

the 8-patch bundle by kelvin t

details

This is a bundle of 8 patches for Ksoloti Gills. The 8 patches are:

1. hardc0re k1cks: a hardcore drum machine
2. polysaw expanded: polyphonic synth based on the polysaw demo patch
3. granupoly: granular polyphonic synth which you can load your own samples
4. jc k1cks: jersey club variation of hardc0re k1cks
5. multi-fx: OTT-style compressor/distortion, time-modulatable stereo delay, chorus and reverb
6. loopsynth: simple synth and looper with effects
7. exposaw: duophonic exponentially rhythmic supersaw synth with sequencer and quantizer
8. multi-fx m: auto-filter, phaser, and time-modulatable delay

instructions

1. Download all 8 patches, the start-up patch (titled 'patch loading.axp'), the patch bank file (titled 'bundle bank.axb'), and the 'granupoly samples' wav file folder for the granupoly patch.
2. Make sure an SD card is inserted into Gills.
3. Connect a USB cable from your Gills to your computer.
4. Open the 'bundle bank' file and make sure it looks like the picture, you might need to relocate the patch files.
5. Click 'Upload All' in the 'bundle bank' file, this uploads all patches in one button.
6. Open the 'start-up patch' file.
7. In the 'start-up patch', go to 'Patch' -> 'Upload to SD Card as Startup'
8. In the main window, go to 'Board' -> 'Enter Card Reader Mode'
9. In your computer, open your SD card drive with File Explorer/Finder, and go to the 'granupoly' folder.
10. Copy all samples from the 'granupoly samples' folder in your computer to the 'granupoly' folder in the SD card.
11. Eject SD card and reconnect power to Gills.
12. Select a patch with the encoder: twist the encoder to see the patches, press the encoder to load the patch.
13. To load a different patch, reconnect power to Gills to get to the start-up patch.

Not (fully) implemented yet!		Upload bank table
Index	File	
0	hardc0re k1cks.axp	
1	granupoly.axp	
2	polysaw expanded.axp	
3	jc k1cks.axp	
4	multi-fx.axp	
5	loopsynth.axp	
6	exposaw.axp	
7	multi-fx M.axp	

hardcOre k1cks

patch instructions

This patch is a hardcore drum machine with a kick, a short delay, and a sequencer for Ksoloti Gills.

To get started: press the kick trigger button, or press and rotate the encoder (pattern select) to play a pattern.

There are 3 pages in the patch.

In all pages: button S1 is always the kick trigger button.

button S2 is always the snare (triggering noise mod and crush mod),

button L3 is used for switching pages.

and the encoder is for switching between patterns to play.

Button L4 has different functions in each page.

All knobs and button functions are in the table below

RED: hardcOre k1cks

A kick made from a sine wave with pitch envelope and filter envelope.

1. Pitch: tuning of sine oscillator. Lower values create bass tones.
2. Pitch env decay: Decay of pitch envelope. Lower values create snappier kicks or toms, higher values create a slow 'boom' sound.
3. Pitch env amt: Amount applied from pitch envelope to pitch. Higher values create snappier kicks or toms, lower values for bass tones.
4. Distort: clips the oscillator before sending the sound to the delay effect.
5. Release: How long the kick will be
6. Filter Freq: Frequency of low pass filter. Lower values for less high end in your kick.
7. Filter env decay: Decay of filter envelope.
8. Filter env amt: Amount applied from filter envelope to filter frequency. Higher values for kicks that start with high end.
9. Resonance: Resonance of the low pass filter. Higher values for acid-house bass lines.
10. Crush: feeds the sine wave back into the phase input, creating a bitcrush effect.

button L4: Switch between the two filter resonance options: a normal option (behaves like a normal low pass filter) and an option to ring modulate the resonance (more acid-like).

YELLOW: hyp3r del4y

A stereo short delay effect. Applied to external audio input as well. You must turn the 'Dry Wet' knob (the 1st knob on this page) in order to hear any effect.

1. Dry wet: How much of the delay effect you can hear.
2. LFO rate: rate of LFO applied to delay. Higher values (while turning 'LFO amount') will give you vibrato.
3. LFO amount: amount of LFO applied to delay. Higher values give you stronger vibrato, chorus, or flanger effects.
4. Env mod direction: Audio envelope modulation direction. It reads the signal of both kick and audio input to modulate delay time. Turn clockwise to affect delay time normally, turn counter-clockwise to affect inversely.
5. Env mod amt: Amount of audio envelope modulation applied to delay time. Turn all the way counter-clockwise for no effect. Slowly turn clockwise to hear the incoming audio affecting the delay time.
6. Left time: Delay time for left channel.
7. Right time: Delay time for right channel.

8. Feedback: Delay feedback. If nothing's playing and there's still sound coming out of your Ksoloti, turn this knob down. It can self-resonate with nothing patched to it.
 9. Filter freq: A base filter is applied to the delay line. Turn this up if you want less bass in your delay signal.
 10. Filter width: Width of the base filter. Lower values for muffled delays.
- button L4: Ping Pong Delay On.

GREEN: sequenc3r

A sequence player with accent and noise modulation to make the kick sound more like a snare. The sequencer is here to make the sequence sound more like a usual drum pattern.

Start by turning the accent pitch envelope or filter knobs (knob 3 & 4 in this page), turning and pressing the encoder to 'PLAY: 5' (or any higher number) and you'll hear the first and third beat accented.

1. Seq Speed: Speed of sequence; affects BPM.
2. Gate length: how long the kick will be when the kick is played by the sequencer.

3. Accent pitch: Accenting the pitch envelope of the kick on certain beats.
4. Accent filter: Accenting the filter of the kick on certain beats.
5. Accent pattern: Accent certain beats based on a pattern you select here. Higher values for closer accents.
6. Noise mod: sends a short noise burst into the phase input of kick, making it sound more like a snare or hi-hat.
7. Noise decay: Used with noise mod. Higher values for snare-like sound, lower for hi-hat sounds.
8. Crush mod: sends a short envelope into the crush parameter of kick.
9. Crush decay: Used with crush mod. Higher values for snare-like sound, lower for hi-hat sounds.
10. Mod Pattern: Selects one of the eight patterns for sending a snare-like sound to the sequence. Higher values for closer snares or hi-hats.

button L4: hold to turn on ratcheting for the sequence.

	Red: kick	Yellow: delay	Green: sequencer
1	Pitch	Dry Wet	BPM/Sequence speed
2	Pitch env decay	LFO rate	Kick gate length
3	Pitch env amount	LFO amount	Kick accent pitch envelope
4	Distort	Audio env modulate direction	Kick accent filter
5	Amp env release	Audio env modulate amount	Kick accent pattern select
6	Filter frequency	Left delay time	Noise mod amount
7	Filter env decay	Right delay time	Noise mod decay
8	Filter env amount	Feedback	Crush mod amount
9	Resonance	Base filter frequency	Crush mod decay
10	Crush	Base filter width	Mod pattern select
button L4	Resonance mode	Ping Ping on/off	Ratcheting on/off

polysaw expanded

patch instructions

This patch is a **3-voice polyphonic synth** for Ksoloti Gills based on the demo polysaw patch.

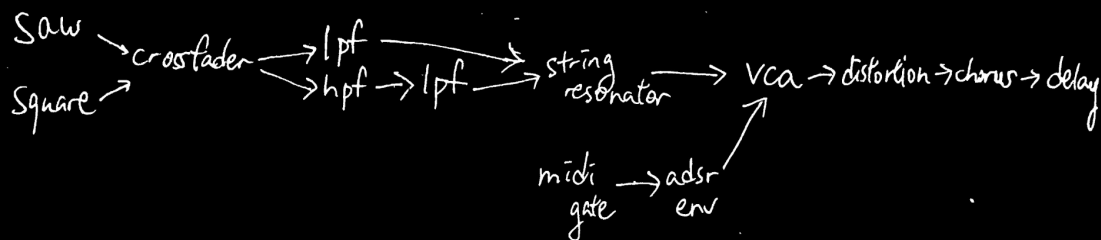
To get started: connect a MIDI keyboard to Gills (via USB Host port or MIDI In port) and play the keys.

There are 3 pages in this patch. Use button S3 to switch pages.

1. Timbre: adjust oscillator detune, filter, and string resonator.
2. Modulation: adjust loopable envelope modulation speed and destination, adjust ADSR of amplitude envelope.
3. Effects: apply distortion, chorus, and delay to the synth.

Button S4 has different functions on each page.

Signal flow



RED: Timbre

Adjust all timbre-related parameters here, including detune, filters, and resonator controls. The oscillators go through 2 filters: a low-pass state-variable filter, and a high-pass state-variable filter with a low-pass filter. Both filter sounds go through the string resonator. Press L4 to enable oscillator distortion.

Knob functions:

1. Oscillators detune
2. 1st state-variable filter frequency.
3. Filter 1 resonance
4. Amp envelope to filter 1 frequency
5. String resonator dampening
6. Oscillators mix: blend between saw and square
7. 2nd state-variable filter frequency.
8. Filter 2 resonance
9. Amp envelope to filter 2 frequency

10. String resonator mix

YELLOW: Modulation

An ADSR amp envelope and an extra AD envelope are available on this page. Pressing L4 toggles between an AD envelope and an LFO.

Knob functions:

1. Amp envelope attack
2. Amp envelope decay
3. Mod envelope attack / Mod LFO rate
4. Mod to Filter 1 frequency
5. Mod to String resonator mix
6. Amp envelope sustain
7. Amp envelope release
8. Mod envelope decay / Mod LFO random amount
9. Mod to Filter 2 frequency
10. Mod to Filter1 resonance

GREEN: Effects

Guitar-amp style hard-clip distortion, chorus, and stereo delay. Button L4 toggles ping pong delay.

Knob functions

1. Distortion gain
2. Chorus speed
3. Delay time left
4. Delay time right
5. Delay base filter width
6. Distortion mix
7. Chorus mix
8. Delay mix
9. Delay feedback
10. Delay base filter frequency

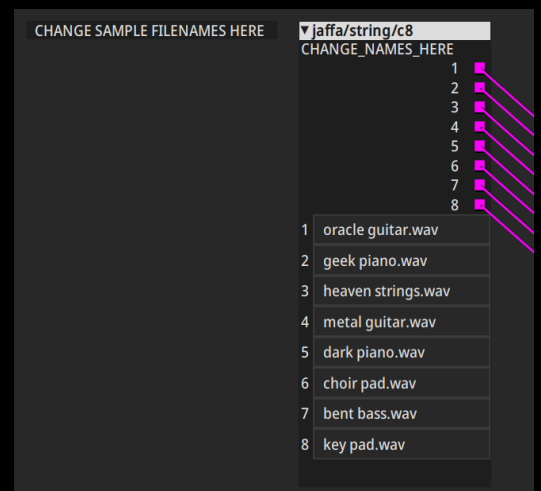
granupoly

patch instructions

This patch is a **3-voice polyphonic granular synth** for Ksoloti Gills.

To get started, you'll need Gills with an SD card attached and your own one-shot synth samples.

1. Open the patch and press 'Live' on the patch, there will be no sound from the patch.
2. Go to Main Window (Ctrl + Shift + M on Windows), 'Board', 'Enter Card Reader Mode'
3. There should be a new drive. Open the SD card drive in your file explorer/browser, and open the folder named 'granupoly'.
4. Paste the one-shot samples into this folder. Take note of the file names.
5. Press 'Eject' on your SD card drive and connect Ksoloti to the patcher.
6. Open the patch and press 'Live' on the patch.
7. Connect a MIDI keyboard and play the keys.
8. If there is no sound, check that the filename in your SD card is the same as the one in the 'CHANGE_NAMES_HERE' object on the top left of the patch. Or check that your sample is loud enough



If you want to use your own samples, in step 4 paste your own samples, take note of the file names, and change the filename in the patch. Filename must end in wav.

There are 3 pages in this patch. Use button S3 to switch pages.

1. Grains: adjust all granular synthesis parameters here.
2. Modulation: adjust envelope/LFO modulation speed, destination and amount, adjust ADSR of amplitude envelope.
3. Effects: apply chorus, reverb, and delay to the synth.

Button S4 has different functions on each page.

Use the encoder to switch samples

RED: Grains

Granular part of the synth. There are 5 individual sample players per voice, those sample players play a short portion of the entire sample, and get retriggered with a square LFO object. L4 button turns on distortion.

Knob functions:

1. Grain retrigger rate: how dense/sparse the sample players will play
2. Grain position: position of sample to play
3. Grain length: how long the sample will hold
4. Filter cutoff
5. Transpose
6. Grain retrigger random: how random the retrigger will be
7. Vary position: randomise sample position every grain
8. Grain decay: how long the sample will decay
9. Filter resonance
10. Pitch variation: varies the pitch per grain.

YELLOW: Modulation

An ADSR amp envelope and an extra AD envelope are available on this page. Pressing L4 toggles between an AD envelope and an LFO.

Knob functions:

1. Amp envelope attack
2. Amp envelope decay
3. Mod envelope attack / Mod LFO rate
4. Mod to Filter 1 frequency
5. Mod to retrigger rate
6. Amp envelope sustain
7. Amp envelope release
8. Mod envelope decay / Mod LFO random amount
9. Mod to position
10. Mod to pitch variation

GREEN: Effects

Chorus, stereo delay, and reverb. Button L4 toggles ping pong delay.

Knob functions

1. Chorus speed
2. Delay time left
3. Delay time right
4. Delay base filter width
5. Reverb time
6. Chorus mix
7. Delay mix
8. Delay feedback
9. Delay base filter frequency
10. Reverb mix

jc k1cks

patch instructions

This patch is a jersey club variation of the hardc0re k1cks patch with a kick, a short delay, and a sequencer for Gills, with different drum patterns compared to the hardc0re k1cks patch.

To get started: press the kick trigger button, or press and rotate the encoder (pattern select) to play a pattern.

There are 3 pages in the patch.

In all pages: button S1 is always the kick trigger button,

button S2 is always the snare (triggering noise mod and crush mod),

button L3 is used for switching pages,

and the encoder is for switching between patterns to play.

Button L4 has different functions in each page.

All knobs and button functions are in the table below

Page 1: jc k1cks

A kick made from a sine wave with pitch envelope and filter envelope.

1. Pitch: tuning of sine oscillator. Lower values create bass tones.
2. Pitch env decay: Decay of pitch envelope. Lower values create snappier kicks or toms, higher values create a slow 'boom' sound.
3. Pitch env amt: Amount applied from pitch envelope to pitch. Higher values create snappier kicks or toms, lower values for bass tones.
4. Distort: clips the oscillator before sending the sound to the delay effect.
5. Release: How long the kick will be
6. Filter Freq: Frequency of low pass filter. Lower values for less high end in your kick.
7. Filter env decay: Decay of filter envelope.
8. Filter env amt: Amount applied from filter envelope to filter frequency. Higher values for kicks that start with high end.
9. Resonance: Resonance of the low pass filter. Higher values for acid-house bass lines.

10. Crush: feeds the sine wave back into the phase input, creating a bitcrush effect.

button L4: Switch between the two filter resonance options: a normal option (behaves like a normal low pass filter) and an option to ring modulate the resonance (more acid-like).

Page 2: hyp3r del4y

A stereo short delay effect. Applied to external audio input as well. You must turn the 'Dry Wet' knob (the 1st knob on this page) in order to hear any effect.

1. Dry wet: How much of the delay effect you can hear.
2. LFO rate: rate of LFO applied to delay. Higher values (while turning 'LFO amount') will give you vibrato.
3. LFO amount: amount of LFO applied to delay. Higher values give you stronger vibrato, chorus, or flanger effects.
4. Env mod direction: Audio envelope modulation direction. It reads the signal of both kick and audio input to modulate delay time. Turn clockwise to affect delay time normally, turn counter-clockwise to affect inversely.
5. Env mod amt: Amount of audio envelope modulation applied to delay time. Turn all the way counter-clockwise

for no effect. Slowly turn clockwise to hear the incoming audio affecting the delay time.

6. Left time: Delay time for left channel.
7. Right time: Delay time for right channel.
8. Feedback: Delay feedback. If nothing's playing and there's still sound coming out of your Ksoloti, turn this knob down. It can self-resonate with nothing patched to it.
9. Filter freq: A base filter is applied to the delay line. Turn this up if you want less bass in your delay signal.
10. Filter width: Width of the base filter. Lower values for muffled delays.

button L4: Ping Pong Delay On.

Page 3: sequenc3r

A sequence player with accent and noise modulation to make the kick sound more like a snare. The sequencer is here to make the sequence sound more like a usual drum pattern.

Start by turning the accent pitch envelope or filter knobs (knob 3 & 4 in this page), turning and pressing the encoder to 'PLAY: 5' (or any higher number) and you'll hear the first and third beat accented.

1. Seq Speed: Speed of sequence; affects BPM.
2. Gate length: how long the kick will be when the kick is played by the sequencer.
3. Accent pitch: Accenting the pitch envelope of the kick on certain beats.
4. Accent filter: Accenting the filter of the kick on certain beats.
5. Accent pattern: Accent certain beats based on a pattern you select here. Higher values for closer accents.
6. Noise mod: sends a short noise burst into the phase input of kick, making it sound more like a snare or hi-hat.
7. Noise decay: Used with noise mod. Higher values for snare-like sound, lower for hi-hat sounds.
8. Crush mod: sends a short envelope into the crush parameter of kick.
9. Crush decay: Used with crush mod. Higher values for snare-like sound, lower for hi-hat sounds.
10. Snare pattern: Selects one of the eight patterns for sending a snare-like sound to the sequence. Higher values for closer snares or hi-hats.

button L4: hold to turn on ratcheting for the sequence.

	Red: kick	Yellow: delay	Green: sequencer
1	Pitch	Dry Wet	BPM/Sequence speed
2	Pitch env decay	LFO rate	Kick gate length
3	Pitch env amount	LFO amount	Kick accent pitch envelope
4	Distort	Audio env modulate direction	Kick accent filter
5	Amp env release	Audio env modulate amount	Kick accent pattern select
6	Filter frequency	Left delay time	Noise mod amount
7	Filter env decay	Right delay time	Noise mod decay
8	Filter env amount	Feedback	Crush mod amount
9	Resonance	Base filter frequency	Crush mod decay
10	Crush	Base filter width	Snare pattern select
button L4	Resonance mode	Ping Pong on/off	Ratcheting on/off

multi-fx (OTT + delay + chorus + reverb)

patch instructions

This patch is a multi-effects unit with Over-The-Top-style multi-band compressor/distortion, chorus, modulatable stereo delay, and reverb based on the one from Mutable Instruments' Elements.

To get started: turn down the output volume knob, connect a sound source to the Gills' audio input, connect your headphones/speakers to Gills' audio output, and play some audio while slowly turning up the volume knob.

If there's no audio, check your sound source, your cables, the input/output volume knobs, the OTT Gain knob (1st row 5th knob), and the OTT output gain (2nd row 2nd-4th knobs) on Gills.

There are 3 pages in this patch. Use button S3 to switch pages.

1. OTT Compressor/Distortion
2. Stereo Delay
3. Chorus & Reverb

Signal flow: OTT -> Delay -> Chorus -> Reverb

The encoder adjusts the global dry/wet mix. LED L1 = wet signal. LED L2 = dry signal.

Button S4 has different functions on each page.

Page 1: OTT Compressor/Distortion

Based on Ableton's OTT multiband compressor, the audio gets split into low, mid, high frequency bands with 2 state-variable filters, and each frequency band goes through a heavily-compressed compressor. Button L4 turns on the resonance for the filters. The resonance can be adjusted through the patcher.

1. Low-mid frequency band
2. Low in: adjust the input gain of low band before it's dynamically processed
3. Mid in: adjust the input gain of mid band before it's dynamically processed
4. High in: adjust the input gain of high band before it's dynamically processed
5. OTT gain
6. Mid-high frequency band
7. Low out: adjust the output gain of low band
8. Mid out: adjust the output gain of mid band
9. High out: adjust the output gain of high band
10. OTT mix: 0 = dry signal, 64 = wet signal

Page 2: Stereo Delay

Time-modulatable stereo delay with filter control. You must turn the 'Dry Wet' knob (the 1st knob on this page) in order to hear any effect. Button L4 turns on ping pong mode.

1. Dry wet: How much of the delay effect you can hear.
2. LFO rate: rate of LFO applied to delay. Higher values (while turning 'LFO amount') will give you vibrato.
3. LFO amount: amount of LFO applied to delay. Higher values give you stronger vibrato, chorus, or flanger effects.
4. Env mod direction: Audio envelope modulation direction. It reads the signal of audio input to modulate delay time. Turn clockwise to affect delay time normally, turn counter-clockwise to affect inversely.
5. Env mod amt: Amount of audio envelope modulation applied to delay time. Turn all the way counter-clockwise for no effect. Slowly turn clockwise to hear the incoming audio affecting the delay time.
6. Left time: Delay time for left channel.
7. Right time: Delay time for right channel.
8. Feedback: Delay feedback. If nothing's playing and there's still sound coming out of your Ksoloti, turn this knob

down. It can self-resonate with nothing patched to it.

9. Filter freq: A base filter is applied to the delay line. Turn this up if you want less bass in your delay signal.
10. Filter width: Width of the base filter.

Page 3: Chorus & Reverb

Stereo chorus with feedback and reverb based on Mutable Instruments' Elements module.

Button L4 inverts the chorus feedback.

1. Chorus speed
2. Chorus pre-delay
3. Reverb time
4. Reverb pre high-pass filter: Turn this up if you want less bass before processed by the reverb.
5. Reverb gain: if you can't hear any reverb after adjusting the mix, try turning this knob.
6. Chorus mix
7. Chorus feedback
8. Reverb diffusion
9. Reverb low-pass filter: muffles the reverb signal
10. Reverb mix

loopsynth

patch instructions

This patch is a looper activated by the synth, with effects after the looper.

To get started: plug a USB MIDI keyboard to the USB host socket and start playing some notes.

Using the looper:

Pressing the encoder prepares the looper to record, or long press the encoder to 'delete data' by recording empty audio, and press the encoder again to go to play mode. When the screen says 'press key to record', press a key on your USB MIDI keyboard to start recording. Stop the recording and set the end point by pressing the encoder again. Button S1 plays/stops the loop, button S2 turns on overdub. LED L1 shows if you're playing the loop. LED L2 shows if you're recording/overdubbing or not.

There are 2 pages in this patch: **synth** and **effects**.

Use button S3 to switch pages.

Button S4 does different functions on each page

Page 1: Sequencer

This is a simple supersaw synth with MIDI note quantization enabled with button L4.

1. Amp attack
2. Amp decay
3. Amp sustain
4. Amp release
5. Oscillator detune
6. Filter env attack
7. Filter env decay
8. Filter cutoff
9. Filter env amount
10. Choose scale: button L4 to toggle on

Page 2: Effects

Chorus, stereo delay, and reverb. Button L4 toggles ping pong delay.

1. Chorus speed
2. Delay time left
3. Delay time right
4. Delay base filter width
5. Reverb time
6. Chorus mix
7. Delay mix
8. Delay feedback
9. Delay base filter frequency
10. Reverb mix

exposaw

patch instructions

This patch explores exponential rhythms with a 2-voice supersaw synth, a sequencer, and reverb.

To get started: press button S2 to play a chord, and use knobs 1 & 6 to adjust the tune.

There are 2 pages in this patch: **sequencer** and **synth**.

Button S2 plays the chord. The number below 'play/stop' is the step you're playing in the step sequencer. Go to the next chord by pressing button S1.

Use button S3 to switch pages.

Button S4 plays the sequence.

Page 1: Sequencer

This is a simple 4-step sequencer that can play 2 notes at a time.

Knobs 1-4 and 6-9 changes the note/tune, knob 5 changes the pitch and knob 10 changes the range of notes to be played.

Pressing the encoder toggles note quantization so the chords will play in key. Change the key with the encoder.

Button S2 plays the chord. The number below 'play/stop' is the step you're playing in the step sequencer. Go to the next chord by pressing button S1.

Use button S3 to switch pages.

Button S4 plays the sequence.

Page 2: Synth

This page controls the synth parameters and the sequence speed.

1. Amp rise: attack time of amp envelope
2. Mod rise: attack time of mod envelope to amp envelope
3. Rand rise: randomise attack time
4. Detune: detunes the supersaw oscillator
5. Reverb time
6. Amp fall: decay time of amp envelope
7. Mod fall: decay time of mod envelope to amp envelope
8. Rand fall: randomise decay time
9. Seq speed: sequence speed
10. Reverb mix

multi-fx m (auto-filter, phaser, delay)

The 'm' in 'multi-fx m' is for 'movement/mangle/morph'.

patch instructions

This patch is a multi-effects unit with an auto-filter, a stereo phaser, and a modulatable stereo delay.

To get started: turn down the output volume knob, connect a sound source to the Gills' audio input, connect your headphones/speakers to Gills' audio output, and play some audio while slowly turning up the volume knob.

If there's no audio, check your sound source, your cables, and the input/output volume knobs.

There are 3 pages in this patch. Use button S3 to switch pages.

1. Auto-filter
2. Stereo Phaser
3. Stereo Delay

The encoder adjusts the global dry/wet mix. LED L1 = wet signal. LED L2 = dry signal.

Button S4 has different functions on each page.

Knob 1 on every page is the dry/wet mix of the individual effects.

Page 1: Auto-filter

Inspired by Ableton's Auto-Filter, the audio gets distorted, wave-folded, and split into 2 low-pass filters: a 2nd order oversampled filter and a state-variable filter. Button L4 toggles the resonance mode for the filter.

1. Dry/wet mix
2. Filter cutoff
3. Filter resonance
4. Env follower: How much the cutoff frequency follows the incoming audio
5. Env smooth: Smooths the audio envelope

6. LFO rate for auto-filter
7. LFO amount for auto-filter
8. OS/SVF mix: blends between the 2nd order oversampled filter and the state-variable filter.
9. Distort mix
10. Wavefold

Page 2: Phaser

A stereo phaser. Button L4 changes the routing between filter->phaser and phaser->filter.

1. Dry/wet mix
2. Pre-delay

3. Feedback
4. Stages
5. Env amount: How much the phase follows the incoming audio
6. LFO rate for phaser
7. LFO amount for phaser
8. Left phase
9. Right phase
10. LFO fold: wavefolds the LFO for phaser

Page 3: Stereo Delay

Time-modulatable stereo delay with filter control. You must turn the 'Dry Wet' knob (the 1st knob on this page) in order to hear any effect. Button L4 turns on ping pong mode.

1. Dry wet: How much of the delay effect you can hear.
2. LFO rate: rate of LFO applied to delay. Higher values (while turning 'LFO amount') will give you vibrato.
3. LFO amount: amount of LFO applied to delay. Higher values give you stronger vibrato, chorus, or flanger effects.
4. Env mod direction: Audio envelope modulation direction. It reads the signal of audio input to modulate delay time. Turn clockwise to affect delay time normally, turn counter-clockwise to affect inversely.
5. Env mod amt: Amount of audio envelope modulation applied to delay time. Turn all the way counter-clockwise for no effect. Slowly

turn clockwise to hear the incoming audio affecting the delay time.

6. Left time: Delay time for left channel.
7. Right time: Delay time for right channel.
8. Feedback: Delay feedback. If nothing's playing and there's still sound coming out of your Ksoloti, turn this knob down. It can self-resonate with nothing patched to it.
9. Filter freq: A base filter is applied to the delay line. Turn this up if you want less bass in your delay signal.
10. Filter width: Width of the base filter.