

55 Squelched Microphone

□ Here is a way to eliminate unwanted background noise and conversation when using a microphone for communications or recording purposes. IC1, an LM370, is a preamplifier with squelch capability. This means that amplification does not begin until the input signal exceeds a

preset threshold level. Since background noise is, in most instances, not as loud as the voice of the person speaking into the microphone, all output is squelched whenever speech stops. So, instead of noise, you get silence. The squelch threshold can be set by adjustment of R3.

PARTS LIST FOR SQUELCHED MICROPHONE

C1—47- μ F, 25-VDC electrolytic capacitor

IC1—LM370 AGC amplifier integrated circuit

M1—dynamic microphone cartridge

R1—120,000-ohm, $\frac{1}{2}$ -watt resistor (all resistors 10%)

R2—39,000-ohm, $\frac{1}{2}$ -watt resistor

R3—10,000-ohm, trim-potentiometer

R4—220-ohm, $\frac{1}{2}$ -watt resistor

