



M 150 Tube Microphone

Preliminary Specifications

- Unparalleled transient accuracy
- Pressure omni capsule for extended low frequency response
- Modern version of the world-famous M 50
- Transformerless tube amplifier based on the award-winning M 149 Tube microphone
- Ideal for DECCA tree recording and surround miking techniques
- Very low self noise of 15 dB-A
- All Titanium capsule



Description

Since the 1950s, the Neumann M 50 has been heralded as the ideal microphone for orchestral recording and string scoring. With its phenomenal transient response and unique directional characteristic, this classic mic has endeared many fans, both in the control room and on the soundstage.

The new M 150 Tube takes many of the features from the original M 50 and incorporates them in a very modern microphone. With low self noise, a Titanium membrane and capsule, transformerless tube amplifier and sophisticated power supply, the M 150 Tube is not a reissue but an entirely new microphone in its own right.

Acoustical features

The Titanium diaphragm of the pressure capsule is 12 mm in diameter and is exceedingly thin. Although Titanium has been known to have unique and desirable characteristics for some time, it has, until very recently, been very difficult to procure in the quantity and quality necessary for use in a microphone of this type.

Neumann M 150 Tube Microphone

Acoustical features, continued.

The headgrille is shaped just like that on the original M 50, as requested by various top engineers in the recording industry. Due to mounting the pressure capsule with the diaphragm flush to the surface of a small (40 mm) sphere, the directional characteristic of the M 150 Tube is entirely unique. At the lowest frequencies, this system is a pure omni pressure transducer with a perfectly circular polar pattern. However, in the mid- and upper frequencies, the pickup pattern becomes more narrow.

The M 150 Tube is an ideal microphone for any stereo, 5.1 or 7.1 surround recording, particularly DECCA Tree technique.

Electrical features

The dynamic range of the M 150 Tube is 119 dB, allowing reproduction of the full musical expression, without restraint. With a low self noise of 15 dB-A, more gain can be used without risk of adding noise to the final product. The transformerless output circuit of this microphone allows for extremely fine reproduction of small signals and low frequency information. Also, long cable runs can be used with no loss of signal quality.

Technical Specifications (preliminary)

Type	DC-polarized condenser
Directional pattern	Modified omni
Acoustic operating principal	Pressure
Frequency range	20 - 20,000 Hz
Sensitivity	20 mV/Pa
Rated impedance	50 ohms
Self Noise	15 dB-A (DIN/IEC 651)
S/N ratio re. 1 Pa @ 1kHz	79 dB (A weighted)
Max SPL for 0.5% THD	114 dB SPL
Max SPL for 5% THD	134 dB SPL
Total dynamic range of amplifier	119 dB (for 5% THD)
Power supply	N 149 Vintage
Dimensions	Diameter - 78 mm (3-1/8") Length - 165 mm (6-1/2") Weight - 800 g (28.3oz)