

Re: May 1971 "Transistorized LM Freq Meter" 73 Magazine, page 60

I have answered sufficient questions about the conversion to warrant a note in 73 Magazine.

TRANSISTOR SUBSTITUTES — Thanks to Bob Bloom W6YUY, the following can be made: MPF - 3004 VFO. MFE - 2095 MIXER. MPF - 107 (2N5486) or 2N4416 XTAL OSC. MFE - 1095 AUDIO. They are made by Motorola.

SCHEMATIC HAS TWO R-106's — My error. The cathode resistor in VFO is R-105. Text did not say shunt R-106 with a 6K resistor. Schematic does show it.

Some FETS IN XTAL OSC. circuit draw more current from battery than the MPF-107. This added drain from the battery can produce small frequency shift in VFO when Xtal is turned off—on. I recommend separate 9 volt battery for the VFO. This can connect to power socket pin 16 provided the filament pins of the 6A7 socket are jumpered 1 to 7. Then 9 volts will appear on pin 6 of the VFO tube socket. The bottom of R-104 can be disconnected and shifted over to his new source of isolated voltage.

LM ACCURACY — doesn't improve with the conversion. It is still the original 0.02% as specified in the manual. The drift, resetability and stability is at least as good as the tube version.

BC-221 — I have not converted a BC-221 mainly because I don't own one.

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