Eagle DB120 Sound Meter

By G8MNY

(8 Bit ASCII Graphics use code page 473 or 850)
The is a simple cheap sound meter.

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CIRCUIT

56k / + Mic 4u7 56k / + Q3 33u

56k + VR3 14k4 Low

VR3<br>56k 150k

220k High 33k<br>VR1 200

OPAMP The TD7120 provides fixed stable gain to drive the non linear metering stage.

PREAMPS
The 3 wire electret mic & preamp Q3 is powered from a decoupled rail.

VR2 calibrates the mic capsule & VR1 calibrates the astable calibrate oscillator Q1&2.
To get a usable 40dB scale on a meter quite a lot of compression is needed. This circuit uses an AGC approach. Transistors Q4, 5 & 6 from a power amp to drive the double voltage doubler bridge D6-10 rectified load of the meter & also provide AGC with D3 & D4 making an variable input attenuator.

VR5 set the AGC log action & diodes D1 & D2 correct for over compression to get the very linear 40dB scale. VR4 is the main calibrate & VR3 is the battery cal.

See my bul on "Sound Levels dBA dBB dBC".

Why don't U send an interesting bul?

73 de John G8MNY @ GB7CIP