

MEET THE MAKERS EURORACK DIY

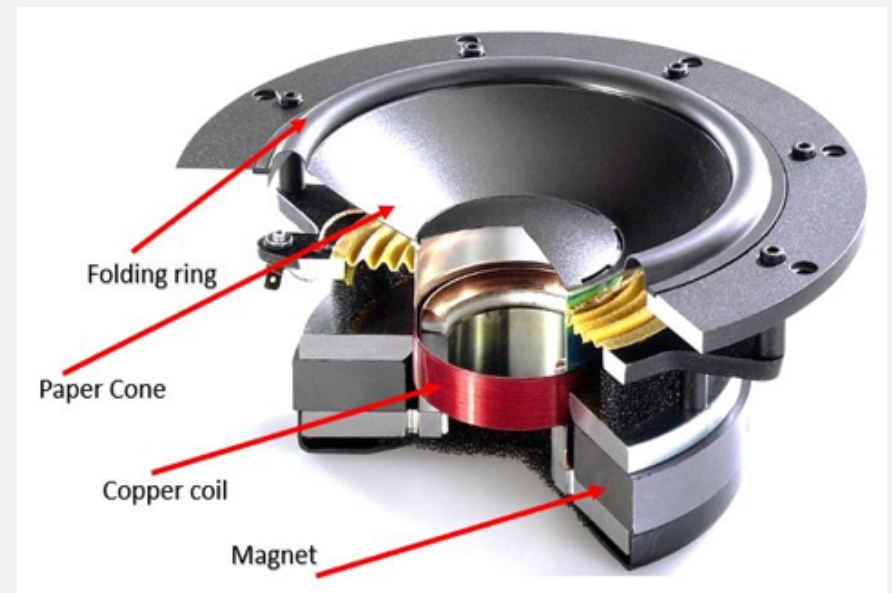
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Milwaukee Maker Faire

Karl Stamm

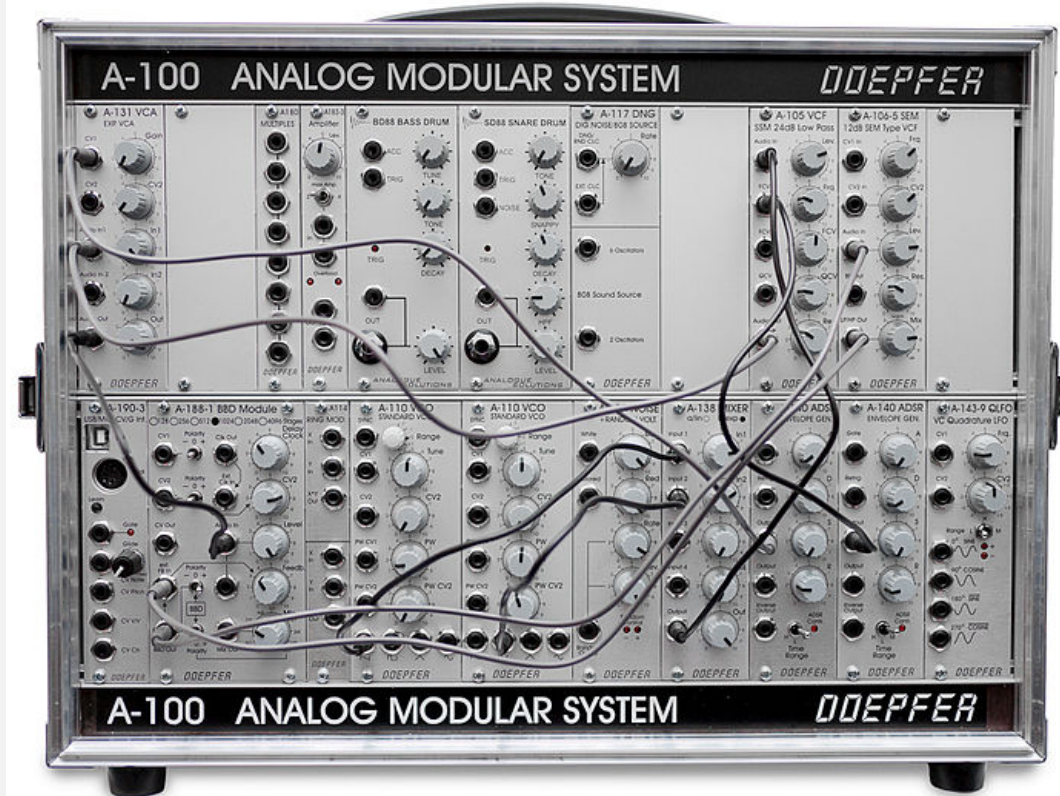
WHO AM I, WHY ARE WE HERE?

- Karl Stamm, from New Berlin, Wisconsin. Went to Marquette University for a Mathematics degree, stayed a very long time for a Masters of Software and a Doctor of Computation.
- I've worked in teaching, cell phone software, bioinformatics (that is the computer science for biologists), business I.T., genetic engineering and finally educational assessment.
- We can make your computer do anything you can imagine. The tough part is inventing something cost-effective (we're not going to make a drone fly any better than the US Army already can).
- Frustrated with software, let's look at controlling hardware instead. Something with direct output like light or sound.
- Musical synthesizers are electronic gadgets that have tangible results, forgiving requirements, and no expectations.



MODULAR SYNTHESIS AND ELECTRONICS D.I.Y.

- A regular synthesizer is usually a keyboard with some circuitry bolted on. Your artistic interface is determined by the manufacturer's best buttons.
- A modular synthesizer is inside-out. Play with the circuits directly, and make sounds nobody has ever heard before.
- Each module is interchangeable, which somewhat increases the cost; therefore let's look at DIY.
- Patents are expiring on classic synthesizer circuits and open-source designs can walk you through developing an instrument that is really unique.
- Bits and pieces like resistors and cabling only cost pennies, although you'll need a lot of them: seek a 'breadboard kit' on Amazon for <\$30.



LOOK MUM, NO COMPUTER!

- LMNC is an inspiration of mine.
- Mr. Battle is a British Youtuber who hacks together silly machines.
- Informal tutorials, always saying don't be scared to try it.
- It's 2021, you should be able to make robots sing if you want to.
- Famous for an organ made of Gameboys and a Chorus made of Furbys.



LINKS WITH SCHEMATICS AND IMPORTANT ELECTRICAL DESIGNS

- MusicFromOuterSpace.com
- yusynth.net
- elby-designs.com
- schmitzbits.de
- lookmumnocomputer.com
- sdiy.info/wiki/Atari_Punk_Console is a fun noise-maker in just a few parts.
- Just search Modular Synth DIY on Youtube for dozens of creators showing off their toys, and how to build them.
- I've written a brochure of the concepts available at karltrn.com/mtm