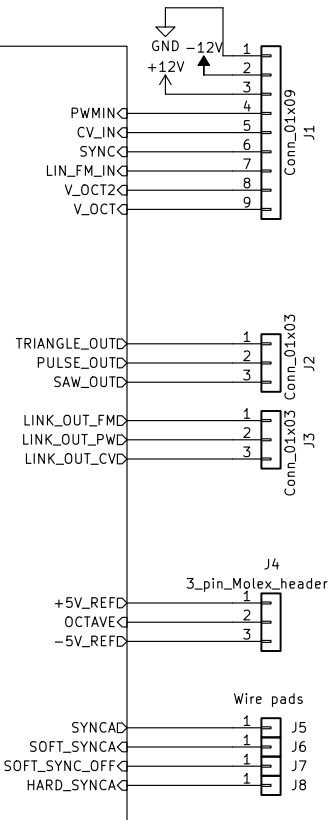


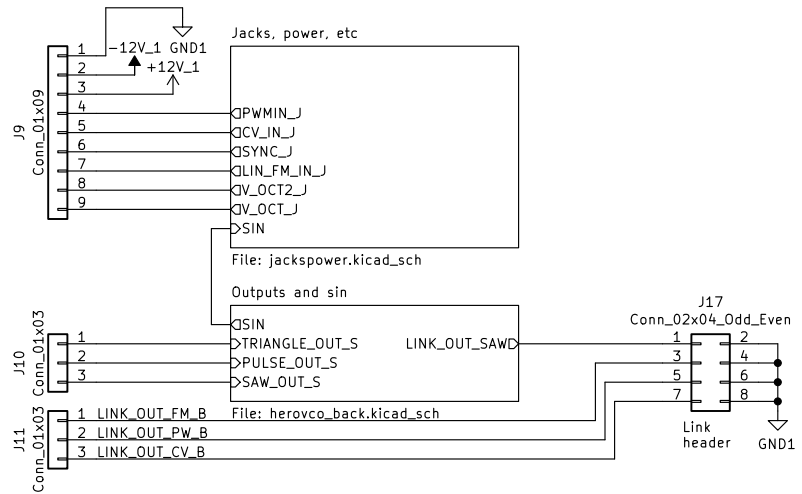
FRONT PCB

Front PCB



File: herovco_front.kicad_sch

BACK PCB



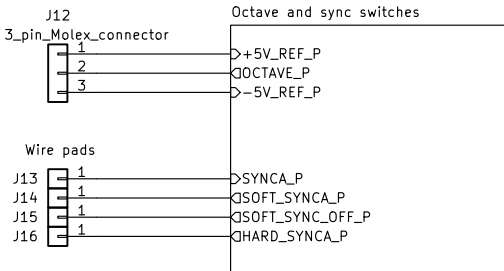
Jacks, power, etc

File: jackspower.kicad_sch

Outputs and sin

File: herovco_back.kicad_sch

PANEL MOUNT



File: octave.kicad_sch

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Rich Holmes / Analog Output

Sheet: /

File: herovco.kicad_sch

Title: Hero VCO

Size: USLetter Date: 2021-11-16

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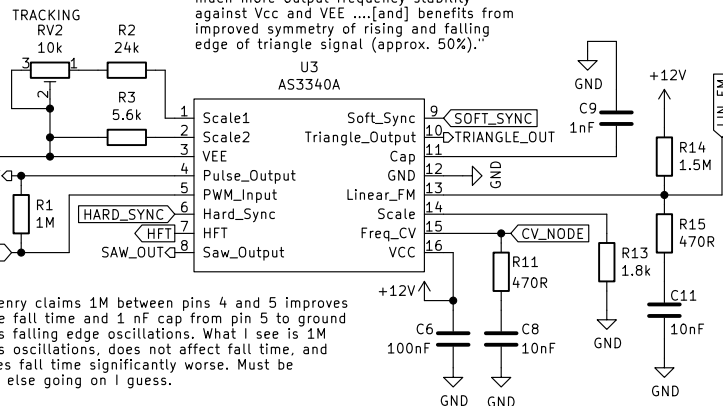
Rev:

Id: 1/5

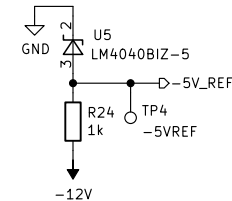
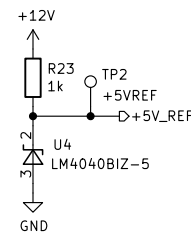


3340

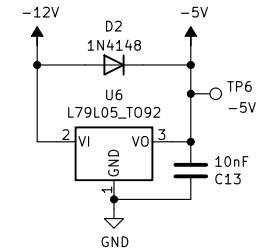
Regulated -5V is recommended by Alfa, and tests show it mostly suppresses PW frequency shift.



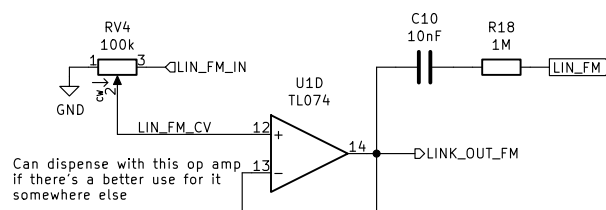
±5 V REFERENCES



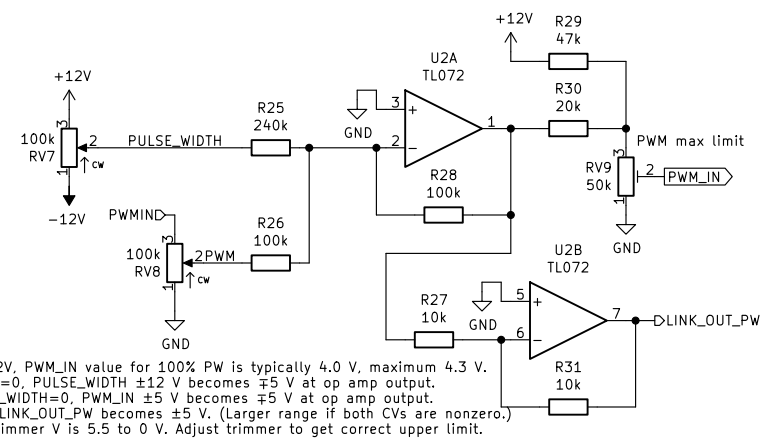
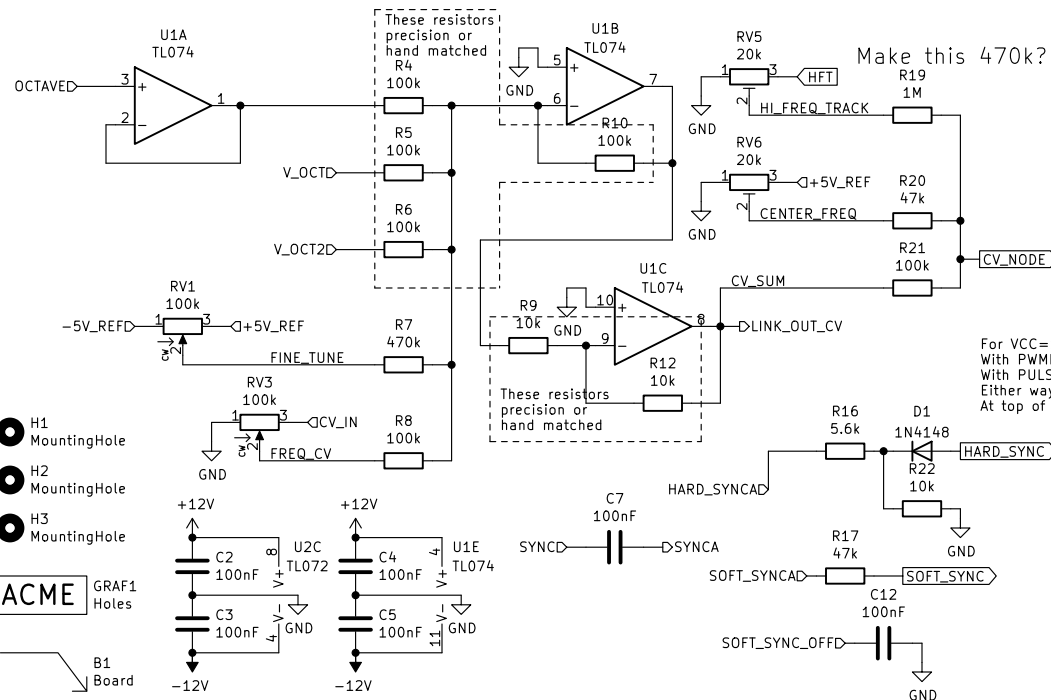
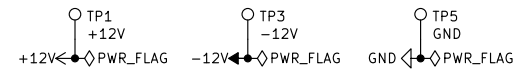
-5V reg



CONTROL VOLTAGES



POWER CONNECTIONS



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Rich Holmes / Analog Output

Sheet: /Front PCB/
File: herovco_front.kicad_sch

Title: Hero VCO

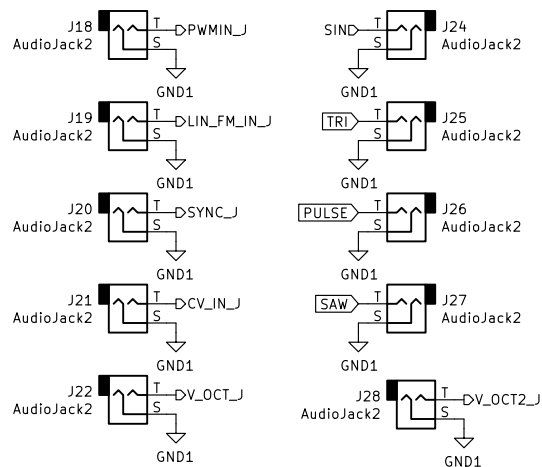
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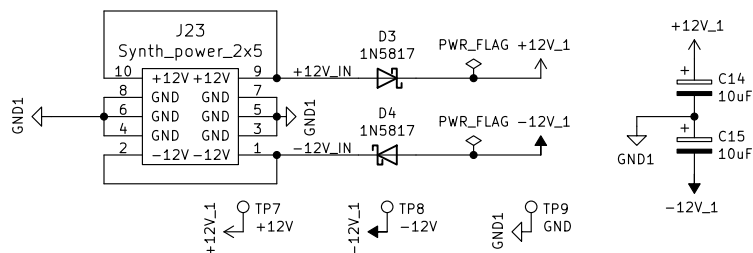
Rev:

Id: 2/5

JACKS



POWER



- H4 MountingHole
- H5 MountingHole
- H6 MountingHole

ACME GRAF2 Holes

ACME GRAF3 AO logo

ACME GRAF4 CC0 logo

B2 Board

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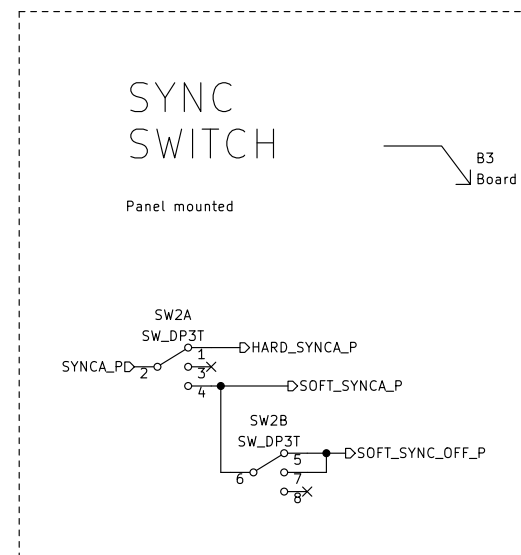
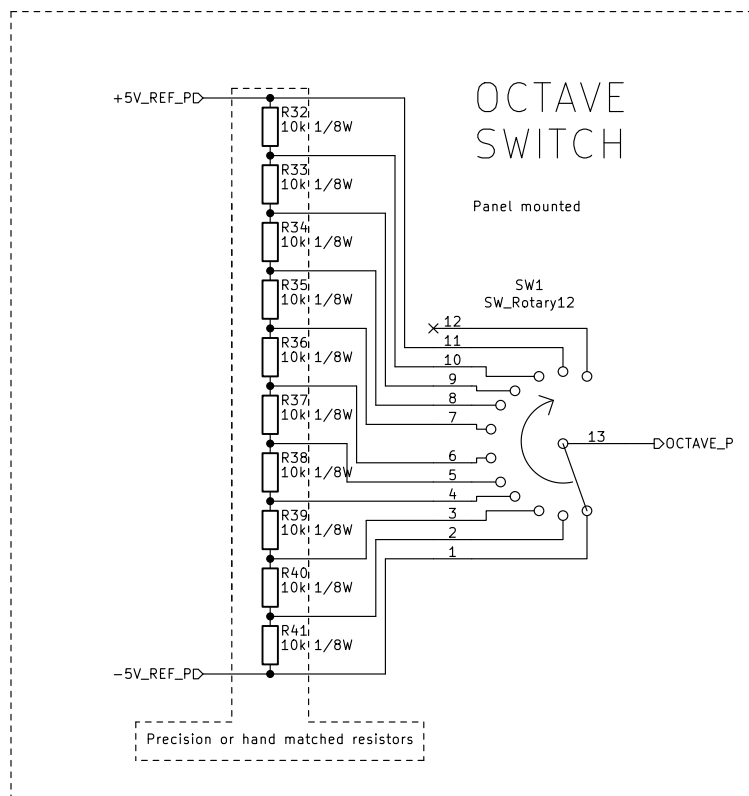
Rich Holmes / Analog Output

Sheet: /Jacks, power, etc/
File: jackspower.kicad_sch

Title: Hero VCO

Size: USLetter Date: 2021-11-16
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Rev:
Id: 3/5



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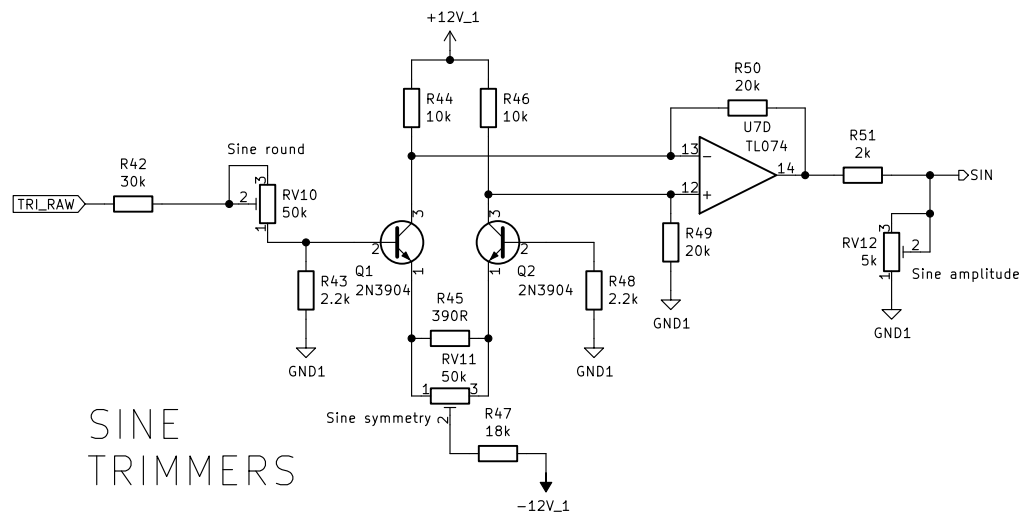
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File: octave.kicad_sch

Title: Hero VCO

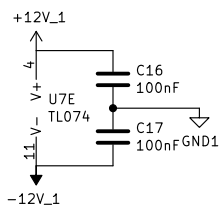
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Rev:
Id: 4/5

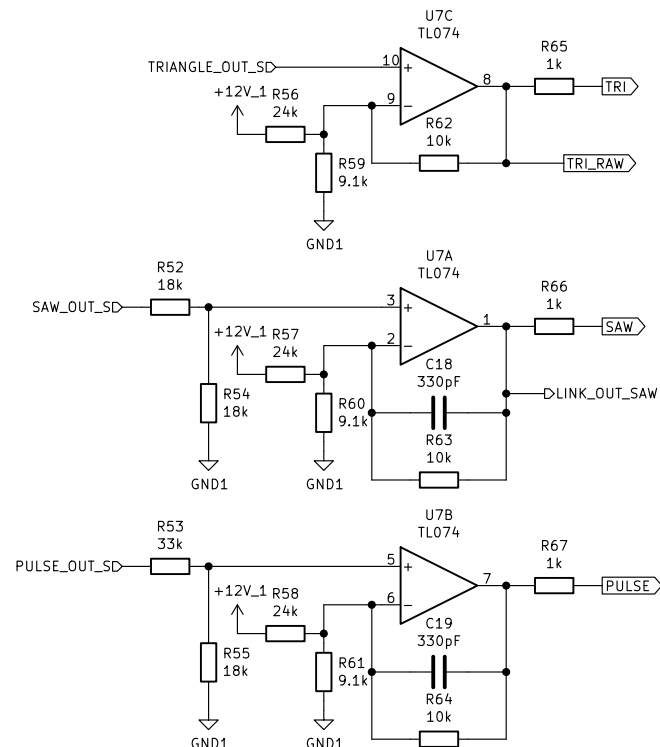
SINE SHAPING



SINE TRIMMERS



OUTPUT CONDITIONING



Kassutronics used 100k feedback resistors and similarly large values for voltage divider resistors. AS3340 datasheet calls for a 51k pull-down on pin 4, so I reduced the voltage divider resistances by a factor of 10. Then stabilization caps were increased more to make $1/(2\pi RC) \sim 50\text{kHz}$.

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Rich Holmes / Analog Output

Sheet: /Outputs and sin/
File: herovco_back.kicad_sch

Title: Hero VCO

Size: USLetter Date: 2021-11-16
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Rev:
Id: 5/5