AC701 substitute

Author: Posted by Kevin Ink

Date: 07/04/2001

Is anyone familair with the tube used in the old Lomo mics? I was told it can used as a replacement in Neumanns for the AC701. Does anyone have a data sheet for the AC701? Thanks, Kevin

Re: AC701 substitute

Author: Posted by Oliver

Date: 07/04/2001

Hello Kevin,
I don't know anything about the old Lomo mics, but there are three tubes that are identical in sound and electric values. The AC701 was only made by Telefunken in Ulm Germany, the last scheduled production run around 1979 was canceled because Western Germany boycotted the Olympic games in Moscow and because of that Neumann lost the deal supplying the microphones for the games. Today there are some 701 on the market but they climbing in price. As an alternative there are three different tubes that work and sound the same. RFT Funkwerk Erfurt in east Germany made the AC761, identical system but grid and plate are reversed, heater voltage is the same, but there are same as rare than the Ac701. Than there are the EC70/71 two UHF sub miniature triodes that were made by Telefunken and other western companies as well EC70/6778 and EC71/5718. Those tubes are very similar to the AC701, u=20/27 Ri=3.65/4.65 with better interelectrode capacitance than the AC701. They fit without a problem in any Mic that asks for an AC701, with minor modification in the cathode set up, the 6.3V filament is no problem at all. Most Neumann power sup. have a potentiometer to adjust the filament from 10 to 3V. Aside the different heater and pin layout the nice price of about $5.00 is way better than the $100 that the AC701 goes for these days. Here is the AC701 data: Bp= 80V Ug= -1.5V Ip = 2.1mA S = 2.8mA/V u = 22 Ri= 8.5 k Ohm Max. Values Bpc = 250V Bp = 120V Pmax = 0.8W I max = 5mA
If you read german I can send you the Telefunken Data sheet and application information....
Best regards,
Oliver

Re: AC701 substitute

Author: Posted by Ulrich Thielemann

Date: 07/19/2001

Wow! Thanks again very much for your expert information. I will go and look for these tubes which I need for my KM56 and KM54 microfones. Ulrich