



user's manual

d:facto™

vocal mic



## Application and use

The DPA d:facto™ vocal mic is a high quality stage microphone with extraordinary natural sound, high separation from nearby sound sources and extreme sound level handling.

Its supercardioid pattern combined with superb definition gives true dynamics and sound color on stage – equally suitable for PA amplification and recording. The integrated 3-step pop protection grid effectively removes unwanted noise.

The d:facto vocal mic bridges the gap between live stage performances and studio recordings, and can also be used as close mic on acoustic instruments.

## Features

- Pre-polarized supercardioid condenser vocal microphone
- Extraordinary natural sound
- Superb definition
- High separation
- Extreme sound level handling
- True dynamics
- 3-step pop protection
- Isolation from handling noise
- Premium selected materials
- Rugged design for professional use

## Proximity effect

The DPA d:facto vocal mic is designed primarily as a handheld vocal microphone and the frequency response is tailored to match this application. At short distances all directional microphones will create a bass level boost. This phenomenon is known as proximity effect or close-talk, and will give a bigger, more powerful sound at short distances, but needs to be controlled in order to avoid a boomy sound.

Keep in mind that the low-frequency level will change according to the distance to the mouth, but be assured that the microphone has been designed and factory fine-tuned to match this use. Also, to avoid acoustic distortion from your lips, keep a distance at about 2 cm (1 in) from the microphone head's mesh.

## Miking and recording voice

When using microphones it is important to know some of the parameters characterizing the source you are recording, its surroundings and the characteristics of the tools you use to record it. For tips and background info on voice miking, please visit [www.dpamicrophones.com/applicationguide](http://www.dpamicrophones.com/applicationguide).

## Directionality

The d:facto polar pattern has its highest rejection at  $\pm 137$  degrees off-axis. The best gain-to-feedback ratio is obtained when loud sound sources like stage monitors project their sound to this angle, not to the rear side of the mic.

## Windscreen

When used outdoors or with performing artists with pronounced wind or pop noise, use the optional windscreen.

## Phantom power

The d:facto vocal is a condenser mic and needs 48V phantom powering from the mixing console or from an external power supply unit. Mute the channel on the console before supplying phantom power to avoid the crackling noise.

## Attenuation pad

The d:facto vocal has an attenuation slide-switch at the back of the mic head. Use a pencil or the like to activate the attenuator and lower the output of the head by 10 dB. **Note:** This is to optimize performance with the Wisycom handle and will not change the max SPL handling.



## Cleaning

Keep the microphone dry and away from exposure to water and cleaning fluids. Do not use spray or fluid containing chemicals that could remove static electricity on or close to the microphone. This could cause permanent damage.

To clean the grid properly without the risk of causing damage to the capsule, you have to disassemble the microphone head. This requires a special tool, which can be obtained from DPA Microphones. Please note that any attempt to take the microphone head apart is purely at your own risk, and any damage caused in the process will not be covered by warranty. Be careful not to touch or deform the inner pop filter, as it will influence the performance of the microphone.

## Wired to wireless

The d:facto vocal mic can be used both wired and wireless. It comes with a handle for wired use, but the microphone body can be unscrewed from the capsule head and exchanged with a wireless handle from Wisycom. Please note that all specifications in this manual apply to the wired handle solution.



## Accessories included

DUA0134 d:facto vocal microphone clip

## Accessories available

DUA0700 Windscreen

TB4000 Table Base

DUA0250 Floor Base

DUA0500 Stand Extension, 500 mm (20 in)

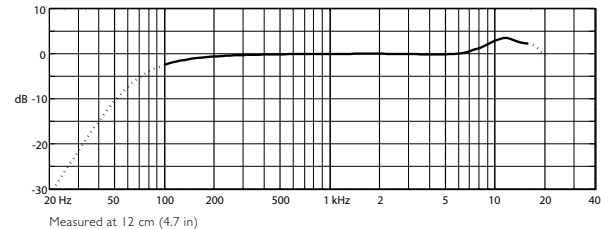
DUA0100 Stand Extension, 100 mm (4 in)

FAHV1B d:facto handle

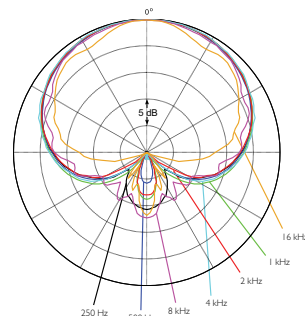
MMH4018V11B d:facto vocal microphone head

DQA0025 Mic head opening tool

## Frequency Response



## Polar Pattern



# Specifications

## Directional pattern

Supercardioid

## Principle of operation

Pressure gradient

## Cartridge type

Pre-polarized condenser

## Frequency range

20 Hz - 20 kHz

## Frequency range, $\pm 2$ dB, at 12 cm (4.7 in)

100 Hz - 16 kHz with 3 dB soft boost at 12 kHz.

Permanent 3rd order low-cut filter (-3 dB at 80 Hz)

## Sensitivity, nominal, $\pm 2$ dB at 1 kHz

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

## Equivalent noise level, A-weighted

Typ. 19 dB(A) re. 20  $\mu$ Pa (max. 21 dB(A)) without attenuation

## S/N ratio (A-weighted), re. 1 kHz at 1 Pa (94 dB SPL)

Typ. 75 dB(A)

## Total Harmonic Distortion (THD)

< 1 % up to 139 dB SPL peak

## Dynamic range

Typ. 120 dB

## Max. SPL, peak before clipping

157 dB

## Switchable attenuator

0 dB / -10 dB

## Output impedance

< 100 ohm

## Minimum load impedance

1 kohm

## 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)

48V Phantom power ( $\pm 4$  V)

## Current consumption

max 5 mA

## Connector

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

## Color

Matte black

## Dimensions

### Weight

245 g (8.6 oz)

### Microphone diameter

50 mm (2.0 in)

### Capsule diameter

19 mm (0.75 in)

### Microphone length

195 mm (7.7 in)

## Output voltage, RMS

> 5V

## Polarity

+V at pin 2 for positive sound pressure

## Temperature range

-40 °C to 45 °C (-40 °F to 113 °F)

## Relative Humidity (RH)

Up to 90%



### Service & repair

If you are not satisfied with the characteristics exhibited by this product, please go to [www.dpamicrophones.com/service](http://www.dpamicrophones.com/service) for instructions.

### Warranty

The dfinem™ headset 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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