Synthbox Quick Start Guide

Before You Start

A microSD card must be inserted into synthbox before you can get started. Synthbox takes MIDI and CV inputs to control the polyphonic wavetable synthesizer. All presets and sounds are stored on the microSD card. Preset changes are only saved when you choose to save them.

Overview

Synthbox is a polyphonic synthesizer that you can control via MIDI or analog control voltage. It includes several internal blocks to shape and manipulate the sound. You can also connect it with other modular gear to further refine the sound.

Play Notes Via MIDI

1. Connect a keyboard or controller to the MIDI input. You may need to use a MIDI adapter. Read the article Stereo Minijacks for MIDI Connections Compatibility Guide on the 1010music.com website for more information. Configure the external device to use MIDI channel 1.
2. Connect an audio output to the Out1 and Out2 jacks.
3. Play notes using the external MIDI controller. You should hear sound come out of your audio output.
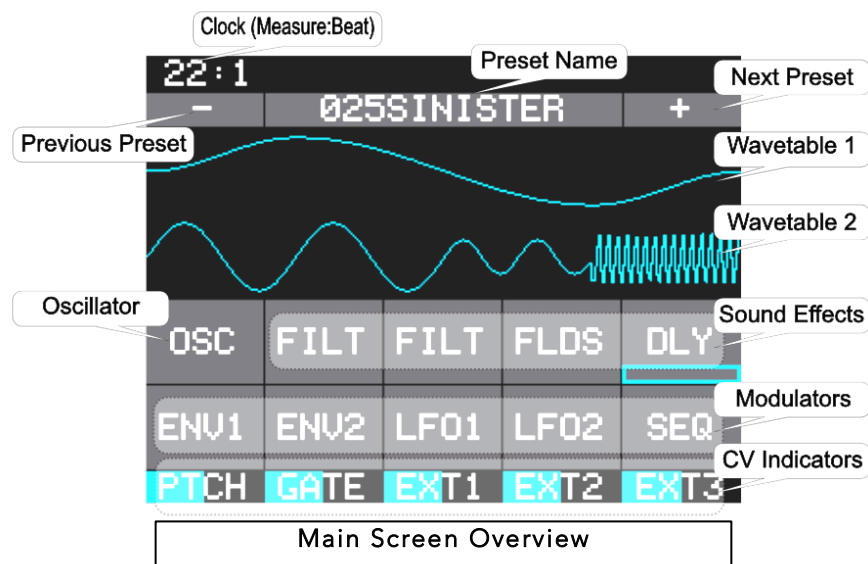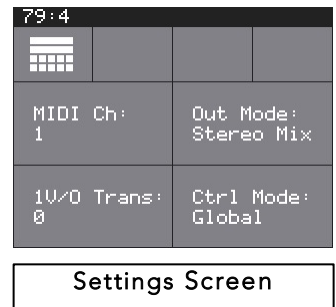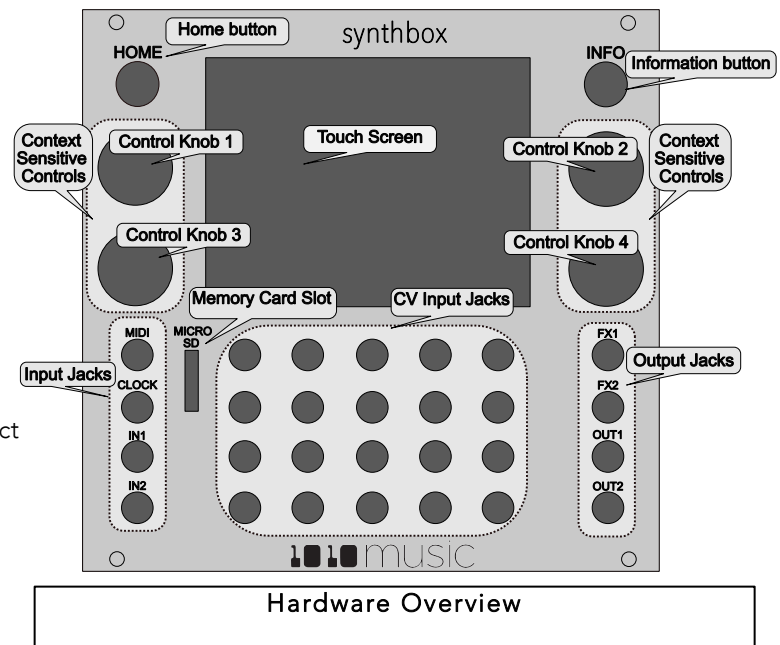
Play Notes Via CV

1. Push the **HOME** button to display the Menu screen with menu choices of **Main** and **Settings**.
2. Touch **Settings** to display the Settings screen.
3. Use Control Knob 4 to set the value of **Ctrl Mode** to either **Per Voice** or **Global**. If set to **Per Voice**, each row of CV Input Jacks will control one voice. When **CTRL Mode** is set to **Global**, the bottom row of CV Input Jacks will control all four voices at once.
4. Connect two control voltage inputs to the CV Input Jacks. Choose the row based on which voice is being played or modulated, using the bottom row for Global control. For starters, plug one CV Input into the bottom row, left column to control pitch and another into the bottom row, second from the left to control gate.
5. Push the **HOME** button to go back to the Main screen. Notice that the row of black boxes along the bottom of the screen shows the labels for the columns of CV Input Jacks (**PTCH**, **GATE**, **EXT1**, **EXT2**, **EXT3**). The blue bar which overlays each column label will grow to represent the current value of the input for the <u>bottom</u> row of CV Input Jacks in that column.
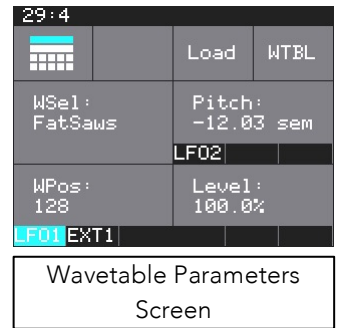
Select and Save a Preset

A preset is a set of pre-configured wavetables, oscillators, effects and modulators. You can use the 1010music presets or create your own.

1. Select a preset from the Main screen by touching **+** and **–** at the top of the Touch Screen on either side of the name of the preset (e.g. **025SINISTER** in the Main Screen Overview diagram).
2. To save changes to a preset, touch the **Preset Name**, **Edit**, then **Save**.

Hardware Overview

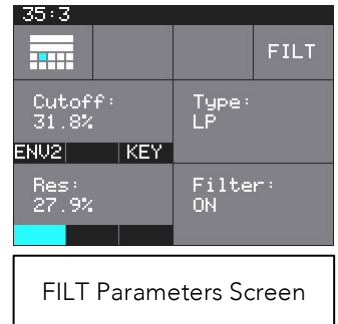Settings Screen

Main Screen Overview

Configure the Wavetables and Oscillator

1. Push the **HOME** button until you are back to the Main screen.
2. On the Touch Screen, touch the element you want to control to display the Parameters screen for that element. Touch the top waveform for Wavetable 1, the bottom waveform for Wavetable 2, or the **OSC** button just below the waveforms on the left for the Oscillator.
3. Adjust a parameter by turning the Control Knob next to it.
4. The parameters that can be modulated have three black boxes under the parameter setting, allowing you to configure three different sources to modulate that parameter. For example, in the screenshot on the right, **LFO2** is configured as a modulator for **Pitch**, and **LFO1** and **EXT1** are modulating **WPos**. We'll discuss modulators later.

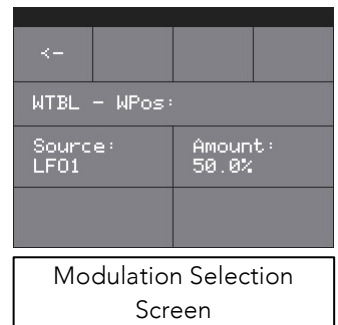Wavetable Parameters Screen

Apply Effects

1. Push the **HOME** button until you are back to the Main screen.
2. Touch the name of the effect you want to control to display the Parameters screen for that element: **FILT** for a filter, **FLDS** for flanger and distortion and **DLY** for delay.
3. Adjust a parameter by turning the Control Knob next to it. Note that some effects parameters also have three black boxes under them that allow you to configure modulation of the parameter.

FILT Parameters Screen

Apply ENV and LFO Modulation

Synthbox allows you to modulate the waveforms, oscillator and effects via envelopes, low frequency oscillators, sequencers, and control voltage inputs. The method of applying modulation to each of these elements is the same, so we will use a wavetable as an example.

1. From the Main screen, touch the element you want to modulate (e.g. Wavetable 1) to display the Parameters screen for that element.
2. Touch a black box under a parameter (e.g. the **WPos** parameter for a wavetable) to display the Modulation Selection screen.
3. Use the Control Knobs to adjust the modulation **Source** and **Amount**. To start with, choose **LFO1** and **50%** for audible results.
4. Push the **HOME** button twice to go back to the Main screen.
5. From the Main screen, touch **LFO1** to display the Parameters screen for **LFO1**. Use the Control Knobs to adjust the **LFO1** parameters as desired. Push the **INFO** button to see page 2 of the **LFO1** parameters screen. Push the **INFO** button again to go back to page 1.

Modulation Selection Screen

Note:
- You can use these same steps to apply **ENV2** and **LFO2** modulation.
- **ENV1** modulation is always applied to the voltage control amplifier for the voice. You can edit the **ENV1** parameters the same way as you edit the **LFO** and **ENV2** parameters.

To Use CV Modulation:
1. Plug a CV Modulator into the rightmost column of the bottom row of CV Input Jacks.
2. From the Main screen, touch the top waveform to display the Wavetable Parameters screen.
3. Touch a black box under the **Pitch** parameter to add a modulator. Choose **EXT3** for the **Source**. The CV Input in the **EXT3** jack will now control the modulation of the **Pitch** parameter.

Learn More

Learn about more features of synthbox such as Sequencer Modulation by downloading the Synthbox User Manual or watching Synthbox Videos on our website at http://1010music.com/support-2.

Join the conversation with other synthbox owners at https://forum.1010music.com.

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Digital Heart – Analog Soul