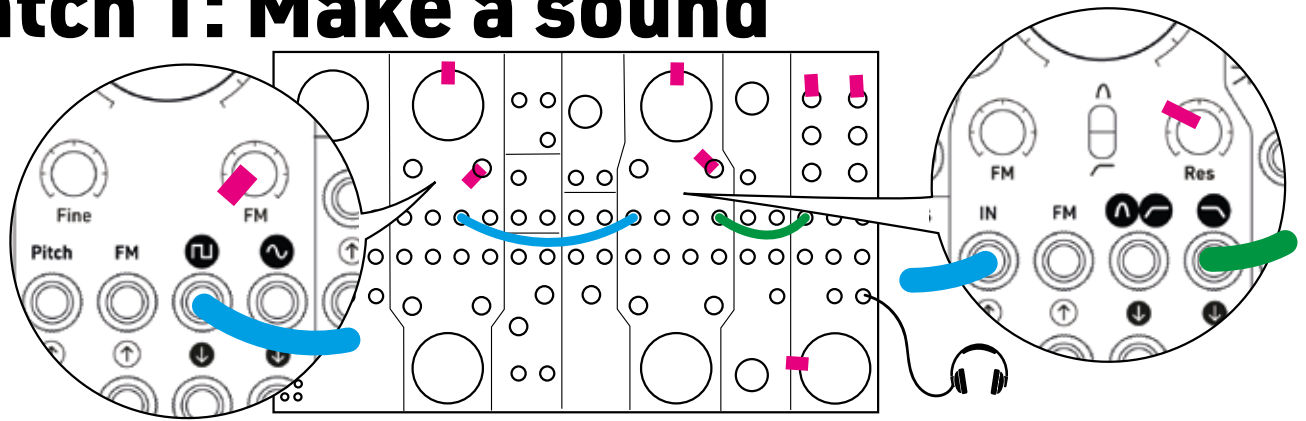# Patch 1: Make a sound

Patch a square wave into the filter, wiggle both the big knobs on the filter and oscillator, see what comes out. Experiment with the FM and Res knobs for wilder sounds, watch the volume.

When you turn up FM, it uses the bottom oscillator to change the pitch of the top oscillator, so try the bottom knob. Turn up both FM knobs for **broken robot chaos**.

Patch 2: Contact mic reverb
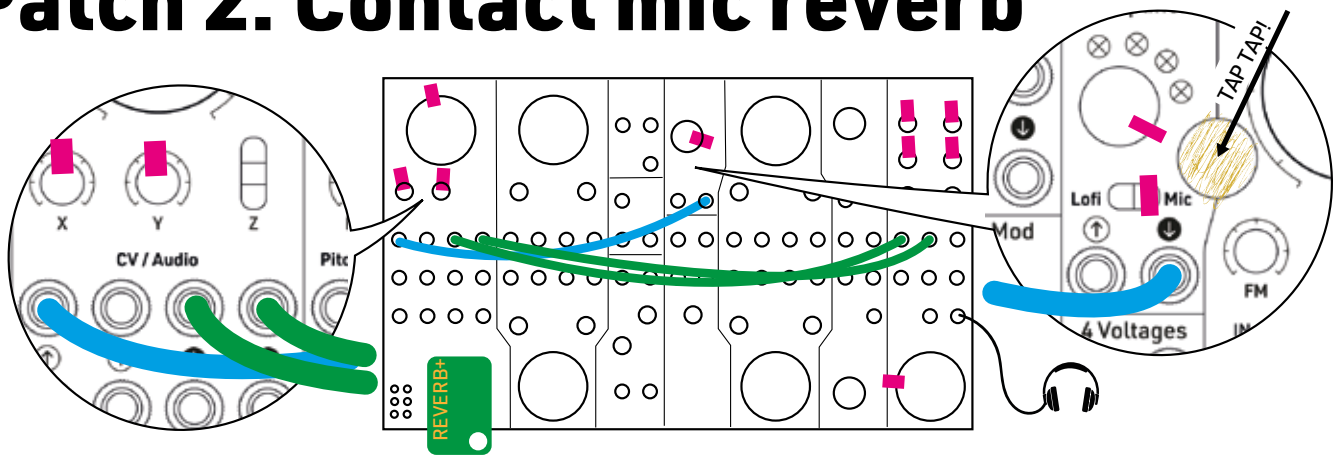
Behind the panel is a contact microphone which picks up vibration from the front panel, the case, the switches and knobs. It's a good way to experiment with the Reverb+ card for

big big noises. Try patching the contact mic into other places, like Oscillator FM or Filter FM - turn up the FM knob and see what happens when you tap or push down on the panel.

Patch 3: MIDI notes and sequences
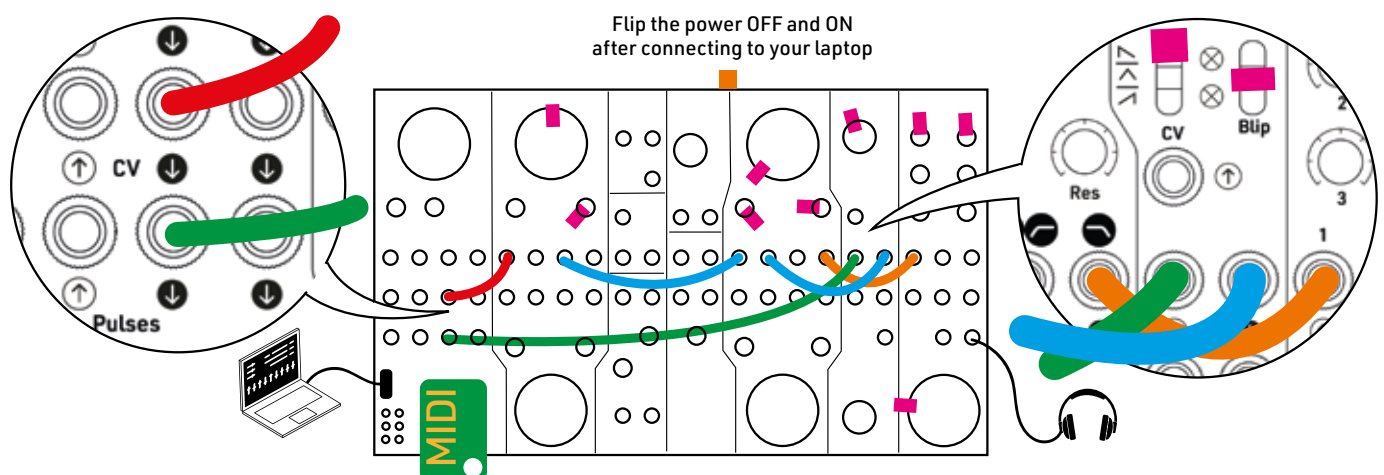
Flip the power OFF and ON after connecting to your laptop

Play the Workshop System with MIDI. The red lead is Pitch CV which sets the frequency of the oscillator. The Green lead is Gate, which turns on and off as notes start and end. Use the Slopes module to turn those gates into longer notes with a bit

of attack or decay. You can also play with the Turing Machine sequencer card, or a CV keyboard like an Arturia Keystep. You can use two MIDI channels, 1 and 2, to play the two oscillators from the left and right CV and Gate outputs.

What would someone like me do with a tiny modular synth?

Most musicians, whether they're writing songs, composing for film, making beats or basslines or noise, chase two things: We want to create something new. And we want to make something that feels personal, uniquely ours.

But we often get stuck.

One reason is convention – the familiar ways instrument tell us they should be played. Play a 909 and a 303, sound like Daft Punk. Play loud, then quiet, then loud again.

These conventions work; they're why genres sell and why instruments feel intuitive.

But they also limit our imagination.

Escaping convention is hard. It requires confidence, trust and stamina. You'll make things that most people don't understand or like, and that you really don't like.

Another reason is habit – the things our hands do automatically. Pick up a guitar, and the same chord progressions appear. Open Ableton, and the drums always seem to end up in the same patterns.

The Workshop System is designed to help you escape both conventions and habits.

It's not just a synthesiser in the sense of "this makes bass sounds, this makes leads."

It's more like a toolkit for sound-making – collection of devices to either generate and manipulate. They can be connected together in any way. And connecting other things into the system is when it really starts to get exciting.

There's not right or wrong way to use it. People often say that, but in this case it's completely true. There's no instruction book, no virtuoso who's been playing the modular synth for years and can explain how to do it properly.

There's no menu-diving, no screens. Just knobs, switches, lots of patch cables. **It's like Lego**: you can't really tell what's going to happen when you start snapping things together.

You can make conventional instruments – a thick-sounding monosynth, a gnarly distortion box, a stereo filter.

But **often, weirdness emerges**.

Take a field recording – street sounds from your phone. Instead of using it as a background texture, what if it became the lead?

Run it through the pair of filters, pulling out peaks. Break the loop into pulses, using it as rhythm. Stretch it, fragment it, let it drive the composition itself.

This is modular thinking. It's not about complexity or obscurity – it's about freedom.

Over time, you can break habits and conventions to shape something that only you understand and only you can play.

Ideally, with a bit of luck and some patience, you can create **something that sounds completely yours.**
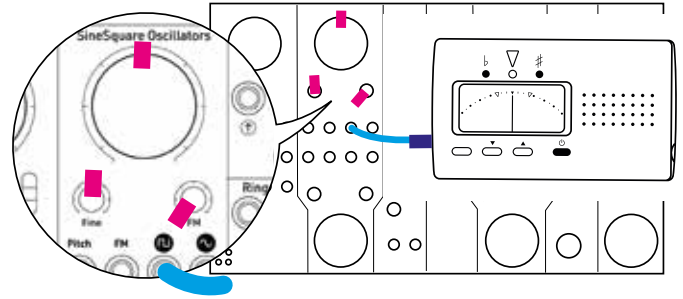
How to: Tune your Workshop System

The workshop system doesn't have fixed tuning. Oscillators can be set to any frequency. But if you're using MIDI or the Turing Machine sequencer, you want specific notes.

Don't plug anything into Pitch. Turn FM fully off.

Use the big knob and the fine knob to tune both oscillators to exactly C3. Now MIDI or the Turing Machine card will play in tune.

Be careful not to nudge those knobs!

How to: Use the Program Cards

The Computer module on the left hand side runs on Program Cards: tiny little memory chips the size of a micro SD card.

To load a program: Insert the card with the gold connector facing down (matching the white symbol below the card slot).

Tap the little reset button next to the slot to load the program.

Find other Program Cards: There are lots of other program cards available at musicthing.co.uk/workshopsystem/

Write your own code: If you can write code or get AI to do it, you can make new Program Cards - details at the WS website.

How to: Get help and learn more

Videos, tutorials, instructions and program card downloads:
musicthing.co.uk/workshopsystem/
@musicthingmodular on Instagram
tom@musicthing.co.uk if have any questions at all

Music Thing Modular