Macumbista Belgian Tripel Workshop Synth

BT-2 : NONLINEAR SEQUENCER w/ STEPPED + XOR + NOISE OUTPUTS

DATA IN

XOR OUT

NOISE OUT

CLK IN

STEP OUT
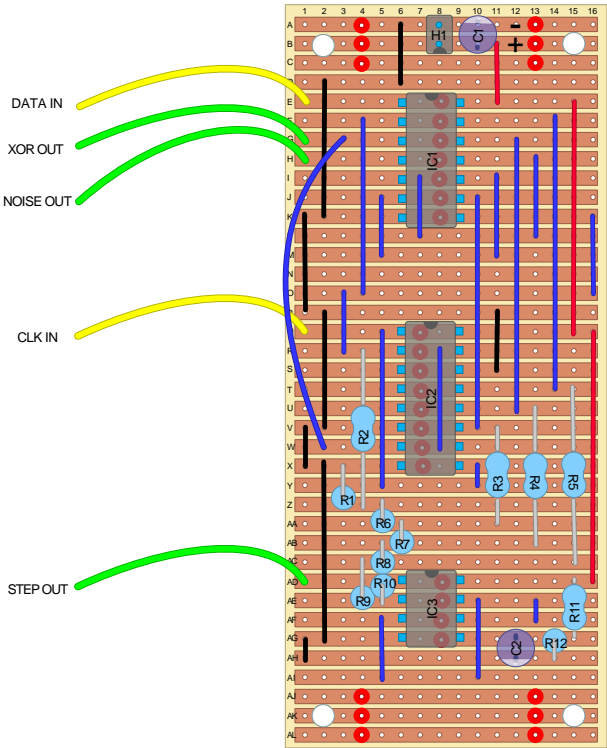
Vero Board	16x38 holes, 1mm hole size
C1, C2	10uF 16V
Eyelet	3mm mouting hole in each corner
H1	2 pole female header, 2.54mm spacing
IC1	4070 XOR
IC2	4015 Shift Register
IC3	LM358 Dual Op Amp
R1, R2, R3, R4, R5, R11, R12	100K
R6, R7, R8, R9, R10	47K

This sequncer, based on a linear feedback shift register, requires a square wave at the DATA input and a square wave at the CLK input

XOR output is an eXclusive-OR operations on incoming data bit with last bit of shift register. "Ring mod" like square wave output.

NOISE output is the combination of eXclusive-OR operations on last four bits of shift register. Pseudo-random square wave output.

STEPPED output is a 4-bit Analog-to-Digital conversion of last four bits of shift register. Can be used as control voltage or "lo-fi" audio signal.

MACUMBISTA, HELSINKI DEC 26 2017

macumbista.net macumbista@gmail.com