

# Classis BM 52

Boundary Microphone



## FEATURES

- Semi-cardioid polar pattern
- RFI-proof due to Scudio™ technology
- ON/OFF, Push-To-Talk and Push-To-Mute function
- Silent membrane key with braille inscription
- High-quality non-glare design
- Linear frequency response with high bandwidth
- LED indicator
- Switchable bass roll-off filter in two stages
- High gain-before-feedback

## TECHNICAL SPECIFICATIONS

Transducer type	Condenser (back electret)
Operating principle	Pressure gradient
Frequency response	45 - 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	63.8 dB dBA, RMS
Noise voltage	8.4 μV [A, RMS]
A-weighted equivalent SPL	30.2 dB [A]
Power supply	Phantom supply
	P48 (+48 VDC ±4 VDC, 6.8 kΩ ±20%)
	P24 (+24 VDC ±4 VDC, 1.2 kΩ ±20%)
	P12 (+12 VDC ±4 VDC, 680 Ω ±20%)
Current consumption	approx. 5.6 mA
Dimensions without connector	
(L x W x H)	105 x 76 x 25 mm [4.13" x 2.99" x 0.98"]
Weight without cable	147 g [5.19 oz]
Weight with cable	292 g [10.30 oz]

## APPLICATIONS

The Classis BM 52 is a very versatile condenser boundary microphone with many different useful functions. Depending on the application, you can choose between the operating modes ON/OFF, Push-To-Talk (PTT) and Push-To-Mute (PTM). In order to suppress low frequency noise, the frequency response can be tailored for use with a two-stage bass roll off filter. The Classis BM 52 is operated with a silent membrane key with braille inscription. An LED indicates the ready-to-speak status. The robust housing with a high-quality design is covered with a very exclusive, dust repellent fabric. Due to its matt, non-glare surface, the Classis BM 52 can discretely be integrated into each installation.

It has all possibilities of an intelligent desktop microphone unit. It can be used anywhere, where little space is available, but a high functionality is required. It is ideal for round table discussions, tele/video conferences or distance learning. 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 52 RC** is available with a remote control. The microphone can be activated by an external button (operator). The built-in membrane key can be turned off. An external device (e.g. video camera) can be controlled with a MOSFET output. The Classis BM 52 is available in matt black.

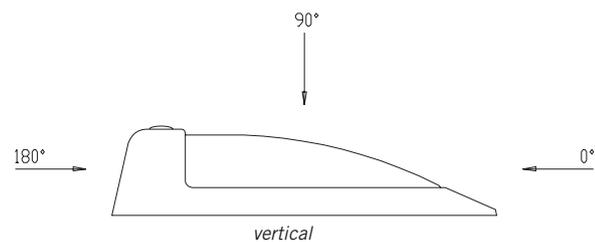
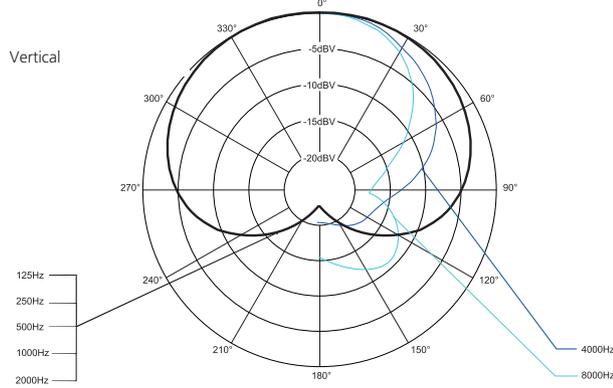
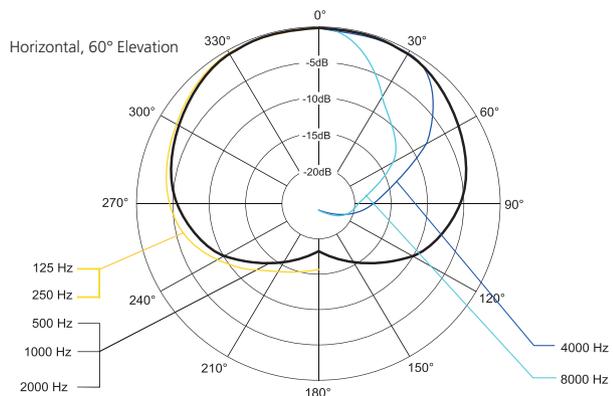
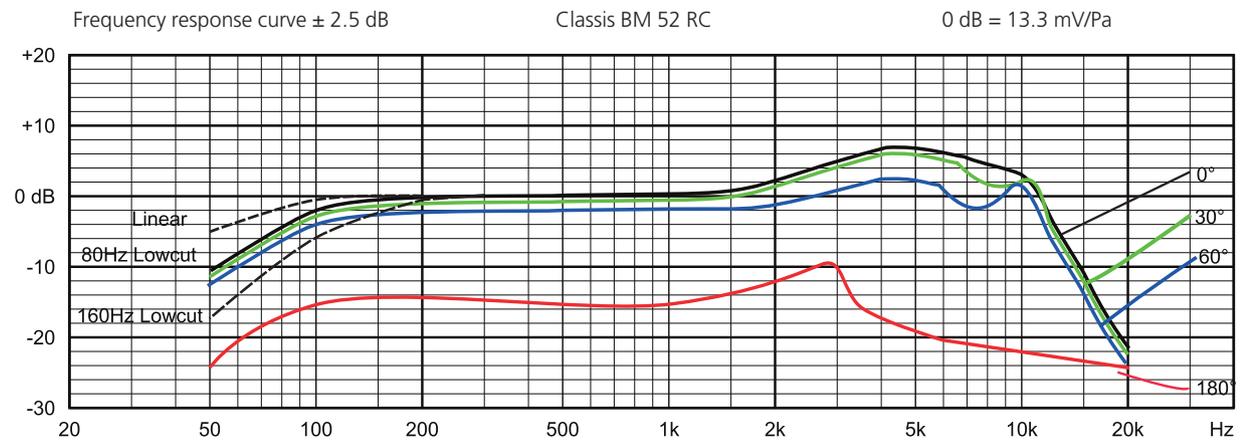
## VERSIONS

Classis BM 52	black, integrated pre-amp, 3 m cable with 3-pin male XLR connector	Order # 729.442
Classis BM 52 RC	black, integrated pre-amp, 3 m cable with 5-pin male XLR connector	Order # 729.450

# Classis BM 52

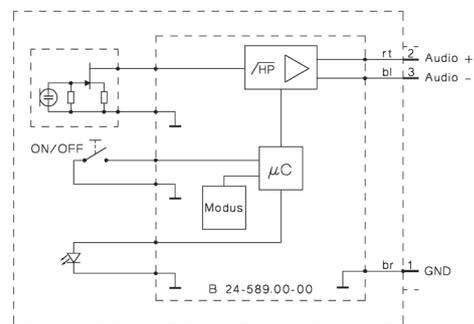
## FREQUENCY RESPONSE & POLAR PATTERN

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

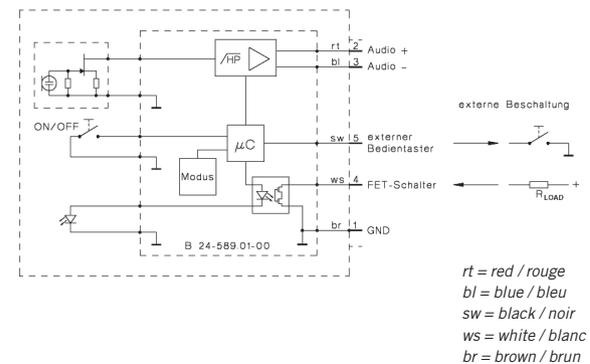


## WIRING DIAGRAMS

### Classis BM 52



### Classis BM 52 RC



# Classis BM 52

## ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

### Classis BM 52

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 45 Hz to 20,000 Hz and an omnidirectional polar pattern. It shall have a built-in phantom power module and shall operate from an external 12V to 52V DC phantom power source (P12, P24, P48). A red LED shall show the status of the microphone. The microphone features a touch-sensitive user switch. A switch shall set microphone button between toggle ON/OFF (with audio muted at power up), push to talk and push to mute mode. A switch shall set a low cut filter between linear, 80 Hz and 180 Hz.

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 105 x 76 x 25 mm (4.13" x 2.99" x 0.98"). Weight without cable shall be 147 grams (5.19 oz). The microphone shall provide an unobtrusive full metal housing for discreet positioning. The steel mesh grille shall be covered by a 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 3 metre cable, with 3-pin male XLR connector.

beyerdynamic type Classis BM 52 is specified.

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The microphone shall be able to be controlled remotely by an external button. The built-in membrane key shall be able to turn off. The remote control of an external device (e.g. video camera) shall be possible with a MOSFET output.

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