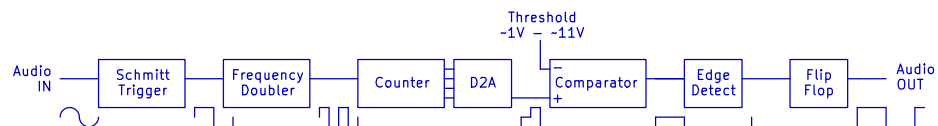


Block Diagram



Issues with rev1

1. needs frontend filter to remove freqs > ~4kHz
(or: the frequency doubler needs tweaking to support higher freqs)
2. output vol seems v low
3. need to add CV override to Threshold input
4. phase of output is unpredictable – freq doubler can see a –ve change before a +ve one
5. bonkersness when Threshold set very close to an exact level coming from D2A
maybe need some hysteresis?
6. might be nice to add a second counter to allow for more subharms
or perhaps use a CD4060 or such instead of CD4516 – we’re not using the preset
7. output square wave has a significant spike on the leading edge

Schematic



File: subharmonizer-schem.kicad_sch

molen, inc.

Sheet: /

File: subharmonizer-rev2.kicad_sch

Title: Subharmonizer Overview

Size: A4

Date: 2025-09-20

Rev: 2

KiCad E.D.A. 9.0.4

Id: 1/2

