Shakmat — Time Wizard

- Manual PDF

Manual PDF

Shakmat Time Wizard — using it for melodic components

The **Shakmat Time Wizard** is not a pitch/CV source by itself, but it is extremely useful for creating the **timing structure that makes melodies feel alive**. Think of it as a **multi-clock brain** for sequencers, quantizers, sample & holds, switch modules, and envelope-driven voices.

What the module does

The Time Wizard is a:

- **6-channel clock divider**
- with **independent division settings**
- plus **routing and logic options**
- plus **reset relationships between groups of dividers**

From the manual, it provides:

- **A column**: A1, A2, A3
- **B column**: B4, B5, B6
- **main clock input**
- **reset / alternate B clock input**
- switches for:
- **Multiply A**: x1 / x3 / x4
- **Clock B**: normal / B4 clocks B5+B6 / independent B clock input
- **Logic A2**: off / `A2 AND B5` / `A2 OR A3`

- **Reset B6**: off / B6 resets A / B6 resets A+B

Outputs are 0–5V triggers, with optional **half-period gates on dividers 5 & 6** via rear jumper.

The musical role of Time Wizard in a melodic patch

For melody, this module excels at:

- creating **different rhythmic layers** that drive multiple sequencers
- generating **phrase resets**
- making **odd-length melodic cycles**
- producing **polyrhythmic note changes**
- deriving **accent, transposition, ratcheting, or note-hold events**
- adding **structural evolution** to otherwise repetitive sequences

It is especially strong when paired with:

- **pitch sequencers**
- **quantizers**
- **sample & hold**
- **sequential switches**
- **precision adders**
- **envelope generators**
- **logic modules**
- **Bernoulli gates / probability**
- **clocked LFOs**

How to use it melodically

1. Clock multiple sequencers at different divisions

A classic melodic use is to send different Time Wizard outputs to different note-generating devices.

Example:

- **A1** → main pitch sequencer clock
- **A2** → modulation sequencer clock for filter/pitch offset
- **B5** → sample & hold clock sampling noise or random CV
- **B6** → reset input of pitch sequencer or switch sequencer

This creates melody from the interaction of:

- one repeating note stream
- one slower contour stream
- one random or semi-random event stream
- one long-form phrase reset

Why this works

Even if your pitch sequencer is simple, the Time Wizard lets note changes, transpositions, and resets happen on **different cycle lengths**, which generates evolving melodic patterns.

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2. Build odd-length phrases

The manual specifically mentions unusual time signatures and strange clock decompositions. This is one of the best melodic applications.

Patch idea:

- master clock into **CLK**
- set:

- **A1 = /5**
- **A2 = /7**
- **A3 = /8**
- use:
- **A1** to clock a 5-step sequencer
- **A2** to advance a sequential switch selecting between 2–3 CV sources
- **A3** to trigger a transposition envelope or precision adder step

Now your melody won't loop in a short obvious way, because timing layers realign only after a long cycle.

Musical result

You get:

- asymmetrical motifs
- evolving phrase lengths
- less "16-step box" feel
- more generative, composed-sounding lines

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3. Use Multiply A for triplets and alternate subdivisions

The **Multiply A** switch can multiply the clock feeding the A column by **3 or 4**.

This is powerful for melody because it lets one part of the patch move at a different feel from the rest.

Example uses

Triplet melody against straight rhythm

- send a straight clock to Time Wizard
- set **Multiply A = x3**
- use **A1/A2/A3** to clock melodic sequencers or S&H

Now melodic note changes can happen in **triplet subdivisions** while percussion or another sequencer remains straight.

Fast ornament layer

- set **Multiply A = x4**
- use one A output to trigger a second sequencer controlling:
- grace notes
- octave jumps
- wavefolder amount
- quantized ornament CV

This can create melodic flutter, pseudo-ratchets, or fast counter-lines.

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4. Use Clock B as a phrase hierarchy

The **Clock B** switch is one of the most interesting features.

Mode 1: normal

B column behaves as regular dividers from the main clock/reset structure.

Mode 2: B4 clocks B5 and B6

In the middle position, **B4 becomes the clock source for B5 and B6**.

This creates a **clock division inside a division**, which is ideal for phrase-level melody control.

Melodic application

Use:

- **A column** for note-to-note activity
- **B4** for bar-level motion
- **B5/B6** for phrase resets, transposition, or variation changes

Example:

- **A1** → clock 8-step pitch sequencer
- **B4** → clock a 4-step transposition sequencer
- **B5** → advance a switch choosing one of several modulation CVs
- **B6** → reset the transposition sequencer or entire melody phrase

This feels like having:

- notes
- bars
- phrases

all derived from one compact timing network.

Mode 3: independent B clock input

In the lower position, the reset input becomes an **independent clock input for B column**.

This is huge for melody because you can run two interacting rhythmic worlds:

- **A column** from one clock
- **B column** from another

Example:

- A clock = steady 16th-note pulse
- B clock = swung clock, Euclidean rhythm, or manually tapped trigger pattern

Then use B outputs to affect melody by:

- resetting the main sequencer
- opening a switch to a second pitch source
- transposing only on B events
- clocking an alternate random voltage source

This creates very musical cross-rhythmic melodies.

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5. Use Logic A2 to create note masks and alternate note timing

The **Logic A2** switch changes the **A2 output** into a logic function.

Available functions:

- middle: **A2 AND B5**
- lower: **A2 OR A3**

This is extremely useful for melodic articulation.

A2 AND B5

This gives a trigger only when both clocks are high together.

Use it for:

- selective note advancement
- accent clocks
- occasional sample & hold updates
- opening a VCA for only some notes
- triggering an envelope for “allowed” notes only

Patch example

- **A1** → clock sequencer every note
- **A2 AND B5** → trigger a second envelope that adds FM or filter accent
- or use **A2 AND B5** to clock a quantized random source

Result: the melody continues, but only certain notes receive ornamentation or pitch changes.

A2 OR A3

This creates a denser trigger stream from either A2 or A3.

Use it for:

- more active melodic gates
- switching between sparse and dense note updates
- clocking a secondary sequencer that “fills in” around the main line

Patch example

- main sequencer runs from **A1**
- **A2 OR A3** clocks a second CV source
- mix or switch between those CV sources before quantization

Result: composite melodies with implied call-and-response or fills.

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6. Use B6 reset for phrase closure

The **Reset B6** switch lets B6 reset:

- **A only**
- or **A and B**

This is one of the most compositionally useful features.

Why it matters

A long divider can act like a **phrase-ending marker**.

Patch idea

- use A outputs to drive main melodic motion
- use B outputs for slower structural changes
- set B6 to a long division
- enable **B6 resets A** or **A+B**

Now the whole melodic system periodically comes back to the top.

This gives you:

- long-form cycles

- recurring hooks
- controlled generative behavior
- melodies that wander but eventually resolve

That “eventual resolution” is often the difference between random clocks and musical phrasing.

Practical melodic patch ideas

Patch 1: Polymetric lead line

Goal: evolving lead melody with repeating macro-structure.

Connections

- master clock → **CLK**
- **A1** → clock main pitch sequencer
- sequencer pitch CV → quantizer → oscillator V/oct
- **A2** → clock modulation sequencer for octave offset
- modulation sequencer → precision adder with main pitch CV
- **B6** → reset main pitch sequencer
- set **Reset B6 = A**

Suggested divisions

- A1 = /5
- A2 = /7
- B6 = /16 or /32 depending on tempo context

Result

The lead changes notes and octave contour at different rates, then periodically restarts into a recognizable phrase.

Patch 2: Triplet ornament melody

Goal: straight melody with triplet embellishments.

Connections

- master clock → **CLK**
- **Multiply A = x3**
- **A1** → clock a small sequencer generating ornament notes
- normal external clock → another sequencer for main melody
- both pitch CVs into a sequential switch or CV mixer
- **B5** → switch control or VCA envelope trigger
- quantizer after mixing/switching

Result

The main melody stays grounded, while triplet-timed notes appear as flourishes or alternate inserts.

Patch 3: Two-clock melodic conversation

Goal: create a melody that responds to another rhythm source.

Connections

- steady clock → **CLK**
- irregular trigger pattern or Euclidean clock → **RST/IN B**
- set **Clock B = IN B**
- **A1** → main sequencer clock
- **B4** → transposition sequencer clock
- **B5** → reset sample & hold
- **B6** → switch between two pitch rows or two quantizer scales

Result

The main melody runs steadily, while another rhythm injects phrase changes, harmonic shifts, and alternate note selections.

Patch 4: Melodic gate masking with logic

Goal: same pitch sequence, but changing articulation creates the melody.

Connections

- **A1** → clock sequencer
- sequencer CV → quantizer → oscillator
- **A2 AND B5** → envelope trigger for VCA
- or use **A2 OR A3** for denser gate pattern
- keep sequencer running continuously, but only audible when the logic output fires

Result

Pitch may be stable underneath, but audible note rhythm changes in a structured way. This can sound like a completely new melody from the same CV source.

Patch 5: Sample-and-hold melody generator

Goal: create generative quantized melodies.

Connections

- noise / slow random / chaotic CV → sample & hold input
- **A1** → S&H clock
- S&H output → quantizer → oscillator pitch
- **A2** → trigger envelope for notes
- **B5** → clock a second S&H for transposition or timbre

- **B6** → reset a switch or sequencer that changes scales/root notes

Result

The Time Wizard turns simple random voltage into a multi-layered melodic system with phrase structure.

Best companions for melodic use

The Time Wizard works especially well with these module types:

Sequencers

Use Time Wizard outputs to clock:

- a main pitch sequencer
- a transposition sequencer
- a modulation sequencer
- a gate sequencer

This is the most direct melodic use.

Quantizers

Since Time Wizard produces timing rather than pitch, quantizers are crucial when using it with random voltages, switches, or CV mixers.

Sample & Hold

A perfect pairing. Different divider outputs can determine:

- when a new note is sampled
- when a transposition is sampled
- when timbre changes are sampled

Sequential switches

Clock the switch with one divider and feed it multiple pitch sources: - sequencer row 1 - sequencer row 2 - random voltage - fixed interval voltage

This creates melodic form from routing.

Precision adders

Use slower Time Wizard outputs to add: - octave jumps - chord-tone transpositions - modal root changes

Envelope generators / VCAs

Even if the pitch source is unchanged, Time Wizard can define when notes are heard, accented, or doubled.

Tips for musical results

Use one output for notes, another for changes to the note system

A very effective strategy is:

- one divider clocks the note sequencer
- another divider changes:
- transposition
- switch state
- scale
- reset point

That gives motion on two timescales.

Let B6 define phrase length

A long B6 division resetting A or A+B creates musical form.

Use odd divisions

Set values like: - 5 - 7 - 3 against 8 - 7 against 16

These make melodies feel less grid-locked.

Use logic for accents, not only note clocks

`A2 AND B5` is especially good for: - occasional accent envelopes - clocking a second oscillator layer - triggering glide only on selected notes

Try the rear jumper option

Setting dividers 5 & 6 to **half-period gates** instead of triggers can help with: - longer note holds - tied notes - drone openings - switching sustained harmonic layers

That can turn short trigger-based sequencing into more legato melodic material.

Limitations to understand

The Time Wizard does **not** generate pitch CV directly. So by itself it won't create melody in the traditional "notes out" sense.

Instead, it creates melody by controlling:

- **when notes happen**
- **when sequences advance**
- **when phrases reset**
- **when transpositions occur**

- **when alternate pitch sources are chosen**
- **when random voltages are sampled**

In modular, that is often just as important as the pitch source itself.

Bottom line

The **Shakmat Time Wizard** is best understood as a **melodic structure module** rather than a note module.

Used with sequencers, quantizers, switches, and S&H, it can produce:

- polymetric melodies
- evolving generative lines
- triplet or multiplied subdivisions
- phrase resets
- melodic masks and accents
- two-clock interactions
- long non-repeating forms that still resolve musically

If you want, I can also turn this into: 1. a **set of concrete patch recipes with knob settings**, or
2. a **“best pairings” guide for your other specific modules**.

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