

SEIT 1928

KONDENSATORMIKROFONE
FÜR STUDIO - UND MESSTECHNIK

MICROTECH GEFELL



UMT 70 S

Transformerless Condenser Microphone with switchable polar pattern

The UMT 70 S condenser microphone, equipped with our reliable large diaphragm capsule, features outstanding performance, high sensitivity, and improved signal-to-noise ratio.

The UMT 70 S guarantees particularly clean and colourless sound reproduction. It is well suited for instrumental and vocal soloists in radio and television broadcasting and any other kind of accurate production.

The pressure gradient transducer is a dual capacitor design that uses a single brass back plate and two large-diameter gold-plated plastic diaphragms. Varying the polarization voltage applied to the diaphragms results in three directional characteristics: omni, cardioid and figure 8. A ring at the bottom of the microphone's head grille is used to select the pattern.

The omni-directional pattern shows a slight 2 dB rise in the vicinity of 10,5 kHz while the bass response is perfectly flat. The cardioid and figure 8 patterns exhibit a smooth presence boost rising to about 4 dB in the 7 kHz range. This response, coupled with a slight roll-off at low frequencies, is responsible for the legendary 'presence' of this microphone.

The direction of maximum sensitivity is perpendicular to the microphone's axis (side addressed).

The newly developed transformerless circuit design substitutes the previous transformer for a symmetrical output stage yielding a superb transient response combined with a high RFI rejection. The circuit technology also achieves a wider dynamic range by lowering the self-noise floor and increasing the headroom for loud signals.

A 10 dB attenuator has been installed to reduce the sensitivity of the microphone when placed near very loud sound sources. A sensitivity reduction for low frequencies can be utilized to suppress the proximity effect when close-miking with the cardioid or figure 8 patterns.

The microphone is equipped with a standard 3-pin XLR connector fitting to a microphone cable, e.g. C 70.

The operation voltage for the UMT 70 S is provided by 48 V phantom powering according to the international standards DIN 45596 and IEC 268-15.

The microphone is available in a satin nickel or a black matt finish.



Delivery

Microphone UMT 70 S in wooden case L x B x H 275 x 90 x 70 mm

satin nickel

Order-No. 211130

black matt

Order-No. 211131

Accessories, optional

Windscreen, anthracite	W 76	Order-No. 202407
Popscreen, black	PO 70	Order-No. 600018
Microphone holder, black	MH 75	Order-No. 202306
Clamp, black	MKV 9	Order-No. 600001
Elastic suspension, satin nickel	EA 21	Order-No. 202318
Elastic suspension, black matt	EA 21	Order-No. 202319
Elastic suspension, modified, anthracite	AT 8410 a	Order-No. 600004
Power supply	N 200	Order-No. 202101
Connection cable	C 70	Order-No. 202212

Specifications UMT 70 S

CE Certificate

Transformerless condenser microphone with switchable polar pattern

Polar patterns	omni, cardioid, figure 8	
Acoustical operating principle	Pressure gradient transducer	
Frequency range	40 ... 18000 Hz	
Switch position "reduced bass roll-off" at 90 Hz	-10 dB ± 1 dB	
Sensitivity	7/13/8 mV/Pa ± 3 dB	
Rated impedance	150 Ω	
Equivalent loudness level due to inherent noise	CCIR 468-4	22 dB
	DIN EN 60 651	14 dB - A
Equivalent loudness level due to inherent noise	CCIR-weighted	72 dB
	A-weighted	80 dB
Max. SPL for THD ≤ 0,5 %	139/134/139 dB	
with 10 dB preattenuation	149/144/149 dB	
Total dynamic range of the microphone preamplifier	120 dB	
Current consumption (P 48, DIN 45596, IEC 268-15)	3 mA	
Output connector	3-pin XLR connector goldplated contacts	
Weight	290 g	
Dimensions (L x Ø)	217 mm x 42/21 mm	
Finish	satin nickel, black matt	

dB Frequency responses UMT 70 S

