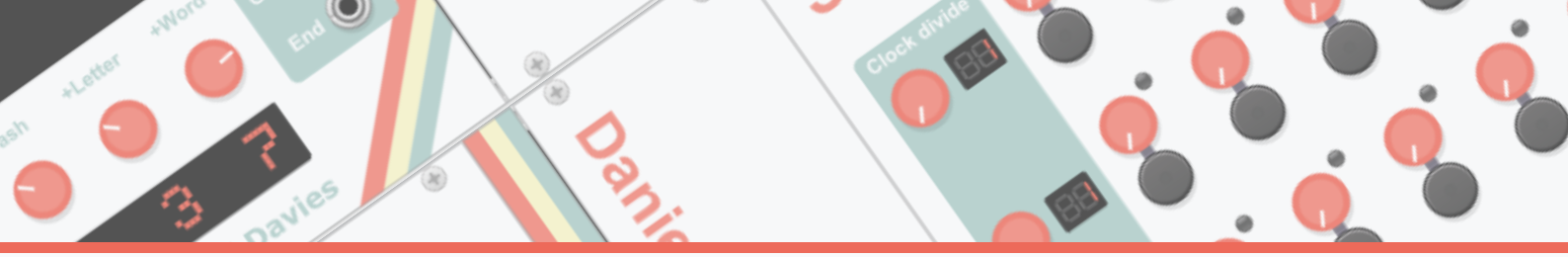
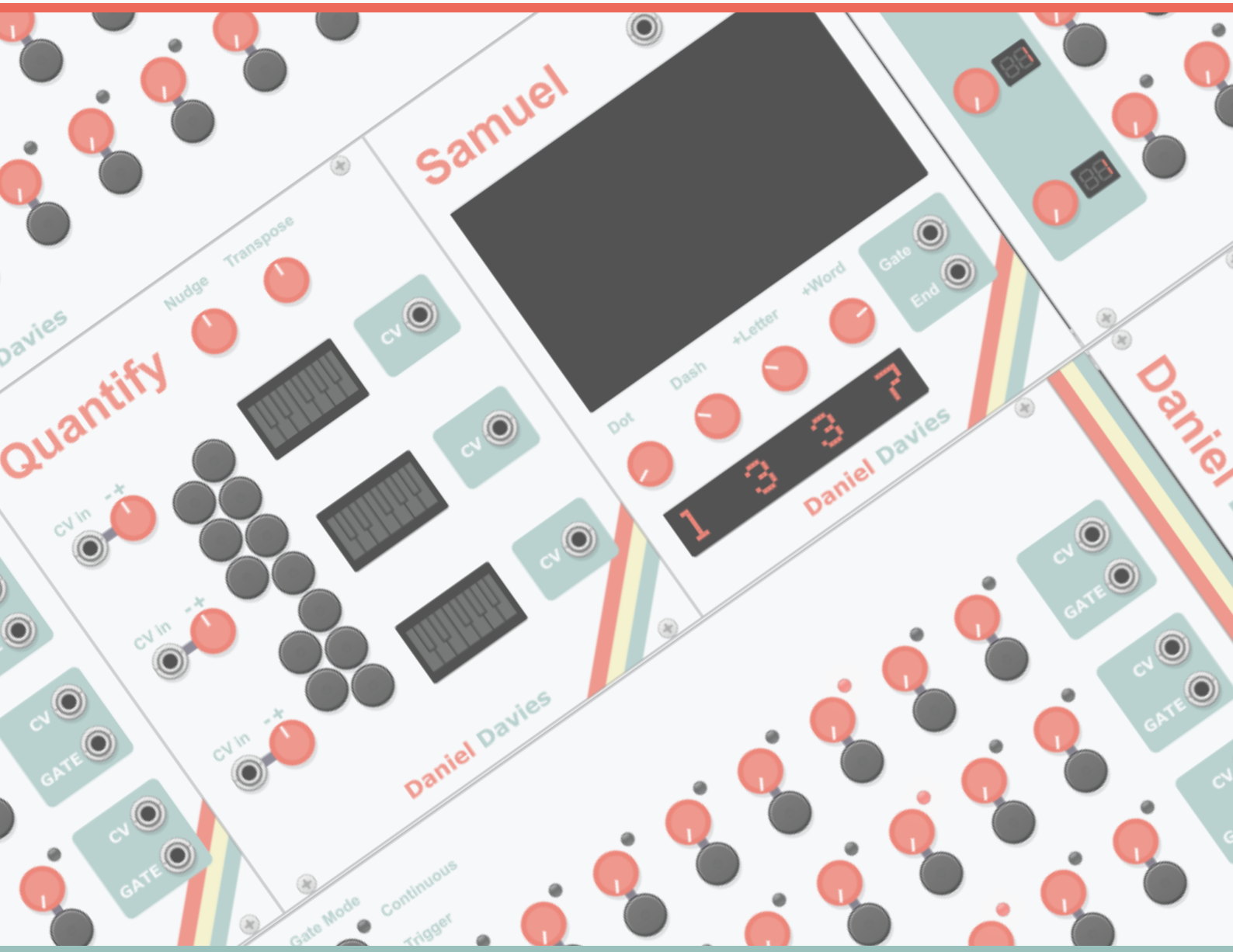


Daniel Davies

Modules for VCV Rack
Manual



Samuel

Morse code based rhythm generator - 20HP

From words, to rhythms. Named after Samuel Morse, the creator of Morse code. Samuel takes text input and constructs natural sounding rhythmic sequences using Morse Code.

Special thanks to Paul Gatt, for both the initial idea, and testing of Samuel

Panel

A. Clock input

B. Reset input

C. Message input screen

D. Dot length control

E. Dash length control

F. New letter length control

G. New Word length control

H. Gate output

I. End of sequence output

J. Length indicator screen

How it works

Samuel uses international morse code:

A .-	G --.	M --	S ...	Y -.--	4 ....-
B -...	H	N -.	T -	Z --..	5 .....
C -.-.	I ..	O ---	U ..-	0 -----	6 -....
D -..	J .---	P .--.	V ...-	1 .----	7 --...
E .	K -.-	Q --.-	W .--	2 ..---	8 ---..
F ..-.	L .-..	R .-.	X -..-	3 ...--	9 ----.

- The length of a dot is one unit
- A dash is three units
- The space between parts of the same letter is one unit
- The space between letters is three units
- The space between words is seven units

Explanation:

Samuel requires 2 things before it will do anything useful:
1. A clock input
2. Some text input

To provide text input to Samuel, click anywhere within the text input screen **(C)**, you can then type using your computer's keyboard (until you click anywhere outside of the text input screen)

Note: currently only letters A-Z and numbers 0-9 are supported

Samuel treats one unit of time as the time between two clock inputs recieved via the clock input **(A)** because of this, fast clocks tend to work best.

Once you have entered some text, and hooked up the clock input (A) to a clock source you can then use the gate output **(H)** to trigger drums, envelopes, Nuclear Armageddon etc.

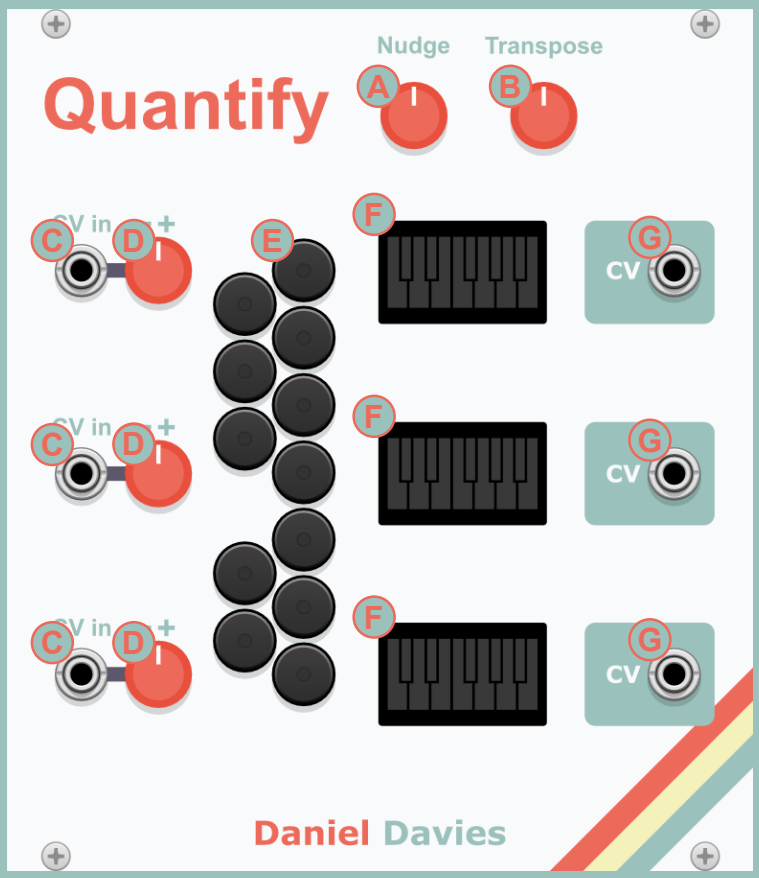
Knobs **(D - G)** can be used to vary the length of dots, dashes, new letters, and new words. Altering these values will change the characteristics of the resulting rhythms.

Quantify

3x Quantizer with nudge and transpose controls - 23HP

Designed to work seamlessly with my Sequel range of sequencer modules, this quantizer can be used to build 3 part melodies within a scale/chord of your choosing. Quantify gives you extra fine control over the range of your melodies in the form of attenuverted inputs and the built in *nudge* control allows you to shift your melody within your scale.

Panel



A. Nudge control

B. Transpose control

C. CV inputs

D. Input value attenuverters

E. Note select buttons (notes C - B)

F. Current note indicator

G. CV outputs

How it works

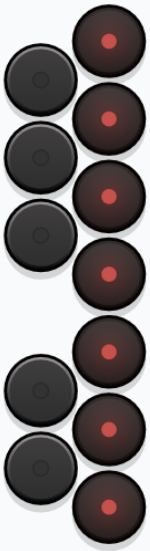
Explanation

Quantify works by rounding your CV inputs to the nearest available note in your selected scale.

To select a scale/chord, click on the note select buttons **(E)** that relate to your intended scale. You can think of the note select buttons as a single octave piano keyboard that has been rotated 90 degrees.

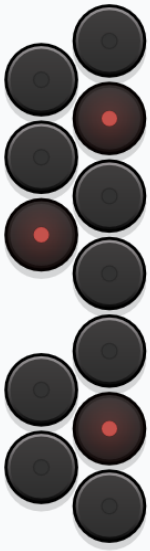
Note: when no notes are selected, Quantify will round all CV inputs to the nearest C.

C Major/A Minor scale



C Major chord

D Major chord



Quantify will display the note that is currently being output on note displays **(F)**

You can change the range of values Quantify will output per-row by altering the attenuvert knobs **(D)**. while these knobs are set to the 12 o'clock position, only one note will play for that row.

The nudge knob **(A)** will shift your CV outputs up or down within the scale, while the transpose knob **(B)** will shift the CV output values up/down by semitone values by a maximum of one octave in either direction.

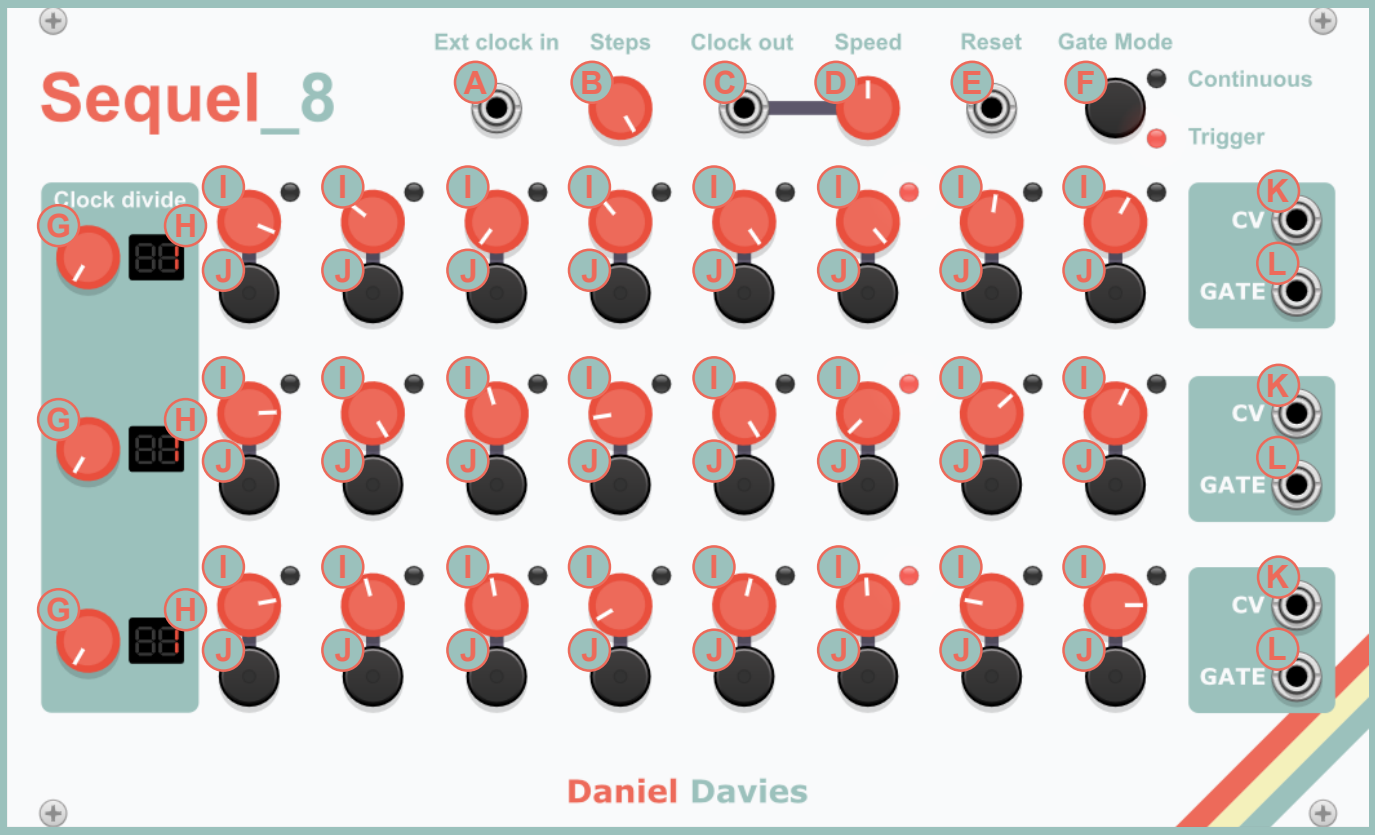
Note: currently the note screens **(F)** do not show the transposed output. This is likely to change in a future update.

Sequel 8 & Sequel 16

Three row 8/16 step sequencer - 48/73 HP

Powerhouse step sequencers with built in clock divide functionality (Sequel 8 and Sequel 16 are identical aside from number of steps). Each row of Sequel has both a gate output and a CV output, this allows Sequel to be used as a powerful drum sequencer, melody generator or controller.

Panel



A. External clock input

B. Step count knob

C. Clock output

D. Speed control knob

E. Reset input

F. Gate mode select

G. Clock divide knobs

H. Clock divide displays

I. CV control knobs

J. Gate on/off buttons

K. CV outputs

L. Gate outputs

How it works

Explanation

Sequel is a CV & Trigger sequencer, inspired by hardware analogue sequencer modules.

Each step of each of Sequel's 3 rows has a CV Knob **(I)**, a trigger button with an led indicator **(J)**, and an active step led. The voltage outputted by each row's CV output (K) is equal to the value of the CV knob **(I)** for the currently active step. Similarly the gate output **(L)** is controlled by switching on or off the gate button **(J)** for the currently active step.

There are two methods for controlling the speed of Sequel. You can use the internal clock controlled by the speed knob **(D)**, or you can feed an external clock source into Sequel via the external clock in port **(A)**.

Clock Divide:

One of the most powerful features of Sequel is it's per-row clock divide functionality.

Set a clock divide value for each row using the clock divide knobs **(G)**, the value is indicated via the clock divide displays **(H)**. The clock divide value determines how many clock inputs are needed before that row will progress to a new step. This means that Sequel's rows are able to become out of sync with eachother, allowing for the creation of interesting polyrhythms.

Gate Modes

Sequel is capable of two different gate modes. The active gate mode is controlled by the gate mode select button **(F)**:

Trigger mode: Gates output 10V for a duration of 1ms.

Continuous mode: Gates output 10v for as long as gate buttons **(J)** are toggled on.