

M 294 M 295

Condenser studio microphones with cardioid polar pattern

The microphones M 294 and M 295 extend the studio microphone System SMS 2000. The proved microphone capsules M 70 and M 94 form a unit with the modified microphone amplifier MV 200.

These microphones are designed for a universal application in professional recording and sound reinforcement and meet the requirements of modern technics.

The newly developed, transformerless circuit design substitutes the previous transformer by a symmetrical output stage. The low intrinsic noise and a remarkably output capability emphasize the advantages of the microphone capsules M 94 and M 70. Microphone capsules with an extremely thin metal diaphragm are very impressive because of its brilliant sound transmission.

The direction of maximum sensitivity is axial. The studio microphones are equipped with a comprehensive range of accessories for widely varying methods of microphone mounting.

It is possible to switch on a 10 dB-preattenuation for the handling of very high sound pressure levels. A reduction of the sensitivity factor for low frequencies can be utilized to suppress the proximity effect. The two switches are sunk placed in the middle of the amplifier.

At the lower end of the amplifier a 3-pin XLR connector is placed for the C 70 microphone cable. The power supply is provided by 48 V phantom powering, which is internationally standardized as P 48 in DIN 45596 and IEC 268-15.

The studio microphones are available with the finish matt black and satin nickel.

Both condenser microphone capsules operate as pressure gradient transducer. The converter elements contain nickel diaphragma with a thickness of less than 1 μm . The teflon-coated back electrodes serve to increase performance reliability.

M 294 The desired treble boost rising of nearly 5 dB at about 8 kHz gives this microphone its special clarity.

M 295 The frequency response in the upper range is virtually linear, while in the lower frequency band it features a slight roll-off to counteract the bass lift of close speech (proximity effect). The microphone is thus ideally suitable for recordings in close proximity to the sound source.

It is recommendable at close-talking to use a close-speech screen and to switch on the bass roll-off on the amplifier. In order to get a life-like recording on location a wind screen should be utilized.



Delivery

Microphone M 294 in wooden case	L x B x H 210 x 68 x 50 mm	
satin nickel		Order-No. 211112
black matt		Order-No. 211113

Microphone M 295 in wooden case	L x B x H 210 x 68 x 50 mm	
satin nickel		Order-No. 211114
black matt		Order-No. 211115

Accessories, optional

Windscreen, anthrazit	W 71	Order-No. 202405
Popscreen, black	PO 70	Order-No. 600018
Microphone holder, Ø 21 mm, satin nickel	MH 64	Order-No. 202302
Microphone holder, Ø 21 mm, black matt	MH 64	Order-No. 202305
Elastic suspension, satin nickel	EA 20	Order-No. 202308
Elastic suspension, black matt	EA 20	Order-No. 202311
Elastic suspension, satin nickel	EH 93	Order-No. 202327
Elastic suspension, dark bronze	EH 93	Order-No. 202328
Table stand, satin nickel	TS 64	Order-No. 212303
Table stand, black matt	TS 64	Order-No. 212308
Double mount, satin nickel	TD 93	Order-No. 202331
Double mount, dark bronze	TD 93	Order-No. 202332
Gooseneck, black	ME 90	Order-No. 202324
Power supply	N 200	Order-No. 202101
Connection cable	C 70	Order-No. 202212

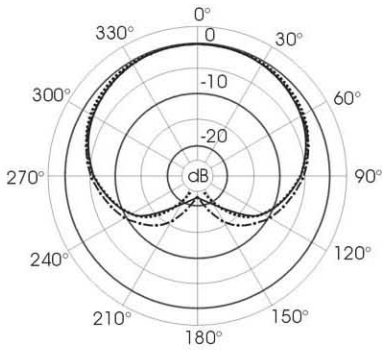
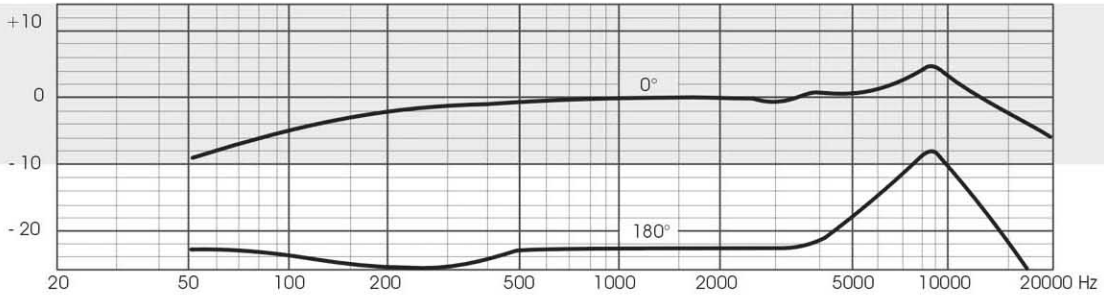
Specifications M 294, M 295

CE Zertifikat

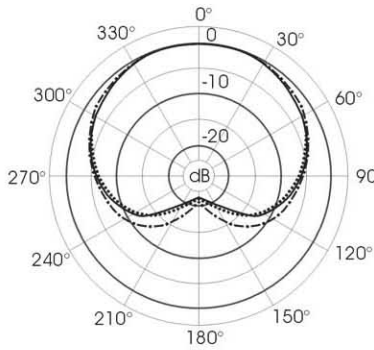
Condenser studio microphone with cardioid polar pattern

Type	M 294	M 295
Polar patterns	cardioid	cardioid
Frequency range	40 ... 18000 Hz	40 ... 18000 Hz
Sensitivity at 1 kHz	17 mV/Pa	17 mV/Pa
Switch position "reduced bass roll-off" at 60 Hz	-15 dB	-15 dB
Rated impedance	150 Ω	150 Ω
Equivalent loudness level	CCIR 468-4	22 dB
due to inherent noise	DIN EN 60 651	13 dB - A
Signal-to-noise-ratio	CCIR-weighted	72 dB
(re. 1 Pa at 1 kHz)	A-weighted	81 dB
Max. SPL for THD ≤ 0,5 %	133 dB	133 dB
with 10 dB preattenuation	143 dB	143 dB
Total dynamic range of the microphones amplifier	120 dB	120 dB
Current consumption (P 48, DIN 45596, IEC 268-15)	3 mA	3 mA
Output connector		3-pin XLR connector goldplated contacts
Weight	160 g	160 g
Dimensions (L x Ø)	166 x 21/25 mm	166 x 21/25 mm

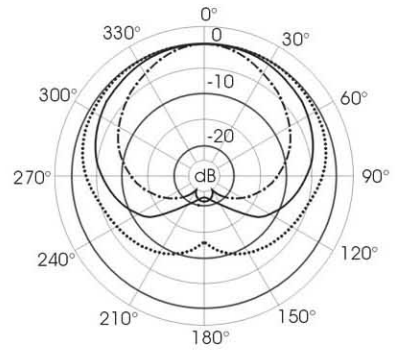
dB Frequency responses M 294



— 1 kHz
 250 Hz
 - - - 500 Hz

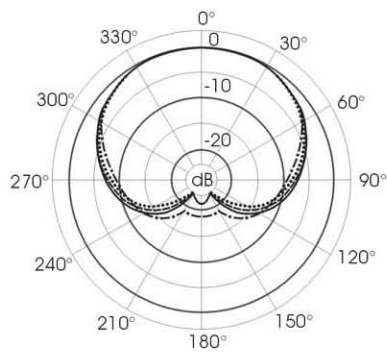
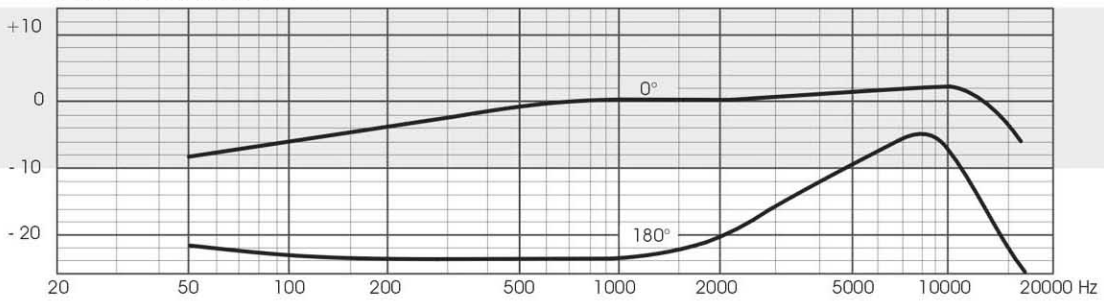


— 1 kHz
 2 kHz
 - - - 4 kHz

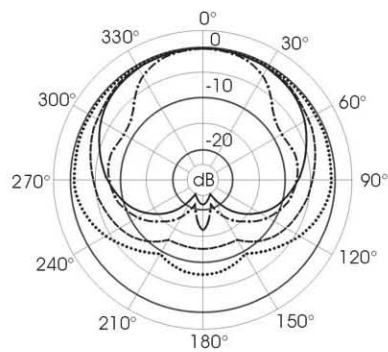


— 1 kHz
 8 kHz
 - - - 16 kHz

dB Frequency responses M 295



- - - 125/250 Hz
 500 Hz
 — 1 Hz
 - - - 2 Hz



— 1 Hz
 4 Hz
 — 8 Hz
 - - - 16 Hz

SEIT 1928

KONDENSATORMIKROFONE
FÜR STUDIO - UND MESSTECHNIK**MICROTECH GEFELL**

M 296

Condenser studio microphone with omnidirectional polar pattern

The family of metal membrane microphone M 294 / M 295 is added by the condenser microphone M 296. Based on the practically linear frequency response of the transmission factor up to 20 kHz it guarantees orthophonic recordings in the short-range and far field as well as sound events with high levels.

It is designed for professional applications in radio and television broadcasting, tone studios, concert haus, theatres and for high quality recordings of all genres.

The direction of maximum sensitivity is axial, i.e. endwise to the microphone. The stable capsule contains a large diameter metal membrane and is similar to our proven measuring microphone cartridges regarding its construction as a pressure transducer. Capsule and impedance transformer are a unit.

The transformerless microphone preamplifier shows a high output capability and has a symmetrical output stage. A 10 dB preattenuation and the bass roll-off extend the application range. The two switches are sunk placed in the middle of the microphone.

The microphone is powered by a 3-pin XLR connector. The power supply is provided by P 48 volt phantom powering according to DIN 45596 and IEC 268-15.

To solve tasks in the field of measurements the microphone is offered as version M 296 S with a frequency response of the transmission factor corresponding to class 2 for sound level meters according to DIN IEC 651.

The microphone is available in black matte and bright nickel finish.



Delivery

Microphone M 296 in wooden case L x B x H 210 x 68 x 50 mm

satin nickel

Order-No. 211134

black matt

Order-No. 211135

Accessories, optional

Windscreen, anthrazit	W 71	Order-No. 202405
Popscreen, black	PO 70	Order-No. 600018
Microphone holder, Ø 21 mm, satin nickel	MH 64	Order-No. 202302
Microphone holder, Ø 21 mm, black matt	MH 64	Order-No. 202305
Elastic suspension, satin nickel	EA 20	Order-No. 202308
Elastic suspension, black matt	EA 20	Order-No. 202311
Elastic suspension, satin nickel	EH 93	Order-No. 202327
Elastic suspension, dark bronze	EH 93	Order-No. 202328
Table stand, satin nickel	TS 64	Order-No. 212303
Table stand, black matt	TS 64	Order-No. 212308
Gooseneck, black	ME 90	Order-No. 202324
Power supply	N 200	Order-No. 202101
Connection cable	C 70	Order-No. 202212

Specifications M 296

CE Certificate

Condenser studio microphone with omnidirectional polar pattern

Polar pattern		omni
Acoustical operating principle		Pressure transducer
Frequency range		20 ... 20000 Hz \pm 2,5 dB
Sensitivity at 1 kHz		15 mV/Pa
Switch position "reduced bass roll-off" at 90 Hz		-10 dB
Rated impedance		150 Ω
Equivalent loudness level due to inherent noise	CCIR 468-4	22 dB
	DIN EN 60 651	14 dB - A
Signal-to-noise-ratio (re. 1 Pa at 1 kHz)	CCIR-weighted	72 dB
	A-weighted	80 dB
Max. SPL for THD \leq 0,5 %		134 dB
with preattenuation		144 dB
Total dynamic range		120 dB
Current consumption (P 48, DIN 45596, IEC 268-15)		3 mA
Output connector		3-pin XLR connector goldplated contacts
Weight		157 g
Dimensions (L x \varnothing)		256 mm x 21/24 mm

dB Frequency response M 296

