. 2
Bitte vor Inbetriebnahme des Gerätes lesen!	
User Instructions	p. 12
Please read the manual before using the equipment!	
Mode d'emploi	p. 22
Veuillez lire cette notice avant d'utiliser le système!	
Istruzioni per l'uso	p. 32
Prima di utilizzare l'apparecchio, leggere il manuale!	
Modo de empleo	p. 42
Antes de utilizar el equipo, lea por favor el manual!	
Instruções de uso	p. 52
Por favor leia este manual antes de usar o equipamento!	



1 1 Precaution/Description

- 1.1 Precaution** Please make sure that the piece of equipment your microphone will be connected to fulfills the safety regulations in force in your country and is fitted with a ground lead.
-

1.2 Unpacking



1 D 880 or D 880 S

1 SA 44 stand adapter

Check that the packaging contains all of the components listed above. Should anything be missing, please contact your AKG dealer.

1.3 Optional Accessories

- **MK 9/10** microphone cable: 10 m (30 ft.) 2-conductor shielded cable with 3-pin male and 3-contact female XLR connectors
 - **ST 102A, ST 200** floor stands
 - **ST 1, ST 12, ST 45** table stands
 - **W 880** windscreen
-

1.4 Features

- Frequency response tailored to vocal miking.
 - Built-in windscreen/pop filter for effective suppression of pop and breath noise.
 - Doubleflex™ f transducer shock mount reduces handling and cable noise.
 - Frequency-independent cardioid polar response for high gain before feedback.
 - New Varimotion™ diaphragm technology for brilliant sound.
-

1 Description



The D 880 is a supercardioid dynamic microphone. It has been designed specifically as a vocal microphone for rough onstage use. The wide frequency response of the D 880 slightly favors the midfrequency and treble regions to ensure good intelligibility of speech. The term "supercardioid polar response" means that the D 880 is most sensitive to sound arriving from in front of it, less sensitive to sound arriving from the sides and rear. This pickup pattern is virtually the same for all frequencies or, in other words, from the lowest to the highest notes ("frequency independent").

A shock absorbing inner grille protects the transducer from damage. The strong die cast housing and the wire-mesh outer grille provide additional protection for the transducer system. The outer steel wire mesh grille and a layer of a special fabric form a very effective windscreen against pop and breath noise and sibilance.

The D 880 features a standard 3-pin male gold plated XLR connector for optimum electrical contact. You can connect the microphone either to a balanced or an unbalanced microphone input.

1.5 D 880

The D 880S has the same mechanical, electrical, and acoustic characteristics as the D 880 and features an additional noiseless On/Off switch (Fig. 1).



1.6 D 880 S

Fig. 1: On/off switch on the D 880 S



2 Wiring

2.1 Circuit Diagram

Fig. 1: D 880 circuit diagram.

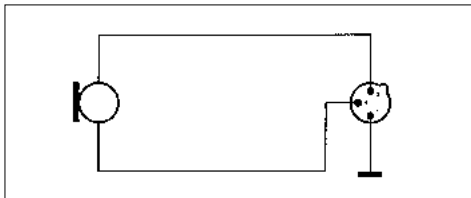
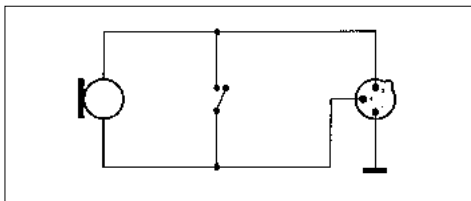


Fig. 2: D 880 S circuit diagram.



The microphone provides a balanced output on a 3-pin male XLR connector:

Pin 1: ground

Pin 2: hot

Pin 3: return

You can connect the microphone either to a balanced or an unbalanced microphone input.

2.2 Connecting the Microphone to a Balanced Input

Refer to fig. 3.

1. Use a commercial XLR cable such as the optional MK 9/10 from AKG. The length of these cables does not affect audio quality.
2. Plug the female XLR connector on the microphone cable into the male XLR connector on the microphone.
3. Plug the other connector on the microphone cable into the desired microphone input socket on your mixer or amplifier.

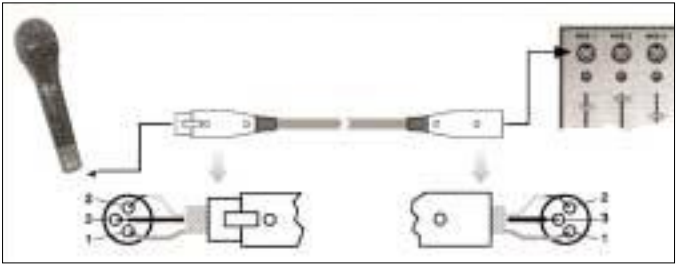
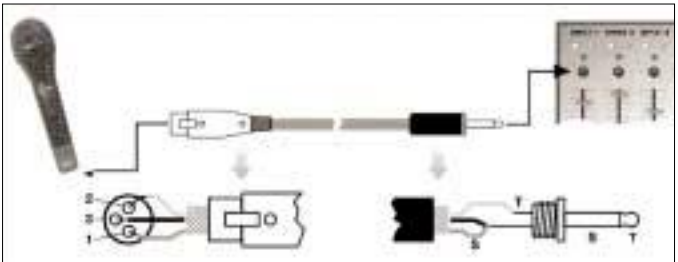


Fig. 3: Using a balanced connecting cable.

1. To connect the microphone to an unbalanced microphone input (1/4" jack), use a cable with a female XLR connector and a 1/4" TS jack plug. These cables are available at music stores.

2.3 Connecting the Microphone to an Unbalanced Input



Please note that unbalanced cables may pick up interference from stray magnetic fields near power or lighting cables, electric motors, etc. like an antenna. This may cause hum or similar noise when you use a cable that is longer than 16 feet (5 m).

Fig. 4: Using an unbalanced cable.



2 Wiring

2. Plug the female XLR connector on the microphone cable into the male XLR connector on the microphone.
 3. Plug the other connector on the microphone cable into the desired microphone input jack on your mixer or amplifier.
-



3 Using Your Microphone

3.1 Introduction

A handheld vocal microphone provides many ways of shaping the sound of your voice as it is heard over the sound system.

The following sections contain useful hints on how to use your microphone for best results.

3.2 Working Distance and Proximity Effect

Basically, your voice will sound the bigger and mellower, the closer you hold the microphone to your lips. Moving away from the microphone will produce a more reverberant, more distant sound as the microphone will pick more of the room's reverberation.

You can use this effect to make your voice sound aggressive, neutral, insinuating, etc. simply by changing your working distance.

Proximity effect is a more or less dramatic boost of low frequencies that occurs when you sing into the microphone from less than 2 inches. It gives more “body” to your voice and an intimate, bass-heavy sound.

3 Using Your Microphone

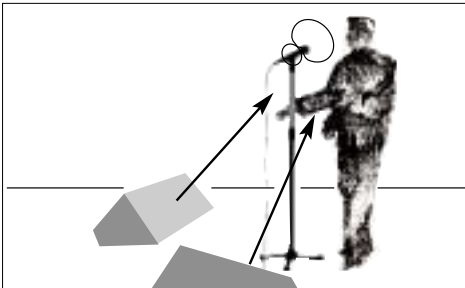


3.3 Angle of Incidence

Fig. 5: Typical microphone position.

Sing to one side of the microphone or above and across the microphone's top. This provides a well-balanced, natural sound.

If you sing directly into the microphone, it will not only pick up excessive breath noise but also overemphasize “sss”, “sh”, “tch”, “p”, and “t” sounds.



3.4 Feedback

Fig. 6: Microphone placement for maximum gain before feedback.

Feedback is the result of part of the sound projected by a speaker being picked up by a microphone, fed to the amplifier, and projected again



3 Using Your Microphone

by the speaker. Above a specific volume or “system gain” setting called the feedback threshold, the signal starts being regenerated indefinitely, making the sound system howl and the sound engineer desperately dive for the master fader to reduce the volume and stop the howling.

To increase usable gain before feedback, the microphone has a supercardioid polar pattern. This means that the microphone is most sensitive to sounds arriving from in front of it (your voice) while picking up much less of sounds arriving from the sides or rear (from monitor speakers for instance).main (“FOH”) speakers in front of the microphones (along the front edge of the stage). If you use monitor speakers, be sure never to point any microphone directly at the monitors, or at the FOH speakers.

Feedback may also be triggered by resonances depending on the acoustics of the room or hall. With resonances at low frequencies, proximity effect may cause feedback. In this case, it is often enough to move away from the microphone a little to stop the feedback.

3 Using Your Microphone



3.5 Backing Vocals

Fig. 7: Two vocalists sharing a microphone.

1. Never let more than two persons share a microphone.
 2. Ask your backing vocalists never to sing more than 35 degrees off the microphone axis. The microphone is very insensitive to off-axis sounds. If the two vocalists were to sing into the microphone from a wider angle than 35 degrees, you may end up bringing up the fader of the microphone channel far enough to create a feedback problem.
-

4 Cleaning



To clean the microphone case, use a soft cloth moistened with water.



5 Troubleshooting

Problem	Possible Cause	Remedy
No sound:	<ol style="list-style-type: none">1. Power to mixer and/or amplifier is off.2. Channel or master fader on mixer, or volume control on amplifier is at zero.3. Microphone is not connected to mixer or amplifier.4. Cable connectors are seated loosely.5. Cable is defective.	<ol style="list-style-type: none">1. Switch power to mixer or amplifier on.2. Set channel or master fader on mixer or volume control on amplifier to desired level.3. Connect microphone to mixer or amplifier.4. Check cable connectors for secure seat.5. Check cable and replace if damaged.

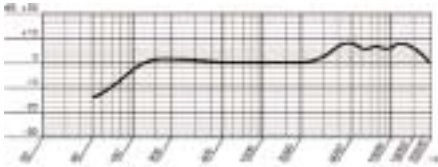
6 Specifications



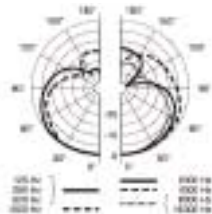
Type:	dynamic pressure gradient microphone
Polar pattern:	supercardioid
Frequency range:	60 to 20,000 Hz; 20 to 20,000 Hz at 1 cm
Sensitivity at 1000 Hz:	2.5 mV/Pa (-52 dBV re 1 V/Pa)
Electrical impedance at 1000 Hz:	≤600 Ω
Recommended load impedance:	≥2000 Ω
Max. SPL for 1 % / 3 % THD:	147 dB SPL / 156 dB SPL
Equivalent noise level:	22 dB (A) (DIN 45412)
Environment:	temperature: -10°C to +60°C rel. humidity at +20°C: 95%
Connector:	3-pin XLR
Connector pinout:	pin 1 – ground pin 2 – hot pin 3 – return
Case material:	die-cast metal
Finish:	matte black enamel
Size:	length: 180 mm (7.1 in.) max. dia.: 50 mm (2 in.)
Net/shipping weight:	290 g (10.2 oz.) / 650 g (1.4 lb.)

This product conforms to EN 50 082-1.

Frequency Response



Polar Diagram



AKG.EMOTION

EMOTION
MICROPHONE
SERIES



The Moffatts



B*Witched



D 660 S



D 880



D 880 S



D 440



D 550



D 770

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