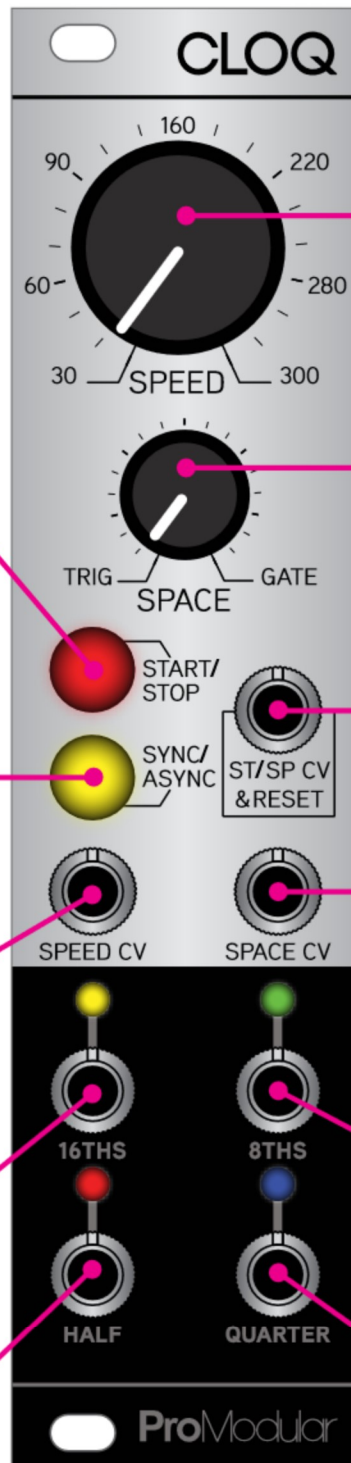


Thank you for purchasing the **ProModular CLOQ** Eurorack Module. **CLOQ** is designed to work within a Eurorack modular synthesizer system. On it's surface, **CLOQ** is a clock generator based on BPM with built-in divided outputs that are set to common musical times, special SYNC and ASYNC modes* and SPACE control over the outputs. Now you can go back to using your LFOs to modulate and let CLOQ do what it's supposed to!



START/STOP:

Use this button to manually start and stop the CLOQ. A steadily lit LED on this control indicates the CLOQ has been stopped.

*SYNC/ASYNC:

Switches between synchronous and asynchronous modes. SYNC mode divides on a pulse's rising edge, where ASYNC divides on the falling edge.
LED OFF= SYNC
LED ON= ASYNC

SPEED CV:

Bipolar CV input for controlling the SPEED frequency. Accepts voltages +/-5V.

16THS OUTPUT:

Outputs a signal every clock pulse.

HALF OUTPUT:

Outputs a signal every half note.

SPEED:

Manual adjustment of normal out clock speed. Approx 30 to 300 beats per minute.

SPACE:

Manual adjustment of gate length common to all the outputs. Approx 10-80% pulse width is possible.

START/STOP CV INPUT & RESET:

CV input for controlling the start and stop of the clock. A +5V pulse will reset the clock.

SPACE CV:

Bipolar CV input for controlling the width of the SPACE control. Accepts voltages +/-5V.

8THS OUTPUT:

Outputs a signal every OTHER clock pulse.

QUARTER OUTPUT:

Outputs a signal every quarter note.

* This is a novel feature and a modular first. This control switches between rising and falling pulse edge triggered divisions respectively. When the CLOQ is in SYNCronous mode the divided outputs will pulse in sync with each other. When the button is depressed and the led is on, the CLOQ is in ASYNChronous mode and the divisions will occur on the falling edge of each successive division.

PATCH IDEAS

- 1.) Feed a positive going pulse into the RESET CV to stop the CLOQ. For the duration that the pulse remains high, the CLOQ will be stopped and will start back at 1 when the pulse goes low. A short pulse will reset the CLOQ back to 1. Try feeding the reset with a pulse train to use the CLOQ as a burst generator(see below) or to hard sync the CLOQ to another tempo.
- 2.) For control over the entire range of the SPEED CV, set SPEED knob to the center position. Higher speeds than 300 bpm are possible with positive CV and adjusting the speed knob past 12 o'clock. The use of an attenuator is recommended for more precise control.
- 3.) To use the CLOQ as a pseudo-burst generator, set the SPEED knob to around 10 o'clock while patching an audio rate signal (VCO, etc.) into the START/STOP input jack and modulate the 1v/oct input on the VCO. You can also use a fluctuating CV source (such as the *Steady State Fate QR noise*) as the CV for the START/STOP, but send it into a VCA and the modulate the VCA with an LFO.
- 4.) To create perfectly syncopated and stuttery sounding beats, you'll need a *Makenoise MATHS*^t (!) as your EG. Patch the 16ths output from the CLOQ into a TRIG input on channel 1 or 4 on MATHS. MULT the CLOQ's 16ths output into a sequencer and use that to sequence the SPACE input on CLOQ. Can also send it into an attenuator or VCA prior to feeding the SPACE input jack.

^tMATHS was the only EG that displayed this behavior when testing.

TECHNICAL SPECS

SIZE: 6HP

POWER CONSUMPTION: +38mA / -22mA

SPEED CV INPUT: +/-5V

SPACE CV INPUT: +/-5V

OUTPUTS: 0-10V

EXPANDER HEADER PRESENT FOR FUTURE EXPANSION.

GRAPHIC REPRESENTATIONS OF DIVISIONS

