

LM380N TDA2003 IC Audio Amps

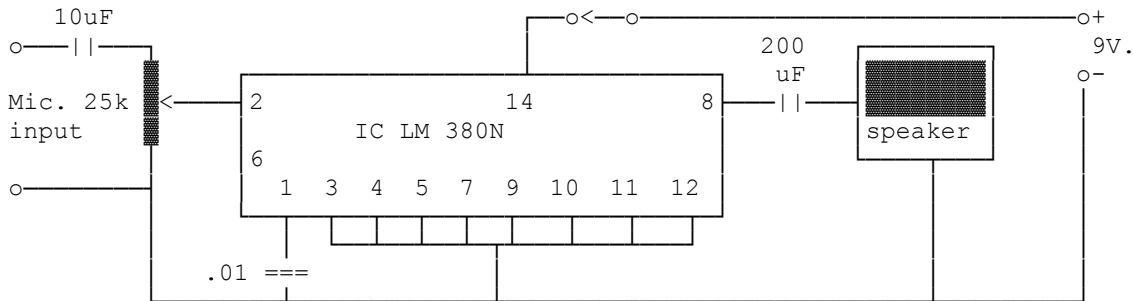
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(Updated Mar 06)

(8 Bit Graphics use code page 437 or 850)

AUDIO PREAMP. avec IC LM 380N



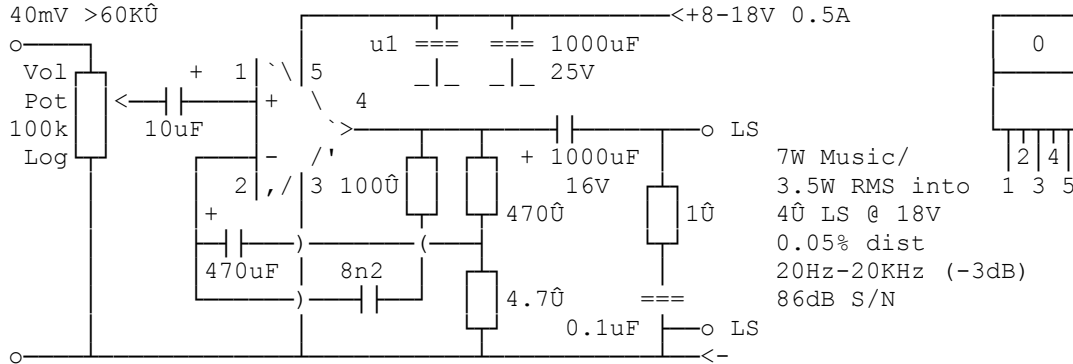
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de VE2ACT.....MONTREAL en packet.....janv04..(D55 audioamp.asc)

G8MNY Comments: Ideally a large C across the supply to help stability & reduce battery supply dips on peak 1/2 cycles. For hifi use the 200uF LS C should be 1000uF if 4 or 8Ω loudspeaker used.

Here is one using a TDA2003
By G8MNY

Sensitivity
40mV >60KΩ



HOW IT WORKS

The input Z of the IC is 150k so with the 100k pot this is approx 60k depending on the slider position. The IC power rail is well decoupled at LF with the 1000uF & @ HF with the u1 cap.

The gain setting NFB is in 2 parts, the basic gain of 100x by the 470Ω/4.7Ω, & the HF cut to 20x by 100Ω/4.7Ω & 8n2 for stability. Also for stability is the "Zobel network" of a 1Ω in series with u1 across the LS, this keeps the O/P stage terminated at HF.

This design with its high IC open loop gain with loads of NFB gives very low distortion, but poor HF stability & possibly poor transient intermod distortion (TIMD)!

Why Don't U send an interesting bul?
73 de John G8MNY @ GB7CIP