

Polly

What is it?

Polly generates polyrhythms. That's it!

Why is it?

I was originally a drummer (ok I was originally a baby) and have been interested in rhythm for most of my life. Polyrhythms are curious constructs that juxtapose two very simple rhythms to create something new that is greater than the sum of its parts. Sort of like hot water and tea leaves. Or a VCA and an envelope.

Getting started

Use the arrows keys to change the values on the two digital readouts. These values represent the number of beats in each rhythm combined to form the polyrhythm. Use the BPM knob to set the tempo. Hook up a sound source that expects a pulse to the two OUT jacks. You've got a polyrhythm!

Operation

Beats

The **two digital counters** define the two parts of the polyrhythm. Use the associated **up and down arrow buttons** to set the desired number of beats in each.

You can also set the numbers with their respective **CV jack**. The numbers are represented by each successive 0.1 increment of voltage starting from 0. For example, 0.2 represents 2 and 2.2 is 22. The expected input range of [-5, 5] represents the values from 1 to 50 by treating negative values as positive. (For those interested in more detail, the range for each increment has an exclusive beginning and inclusive end. For example, a range of (.1, .2] represents 2.)

To maintain rhythmic integrity, the polyrhythm will change in output only after that current polyrhythm is complete. So if you're playing a 4 against 3 and change it to 3 against 2, the 4 against 3 must complete before the 3 against 2 is reflected in the output.

Output

The **OUT jacks** send triggers associated with their respective parts of the polyrhythm.

White Lights

They blink when a trigger is sent in their associated jack (when a beat occurs in the polyrhythm).

BPM

Beats per minute can be set in two ways. The **BPM knob** is self-explanatory.

The **EXT CLOCK jack** expects pulses (or gates or any leading edge) that rise to +5 and determines the bpm as fast as it can, taking two or three pulses to sort things out. This should be very similar to the way many other modules work.

Reset

The **RESET button and jack** both immediately reset the polyrhythm.

Rhythm Start

The **RHYTHM START jack** sends a trigger and a tiny blue light blinks to indicate the beginning of a pattern.

Polly

She's a Norwegian Blue. Well, she's actually a Hyacinth Macaw, similar to what passed for a Norwegian Blue in the original [Dead Parrot sketch](#). The Norwegian Blue isn't a real thing, [probably](#).

?

The **? button and associated jack** add some extra flavor. While the button is depressed or the jack has a value ≥ 5 , an extra beat is added or an existing beat removed from each rhythm pattern. The overall polyrhythm stays intact. This is just a touch of spice. Once the button is undepressed or the jack's value drops ≤ 0 , the flavor is removed. Activate it again and maybe you'll get a different bit of spice. Nutmeg this time, cinnamon the next.

Final thoughts

Thank you for giving my first release a try. It's a simple module, but one must start at the beginning, and this is hopefully the first of many to come. If you have any problems, questions, suggestions, Monty Python references, or anything else to share, please feel free to post at my Cherry Audio [forum](#).

Attributions

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Again, thanks!

borkman