

Xoid

An XORing synth to make great digital sounds and noise!

How to use:

==== Presets ====

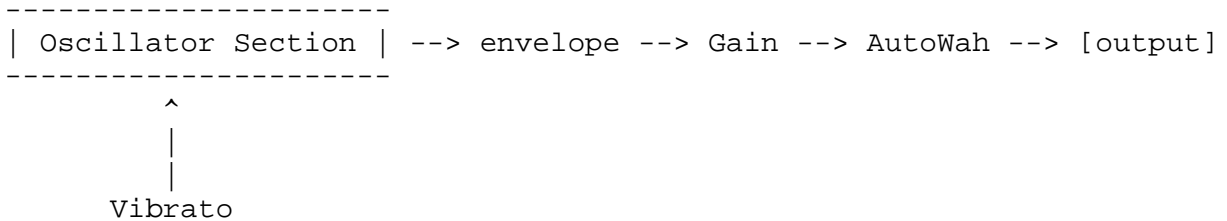
There are lots of way cool presets! Some are even noisier than the rest.

Try them out! Load preset sounds by *Double-Tapping* the right button and then pressing any "white" key.

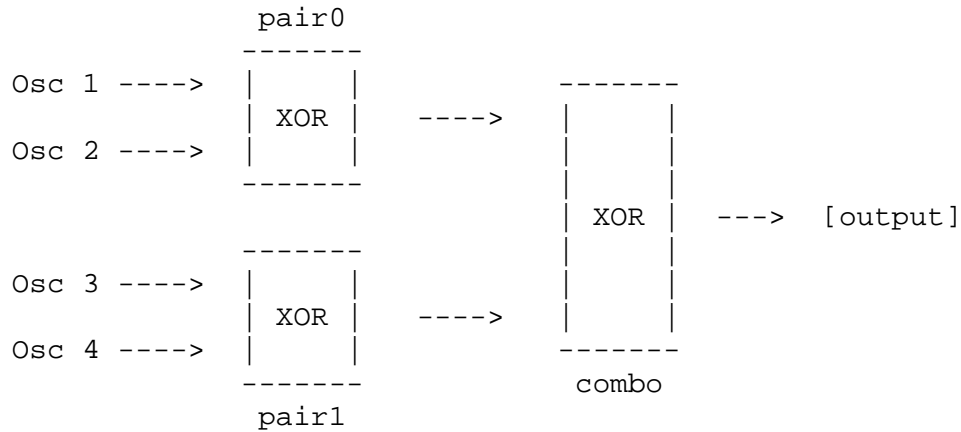
Play with these presets, and you can make lots of crazy digital sound and noise!

Please see page 3 of this document for a list of all types of button presses (including "*Double-Tapping*") you can use on this synth.

==== Diagram of the Xoid Voice ====



==== Diagram of the Oscillator Section ====



==== After loading a preset, you can mess with the sound! ====

Try *Pressing* and *Tap-Pressing* the buttons and twiddling the pots, and see what kind of crazy sounds and noise you can get!

If you want to get really good at Xoid, it takes practice.

Xoid has a lot of combinations. What follows is an explanation:

Each LED can be in one of 3 states : OFF - ON - BLINKING

The LEDs indicate what parameters the pots control:

Red LED	Blue LED	top POT	bot POT
OFF	OFF	combo XOR mix	combo freq ratio
ON	OFF	pair0 XOR mix	pair0 freq ratio
BLINK	OFF	pair1 XOR mix	pair1 freq ratio
OFF	ON	env ATTACK	env DECAY
ON	ON	env SUSTAIN	env RELEASE
BLINK	ON	vibrato FREQ	vibrato DEPTH
OFF	BLINK	autowah FREQ	autowah DEPTH
ON	BLINK	autowah ON/OFF	autowah CUTOFF
BLINK	BLINK	gain	portamento

To bump the Red LED state: *Press* left button

To bump the Blue LED state: *Press* right button

When the Blue LED is off the Red LED also indicates what happens when you *Tap-Press* a button (a "Tap-Press" is a double tap with the 2nd tap being of longer duration):

Red LED	Blue LED Tap-Press:	
		left BUTTON	right BUTTON
OFF	OFF	combo XOR on/off	bump combo freq spectrum
ON	OFF	pair0 XOR on/off	bump pair0 freq spectrum
BLINK	OFF	pair1 XOR on/off	bump pair1 freq spectrum

Note 1: Toggling an XOR function on and off dramatically effects the sound.

Note 2: Bumping the freq spectrum changes the frequency sweep for bottom pot.

For more info on XOR objects and their User Interface (U/I) see example sketches numbered in the 40s.

To raise keyboard by an octave, *Tap* right button once.

To lower keyboard by an octave, *Tap* left button once.

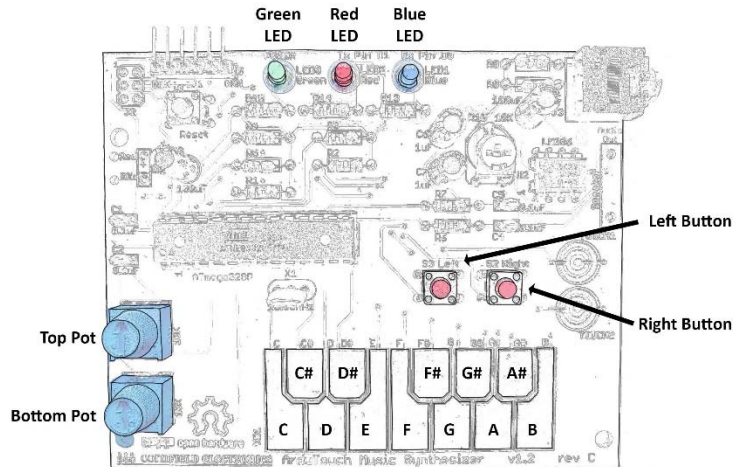
Types of button presses:

Tap: quickly tap a button

Press: long-press a button

Double-Tap: quickly double-tap a button

Tap-Press: think of this as a *Double-Tap* but with the second tap being of a longer duration.



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