

RETRACE

Analyse a sound. Rebuild it as a playable synth patch.



RETRACE uses local AI and a refinement search to set its own synthesizer from an audio reference. The result is an editable instrument patch, rather than the original sample spread across a keyboard.

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Installation and first launch

Install the format your DAW supports, then load RETRACE on an instrument track.

- 01.** Close your DAW before installing or updating the plugin.
- 02.** Download the installer for your operating system from the [METASIS support page](#). Use the formats supplied with that release.
- 03.** Run the installer and reopen your DAW. If necessary, use its plugin manager to rescan.
- 04.** Find RETRACE under Metasis Audio. Enable MIDI input or create a MIDI clip, then play a note.

Format	Standard installation folder
Windows / VST3	C:\Program Files\Common Files\VST3

AU is a macOS format. VST3 is used on Windows and macOS. Your DAW must support the format and architecture of the installed build. Minimum OS versions and the availability of each build are listed with the release download.

This Windows release includes a 64-bit VST3 plugin and a standalone application. Run the installer with your DAW closed, then rescan plugins. The included AI model runs locally; no external AI account or API key is required.

The sound-analysis AI runs locally without cloud uploads, API keys or usage credits. Licence activation needs one brief online connection; normal activated use works offline.

Open the plugin menu and its licence entry. The full-featured trial lasts seven days. To activate a purchase, enter your purchase email and licence key while online. Normal activated use works offline without periodic licence-server checks.

Your first sound match

- 01.** Load RETRACE on an instrument track. Drag a sample into the plugin or click the sample field to browse. WAV, AIFF and FLAC are listed by the chooser.
- 02.** Use an isolated note or short, clearly pitched sound. Loading a sample starts analysis.
- 03.** Check NOTE. Correct a wrong pitch or octave with the field or arrows, then press RETRACE to run analysis again.
- 04.** Use ORIGINAL to hear the sample, REBUILD to hear the result and STOP to end auditioning.
- 05.** Play MIDI notes or the on-screen keyboard. Edit the controls and save the patch.

Control	What it does
FAST	Shorter search for quick experiments.
NORM	Middle search effort; a useful default.
DEEP	More refinement work. Takes longer and does not guarantee an exact match.
RETRACE	Analyses the current sample again, or opens the chooser if no sample is loaded.
EJECT	Clears the sample and returns to an initial starting state. Save useful work first.

Choose search depth before the next analysis. These modes change search effort, not playback quality. After matching, the result plays as a normal synthesizer.

Getting a useful match

Choose a clear reference

Begin with one instrument and a clear note, including the attack and some decay. A layered chord or full mix contains several behaviours that a single patch may not reproduce. Choose a representative sound rather than a long track.

Match the core sound first

The match focuses on the dry tone and its shape. Reverb and other effects in a reference do not imply an identical effect chain in the result. Build the patch, then add chorus, delay or reverb for the arrangement.

Check the detected note

An octave error can send the search towards a different register. Correct NOTE and rerun RETRACE before compensating with oscillator controls.

Compare by ear

The trace and match readout help compare reference and synth. The score is an optimisation measure, not a percentage guarantee. Listen to ORIGINAL and REBUILD, then test the patch on the notes you intend to play.

Offline AI

The model and refinement run on your computer. The sample needs no cloud upload, external API key or recurring usage credits.

Results depend on the source and the synthesizer's sound range. Save useful intermediate patches before running another analysis, which can replace current settings.

Oscillators and tone sources

Control	What it does
Oscillator A / B	Two wavetable oscillators. Choose a table family, then move Position through its frames.
Position	Changes waveform within a table; it is not the original sample's playback position.
Level	Balances each oscillator. Reduce one to hear the contribution of the other.
Unison / Detune / Spread	Adds and separates unison voices. Increase gradually and check tuning and mono compatibility.
B Coarse / Fine	Sets Oscillator B's pitch relative to the played note, in fixed intervals and cents.
FM	Uses Oscillator B to modulate A's phase, adding harmonic complexity.
Sync	Links oscillator cycles through hard sync. Listen while changing oscillator settings.
Sub	One or two octaves below the note, with sine, triangle or square choices.
Noise / Colour	Adds noise and changes its tone. Start low for attack or breath detail.

Wavetable families

Classic, Pulse, Harmonics, Odd/Even, Formant, Organ, Bell, Reed, Digital, Spectral, Sync and Pluck are in the current engine. Explore Position within a family before changing several other controls.

After matching, the controls remain editable. Keep the matched envelope and change a wavetable to preserve the gesture with a different tone.

Filter, envelopes and the trace

Control	What it does
Cutoff	Filter frequency. Lower it to soften the sound; raise it to reveal upper harmonics.
Resonance	Emphasises frequencies near Cutoff. Use high settings carefully.
Filter Drive	Pushes the filter stage for more harmonic colour.
Key Track	Makes the filter follow the played note.
Amp envelope	Attack, Decay, Sustain and Release shape loudness over the note.
Filter envelope / Depth	Moves Cutoff over the note. Depth sets how far it moves.
Pitch envelope depth	Applies pitch movement shaped by the filter envelope, useful for percussive or falling-pitch sounds.

Understanding ADSR

Attack is the rise after note-on. Decay moves towards the held Sustain level. Release starts at note-off. Longer Release continues after the key is released; extremely short values can end abruptly.

Direct editing

In the trace, adjust the resting cutoff line and envelope peak. Envelope displays provide handles for timing and level stages. Hover controls to read the information line and make small changes while playing the same notes.

Make the patch fit the part

For a pad, lengthen Amp Attack and Release. For a pluck, shorten Decay and lower Sustain. If note endings click, try a slightly longer Amp Release before changing the whole sound.

Modulation and performance

Control	What it does
LFO 1 / LFO 2	Repeating sources for motion in pitch, cutoff, amplitude and position. LFO 2 is a manual tool rather than a parameter the AI must recover from a sample.
Modulation matrix	Sixteen slots connect a source to a destination with adjustable depth. Start with small amounts.
Four macros	Move several assigned destinations with one control. A macro needs assignments before it has an effect.
Poly / Mono / Legato	Playing modes. Poly is a starting point for chords; Mono and Legato are for single-note lines.
Glide	Pitch-transition time in playing modes that use it.
Bend Range	Pitch-bend range, up to 24 semitones.
Output / -36 to +12 dB	Final level trim.

Create a macro

01. Choose a free matrix slot and a Macro as its source.

02. Select a destination such as cutoff or wavetable position, then set a small positive or negative depth.

03. Move the Macro. Add more slots with that same source to control several parameters together.

Right-click an eligible knob to assign or remove modulation. Confirm its source and destination in the matrix. Built-in chorus, delay and reverb add space after the core synth sound; keep them restrained while comparing a match.

Patches and offline workflow

Browse and save

Click the preset display for the factory bank or use its arrows. SAVE writes a .retrace patch and LOAD opens one. You can also drop a .retrace file into the plugin.

- 01.** Save a patch immediately after a useful match.
- 02.** Save another version before changing oscillators, adding modulation or reanalysing.
- 03.** Save the DAW project for routing and automation as well as the plugin state.
- 04.** Keep the source audio with your project if you want to compare or analyse it later.

Install the complete package

Install the complete package to include the local AI model and runtime dependencies. Moving only a plugin binary can leave the model unavailable. For installation problems, check the package instructions or contact support.

Using the result

The patch generates synthesized audio, so you can play other notes and edit its controls. Matching does not remove rights or permissions attached to the original audio; use source material you are entitled to work with.

The Windows installer includes the plugin, local AI model and runtime. Activate with your purchase email and key, then work offline. See the activation and device-change instructions in this manual.

Troubleshooting and support

Symptom	Check this first
No sound	Use an instrument track with MIDI input. Check monitoring, Output and oscillator levels.
Wrong pitch or octave	Correct NOTE, then press RETRACE to analyse again.
Reference sounds different	Use an isolated note, check pitch, compare the dry core and try deeper search. Edit the result afterwards.
Local model unavailable	Install the complete package to include the local AI model and its runtime dependencies. No cloud login is needed.
Analysis replaced a useful patch	Load the version saved before reanalysis. Save useful variations first.

Plugin missing from the DAW

Confirm the plugin format, architecture and installed location. Close and reopen the DAW, rescan with its plugin manager, and review any failed-validation list. Remove duplicate old installations only when you know which version your existing projects require. Do not disable operating-system security checks to force a plugin to load.

Projects, presets and updates

Save your DAW project and a copy of important user presets before updating. A DAW project stores the plugin state; a preset file lets you reuse settings in another project. Keep the original installers needed for archived sessions.

Contact METASIS

Email support@metasisaudio.com with the plugin name and version, operating system, DAW/version, plugin format and steps to reproduce the issue. For audio problems, include sample rate, buffer size and a short example you are allowed to share.

[Support and current downloads](#) | [My account](#)

Document revision 2.1 - 21 September 2026. This operating guide accompanies the licence agreement and release requirements supplied with your software.

Activation and device changes

Activate once, use offline

Open the plugin menu and its licence entry. The full-featured trial lasts seven days. To activate a purchase, enter your purchase email and licence key while online. Normal activated use works offline without periodic licence-server checks.

One personal licence normally covers two computers. View the allowance in My account; deactivate inside the plugin. Multiple instances on one computer use one place. Contact support@metasisaudio.com for an individual allowance or help with an unavailable device.

Release a computer

01. Open the licence window on the old computer and choose DEACTIVATE while online. Wait for server confirmation.

02. If the connection fails, the plugin keeps a pending local deactivation. Reconnect and choose RETRY; the device place is released after server confirmation.

03. Activate on your replacement computer using the purchase email and key. An older activation may need one verification before deactivation.

Deactivation preserves the original trial start. It cannot create another seven-day trial. If the old computer is lost or broken, support can resolve its place. Existing activated computers keep working when the allowance is reached.

Transferring your licence

Transfer a perpetual paid licence to another person from your customer account. There is no transfer fee.

01. Deactivate every authorised computer inside the plugin. Contact support if a computer is unavailable.

02. Stop using the licence and make all retained copies and restorable backups unusable.

03. Open My account > My Licenses. Enter the recipient email for the selected licence, confirm that you have relinquished the copies and send the invitation.

04. The recipient accepts the email invitation within seven days. They use the account for that email or receive a password-setup email for a new account.

05. The recipient receives a new key and download access. Your original invoice and other purchases stay in your account. Both sides receive confirmation.

While an invitation is pending, new activations are paused. Cancel it before acceptance if needed; unaccepted invitations expire after seven days. Private resale payment is arranged between the parties. Statutory rights remain unaffected.

Full instructions: metasisaudio.com/support. Privacy: metasisaudio.com/privacy-policy.