dub is a patch for creating spacey, dubbed out effects live on the monome.

I haven't seen that many monome patches that incorporate effects and live processing (though there are some really awesome ones, like DJFX), so I thought it would be fun to make a performance oriented delay/reverb patch.

Since acquiring a second monome, I've realized the benefits of having an entirely effects oriented patch- kind of a secondary patch to compliment a set of samples or a midi instrument controlled by another monome.

I've added a bunch of different features to dubb, with the overriding philosophy that it should be playable, simple, and operable (almost) entirely from a single monome 64. A lot of the stuff I've added is locked to a certain value: for example, the low pass button cuts only to 700hz. Feel free to open up dub and edit to taste- the patch is pretty simple I think, all things considered.

That said, this is also my first Max patch to involve sound processing as well as control- let me know if there are any weird kinks.

I also want to thank my friend Jonathan Moran, from jm-dsgn.com for helping me with the artwork.

-pewt

FEATURES:

delay:
the delay mix is controlled by column 4- you can jump to a value by pressing any button except the top or bottom button. the top and bottom buttons increment the delay up or down. the feedback is controlled by column 3- every button except for the bottom one will jump to a lower or higher amount of feedback. the bottom button locks the rest of the column so the buttons stay static. delay time is controlled by column 2- every button jumps to a different delay time value (between 50-1000ms). you can also get a tap-tempo by pressing button 4, column 1- the timing is determined by when you release the button (play around with it and you'll get the idea).

reverb:
the reverb mix is controlled by column 5, same deal as the delay mix. the reverb decay is controlled by column 6, again with the same behavior as the delay feedback. reverb size is controlled by column 7- similar to delay time. beware: the reverb size parameter tends to make clicking noises when changed- you can lower the reverb mix to minimize clicking. reverb diffusion is controlled by column 8, buttons 4-6: there are three levels: low, medium and high (respectively). finally, you can control the high frequency damping somewhat using column 8, button 7 is low damping, button 8 is high damping.

filter:
pressing column 1, button 1 will engage a quick and dirty 700hz low pass filter to the signal- adds a bit of murk.

bit reduction:
pressing column 1, button 2 will cut the signal to 12-bit, with half the sampling rate- adds a bit of grit.

mod-delay:
there is a second delay that can be engaged by pressing column 1, button 4. the mod-delay is a division of the primary delay. you can change the division by pressing column 1, buttons 5-8: 1/2, 1/4, 1/8 or 1/16 division (respectively).

dub siren:
drop a wav file into the "siren dropp" box on the gui to create a dub siren
(essentially a 250ms looping slice of the beginning of whatever you drop in).
Column 8, button 1 will momentarily engage the siren.

freeze:
column 8, button 3, will set up the "freeze record" function. hold the button
down for a bit and let go- immediately after you let go, it will record for
however long you held down. pressing column 8, button 2 will engage a
loop of the recorded bit. Be careful with freeze- it can be kind of fussy.
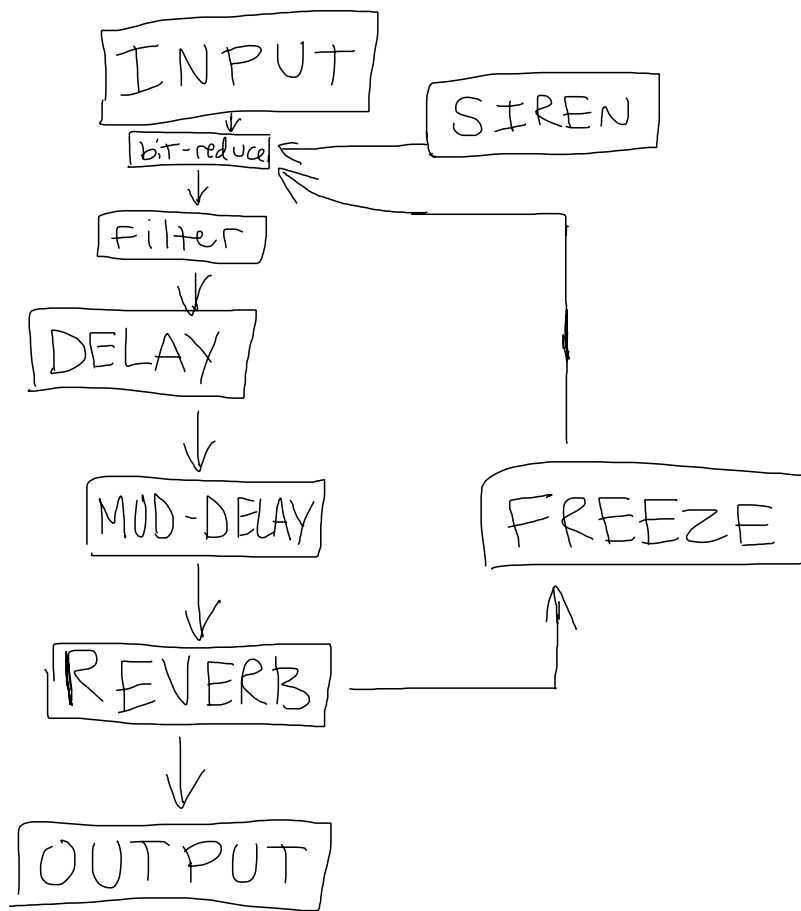
Illustration of signal path:

INPUT
bit-reduce
filter
DELAY
MOD-DELAY
REVERB
OUTPUT
SIREN
FREEZE

Diagram for monome input

dubb

reverb
size
↓

LPF		∧	d	r	∧		SIREN
bit reducr		f	e	e	T		FREEZE PLAYBACK
MOD delay		e	l	V	A		FREEZE RECORD
TAP delay		d b	a	e	I		LOW
1/16		a c	y	r	I		MID
1/8		K	M	b	L		HIGH
1/4		V	I	M I	V		LOW
1/2		FB latch	X	X	tail latch		HIGH

mod delay division

damping

delay time (0 - 1000)

diffusion