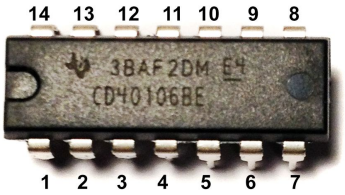
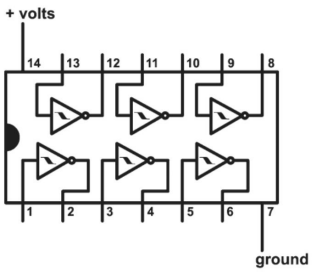
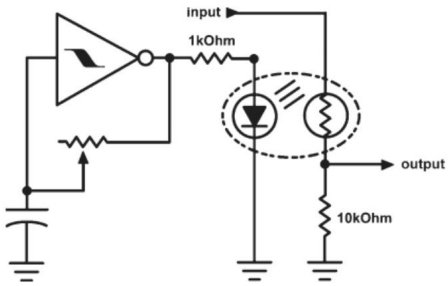
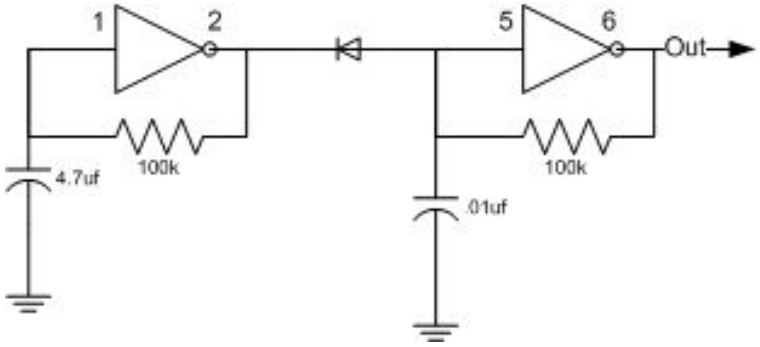
The 40106 IC is a Hex Schmitt Trigger that can be used to produce 6 musical square waves. These are some examples of how it could be wired up.

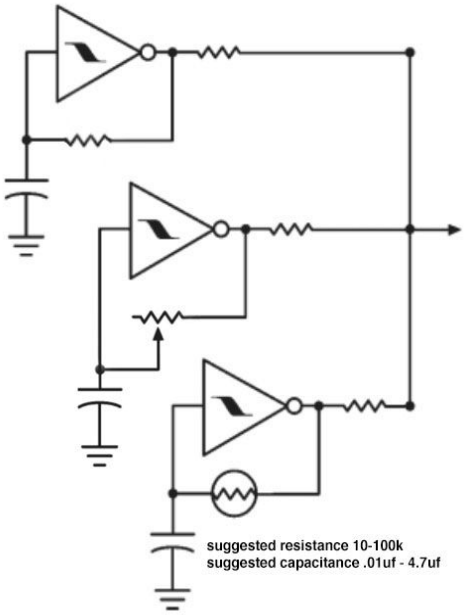






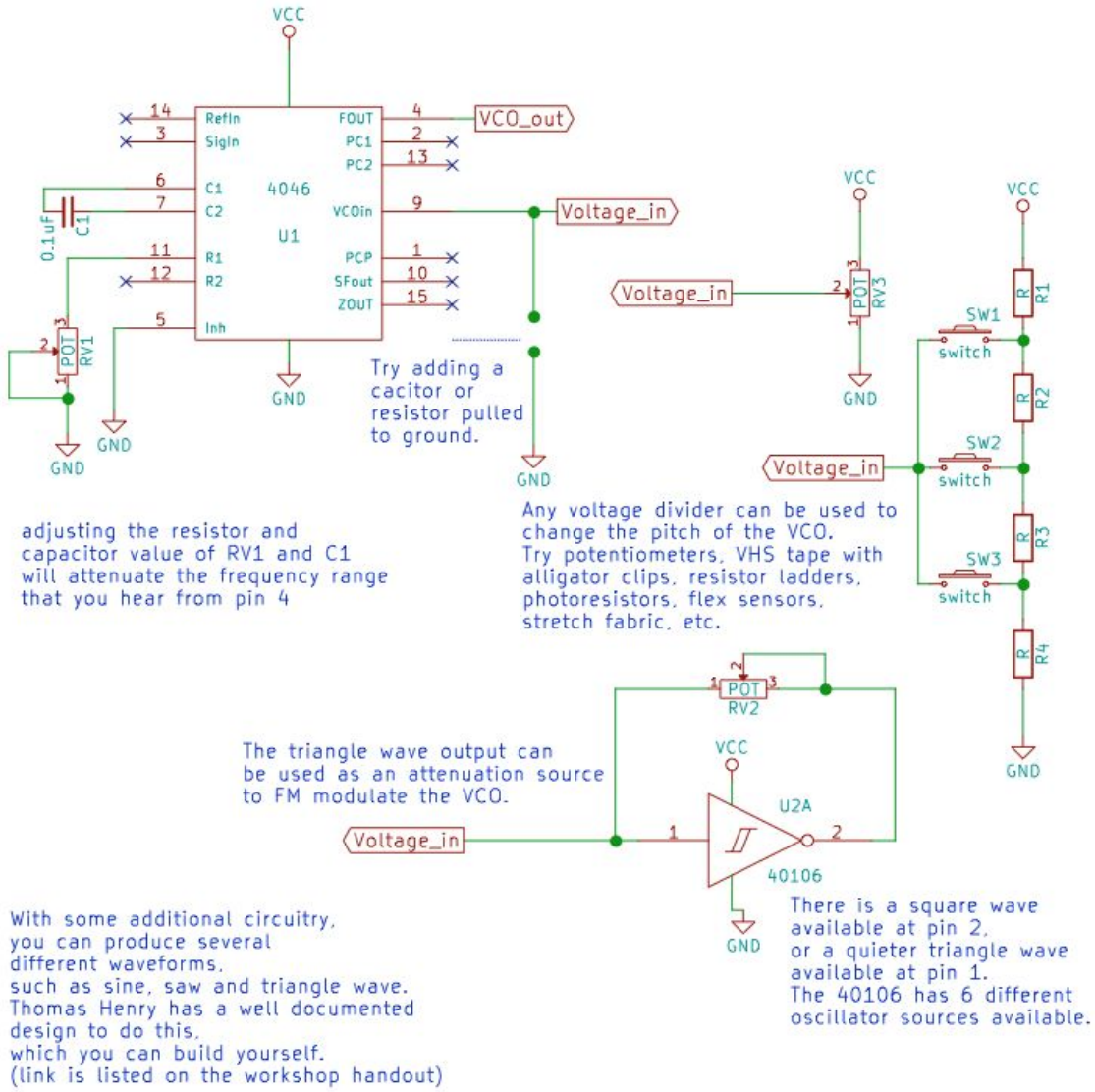


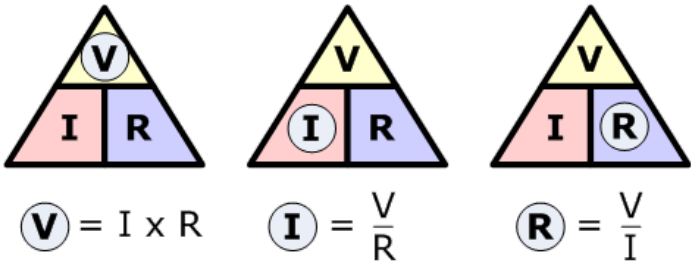
Use a diode or resistor to drive two schmitt trigger oscillators into each other



If you want to use multiple square waves, use either diodes or resistors to tie their outputs together.

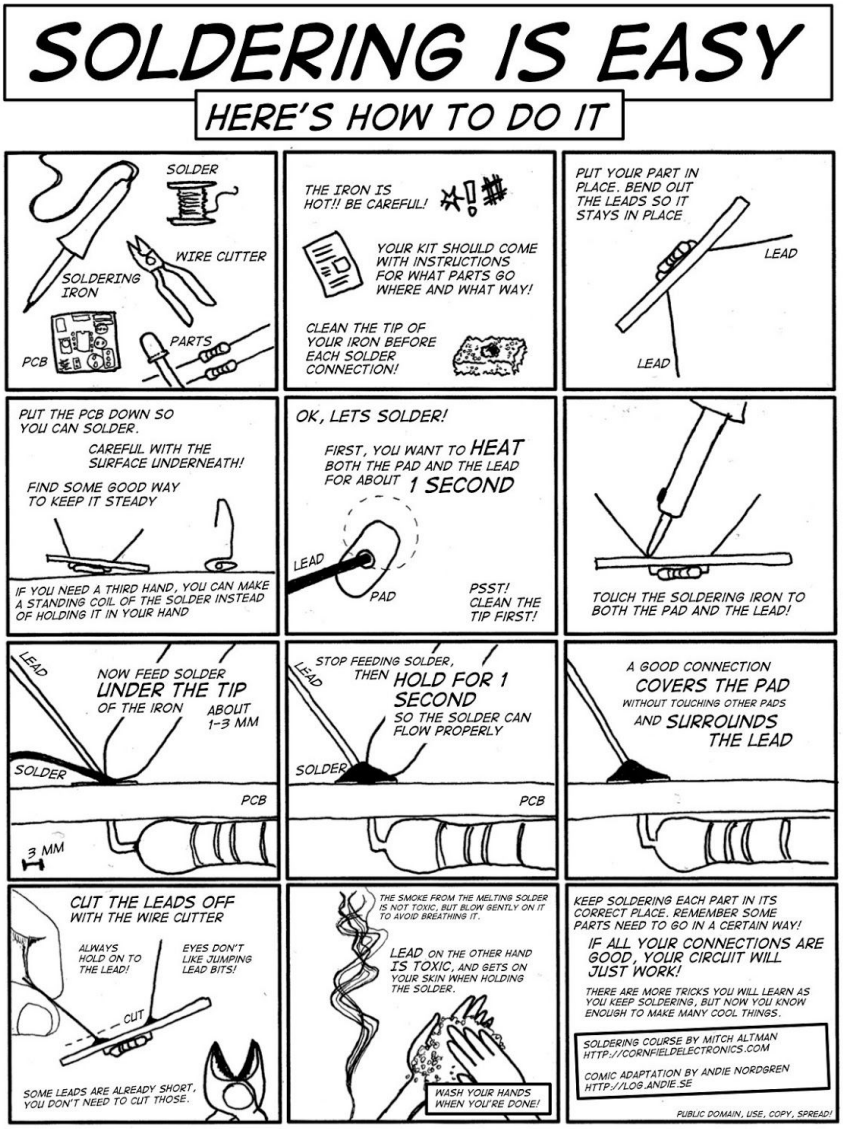
Examples of different ways to control the pitch of the VCO on the 4046.





OHMS LAW FORMULAS

I = Current, V = Voltage, R = Resistance



Soldering course from Mitch Altman at CornFieldElectronics.com

Advanced builds using the 4046 IC:

The PCB designs and build instructions are available for this X4046 VCO synth by Thomas Henry, with the in-depth exploration article written by Scott Stites of Birth of a Synth
http://www.birthofasynth.com/Thomas_Henry/Pages/X-4046.html

Thonk DIY eurorack 4046 vco kit:
https://www.thonk.co.uk/shop/fonitronik-th-x-4046-vco/

Recommended Reading:

-The Logic Noise series by Elliot Williams at Hackaday are very well documented and dive into some of the musical designs possible with CMOS circuits
http://hackaday.com/tag/logic-noise/

-This is a well documented exploration of CMOS music circuits with several schematics you can build with just a few CMOS ICs. Written by Sebastian Tomczack
http://milkcrate.com.au/_other/sea-moss/

-The electro-music forums have a great support forum for DIY electronics, with a whole subforum dedicated to 'Lunetta builds', which are primarily CMOS circuits that can be patched together. There's lots of helpful folks who can help answer any questions, and lots of fun CMOS designs shared by the community.
http://electro-music.com/forum/forum-160.html

How to use an LDR as a voltage divider. Good animations and a calculator to do the math.
http://www.petervis.com/GCSE_Design_and_Technology_Electronic_Products/Potential_Divider/Potential_Divider_with_LDR.html

Good Books:

Make: Electronics: Learning Through Discovery by Charles Platt
https://www.amazon.com/Make-Electronics-Discovery-Charles-Platt/dp/0596153740/ref=pd_sim_14_10?_encoding=UTF8&pd_rd_i=0596153740&pd_rd_r=4YPD0NRTT3APQ2YVGHRF&pd_rd_w=7g9RR&pd_rd_wg=g68Dm&psc=1&refRID=4YPD0NRTT3APQ2YVGHRF

Make: Analog Synthesizers by Ray Wilson, the mastermind behind Music from Outer Space
https://www.amazon.com/gp/product/1449345220/ref=ox_sc_mini_detail?ie=UTF8&psc=1&smid=ATVPDKIKX0DER

Handmade Electronic Music by Nicolas Collins
https://www.amazon.com/Handmade-Electronic-Music-Hardware-Hacking/dp/0415998735

Good Hardware:

Tayda Electronics is the cheapest US supplier I've encountered. They have most things you'd need for DIY builds and PCBs available for some pre-existing designs. http://www.taydaelectronics.com/

The OMsynth by Casper Electronics:
This prototyping station was the reference for the workshop PCBs by LadyBrain Studios, and the PCB printing service was donated by OSHpark. This has everything that you need for a solid development setup, and even has an onboard speaker for listening to your experiments! There are some great oscillator tutorials built around it.
http://www.bastl-instruments.com/instruments/omsynth/
Available for sale here: http://noise.kitchen/shop/bastl/the-omsynth-mini-lab-diy-kit/