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DUAL LOW NOISE VCA

Preliminary, January 1987

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### Description

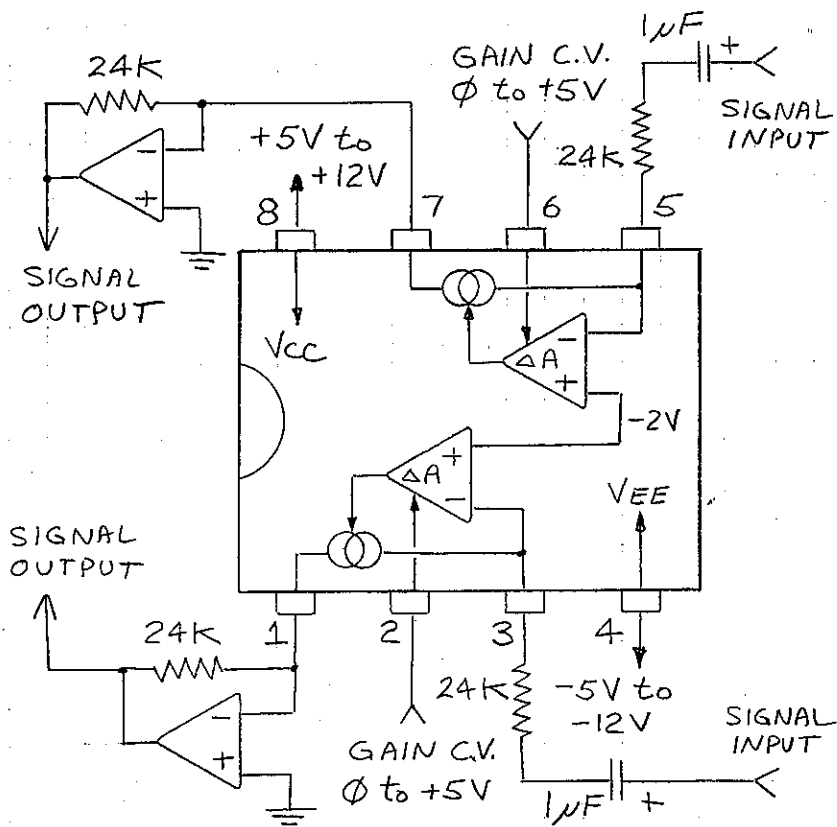
The CEM 3381 and CEM 3382 are low cost dual voltage controlled amplifiers intended for applications requiring high audio performance in a small space. Both independently contained in a standard 8 pin minidip, the two gain cells feature extremely low noise for signal-to-noise ratios better than 100dB, low distortion with less than 0.1% THD, and low control feedthrough for "pop" free performance with gain modulation.

The 3381 and 3382 are also extremely easy to use, requiring few external components and no external trimming to meet their excellent performance. The signal inputs are summing node inputs for convenient signal mixing, and the control voltage inputs, with a 5 volt nominal range, are referenced to ground when the outputs feed virtual ground summing nodes. Choice of control scales is also possible: with over 100dB of control range, the CEM 3381 provides a linear scale while the 3382 offers exponential, or dB/volts, scaling. Finally, the current mode outputs offer additional flexibility, allowing these devices to be used in high performance V.C. filters and waveform generators as well as amplifiers.

Able to operate over a wide dynamic range, the CEM 3381 and CEM 3382 offer CD performance in little board area and at low cost.

### Features

- o Two High Performance VCAs in a Minidip
- o Low Cost
- o Extremely Low Noise: >100dB S/N Ratio
- o Low Distortion: <0.1% THD
- o Low Feedthrough: <0.3% of Full Scale Output
- o Easy to Use



CEM3381 / CEM3382 DUAL LOW NOISE  
VCA