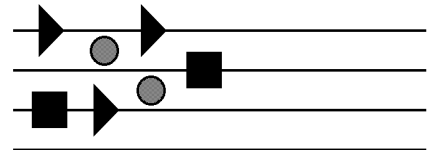


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## AC701-FD

### Replacement Circuit for Telefunken AC701/AC701k Microphone Tube

#### General Information

The most renowned 1950s to '60s microphones are based on the Telefunken AC701k tube, custom-developed for this application and still regarded as a summit in vacuum tube technology. The wide range of microphones comprises the Neumann **KM53, KM54, KM56, KM64**, the **M49 / M50**, as well as their RF-shielded versions with the "2" prefix. Also several AKG models were fitted with the AC701, including the priceless Telefunken **Ela M250 / M251**. A special version for Schoeps M221 microphones is under development.

As an inescapable matter of physics, also the last AC701 tubes in service are bound to suffer from wear and elevated noise one day, rendering even the most valuable microphone useless. Stocks of AC701 aren't left, so this is where the AC701-FD takes over:

Drefahaudio's newly developed substitute allows unrestricted further use of the microphone at excellent specs, lowest noise and an expectable lifespan of several 10.000 operation hours.

#### Installation

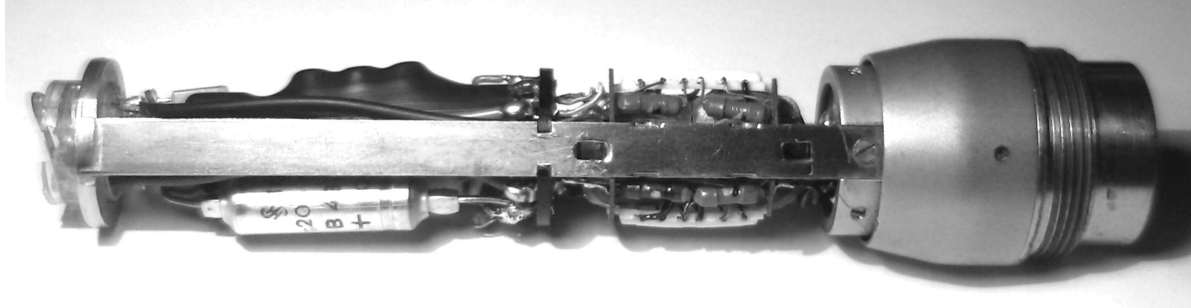
The AC701-FD is designed to fit into the original tube slot, with minimum modification needed. All original parts remain in the signal path, from capsule through Cs and Rs down to the output transformer. Since the signal takes exactly the same way as before, original performance of the microphone is preserved to the best possible extent.

Should a good AC701 spare come available later, the AC701-FD can be swapped out again with minimum effort.

**NOTE: Installation can be performed by drefahaudio only. Faulty small parts found at the same time will be swapped out to ensure trouble-free operation.**

## Powering

The AC701-FD requires no alterations to the original power supply nor cabling at all. Current consumption equals the original tube, and alignments can remain exactly the same (unless out of range).



Picture: Neumann KM254 with AC701-FD installed

## Technical Data

Operating voltage	120V DC +/-10%
Current consumption	0.6...1.2mA
Operating conditions	0...50°C
Residual Noise	-104 dBu (measured in KM254)
Dimensions	10 x 10 x 40mm approx. (wires excluded)
CE Conformity	EG-Niederspannungsrichtlinie 73/23/EWG, Anhang I DIN EN 50081-1:1992
RoHS/WEEE Conformity	All materials and processes are RoHS compliant