DOTMATRIX

DOTMATRIX / LIGHTWEIGHT AUDIO PLUGINS

SHIRABE

A melody writer:
seed packs, your own ideas re-imagined, and a taste it learns from you.



Shirabe by Dotmatrix

USER GUIDE | VERSION 1.0.0 | AU | VST3 | CLAP | APP | macOS 10.14+ | INTEL + APPLE SILICON

Click a pack for a new melody, re-imagine your own, shape it, and play it in time or send it out as MIDI.

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— ABOUT SHIRABE

Shirabe is a melody writer from Dotmatrix. Click one of sixteen seed packs, from koto gardens and film scores to lo-fi, trap bells and trance, and it writes a new melody in that style, never the same one twice, in any key and any of sixteen scales. Drop in a MIDI file or an audio loop, record from your keys, or take its own output, and RE-IMAGINE rewrites it as far as CREATIVITY lets it stray. Edit the notes on the piano roll, then shape them with gate, rhythm, contour, arpeggios, swing, humanise and octave. LIKE and PASS teach it your taste over time. It plays in time with your project through its own synth (plucked strings, FM keys and bells, pads, leads and basses, with reverb) or sends only MIDI to another instrument, and DRAG MIDI or DRAG WAV puts the clip on a track. Everything runs on your Mac: no downloads, no account. AU, VST3, CLAP and a standalone app for macOS, universal.

— QUICK FACTS

Type	A melody writer: it writes MIDI melodies from seed packs or from your own idea, shapes them, plays them in time through its own synth and sends them out as MIDI.
Formats	Audio Unit instrument with MIDI out, VST3 and CLAP instrument, and a standalone app. Universal: Apple Silicon and Intel, macOS 10.14 Mojave or later on Intel, macOS 11 or later on Apple Silicon.
On your Mac	Everything is written on your computer by a phrase model of our own. No downloads, no account, no limits.
Library	16 seed packs and an 8-pack bonus bank, 16 scales and 16 sounds. Your own packs are folders of MIDI files in ~/Music/Dotmatrix/Shirabe/Packs.
Identity	Manufacturer Dotmatrix (Dtmx). AU code: Shrb.

SECTION 01

Getting started

Pick a pack, write, keep what you like.

— NEW IN VERSION 1.0

1.0	The first release: 16 seed packs and a bonus bank, your own packs, WRITE and RE-IMAGINE with CREATIVITY, MIDI, audio and recorded prompts, an editable piano roll, SHAPE (gate, rhythm, contour, arp, swing, humanise, octave), LIKE / PASS taste models, take history, a 16-sound synth, HOST SYNC, trigger and transpose keys with LATCH, DRAG MIDI and DRAG WAV, dark and light panel.

— INSTALLING

Copy each plug-in from the download's **Plug-Ins** folder into its folder: **~/Library/Audio/Plug-Ins/Components** (Audio Unit), **~/Library/Audio/Plug-Ins/VST3** and **~/Library/Audio/Plug-Ins/CLAP**. Copy **Shirabe.app** into Applications to use it on its own. The release is not yet signed through Apple's developer program, so macOS needs one Terminal line before it will load it; **READ ME FIRST.txt** in the download has the exact steps. Logic Pro checks new Audio Units the first time it starts; Shirabe appears under **AU Instruments › Dotmatrix**.

— FIRST STEPS

1	**Insert it**	Put Shirabe on an instrument track (in Logic: AU Instruments › Dotmatrix › Shirabe). Press play in your project: the melody plays in time, locked to the bars.
2	**Write**	Click a seed pack. Each click writes a new melody in that style. Set **KEY**, **SCALE** and **BARS** first, or leave SCALE on Pack.
3	**Steer it**	Turn **CREATIVITY** down to stay close to the pack's seeds, up for more surprising lines, then press **WRITE** again. The arrows step back through your takes.
4	**Shape it**	Edit notes on the roll, then shape the clip with **GATE**, **RHYTHM**, **CONTOUR**, the **ARP** keys, **SWING** and **HUMANISE**. Shaping never rewrites the melody.
5	**Keep it**	Press **LIKE** so later melodies lean towards it, then drag **DRAG MIDI** or **DRAG WAV** onto a track.

— BASIC HANDLING

Dials	Drag up or down. Double-click to reset. Click the value under a dial to type one.
Glowing dials	CREATIVITY (teal), GATE (yellow) and OUTPUT (green) have a light ring that grows around the knob with the value.
Pack tiles	Click a tile to write from that pack. The lit tile is the pack in use; its colour runs down the tile's edge.
Piano roll	Click to add a note, drag to move it, drag its right edge to lengthen, double-click or right-click to delete. Bar numbers carry the chord under each bar.
Drop a file	Drop a MIDI file or an audio loop anywhere on Shirabe to make it the prompt.
LCD	The key and scale, the pack and the length, what is playing, and the tempo.
Help line	Hover over any control and the strip at the bottom of the panel says what it does.
Light and size	LIGHT switches to the light panel and back; every window remembers it. Drag the window's corner for any size from 60 to 200 %.

SECTION 02

The panel

The seed packs on the left, the melody and its prompt across the middle, then three bays: WRITE, SHAPE and SOUND.



Header	LIGHT and the LCD.
Seeds	Sixteen pack tiles and LOAD PACK.
Melody	WRITE, RE-IMAGINE, the take arrows, LIKE, PASS, the taste MODEL menu, UNDO, REDO, DRAG MIDI and DRAG WAV; the PROMPT strip with REC, FROM OUTPUT and CLEAR; the piano roll.
Write	CREATIVITY, DENSITY, RANGE, REGISTER, KEY, SCALE and BARS.
Shape	GATE, RHYTHM, CONTOUR, SWING, HUMANISE, the ARP keys, ORDER and OCTAVE.
Sound	The sound menu, SOUND and PLAY, TONE, ATTACK, RELEASE, MOTION, SPACE, OUTPUT, HOST SYNC, KEYS and LATCH.

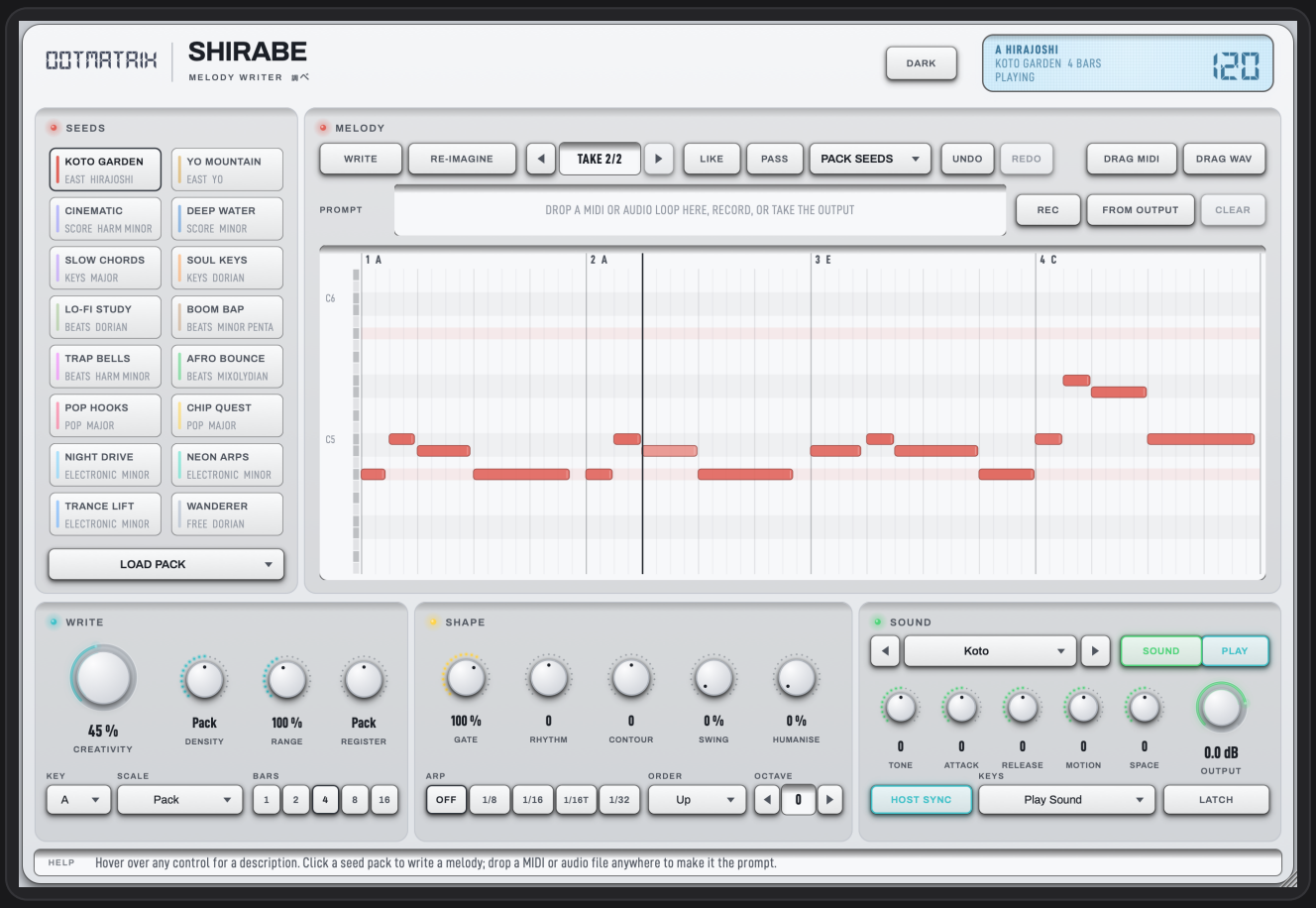
SECTION 03

Dark or light

The same panel, lit two ways. LIGHT switches it; drag the window's corner for any size from 60 to 200 %.

— LIGHT

A light panel with light grey dials and keys, for bright rooms. The roll, the LCD and the glowing rings stay lit the same way.



SECTION 04

How it writes

Shirabe writes with a phrase model of our own, on your Mac.

— SEED PACKS

Each pack is a style: a scale, a register and range, how busy it is, how much it repeats, how far it leaps, and a few seed phrases and chord progressions written for Shirabe. Phrases are written in scale steps, so any pack works in any key and scale.

— PHRASES THAT ANSWER EACH OTHER

A melody is built four bars at a time in a form such as A B A C or A A B A: some bars repeat or vary an earlier one, others are new. Over a chord progression, strong beats lean on chord tones and the last note lands on one. CREATIVITY sets how much it repeats and how far it strays.

— NEVER THE SAME TWICE

Every click starts from a fresh random seed. Shaping, by contrast, is repeatable: the same SHAPE settings always give the same result, and putting them back to neutral gives you the melody as it was written.

SECTION 05

Write

The controls the next WRITE or RE-IMAGINE uses.

— MELODY

CONTROL	RANGE	DEFAULT	WHAT IT DOES
Write	key		A new melody from the selected pack, with the WRITE settings.
Re-imagine	key		Rewrites the prompt (or, with no prompt, the output) in the pack's style. CREATIVITY sets how far it strays.
Takes	arrows		Step back and forward through this session's takes, up to 64.
Undo, Redo	keys		Undo the last edit or new melody, and redo it.

— WRITE SETTINGS

CONTROL	RANGE	DEFAULT	WHAT IT DOES
Creativity	0 to 100 %	45 %	Low stays close to the seeds (or the prompt) and repeats its motifs; high takes more surprising steps and repeats less.
Density	-100 to +100	Pack	Pack keeps the pack's own busyness; down for space, up for more notes.
Range	40 to 180 %	100 %	How far the melody may wander from its register, as a share of the pack's range.
Register	-24 to +24 st	Pack	Moves the melody's home register up or down.
Key	C to B	A	The key. A prompt you drop sets it to the prompt's key.
Scale	Pack, or one of 16	Pack	Pack uses the pack's own scale. The list includes the seven modes, pentatonics, blues and four Japanese scales.
Bars	1, 2, 4, 8, 16	4	The melody's length.

CLOSE VARIATIONS CREATIVITY around 20 % and RE-IMAGINE on a melody you like: the rhythm and shape stay, the notes move.

SECTION 06

Prompts and taste

Start from your own idea, and teach Shirabe what you like.

— PROMPT

CONTROL	RANGE	DEFAULT	WHAT IT DOES
Drop a file	MIDI or audio		Drop a MIDI file or an audio loop (up to 16 bars) anywhere on Shirabe. Audio is listened to for its melody: one note at a time.
Rec	key		Records what you play into the prompt, over the BARS length, while the loop runs. Press again to stop and keep it.
From Output	key		Makes the current melody the prompt, so RE-IMAGINE varies it.
Clear	key		Clears the prompt.

— TASTE

CONTROL	RANGE	DEFAULT	WHAT IT DOES
Like	key		The selected taste model learns this clip as it is now, with your edits, so later melodies lean towards it.
Pass	key		The taste model learns to steer away from clips like this one.
Model	menu	Pack seeds only	What the phrase model writes with: the pack's seeds alone, or the seeds plus one of your taste models. New taste model… adds another.

ONE TASTE PER PROJECT Keep a taste model for each project or artist: likes from one won't pull the other.

SECTION 07

Shape

Reworks the clip without rewriting it. Neutral settings give the melody as written.

— CONTROLS

CONTROL	RANGE	DEFAULT	WHAT IT DOES
Gate	10 to 200 %	100 %	Note lengths: clipped staccato, as written, or overlapping legato.
Rhythm	-100 to +100	0	Left thins the off-beat notes out; right fills long notes with passing notes.
Contour	-100 to +100	0	Tilts the melody so it falls (left) or rises (right) across the clip, staying in the scale.
Swing	0 to 100 %	0 %	Delays the off-beat sixteenths (or eighths), up to a full triplet feel.
Humanise	0 to 100 %	0 %	Small, repeatable moves in timing and velocity.
Arp	OFF, 1/8, 1/16, 1/16T, 1/32	OFF	Long notes and chords become arpeggios on the chosen grid.
Order	Up, Down, Up-Down, Random	Up	The arpeggio's note order.
Octave	-2 to +2	0	Moves the whole clip by octaves.

SECTION 08

Sound and play

The built-in synth, and how the melody plays.

— SOUND

CONTROL	RANGE	DEFAULT	WHAT IT DOES
Sound	16 sounds	Koto	Plucked strings, FM keys and bells, pads, leads and basses.
Sound on	on / off	on	Off, Shirabe sends only MIDI: put an instrument on the track it feeds. On, it plays its own synth as well.
Tone, Attack, Release	-100 to +100	0	Darker or brighter, slower or faster starts, shorter or longer tails than the sound's own.
Motion	-100 to +100	0	Vibrato, from none to a wide, slow shimmer.
Space	-100 to +100	0	The reverb, from dry to washed out.
Output	-24 to +6 dB	0 dB	The synth's level.

— PLAY

CONTROL	RANGE	DEFAULT	WHAT IT DOES
Host Sync	on / off	on	The loop plays with your project's transport, locked to its bars.
Play	key		Loops the melody at the project's tempo without the transport (120 BPM in the app).
Keys	Play Sound, Trigger, Trigger + Transpose	Play Sound	Play Sound plays the synth from your keys. Trigger starts the loop while a key is held; Trigger + Transpose also moves it to the key (C4 is as written).
Latch	on / off	off	In a trigger mode, one key press keeps the loop playing after you let go.
Drag MIDI	drag		Drag onto a track for the clip as a MIDI file, named with its key, scale and tempo. Click to show the file.
Drag WAV	drag		Drag onto a track for the clip played by Shirabe's sound, 48 kHz / 24-bit, with its tail.

MIDI OUT IN LOGIC Put another instrument on a new track and choose Shirabe as its MIDI input; switch SOUND off to hear only that instrument.

SECTION 09

Packs, sounds and scales

Sixteen seed packs on the tiles and eight more in the bonus bank under LOAD PACK. Any folder of .mid files in ~/Music/Dotmatrix/Shirabe/Packs becomes a pack of your own after a rescan (LOAD PACK opens the folder). Taste models are kept in ~/Library/Application Support/Dotmatrix/Shirabe/Taste.

GROUP	PACKS, SOUNDS AND SCALES
Seed packs	Koto Garden (East), Yo Mountain (East), Cinematic (Score), Deep Water (Score), Slow Chords (Keys), Soul Keys (Keys), Lo-Fi Study (Beats), Boom Bap (Beats), Trap Bells (Beats), Afro Bounce (Beats), Pop Hooks (Pop), Chip Quest (Pop), Night Drive (Electronic), Neon Arps (Electronic), Trance Lift (Electronic), Wanderer (Free)
Bonus bank	Sakura Rain (East), Miyako Night (East), Matsuri (East), Blues Walk (Soul), Lullaby (Keys), Lydian Float (Score), Dusk Phrygian (Score), House Stabs (Electronic)
Yours	Any folder of .mid files in ~/Music/Dotmatrix/Shirabe/Packs, after a rescan from LOAD PACK
Sounds: Strings	Koto, Harp, Shamisen, Nylon
Sounds: Keys	Tine Keys, Glass Bell, Marimba, Music Box
Sounds: Pads	Soft Pad, Night Pad
Sounds: Leads	Warm Lead, Square Lead, Neon Pluck, Brass Stab
Sounds: Bass	Sub Bass, FM Bass
Scales	Major, Minor, Dorian, Phrygian, Lydian, Mixolydian, Harmonic Minor, Melodic Minor, Major Penta, Minor Penta, Blues, Hirajoshi, In Sen, Yo, Miyako-bushi, Chromatic

— RECIPES

01	**A koto line**	**Koto Garden** with the Koto sound, 4 bars, CREATIVITY 45 %: a pentatonic line in Hirajoshi.
02	**Trap bells**	**Trap Bells** with ARP 1/16T on long notes and GATE 60 %: rolling triplet bells.
03	**Your hook, again**	Drop your own MIDI hook, CREATIVITY 25 %, then RE-IMAGINE a few times and LIKE the best.
04	**Lift**	**Trance Lift** with CONTOUR +50: every bar climbs a little higher.
05	**Hum it in**	Drop a recording of a sung or whistled line: Shirabe turns it into notes for the prompt.

SECTION 10

Reference and troubleshooting

— TECHNICAL NOTES

Writing	A second-order statistical phrase model over scale steps, with a rhythm model per sixteenth slot, motif forms every four bars and chord progressions from each pack. Not a neural network; nothing is downloaded.
Audio to MIDI	A pitch tracker for one note at a time, quantised to sixteenths. Chords and drums can't be read.
Synth	12 voices: plucked string, two-operator FM and two-saw analog engines, a low-pass with its own envelope, and a reverb.
Timing	Notes are placed at sample accuracy in the host's bars. The audio thread never allocates.
Sessions	A project stores the melody, the prompt, the takes, every setting and the window size.
Not in 1.0	Hosting other plug-ins inside Shirabe, polyphonic audio to MIDI, and a tutorial.
Compatibility	Universal (Apple Silicon and Intel). VST2 is not available: Steinberg no longer licenses it. CLAP is built with the open-source clap-juce-extensions.
Trademarks	All product names are trademarks of their respective owners. Dotmatrix is not affiliated with or endorsed by any of them.

— TROUBLESHOOTING

Nothing plays	Start your project's transport (HOST SYNC follows it), or press PLAY. In a trigger mode, hold a key.
No sound, but notes move	SOUND is off: Shirabe is sending only MIDI. Switch it on, or route its MIDI to an instrument.
The audio loop made odd notes	Audio to MIDI reads one note at a time. Use a solo line without drums or chords.
My pack is missing	Put .mid files in a folder inside ~/Music/Dotmatrix/Shirabe/Packs, then choose Rescan in the LOAD PACK menu.
It does not appear in Logic	Run the Terminal lines in READ ME FIRST.txt, then restart Logic. In Logic > Settings > Plug-in Manager, select it and click Reset & Rescan Selection.



Shirabe by Dotmatrix

Lightweight audio plugins. Documentation for version 1.0.0.