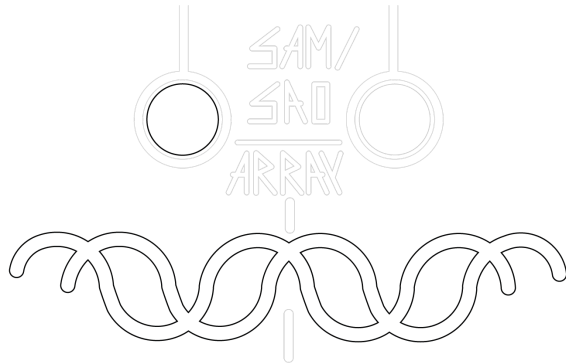
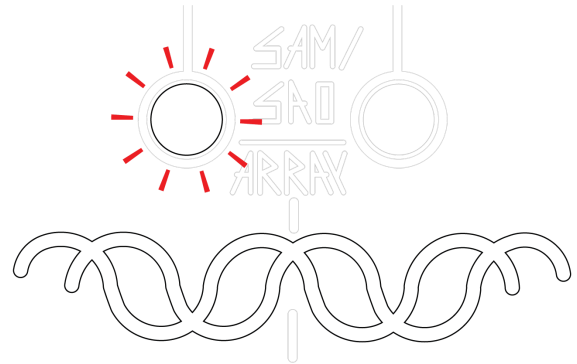

BUTTONS

SAM/SAO Button (one per side) switches between modes:

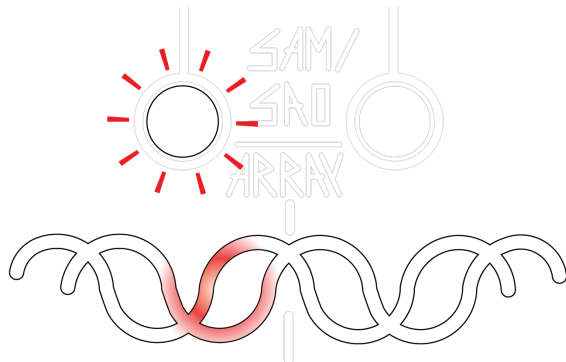
SAM (Spectral Amplitude Modulation)
SAM/SAO LED OFF, Array Binary OFF



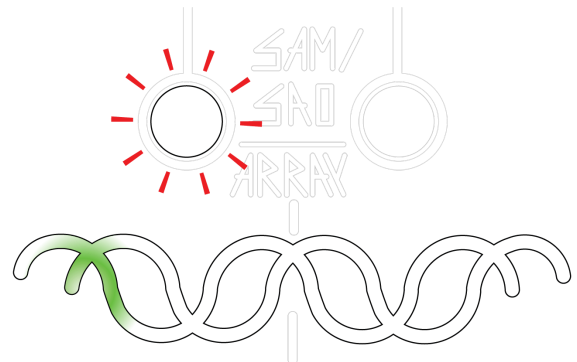
SAO (Spectral Array Oscillation)
SAM/SAO LED ON, Array Binary OFF



Noise
SAM/SAO LED ON, Array Binary RED



Chaos
SAM/SAO LED ON, Array Binary GREEN



SHIFT Button/Clock Input (one per Side)

In SAM, Shift button (and Clock Input) sets clock rate for Array Creation

- If no clock has recently been received, Array Creation is clocked internally at maximum rate

In SAO, Shift button (and Clock Input) steps through the spectra of the current Array (only if the Side's Sub/CV is set to Sub)

In all modes, if Sub/CV is set to a clocked CV output (Stepped Random, Smooth Random, or Tri LFO), Shift button and Clock input set the clock rate for the CV output

FOLLOW/SYNC Button (Side B only)

Press to set Side B to Follow or Sync

-

BUTTON COMBOS

All button combos are Hold Shift + Press _____, and apply to whichever side's Shift button is held. The Shift functions of the buttons are labeled in Gold and the buttons are referred to by that name when combos are described.

Shift + Array

SAM: Create Array

SAO/Noise/Chaos: Switch between audio and low frequency

Shift + CV

Set the behavior of the Side's Sub/CV output (Sub-Oscillator, Envelope Follower (SAM only), Stepped Random, Smooth Random, Triangle LFO)

Shift + (opposing) Shift

Select Array

Shift + (opposing) Shift (hold 2 seconds)

Delete current Array and return it to default



KNOB FUNCTIONS PER MODE

FREQ and FM Index function identically in all modes.

SAM

Partials: Turns on higher harmonics of the spectrum as value increases

Focus: sets the size of the ranges of harmonics that will be activated by the Spectraphon

Slide: sets the fundamental frequency in relation to which the incoming signal will be analyzed

Input attenuators for In-A and In-B: sets the input level for spectral amplitude modulation

SAO:

Partials: Turns on higher harmonics of the spectrum as value increases

Focus: selects the spectrum within the Array (fine)

Slide: selects the spectrum within the Array (coarse)

Input attenuators for In-A and In-B: Offsets even harmonics from down an octave to unity

Noise:

Partials: Sets the width of noise sidebands around the core frequency

Focus: Sets the cutoff frequency of the high pass filter for the modulating noise

Slide: Sets the cutoff frequency of the low pass filter for the modulating noise

Input attenuators for In-A and In-B: Offsets "Even" output sine from unity to up an octave

Chaos:

Partials: Adds audio rate modulation of one sine wave by the other

Focus: Sets the harmonic ratio between the two sine waves

Slide: Adds multiple chaotic feedback paths to the modulation set by Partials

Input attenuators for In-A and In-B: Offsets "Even" output sine from unity to up an octave

[VIEW THE FULL SPECTRAPHON MANUAL HERE](#)

