



2028 Vocal Microphone

User's Manual

dpamicrophones.com/2028

Application and use

The 2028 Vocal Microphone is a professional stage mic with extraordinary natural sound, high separation from nearby sound sources and very high SPL handling.

The mic features exceptionally controlled directional quality. This, combined with superb definition and true dynamics, makes the 2028 the perfect match for all types of live performances.

Grid and windscreen

The 2028 has a very effective 3-step pop protection grid incorporated, which removes unwanted pop noise. When used outdoors or with artists that create pronounced wind or pop sounds, it may be necessary to add an additional external windscreen.

Phantom power (For wired version)

The 2028 is designed to apply its full specifications at the standard +48 volt phantom power (± 4 V) but will work at lower supply voltages with reduced specifications.



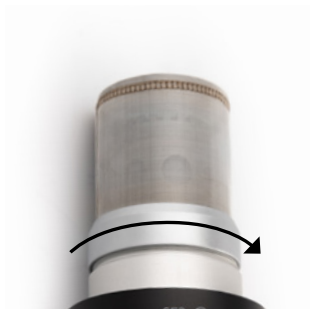
Cleaning

Keep the microphone dry – away from water and cleaning fluids. Do not use sprays or fluids containing chemicals that could remove static electricity on or near the microphone. This could cause permanent damage.

To clean the grid properly, without risk of causing damage to the capsule, you have to unscrew it from the microphone body. Be aware that the mic capsule itself should not be cleaned in any way, as it will influence the performance.

The grid consists of two parts: the outer black metal mesh and an inner foam windscreen. Both parts may be cleaned separately.

Once you have separated the mic grid from the body, the inner pop filter becomes visible. Gently unscrew it being careful not to touch the mesh.



All the parts should be assembled again in the opposite order. Be careful to align the foam windscreen in the outer black metal mesh and reposition the inner pop filter on the thread.

When remounting, take care to tighten the grid firmly, which secures the inner pop filter properly.

Accessories included

DUA0415 Clip for 2028 Vocal Microphone

Replacement parts

DUA0410B Grid – including outer black metal mesh and inner foam windscreen

DUA0411 Inner Cylindrical Pop Filter

Available models:

2028-B-B01

2028 Supercardioid Vocal Mic, Wired DPA Handle, Black

2028-B-SLI

2028 Supercardioid Vocal Mic, SLI Adapter
(Shure/Sony/Lectrosonics), Black

2028-B-SE2

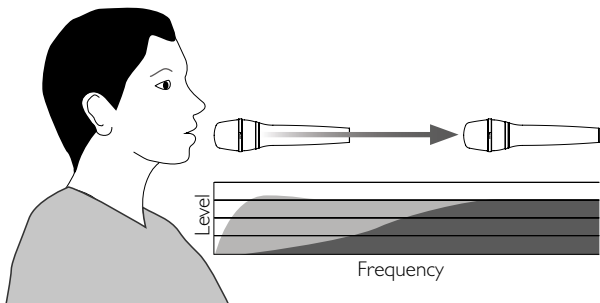
2028 Supercardioid Vocal Mic, SE2 Adapter
(Sennheiser 2000/6000/9000/evolution/D1), Black



Proximity effect

The 2028 Vocal Microphone is designed as a handheld vocal mic. The frequency response is tuned to match this application.

At short distances, all directional microphones will create a bass-level boost – at extended distances, there will be a long-distance low cut. This phenomenon is known as proximity effect or close-talk. This gives a deeper/warmer vocal sound at short distances and more thin-sounding vocals as the distance increases.



So keep in mind that the low-frequency level will change according to the distance the mic is to the mouth. The mic has been designed and factory fine-tuned for this. The 2028 is intended to be flat at 12 cm (4.7 in).

Miking and recording voice

When using a mic, it is important to know some of the parameters characterizing the source you are amplifying/recording, its surroundings and the characteristics of the tools you are using. For tips and background info on voice miking, please visit:

dpa[microphones.com/micuni](https://www.dpamicrophones.com/micuni)

2028 Vocal Microphone Specifications

(Measured with wired DPA Handle)

Directional pattern

Supercardioid

Principle of operation

Pressure gradient

Cartridge type

Pre-polarized condenser

Frequency range

20 Hz - 20 kHz

Frequency range, ± 2 dB, at 12 cm (4.7 in)

100 Hz - 16 kHz. Permanent 3rd order low-cut filter at 80 Hz

Sensitivity, nominal, ± 3 dB at 1 kHz

5 mV/Pa; -46 dB re. 1 V/Pa

Equivalent noise level, A-weighted

Typ. 22 dB(A) re. 20 μ Pa (max. 23 dB(A))

Total harmonic distortion (THD)

< 1% up to 139 dB SPL peak

Dynamic range

Typ. 117 dB

Max. SPL, peak before clipping

160 dB

Output impedance

150 Ω

Minimum load impedance

1 k Ω

Cable drive capability

100 m (328 ft)

Output balance principle

Impedance balancing with Active Drive

Common mode rejection ratio (CMRR)

> 50 dB at 1 kHz

Power supply (for full specifications)

48 V Phantom power (± 4 V)

Current consumption

Max 2.5 mA

Connector

XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase

Maximum output

9 V_{rms}; 19 dBV; 28 dBu

Polarity

+V at pin 2 for positive sound pressure

Dimensions

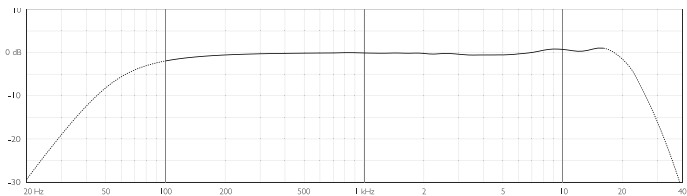
Weight: 286 g (10.1 oz)

Microphone diameter: 48 mm (1.9 in)

Capsule diameter: 19 mm (0.75 in)

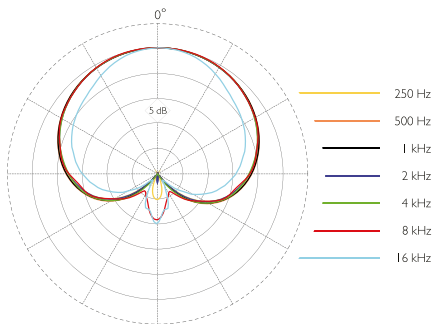
Microphone length: 188 mm (7.4 in)

Frequency response



Typical on-axis frequency response of 2028 Vocal Microphone measured at 12 cm (4.7 in).

Polar pattern



Service & repair

If you are not satisfied with the characteristics exhibited by this product, please go to dpmicrophones.com/service for instructions.

Warranty

The 2028 Vocal Microphone is covered by a two-year limited warranty.

CE marking

This product conforms with all relevant directives approved by the European Commission.




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