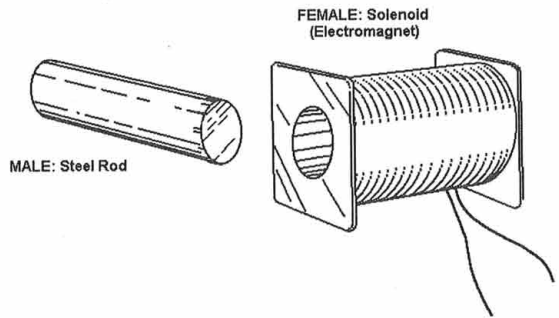


NORM WHITE

**T.F.R. -- Givens**



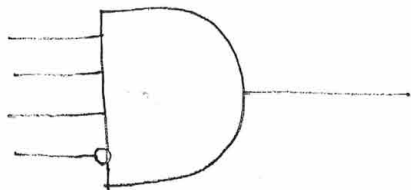
"Them Fuckin' Robots" -- a collaborative work I did with Laura Kikauka, with Laura building the female robot, and I, the male. These were built apart and in secrecy, with only the sex organs and the position (female on top) agreed on in advance. They performed first in 1988 at 44 Dovercourt, Toronto.

NORM WHITE

10/14/79

Ladies and Gentlemen:

THE BUT GATE!

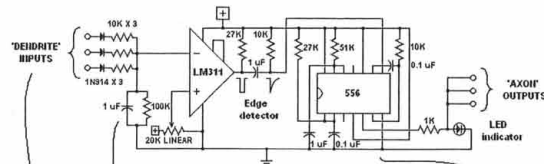


A visual joke for electronic geeks.

NORM WHITE

Norm's Neuromime

July, 2009



the capacitor accumulates charge received by the 'dendrite' inputs, while the resistor bleeds off that charge. The capacitor can reach a critical charge either by stimuli occurring more or less simultaneously at several inputs (Spatial Summation) or by successive stimuli happening within a short time frame at a single input (Temporal Summation).

These are the excitation inputs, which come from other neuromimes or, if at the start of the chain, from sensors. They don't all have to be of the same value... smaller values will cause a corresponding stimulus to be more likely to influence the neuromime to fire.

The upper half of the 555 determines the Latency Period (the time it takes for the impulse to travel along the axon to the output terminals) while the lower half determines the width of the output pulse

The following properties have yet to be implemented:  
 \* Refractory Period - this could be achieved by adding a third edge detector and timer (555), feeding back to the non-inverting input of the LM311 comparator.  
 \* Inhibition inputs - similar to the excitation input complex, except also connected to the non-inverting input of the LM311 comparator.

I first read about scientists designing neuromimes back in the 70's, but it wasn't until Daniel Jolliffe's "Open Source Hardware" conference at Banff in 2006, that I actually tried designing and building one. The idea is simple: to construct an electronic circuit that has the properties of a biologic nerve cell, so that chains and matrices can be assembled to mimic simple neurological function.

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