

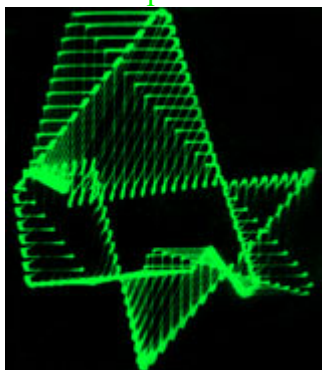
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The Oscilloscope Artist originally appeared in the November, 1975 issue of *Popular Electronics*.

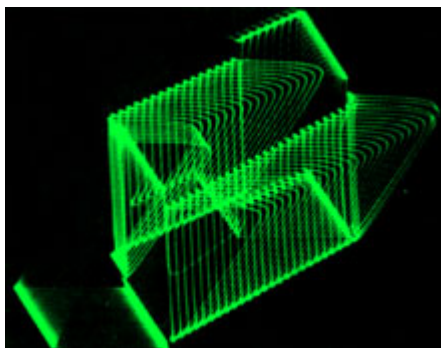
It creates all sorts of fascinating moving geometric patterns on an oscilloscope screen.

It took me 24 years to build one.

All you need is a low bandwidth 'scope with horizontal and vertical inputs.

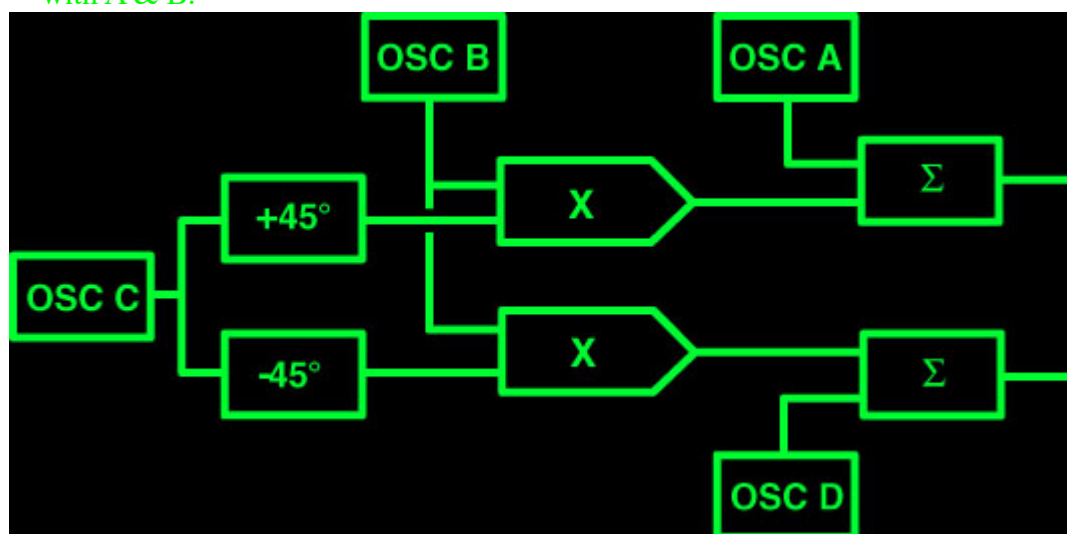


A reconstruction of the complete article is in a pdf file. All the original parts are still available!



The original block diagram is a bit confusing so I redrew it. Oscillators A & D create a Lissajous figure baseline from triangle/square waves. Oscillators B & C are multiplied and summed with A & B.

To make things interesting, C is 90 degrees out of phase between the multipliers. All the oscillators are sync'd to A, which is ~60Hz. All this produces complex patterns which move and shift.



This simple circuit has a lot of potential. The individual sections could be brought out to normalized jacks, making the whole thing patchable. One obvious mod would be to add sine shapers to A & B, producing the more familiar ellipsoidal baseline. A staircase generator would be interesting to see as well. And you can always replace C with an external signal (and add a sync output).

If you have a modular synth you may be able to patch this up right now (got two ring modulators?). The only thing you might have to add are the phase shift networks.

[Download](#) the pdf (~3.8 MB)

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