## The Microtech Gefell M 990

## A modern large-diaphragm condenser microphone in tube technology



Committed to the Georg Neumann heritage, Microtech Gefell/MTG stands for tradition and innovation since 1928. This is evidenced by the M7 PVC capsule, which has been handmade for more than 80 years. The renowned M7 capsule, which was created by Georg Neumann in 1932 and used in the original U47 and M49 microphones, is, e.g., still found today in Microtech Gefell's legendary UM 900 and

several other models.

In addition to the production of the classic M 7 capsule, MTG faced new challenges with the development of a completely new capsule generation. Following the principle of tradition and innovation, a completely new development was created - the M 930 capsule, which is used in the M 990.

The introduction of the M 990 with this newly designed capsule marks a radical departure for the company. The M 930 is a modern tuned large-diaphragm capsule with goldplated PE 6-micron Mylar diaphragm, mounted on a triangular pedestal designed to reduce standing-wave coloration within the headbasket.

What particularly distinguishes the M 930 – capsule, as in the M 990, apart from its faithful reproduction, is that it maintains the cardioid characteristic particularly faithfully over the entire frequency range. This makes it suitable for project studios that do not have the best acoustic conditions.

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The stylish, slim and lightweight microphone combines modern capsule technology with the warm, full sound with silky highs typical of tube mics, which is particularly preferred by singers and instrumental soloists. The mic records very finely and reveals even the smallest details. The instruments and voices are modelled in detail. This is an advantage especially for instrumentalists who work with different timbres when playing. Since its launch, it has been highly appreciated by a variety of renowned studios and musicians in East and West, e.g. some time ago for vocal

recordings for the Scorpians album " Sting In The Tail".

An internationally operating recording studio specialising in professional speakers and podcasters calls the Microtech Gefell M 990 a "heartbreaker". The customer praises a wonderful warm and at the same time very transparent tube sound as well as noble highs and pleasant basses. The customer's conclusion - the traditional manufacturer from East Germany hardly does any marketing but makes microphones to fall in love with.



The M 990 is a true, hand crafted microphone that follows Gefell's unique 90-year tradition. This means that everything from hand drilling the back plate, to hand stretching the diaphragm, and individually selecting the capsules and components, to the final assembly and testing is done meticulously, one at a time in both an anechoic chamber and then a live listening test.

The heart is the new developed large diaphragm capsule with its handmade, goldplated PVC membrane. The M 990 is renowned for its high sensitivity and excellentsignal-to-noise ratio for tube microphones.

The excellent signal-to-noise ratio is complemented by the microphone's comparatively high input sensitivity, so that even microphone preamplifiers with less headroom can be combined with the M 990. The tube preamplifier is equipped with an extremely carefully selected EF 86 pentode, which is generally characterised by a high degree of noise reduction.

The EF 86 works in a triode circuit and must be particularly low-noise as well as sound-proof (noise-free). However, the triode circuit of the M 990 favours harmonics with an even index, the popular K2 harmonics, which are pleasant to the ear and are to a small extent responsible for the legendary tube sound.

The N 920.1 power supply provides the operating voltage forthe vacuum tube condenser microphone. It can be poweredfrom AC mains with a primary voltage of 115 or 230 volts / 50 or 60 Hz. The N 920.1 is equipped with an on/off-switch, a 7-pin Tuchelconnector that powers the microphone and a 3-pin XLRconnector with integrated line voltage selecto

The M990 at a glance:

- Cardioid characteristic
- M 930 -large diaphragm capsule
- Sensitivity 28 mV/ Pa

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