Doepfer — A-160-2

- Manual PDF

A-160-2 Clock/Trigger Divider II Manual (via Doepfer)

Creative Uses for the Doepfer A-160-2 Clock/ Trigger Divider II

The Doepfer A-160-2 Clock/Trigger Divider II is a highly flexible clock utility, capable of generating a broad variety of rhythmic divisions. Its versatility allows it to serve a range of functions in any Eurorack system beyond simple drum clocking. Here are some creative patching ideas:

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1. Complex Rhythms and Polyrhythms

How:
Use the prime number division mode (2, 3, 5, 7, 11, 13, 17) to create evolving polyrhythms.
Combine With:
- Multiple drum modules (e.g., **ALM Akemie's Taiko**, **Tiptop Audio ONE**)
- Sequential switches or analog switches (e.g., **Doepfer A-151 Sequential Switch**)
Idea:
Patch different divider outputs to individual drum triggers. Using non-binary divisions, you get non-repeating rhythmic patterns. Pass some of these triggers to a sequential switch to rotate the destinations for even less predictability.

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2. Generative and Evolving Sequences

How:
Send divided clocks into random generators or sequential switches for generative melody/rhythm.
Combine With:
- Random or sample & hold (e.g., **Mutable Instruments Turing Machine**, **Doepfer A-184-1**)
- Quantizers (**Intellijel Scales**, **Doepfer A-156**)
Idea:
Feed the A-160-2's divided outputs to trigger random voltage generators, then quantize those voltages to create musical pitches. The varying length of divided clocks introduces organic timing into your generative process.

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3. Clocked Modulation/Gates

How:
Use gate or trigger outputs to cycle modulation sources in sync with your master clock.
Combine With:
- Envelope generators (**Intellijel Quadra**, **Make Noise Maths**)
- LFOs
Idea:
Trigger envelopes or reset LFOs with different divisions for evolving modulation that stays rhythmically relevant to your sequence.

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4. DIY Euclidean Patterns

How:
Patch divisions from the "integer" output set (2, 3, 4, 5, 6, 7, 8) to gate the steps of a sequencer/reset logic, mimicking Euclidean rhythms.
Combine With:
- Simple step sequencer (**Doepfer A-155**, **Erica Synths Sequencer**)
- Logic modules (AND/OR, e.g., **Doepfer A-166**)
Idea:

AND-gate together different divider outputs for DIY Euclidean patterns or to create rests/accents in drum parts.

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5. Clocked Effects & Synchronized Modulation

How:
Synchronize effects like delays, filters, or audio processing with sub-divided clock signals.
Combine With:
- Synchronized effects processors (**Make Noise Mimeophon**, **Erica Synths Pico DSP**)
- VCAs or LPGs
Idea:
Use a divided clock output to ping a filter resonance, open a VCA/LPG, or modulate effect send levels, all perfectly in sync but at musically related sub-divisions.

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6. Performance/Improvisation Tools

How:
Switch divisions and modes live for spontaneous variation.
Combine With:
- Manual gate or switch modules (**Mutable Instruments Shades**, **Doepfer A-150**)
Idea:
Flip the divider set switch mid-performance for instant rhythm changes, or engage/reset the module on the fly to reorganize the patterns.

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7. Syncing Analog and Digital Worlds

How:
Take a MIDI clock or a DAW sync signal (via a MIDI-to-CV interface) and use the A-160-2 to produce complementary clocks for analog sequencers, drum machines, or S&H modules.
Combine With:

- MIDI-to-CV interface (**Doepfer A-190-series**, **Expert Sleepers FH-2**)
- Clock distributors/multiples (**Intellijel Buff Mult**, **Mutable Instruments Links**)

Idea:
Let your DAW run at one tempo, while different synth voices or modulation lines run on intricate, clocked subdivisions for intricate interplay.

Additional Creative Nuggets

- **Inverted Outputs:** With the output polarity jumper, you can get negative-polarity clocks for specialized logic patches.
- **Trigger Mode AND Clock Pulsewidth:** Use the trigger mode with clock sources that have variable pulsewidth to create variable-duration triggers—handy for driving percussion modules with dynamic amplitude or accent response.
