

Welcome to
the
MAMI
Tech Toolkit

Hello and welcome to the Tech Toolkit.

This kit is comprised of 4 hardware tools and some software to enable you to use this hardware to make noises! The tools in the kit are the touchBox, filterBox, the squishyDrum, and the Noodler.

touchBox



The touchBox is a **stand-alone device**, meaning that it does not need to connect to a computer. It has on-board speaker, buttons, dials, screen, and connectable trigger pads. These allow control of the sound, settings, and triggering of the notes.

In touchBox you can use the buttons to control the type (timbre) of the sound (from Square, Triangle, Sample, Sine, and Saw), the octave of the notes (plus or minus 2 octaves), the scale (Major, Minor, Akebono, Pygmy, Equinox, Sapphire, Gypsy, Silver Spring, Integral, Dorian, Golden Arcadia, Pentatonic Major, Pentatonic Minor, and Blues), and finally the tonic note of the scale (A, A#, B, C, C#, D, D#, E, F, F#, G, G#).



You can connect up to 8 pads using the 3.5mm jack sockets along the front of the device. Each pad triggers a different note in ascending order from left to right, in the selected scale starting from the selected tonic note. The box will load in the scale of A Major with the square wave timbre, with the starting note being A below middle C.

Tools that Connect to the Computer

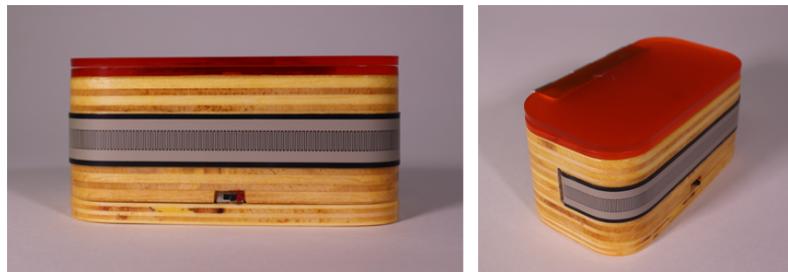
The other 3 pieces of hardware send all of their data to the computer via a receiver (one for each device).

The filterBox

The filterBox system comprises of the filterBox, its receiver, and the software app that it connects to.

The hardware

The filterBox features 2 buttons, a pressure strip around its middle, and a light sensor underneath the lid. The buttons control notes moving up and down through the selected scale. The pressure strip controls the volume of the notes, and the light sensor control the filter of the notes.



The software

The software app allows for the selection of a virtual instrument (VST), turning on/off of the sounds, control of the volume, selection of the channel for the sound to come out, and selection of the musical scale. There are also icons that visually show the interaction with the buttons, pressure strip, and the light sensor.



The squishyDrum

The squishyDrum comprises of the squishyDrum, its receiver, and the software app that it connects to.



The hardware

The squishyDrum features 3 pressure sensors underneath the top of the silicon layer atop the drum. It also features 2 piezo sensors which can detect knocks on the enclosure.

The software

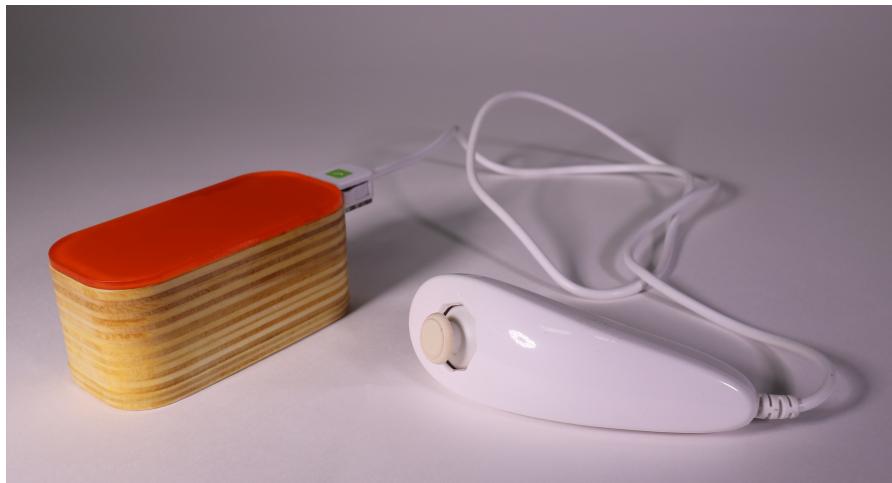
There are two software apps that work with squishyDrum. One software app, named squishyShaker, allows for the selection of objects to be used as shaker style items, the pitch of the sound to be selected, the channel for the output of the sound, the volume, and an icon to turn the sound off. The other software app, named Simple Sample, allows for 3 samples to be triggered by pressing the pressure sensors, and for 3 samples to be recorded via the computer to then be triggered by pressing the pressure sensors.

The Noodler

The Noodler comprises of the Noodler, its receiver, and the software app that it connects to.

The hardware

The Noodler features 2 buttons, an X/Y joystick (left to right, and up and down), and an accelerometer (detects which way up the Noodler is and how fast it is moving in space).



The software

The Noodler software allows coloured zones to be used as trigger zones for notes or samples. It uses the joystick and buttons. The trigger zones can be drawn in and saved or loaded from presets.

There are 2 modes –MIDI notes triggering, or sample triggering.

MIDI note triggering – in this mode you can select the notes that are triggered by assigning a note to a colour or you can choose to connect the trigger zones to a scale. You can also select the instrument (from 127 choices) and the octave (-2 octaves to +4 octaves). You can also select whether to use MIDI instruments from the general MIDI standard or MIDI drums. You can also select if the note stays on whilst you stay within a trigger zone or whether it has a set duration, which you can also change.

Sample triggering – in this mode you can select a folder of samples and then assign those samples to the different colours of the trigger zones. You can select which samples the buttons trigger also. As well as this you can select if the sample plays to the end or stops as soon as you leave the trigger zone.

Mira iPad App

The Tech Toolkit software can also be connected to an iPad to enable control of some of the settings whilst away from the computer. To enable this, you must have an iPad and have downloaded the Mira app (which costs £9.99).