

Doepfer — A-151 Quad Sequential Switch

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[Doepfer A-151 Quad Sequential Switch Manual \(PDF\)](#)

Doepfer A-151 Quad Sequential Switch — creative patch ideas

The **A-151** is a **4-step bidirectional sequential switch**: each trigger advances the common jack to the next of four jacks, and reset returns it to step 1. In **v2**, you also get a **2/3/4-step selector** and full **±12V** signal handling. Practically, it can behave as:

- **4 inputs → 1 output**
- **1 input → 4 outputs**
- an **audio router**
- a **CV router**
- a **rhythmic structure tool**
- a **manual-seeming form generator** when clocked and reset cleverly

Because it is so simple, it becomes powerful when paired with clocks, gates, envelopes, VCAs, mixers, sequential voltage sources, logic, and sound sources.

What the manual tells us musically

Key takeaways from the manual:

- It advances on the **rising edge** of the trigger.
- **Reset** instantly forces it back to **I/O 1**.
- It is **bidirectional**, so think both “multiple sources to one destination” and “one source to multiple destinations.”
- At high trigger rates, it can create **audio-rate switching effects**, effectively generating new timbres.
- The v2 **2/3/4 step switch** is very useful for phrase lengths and polyrhythms.

That means the A-151 is not just a utility switch — it is a **structure generator**.

Best companion module types

If you want the A-151 to shine, pair it with:

- **Clock / trigger sources**
e.g. Pamela’s New Workout, Tempi, 4ms QCD, Batumi in square mode, simple LFOs
- **Logic / trigger processing**
e.g. Doepfer A-166, Joranalogue Compare 2, Mutable Kinks, OR combiners
- **Sequential voltages / sequencers**
e.g. Doepfer A-155/A-154, Make Noise 0-CTRL, Metropolis, Pressure Points + Brains
- **Envelope generators**
e.g. Doepfer A-140, Intellijel Quadrax, Befaco Rampage, Maths
- **VCAs / mixers**
e.g. Veils, A-135, Happy Nerding 3xVCA, Mutable Blinds
- **Filters with multiple outputs**
e.g. Doepfer A-121, XAOC Zagrzeb, QPAS, multi-mode filters generally

- **Oscillators with multiple simultaneous outputs**

e.g. A-110, Dixie, STO + sub, analog VCOs with saw/pulse/triangle/sine outs

- **Effect modules**

delays, resonators, wavefolders, frequency shifters, granular FX

- **Sample & hold / slew / quantizers**

e.g. A-148, A-170, O_C, uScale, Disting

Core patch concepts

1. Waveform animator

What to patch - VCO triangle/saw/pulse/sub into **I/O 1–4** - **O/I** to filter or VCA - Clock the **Trig In** with LFO, gate pattern, or another VCO square

Result - Slow clocks: stepped timbral changes - Medium clocks: rhythmic waveform alternation - Audio-rate clocks: new buzzy composite timbres, crude wavefolding-ish textures

Make it better - Put slightly different processing on each waveform before the A-151: - one dry - one filtered - one wavefolded - one ring modded - Then switch between “versions” of the same oscillator.

Recommended partners - Any analog VCO - Wavefolder like uFold / A-137 - Filter with strong character - Fast square LFO or oscillator for triggering

2. One sequence, four destinations

What to patch - Sequencer CV or modulation source into **O/I** - Outputs **I/O 1–4** to: - VCO pitch - filter cutoff CV input - waveshaper amount - effect parameter

Clock the A-151 to rotate where the same CV goes.

Result A single melodic or modulation pattern gets “thrown” around the patch, creating animated arrangements from minimal material.

Variation Use different attenuators on each destination so the same source behaves differently each step.

Great with - precision adders - attenuverters - quantizers - modulation destinations that like stepped CV

3. Four envelopes, one voice

This is one of the manual's examples and it's genuinely excellent.

What to patch - Four envelopes into **I/O 1-4** - **O/I** to filter CV, VCA CV, wavefolder CV, or FM index CV - Same clock/gate triggers all four envelopes and also clocks the A-151

Result Each note uses a different envelope shape, even though the voice architecture stays the same.

Best use - Different filter plucks per step - Different VCA dynamics - Alternating long/short accents - Different FM index shapes for each note

Upgrade idea Use: - one AD envelope - one slow AR envelope - one snappy exponential envelope - one looping envelope

Now the timbre cycles in a more performative way.

4. One envelope, four destinations

Reverse the prior idea.

What to patch - A single envelope into **O/I** - **I/O 1-4** to various CV destinations: - filter - VCA - oscillator PWM - FX send level

Result On each trigger, the envelope shapes a different aspect of the patch. This can make one voice feel like a whole arrangement.

Try Routing one envelope sequentially to: 1. pitch sweep 2. filter ping 3. reverb amount 4. wavefolder depth

5. Sequential effects chain selector

What to patch - Voice or drum loop into **O/I** - **I/O 1–4** each go to a separate processor input path - Return processed outputs to mixer

Or, depending on your routing options, feed: - four different processed versions of a sound into **I/O 1–4** - take **O/I** as the selected result

Example four paths - dry - delay - phaser - distortion

Result Per-step FX changes without needing a full matrix mixer.

Best with - compact stereo mixer - FX aid / Mimeophon / Magneto / Desmodus style processors - drum voices or drones

6. Filter mode sequencer

Also suggested by the manual.

What to patch - Use a multi-mode filter with several simultaneous outputs: - LP - BP - HP - notch - Patch those to **I/O 1–4** - **O/I** goes to VCA/output - Advance A-151 every note or every bar

Result The same source walks through different filter characters.

Why it works This keeps pitch/melody stable while changing the spectral role of the sound. Very useful in techno, electro, and generative patches.

Great companion filters - Doepfer A-121 - Mutable Ripples - QPAS - any SEM-style or multimode filter

7. Phrase-length tricks with reset

The reset input is where a lot of the musical magic lives.

What to patch - Steady clock to **Trig In** - A different rhythm or gate pattern to **Res. In**

Result Instead of a boring 1-2-3-4 loop, you get asymmetrical forms: - 1-2-1-2-3-1-2-3-4... - 1-2-3-1-2-3... - irregular restarts synced to another pattern

Creative sources for reset - gate from sequencer end-of-cycle - Euclidean rhythm - manual gate button - comparator output from slow CV - odd clock division

Very effective for - melody selection - timbral phrase resets - structured but non-repetitive modulation

8. 2-step / 3-step / 4-step polymeter engine

If you have **v2**, use the step selector musically.

Patch idea - Run one A-151 at 3 steps - Another sequential process elsewhere at 4 or 5 steps - Clock both together

Result Longer evolving cycles due to pattern interference.

With one A-151 Even just switching the module between 2, 3, and 4 steps during a performance changes perceived phrase length instantly.

Use for - drum fills - bass variation - call/response structures - modulation loops that never line up the same way twice

9. Sequential transposition hub

What to patch - Main pitch CV sequence into **O/I** - Outputs **I/O 1-4** to four precision adders or quantizer input chains, each with a different offset/transposition - Or reverse it: put four different transposed versions into **I/O 1-4** and take **O/I** to the oscillator

Result Same melody, different harmonic positions each step/bar.

Examples - root - +5th - octave - minor 3rd

Excellent with - quantizer - precision adder - buffered multiple - chord-capable oscillators

10. Drum voice rotation

What to patch - One trigger stream into **O/I** - Outputs **I/O 1–4** to four drum trigger inputs

Now each incoming trigger hits a different drum in sequence.

Result A single pulse train becomes a pattern spread over kick/snare/hat/clap or multiple voices.

Variation Send irregular triggers to the A-151 clock, and a master pulse stream through the switched path, or vice versa.

Advanced variation Route accent CV instead of triggers so different drums get the same accent pattern on different steps.

11. Accent distributor

What to patch - Accent gate or accent envelope into **O/I** - **I/O 1–4** to: - VCA CV boost - filter accent - FM amount accent - delay feedback duck/accent path

Result Each accent lands on a different musical parameter, which gives far more life than a static accent lane.

12. Sequential clock divider / distributor feel

The A-151 is not a divider itself, but it can behave like a **rotating clock destination**.

What to patch - Master trigger into **O/I** - **I/O 1–4** to four envelope gates, drum triggers, or sequencer advance inputs - Clock A-151 with a slower pulse

Result A repeating trigger source gets sent to different modules over time, creating changing rhythmic emphasis.

Companion modules - clock dividers - Bernoulli gates - trigger delays - logic modules

This is especially good in drum systems.

13. Address four modulation rates/shapes

What to patch - Four modulation sources into **I/O 1–4**: - slow sine LFO - random stepped CV - looping envelope - sample & hold - **O/I** to one destination like filter cutoff

Result That one destination behaves like it has a “macro arrangement” around it, with each section animated differently.

Best destination choices - filter cutoff - wavetable position - wavefolder depth - stereo spread - reverb size

14. Sequential feedback path selector

Excellent for experimental patches.

What to patch - Put the A-151 in a feedback network: - mixer send or processor output into **O/I** - **I/O 1–4** go to different feedback treatments: - clean feedback - filtered feedback - distorted feedback - delayed feedback - Selected path returns to mixer/effect input

Result Feedback character changes step by step. This can create very alive dub-techno and noise textures.

Be careful Levels can get intense quickly; a VCA or attenuator in the feedback loop helps a lot.

15. Sequential sample source selector for S&H

What to patch - Four CV sources into **I/O 1-4** - **O/I** to sample & hold input - A-151 clocked slowly, S&H clocked faster or differently

Result The S&H draws from a rotating set of source voltages, producing much more structured random-ish behavior.

Example sources - offset voltage - sequencer row - noise through slew - envelope - slow LFO

Great with - quantizer for melodies - slew for glide - comparator for rhythm extraction

16. Audio-rate pseudo-granular or crude wavetable stepping

What to patch - Four related audio signals into **I/O 1-4** - same oscillator through 4 filters - four phase-shifted signals - four harmonic-rich sources - Clock A-151 from oscillator square or another audio-rate source

Result Harsh, digital-like spectral animation; metallic tones; animated drones.

Especially good with - fixed filter banks - phase shifters - ring mod - submixes of harmonics

17. Voice allocation / round robin

What to patch - Pitch CV can be multed to several voices - Gate into **O/I** - **I/O 1-4** to four envelope/gate inputs for four voices

Clock the A-151 with the same keyboard gate, or a derived trigger.

Result Each new note is assigned to the next voice, creating rotating pseudo-polyphony or layered variation.

Useful with - multiple identical voices - chord stacks - per-step different timbres

18. Sequential modulation of modulation

Use the A-151 not on the final sound path, but on the control path feeding another modulator.

What to patch - Four CV sources into **I/O 1-4** - **O/I** to FM amount CV, LFO rate CV, envelope decay CV, or clock rate CV

Result You're changing the behavior of another modulator in steps, which creates deeper evolving systems.

Example Route 4 voltages to your LFO rate input: - very slow - medium - fast - near audio

Now your filter modulation "changes gears" each phrase.

19. Build a 16-step sequence from 4-step parts

If you have multiple short sequencers or 4-step voltage rows:

What to patch - Four 4-step sequencer rows or voltage memories into **I/O 1-4** - **O/I** to oscillator pitch or filter CV - Advance A-151 every 4 notes using a clock divider

Result You effectively chain four short sequences into a longer form.

Excellent modules for this - Pressure Points - A-155 rows - Voltage Block channels - 0-CTRL rows - simple voltage sources plus attenuators

20. Morph between four “scenes”

Create four different complete versions of a sound or control idea, then use the A-151 to move through them.

Example scene sources 1. dry bass 2. filtered bass 3. FM bass 4. delayed bass

or in CV terms: 1. calm modulation 2. rhythmic modulation 3. random modulation 4. extreme modulation

The A-151 gives clean scene changes with a simple clock.

Particularly strong module pairings

With Pamela’s New Workout

- Use one channel as clock
- another as reset pattern
- another as stepped random trigger density
- another as Euclidean reset

This turns the A-151 into a phrase and structure machine.

With Maths / function generators

- Send four different envelopes or slews into the A-151
- or switch one Maths channel to four destinations
- use EOC/EOR outputs to trigger or reset the switch

Very fertile for self-running patches.

With a quantizer

- Rotate between four CV sources before quantization
- or rotate between four quantized pitch offsets after quantization

This keeps melodies coherent while still changing.

With logic

- Trigger from one rhythm
- reset from AND/XOR/OR-derived events

This creates “composed” irregularity.

With a matrix mixer

Use the A-151 to select different sources or destinations, then use the matrix mixer to blend the consequences. Great for performance systems.

With another sequential switch

Two A-151s together are much more than double the power: - one selects pitch source - the other selects timbre source - different clocks/reset patterns create long cycles

Or chain them to make more than 4 stages.

Performance-oriented ideas

Manual reset as a fill button

Patch a button or gate controller to **Res. In**.

During performance, force the cycle back to step 1 to re-anchor the phrase.

Section changes with the step selector

On v2, move between: - 2-step for tight alternation - 3-step for lopsided groove - 4-step for full phrase

It's a simple but very effective performance gesture.

Create “lead voice spotlighting”

Send a shared modulation or effects send sequentially to different voices. Each bar, a different voice gets the spotlight.

Things to watch out for

- **Version matters:** older versions are more limited in signal range; v2 handles full $\pm 12V$.
 - Fast switching can click — but often that's musically useful.
 - If switching audio, matching levels between sources helps avoid ugly jumps unless you want them.
 - Reset timing can strongly affect groove; try slightly shifted reset pulses for less rigid behavior.
 - Because it's passive in concept but active in use, attenuation and buffering around it can make patches more predictable.
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My favorite high-value patch recipes

A. Four-character bassline

- One VCO to four differently processed paths
- A-151 selects path each note
- same sequencer pitch the whole time

- reset every 8 or 16 steps

You get a bassline that sounds arranged rather than looped.

B. Modulation carousel

- 4 CV sources into A-151
- output to one important destination
- trigger every bar
- reset on phrase start

Simple, elegant macro-evolution.

C. Rotating drum accents

- Accent envelope through A-151 to kick/snare/hat/clap accent inputs
- clocked every 2 or 4 beats

Small patch, big groove payoff.

D. Evolving drone switcher

- 4 filtered variants of same drone
- A-151 switched at sub-audio or audio rate
- occasional resets from random gate source

Excellent for ambient, industrial, and electroacoustic work.

E. Four-envelope sequenced filter

- the manual's patch, but with wildly different envelope times and shapes
- use one super short pluck, one medium decay, one inverted envelope, one very slow sweep

This makes a single sequence feel alive immediately.

Summary

The **Doepfer A-151** is deceptively powerful. It excels at:

- **rotating timbres**
- **distributing modulation**
- **building phrase structure with reset**
- **creating variation from minimal material**
- **audio-rate spectral switching**
- **turning one source into a multi-part arrangement**

If you treat it as a **compositional router** rather than just a utility switch, it becomes one of the most musical low-HP modules in Eurorack.

[Generated With Eurorack Processor](#)