

Doepfer — A-151 Quad Sequential Switch

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

Using the Doepfer A-151 to Create Melodic Material

The attached manual is for the **Doepfer A-151 Quad Sequential Switch**, a very simple but extremely musical utility. Even though it does not generate pitch by itself, it becomes a strong **melody-creation module** when combined with oscillators, sequencers, envelopes, clocks, LFOs, quantizers, mixers, and filters.

What the A-151 does

The A-151 is basically a **4-step sequential signal router**:

- One **common jack**: 0/I
- Four switched jacks: I/0 1–4
- A **Trigger In** input advances the switch by one step
- A **Reset In** input returns it to step 1
- LEDs show the active step
- Version 2 adds a **2 / 3 / 4 step selector**

It is **bidirectional**, which is the key to musical use:

- **4 inputs → 1 output**
- or **1 input → 4 outputs**

That means it can be used to: - rotate through **different pitch CV sources** - distribute one pitch sequence to **different destinations** - rotate through **different rhythmic gates / envelopes / timbral states** - create repeating phrase structures with reset control

Important practical notes from the manual

- Triggering happens on the **rising edge**
- Reset immediately returns the switch to **I/O 1**
- Older versions handle about **-8V to +8V**
- Version 2 handles **-12V to +12V**
- Fast switching can enter **audio-rate territory**, which can create new timbral results

For melodic patching, this means it is ideal for **control voltage sequencing**, phrase switching, and step-based variation.

Best melodic uses of the A-151

1. Switching between multiple pitch sources

This is the most direct melodic application.

Patch idea

Send four different melodic CV sources into **I/O 1–4**, and take **O/I** to your oscillator's 1V/oct input, ideally through a quantizer if needed.

Example sources: - **I/O 1** : a slow 8-step sequencer - **I/O 2** : a transposed copy of that sequencer - **I/O 3** : random stepped CV - **I/O 4** : a fixed voltage or keyboard CV

Then: - clock the A-151 from a divided trigger - send **O/I** → quantizer → VCO 1V/oct

Result

Each trigger to the A-151 changes which melodic source is currently controlling pitch. This gives: - phrase changes - verse/chorus-style movement - call-and-response lines - evolving melodic patterns

Musical benefit

Instead of writing one sequence, you can write **four related pitch behaviors** and let the A-151 structure them into a larger melody.

2. Creating 2-, 3-, or 4-bar melodic phrases

If your A-151 is version 2, the **step count switch** is very useful musically.

Patch idea

Use the A-151 to cycle through: - 2 phrase variants - 3 phrase variants - 4 phrase variants

For example: - I/O 1 : root melody - I/O 2 : variation - I/O 3 : higher-register variation - I/O 4 : tension phrase

Clock the switch once per bar.

Result

- In **2-step mode**, you get ABAB...
- In **3-step mode**, you get ABCABC...
- In **4-step mode**, you get ABCD...

This is excellent for melodies that feel composed rather than merely looped.

3. Reset-controlled melodic form

The reset input is one of the most useful musical features.

Patch idea

Advance the A-151 with a regular clock, but send a reset pulse from: - a manual gate button - a clock divider - an end-of-cycle trigger - a sequencer reset output

Result

You can force the melodic structure back to phrase 1 at predictable moments.

Examples: - reset every 4 bars for a repeating song form - reset irregularly for non-looping phrasing - reset from a keyboard gate so every new played note starts from phrase 1

Why this matters

Without reset, sequential switching can drift against the rest of your patch. With reset, it becomes a **musically aligned phrase sequencer**.

4. Routing one sequencer to different pitch destinations

Because the A-151 is bidirectional, you can also use it as **1 input → 4 outputs**.

Patch idea

Send one melodic CV sequence into **O/I**, and use **I/O 1–4** as switched outputs to different destinations: - **I/O 1** : VCO 1 pitch - **I/O 2** : VCO 2 pitch - **I/O 3** : filter cutoff CV input - **I/O 4** : wavefolder or FM index CV

Trigger the A-151 every note or every few notes.

Result

A single sequence is distributed to different parts of the patch over time.

This creates: - alternating lead and bass motion - melody-to-timbre interaction - pseudo-counterpoint - dynamic phrase orchestration

This is especially effective if different destinations are attenuated differently.

5. Switching between transpositions

A very powerful melodic use is to patch **the same sequence processed four different ways**.

Patch idea

Start with one pitch sequence. Mult it and process the copies differently: -

I/O 1 : original - I/O 2 : +7 semitones - I/O 3 : +12 semitones - I/O 4 : -5 semitones

Then send **O/I** to your oscillator pitch input through a quantizer.

Result

The A-151 turns a simple sequence into a **harmonically shifting melody generator**.

This can sound like: - chord changes implied by a monophonic line - modal movement - octave jumps - recurring refrain structures

This is one of the most musical uses of a sequential switch.

6. Switching gate patterns that drive pitch events

Melody is not just pitch; it is also **when notes happen**. The A-151 can shape note rhythm by switching which gate stream is active.

Patch idea

Patch four rhythmic gate sources into **I/O 1–4** : - straight 8ths - syncopated rhythm - sparse accents - bursty pattern

Take **O/I** to: - envelope trigger - sequencer advance - sample-and-hold clock - quantizer trigger input

Result

The pitch material may stay the same, but the **articulation and note timing** changes every time the A-151 steps.

This creates much more expressive melodies from simple CV material.

7. Stepping through different envelopes for melodic articulation

The manual itself gives a related example with switching between envelopes. This is very musical.

Patch idea

Have one pitch sequence running, but send four different envelope shapes into **I/O 1–4** , and route **O/I** to filter CV or VCA CV destination.

For example: - **I/O 1** : short pluck - **I/O 2** : long swell - **I/O 3** : medium decay - **I/O 4** : snappy accent

Clock the A-151 with the same rhythm as the melody or a slower subdivision.

Result

Each note or phrase has a different articulation, making the melody feel more “played.”

This is especially useful for: - acid-style phrasing - animated arpeggios - evolving pads - repeated motifs that need variation

8. Switching between different filter outputs for melodic timbre changes

The manual specifically mentions using the A-151 with a multimode filter such as the A-121.

Patch idea

Send different filter outputs into the four switched jacks: - lowpass - bandpass - highpass - notch

Take **O/I** to the VCA or mixer.

Advance the switch with each note or each bar.

Result

The melody keeps the same pitch, but its **spectral identity changes step by step**. This is musically powerful because timbre can imply phrasing just as strongly as pitch.

This works beautifully for: - repeating basslines - techno riffs - generative melodies - motif development

9. Building larger melodies from small cells

The A-151 excels at **form**. Think of each input as one “melodic cell.”

Patch structure

- Cell A: 3-note motif
- Cell B: answer phrase
- Cell C: transposed fragment

- Cell D: rest / drone / held note

Clock the A-151 once every few beats or once per completed mini-pattern.

Result

Instead of one long programmed melody, you get a melody built from interchangeable phrase fragments. This feels more modular and more alive.

This is one of the best ways to create: - evolving Berlin-school sequences - generative ambient lines - modular “composition by recombination”

10. Using audio-rate switching for pitched timbral melodies

The manual notes that very fast triggering can produce **audio-frequency modulation**.

Patch idea

Feed different waveforms from a VCO into **I/O 1–4** : - sine - triangle - saw - pulse

Take **O/I** to filter or VCA, and trigger the A-151 at audio or near-audio rates from: - a fast LFO - another VCO square wave

Result

You get a composite waveform with a distinct timbre. If the switching rate or source relationships are tuned musically, this can create tones with melodic identity.

This is less about note sequencing and more about **melody-through-timbre**, but it is very effective in experimental patches.

Strong patch combinations for melodic music

A. Sequential phrase selector

Modules to combine: - pitch sequencer - precision adder or offset source - quantizer - A-151 - VCO - envelope + VCA

Idea: Use the A-151 to switch between four versions of a melody: 1. original 2. transposed up a fifth 3. octave up 4. sparse alternate line

This gives instant melodic arrangement.

B. Four articulation melody engine

Modules to combine: - one sequencer - one VCO - VCF - four envelopes - A-151 - clock / trigger source

Idea: Pitch stays constant, but the A-151 rotates through four envelopes going to the filter.

This creates a melody with changing accent, contour, and emotional feel.

C. Generative melody selector

Modules to combine: - random stepped CV - sequencer - keyboard CV - fixed offset - quantizer - A-151 - clock divider - reset source

Idea: Put four types of pitch source into the A-151 and use reset to define formal boundaries.

This gives structured unpredictability: random, but still phrased.

D. Note-by-note timbre melody

Modules to combine: - VCO - multimode filter - A-151 - gate source from keyboard or sequencer - envelope + VCA

Idea: Every new note advances the A-151 through different filter outputs. The melody becomes orchestrated step-by-step without changing the pitch line.

Musical strategies

Use the A-151 at different clock divisions

Try advancing it: - every note - every 2 notes - every bar - every 4 bars

This changes whether it behaves like: - a step sequencer - a phrase selector - an arrangement tool

Pair it with a quantizer

The A-151 itself does not constrain pitch. If you are switching voltages intended as melody, a quantizer will keep results harmonically useful.

Use reset for structure

Reset is what turns “cycling” into “composition.”

A reset every 4 or 8 bars keeps melodic changes aligned with your piece.

Switch both pitch and timbre in parallel

For richer melody, use one A-151 for pitch-source switching and another for envelope or filter-output switching. Even if you only have one A-151, you can still create this feel by switching one domain at a slower rate than another part of the patch.

Exploit 3-step mode

Three-step phrase cycling over 4/4 rhythms creates beautiful asymmetry. A 3-phrase melodic cycle against a 4-beat bar can feel much less repetitive.

Best roles for the A-151 in melodic patching

The A-151 is especially good as a:

- **phrase selector**
- **melodic variation router**
- **transposition cycler**
- **articulation switcher**
- **timbral melody animator**
- **structural resettable form generator**

It is less a melody generator on its own and more a **melody organizer**. In a modular system, that is often even more valuable.

Example melodic patch recipes

Patch 1: Four melodic phrases

- Four CV phrase outputs into I/O 1–4
- O/I to quantizer, then VCO 1V/oct
- Trigger A-151 once per bar
- Reset every 4 bars

Result: a looping 4-part melodic form.

Patch 2: Same melody, four transpositions

- One sequence multed four ways
- Add different offsets to each copy
- Send to I/O 1–4
- O/I to quantizer and oscillator

Result: chord-implying monophonic melody.

Patch 3: One pitch line, rotating articulations

- Sequence to VCO
- Four envelopes into I/O 1–4
- O/I to filter CV input
- Trigger switch every note

Result: expressive melodic variation.

Patch 4: One note source, four destinations

- Pitch CV into O/I
- I/O 1–4 to VCO1, VCO2, filter, FM amount
- Advance at phrase intervals

Result: the melody moves around your patch and creates evolving roles.

Conclusion

The **Doepfer A-151** is a deceptively simple module that becomes highly musical when used for **melodic routing and phrase structure**. Its real strength is not just switching signals, but switching **musical roles**:

- which pitch source is active
- which transposition is heard
- which articulation shapes the note
- which timbre carries the melody

- when a phrase restarts

If you build your patch so that each of the four positions represents a different but related musical idea, the A-151 becomes a compact **melody form generator** for Eurorack.

[Generated With Eurorack Processor](#)