The U 77 and U 87 condenser microphones are multipurpose studio microphones which fulfill all requirements which have been posed by the modern recording technique. By means of a switch at the microphone the directional characteristics omni-directional, cardioid and figure-of-eight can be set. For close talking in cardioid characteristic the resulting rise at the low frequency end can be switched to "linear". Extremely high sound pressures can be prevented from overloading the amplifier stage by reducing the capsule’s sensitivity before the amplifier section. These possibilities permit completely natural and undistorted sound reproduction even when the microphone is placed in close proximity to the sound source. The physical size of the microphones makes it possible to insert batteries if necessary.

In that case the microphones can be operated completely independent from external feeding. The microphone U 77 is provided for modulation-lead powering, the microphone U 87 for phantom powering.

The microphones KM 73, KM 74, KM 76 and KM 83, KM 84 and KM 86 are also available with Cannon connectors. They can same as microphones U 77 and U 87 be matched with amplifiers provided for a nominal output impedance of 150/250 Ω by means of a pad.

The microphone amplifiers of the NEUMANN transistor condenser microphones are using audio frequency circuitry and are equipped in the input with a field effect transistor. All microphones of the 70- and 80-series are acoustically identical, they differ, however, with respect to the powering systems. The microphones of the 70-series are provided for modulation-lead powering with 7.5 ... 13 VDC, the microphones of the 80-series are provided for phantom powering with 48 VDC through the electrical center of the modulation pair and a third lead or the cable shield. The characteristic features of these powering systems are illustrated in the table next page.