

# Classis BM 42

Boundary Microphone



## FEATURES

- Semi-cardioid
- RFI-proof due Scudio™ technology
- High-quality non-glare design
- Linear frequency response
- High gain before feedback
- Reduced diffuse room noise
- Suitable for miking speech

## TECHNICAL SPECIFICATIONS

Transducer type	Condenser (back-electret)
Operating principle	Pressure gradient
Frequency response	55 - 20,000 Hz
Polar pattern	Semi-cardioid
Open circuit voltage	13.3 mV/Pa = -37.5 dBV
Nominal impedance	< 200 Ω
Nominal output impedance	≥ 1 kΩ
Max. SPL at 1 kHz	114.2 dB
Dynamic range	84 dB
Signal-to-noise ratio	63.9 dB [A, RMS]
Noise voltage	8.4 μV [A, RMS]
A-weighted equivalent SPL	30.1 dB
Phantom supply	8 - 52 V
Current consumption	approx. 2.1 mA
Dimensions without connector (L x W x H)	86 x 61 x 21 mm [3.39" x 2.40" x 0.83"]
Weight with cable	213 g [7.51 oz]

## APPLICATIONS

The Classis BM 42 is a small condenser boundary microphone with a semi-cardioid polar pattern. The robust housing is of a high-quality design and covered with a very exclusive, dust repellent fabric. Due to the linear frequency response the microphone can be used for a number of applications, for which a microphone mounted on a stand cannot be used. The matt, non-glare surface allows integrating the Classis BM 42 discretely into each installation placing the microphone on conference tables, lecterns, round tables or on altars. It also can be used on theatre stages or for live recordings. The integrated high pass filter reduces low-frequency noise from tables and other.

The principle of a directional boundary microphone has several advantages:

- The semi-cardioid polar pattern of the Classis BM 42 provides in contrast to standard boundary microphones a better gain-before-feedback and reduces ambient noise.
- The increase of the sound pressure at a boundary results in a higher gain, signal-to-noise ratio and comb filter effects cannot occur.

The Classis BM 42 is available in matt black or white.

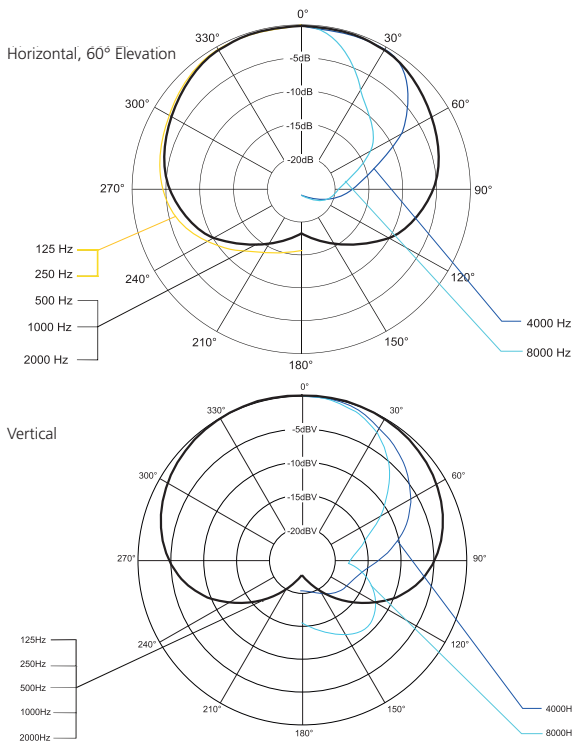
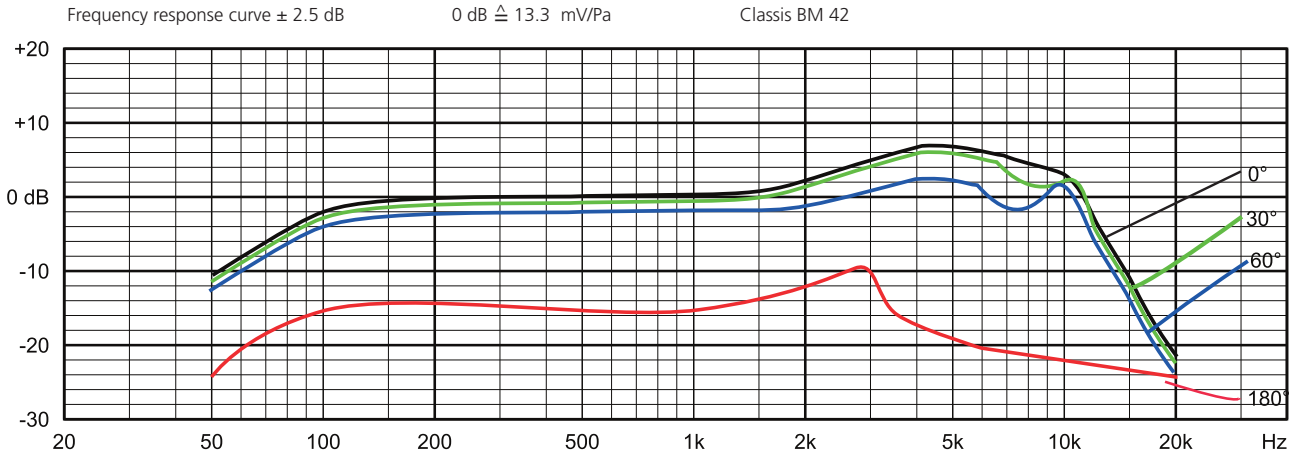
## VERSIONS

Classis BM 42 B	black, integrated pre-amp, bare-ended 3 m long cable . . . . . Order # 723.789
Classis BM 42 W	white, integrated pre-amp, bare-ended 3 m long cable . . . . . Order # 723.797
Classis BM 42 BC	black, integrated pre-amp, 3 m long cable with 3-pin male XLR connector . Order # 729.507

# Classis BM 42

## FREQUENCY RESPONSE & POLAR PATTERN

This frequency response curve (measuring tolerance  $\pm 2.5$  dB) and polar pattern correspond to a typical production sample for this microphone.

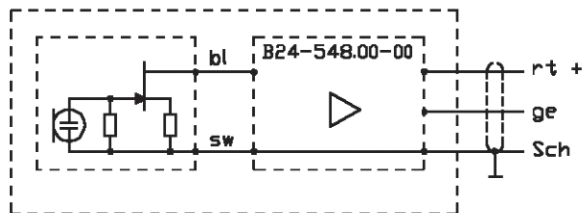


## ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The microphone shall be a fixed-charge condenser designed for use in table or panel-mount boundary applications. It shall have a frequency response of 55 Hz to 20,000 Hz and a semi-cardioid polar pattern. It shall have a built-in phantom power module and shall operate from an external 8V to 52V DC phantom power source. The filter in the microphone grille shall eliminate wind and pop noise. The RFI shield technology shall eliminate radio frequency interference of wireless communication devices. It shall be capable of handling sound input levels up to 114,2 dB with a dynamic range of 84 dB. Nominal open circuit output voltage shall be 13.3 mV/Pa at 1 kHz. Output shall be low impedance balanced (<200 ohms). The microphone shall have a maximum size of 86 x 61 x 21 mm (3.39" x 2.40" x 0.83"). Weight shall be 213 grams (7.51 oz). The microphone shall provide an unobtrusive full metal housing for discreet positioning. The steel mesh grille shall be covered by fabric. Finish shall be non-glare mat black [white]. Rubber pads shall be mounted for reduction of mechanical noise transfer from the mounting panel. The microphone shall have a bare-ended 3 meter long cable [3-pin male XLR connector].

Manufacturer: beyerdynamic  
 Type: Classis BM 42 B [W, BC]

## WIRING DIAGRAM



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