NLC OTA VCO simple LM13700 based VCO

https://www.nonlinearcircuits.com/modules/p/dual-ota-vco

A tri-core VCO. Quite simple design, not great tracking or stability but decent enough and very usable.

NLC packed two of these on one board to make full use of the LM13700, which the circuit only uses half of. I rather waste half the chip for simplicitys sake and just build another identical one. In the NLC dual version one VCO misses the FM input, the other the Sync input (to limit panel size, probably).

The VCOs range from approx. 19Hz up to 9500Hz, they are quite simple designs with reasonably low drift and can be tuned to 1V/oct, but they are not exactly rock steady either. There is a trade-off between component quality and design complexity versus drift and accuracy. Anyhoo, the VCOs output triangle, square and pulse waveforms. The pulse width can be set with a pot or controlled by a CV (control voltage). Both VCOs have CV inputs to control pitch, one has a soft sync input, the other has an FM input. Try injecting all kinds of CVs and audio rate signals into these to see what effects you can get.

A simplified version of this circuit was also used in the Null-A2. There it ommited the FM and Sync input, as well as the Square output.





