RAWPULSE AUDIO

CATHODE

USER GUIDE / ENGLISH



Sound matter differently.

Sampling, granular textures, reverse, tremolo and Half Time.
Installation and complete operating guide.

Windows VST3 / macOS AU + VST3

Version 0.6.4 | October 2026

Your route through CATHODE

Start with installation and activation, then follow the sampler and effects chapters. Click a title below to jump to that page.

03 Welcome to CATHODE

04 Install on Windows

05 Install on macOS

06 Choose your graphics

07 Trial and permanent activation

08 Make your first sound

09 Find your way around

10 Load, play and slice

11 Select, repeat and navigate

12 Play a sample across the keyboard

13 Pitch and sample glide

14 Build a granular texture

15 Fine-tune the grains

16 Reverse the motion

17 Shape rhythmic volume

18 Slow down and reshape

19 Draw your own modulation

20 Curves, grid and templates

21 Presets, RANDOM and Undo

22 Export the processed result

23 Save and move your projects

24 Automation and performance

25 Activation and file locations

26 Troubleshooting: getting sound

27 Troubleshooting: working smoothly

28 Control ranges

29 Terms and everyday gestures

Welcome to CATHODE



CATHODE is a sample-based instrument with granular processing, reverse, tremolo and Half Time. Load your own audio, play slices or pitched notes from your DAW, and use the effects to build a new sound.

Windows includes a 64-bit VST3 instrument. macOS includes universal AU and VST3 instruments for Intel and Apple silicon. Load it on an instrument/MIDI track, not as an insert effect for processing another track's live input. A compatible DAW and an active trial or purchased CATHODE license are required. An AAX version for Pro Tools and a standalone audition application are not included in these customer packages.

There are no bundled audio samples or factory sound presets in this release. The built-in waveform choices and Half Time custom-shape library are modulation shapes, not complete sound presets.

This guide covers the 0.6.4 trial-enabled release. Screenshots use an example audio file; that file is not included. Hardware-style artwork may carry a different decorative version label.

> Instrument, sampler and effects in one interface. Start with your own audio and turn it into something new.

Install on Windows

Before you begin

Use a 64-bit Windows PC, a compatible 64-bit VST3 instrument host and a working audio driver. Use an operating system supported by your DAW and drivers. Administrator permission is needed to install. The installer checks Direct3D compatibility; that check is not a full performance benchmark.

1. Extract the downloaded ZIP using Extract All. Open the extracted folder.

2. Save your projects and close every DAW or plug-in host.

3. Run CATHODE-Setup-x64.exe. Confirm the installation prompt after checking that the file came from your official download.

4. Keep the default VST3 destination unless your DAW requires another supported location.

5. Review the hardware information and choose Standard or High graphics. Standard is the recommended starting point.

6. Finish setup, reopen your DAW and scan for new plug-ins.

7. Add CATHODE as an instrument. Open KEY to start a trial or enter your purchased key.

In FL Studio

Open Options > Manage plugins and run Find installed plugins. Add the CATHODE instrument to the Channel Rack, then open its Piano roll. Load a sample before playing notes. Select your audio interface and buffer in FL Studio's audio settings.

Default installation location

C:\Program Files\Common Files\VST3\CATHODE.vst3

This is a VST3 bundle. Keep the whole bundle intact. The customer installer does not require CMake, Visual Studio or a compilation script. It does not include a standalone player, AU or AAX.

If Windows shows a publisher warning

Check the download source and file before continuing. Do not disable antivirus or system protection. If setup cannot replace a file, close all applications that may have loaded CATHODE and try again.

> Load the instrument on a MIDI/instrument channel. It is not the live-input insert-effect version.

Install on macOS

Before you begin

CATHODE requires macOS 11 or later and a compatible AU or VST3 instrument host. The Mac package is universal: it contains Intel and Apple silicon code. Installation requires administrator authorization.

1. Open the downloaded ZIP in Finder.

2. Save your work and close all DAWs and plug-in hosts.

3. Open the CATHODE macOS .pkg installer supplied in your download. The 0.6.4 package is named CATHODE-0.6.4-macOS-SIGNED.pkg.

4. Follow Installer's pages. Select the plug-in components you need when offered, and choose Standard or High graphics on the first installation.

5. Complete installation using your Mac administrator credentials when requested.

6. Reopen your DAW. Refresh or rescan its plug-in list if needed.

7. Create a software-instrument track and load CATHODE. Open KEY to start the trial or enter your purchased key.

Choose the format your DAW supports

Logic Pro and GarageBand use the AU instrument. A VST3-compatible host can use the VST3 instrument. Choose one format per instance; you do not need to load both.

Installed plug-ins

AU: /Library/Audio/Plug-Ins/Components/CATHODE.component

VST3: /Library/Audio/Plug-Ins/VST3/CATHODE.vst3

The Library above is the computer-wide Library, not the Library inside your home folder. In Finder, use Go > Go to Folder to paste a location.

Security and scanning

The supplied 0.6.4 Mac installer is signed and notarized. No Terminal security-unlock command is part of normal installation. If macOS rejects the package, download a fresh copy from your official source and report the exact message. Do not re-sign or modify the installed bundles.

Choose your graphics

Standard - recommended

Standard keeps the visual treatment lighter, especially in the preset browser and enlarged LFO panels. Choose it when responsiveness and lower display overhead are your priorities.

High

High uses fuller CRT screen effects. It needs more graphics headroom, particularly in busy DAW sessions. The audio engine, features and sound quality are the same in both modes.

Where the choice is made

Choose graphics quality during installation. There is no quality switch inside CATHODE. Updating over an existing installation preserves its graphics choice.

Change the choice on Windows

1. Save your projects and close all DAWs.
2. Open Windows Settings > Apps > Installed apps (or Apps & features).
3. Select CATHODE and choose Uninstall.
4. Run the installer again and select the other graphics mode.

Change the choice on Mac

1. Save your projects and close all DAWs.
2. In Finder, use Go > Go to Folder and open: /Library/Application Support/RawPulse Audio/CATHODE
3. Run Uninstall CATHODE.command and follow its prompts.
4. Run the .pkg installer again and select the other mode.

Keep your work

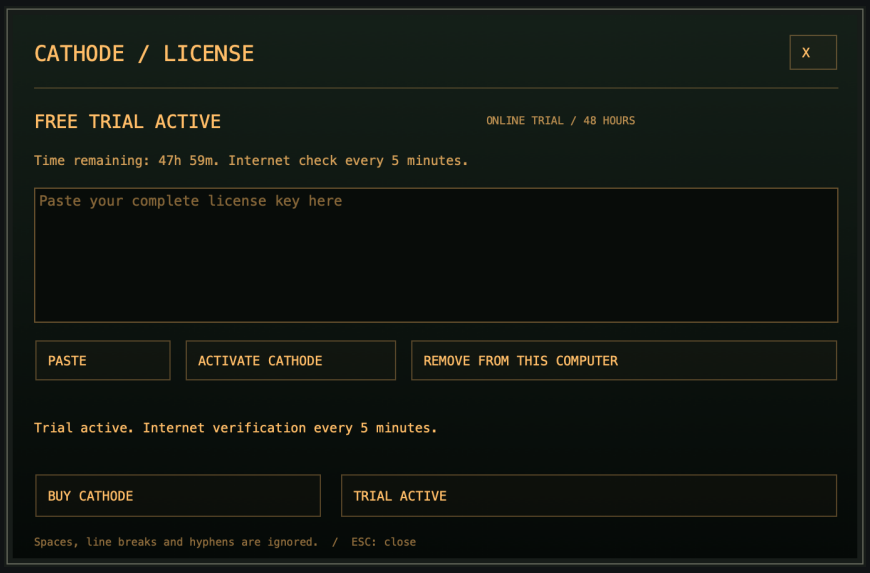
The supplied uninstallers preserve user presets and local activation. Back up your DAW projects and original samples separately. To remove CATHODE entirely from use, follow the uninstall steps without reinstalling.

Understanding compatibility

A hardware compatibility check does not guarantee a particular frame rate. DAW load, drivers, display scaling and resolution all matter. Separate measured CPU/RAM minima for smooth High graphics have not been established.

> To change Standard / High, uninstall and reinstall. Standard does not reduce audio quality.

Trial and permanent activation



Start your 48 hours

Open KEY and click START FREE 48-HOUR TRIAL while connected to the internet. The trial begins when activation succeeds, not when you download or install CATHODE. KEY shows the remaining time.

These are 48 consecutive hours, not 48 hours of playing time. Closing the DAW or turning off the computer does not pause the deadline. Reinstalling on the same recognized device does not start a new trial.

Stay connected during the trial

CATHODE checks online every five minutes. If verification fails, trial access pauses until a successful check. Reconnect and use RETRY INTERNET CHECK when offered. The original expiry time does not move.

When the trial ends

CATHODE remains installed, but sample playback and processing require a purchased key. The plug-in does not uninstall itself. BUY CATHODE opens the store; purchasing supplies the key separately.

Unlock permanently

Paste the complete purchased code into KEY using PASTE, then click ACTIVATE CATHODE. A successful activation shows ACTIVATED. Purchased-key validation works offline and the activation survives a DAW restart. You can activate during the trial or after it expires.

> Store: https://rawpulseaudio.com/cathod.html

Make your first sound



1. Install CATHODE, restart your DAW and refresh its plug-in list if needed.

2. Add CATHODE to an instrument track/channel.

3. Open KEY and start the free trial online, or activate with your purchased license code.

4. Drag an audio file onto DROP LOOP HERE, or use LOAD LOOP/LOAD SAMPLE. Wait for the waveform to appear.

5. Choose LOOP for slicing, or ONE SHOT for playing the whole sample.

6. Route MIDI notes to CATHODE and route its output to your DAW's master.

7. Start with a moderate monitoring level, then play notes or press Play in the sampler to audition.

LOOP example: load a drum loop, choose MODE BEAT and a beat division, then draw notes starting at MIDI note 60. Note 60 triggers the first slice, 61 the next, and so on. In FL Studio, MIDI 60 is normally displayed as C5. Other DAWs may call it C3 or C4: the MIDI number is the reliable reference.

ONE SHOT example: load a tonal sample, select ONE SHOT, leave ROOT at MIDI 60 and play that note to hear the original pitch. Play higher or lower notes to transpose it. Set the amplitude envelope for the desired onset, held level and release.

The instrument receives MIDI as part of normal operation. The MIDI indicator is not an on/off switch for MIDI reception in this instrument.

Find your way around



The left screen holds the sample, waveform, slicing and pitch controls. The right screen changes context when you touch the Granular, Reverse, Tremolo or Half Time controls. To return to an effect's screen, touch one of that section's knobs. This reveals its detailed controls.

INPUT changes the level entering the effects. OUTPUT changes the final processed level. Their ranges are -60 to +12 dB. Watch the meters and leave headroom in the DAW, especially with overlapping grains or samples.

Drag knobs to adjust them. Hold Shift for finer adjustment where provided. Double-click the main knobs to reset their values. Stepper controls use left/right arrows to change choices. Toggle buttons light when enabled. The ? help button enables descriptions when you hover over controls.

UNDO returns to the previous supported edit. With the sampler focused, Cmd+Z on Mac or Ctrl+Z on Windows also requests Undo. DAW keyboard-focus rules may intercept shortcuts. Use the on-screen button when that happens.

Resize the plug-in through the editor/host resizing controls available in your DAW. The screens and their clickable controls scale with the editor.

BYPASS in the sampler compares the source with the processed result. It removes effects and input/output gain changes while preserving sampler pitch, SYNC and playback position. This is different from disabling or bypassing the instrument in the DAW, which may silence the instrument.

Load, play and slice



Loading

Use LOAD LOOP or drop one supported audio file into the waveform area. The loader accepts WAV, AIF/AIFF, FLAC, MP3 and OGG files; a file must also contain valid, decodable audio. WAV or AIFF is a useful interchange choice. A loading or decoding error is shown in the sample display.

Playback

Play starts auditioning the source. Pause stops playback; Rewind returns the playback position to the start. Starting whole-loop audition clears slice-repeat/sequence audition. With the sampler focused, Space toggles playback; stopping this way also rewinds. The DAW may own the Space key. For a repeatable arrangement, program MIDI notes on the instrument track.

SYNC

SYNC follows the host tempo/transport for loop playback while preserving pitch. CATHODE estimates the imported loop's musical length. For reliable sync, use a neatly trimmed musical loop. An irregular or poorly trimmed recording may not match the expected beat length.

MODE BEAT

Divides the source on a musical grid. The BEAT selector offers 4, 2, 1, 1/2, 1/4 and 1/8 beat intervals. Smaller values create shorter slices. Where a boundary is editable, drag the cut marker to adjust it.

MODE TRANSIENT

Uses detected attacks to establish slices. These detected cuts are locked. The GATE control determines whether releasing a MIDI note stops its slice: ON stops on release; OFF lets the slice play to its end.

Select, repeat and navigate



Selection and effect scope

Click a slice to select it. Shift-click or Shift-drag extends a range. Left/Right arrow keys move between slices when the waveform has focus; Shift+Left/Right extends the selection.

APPLY TO LOOP applies effects across the loop. APPLY TO SLICE restricts processing to the selected slices; other slices remain outside that selected processing scope. Selection does not delete or crop the source. Per-slice pitch editing is separate from global sample pitch.

Repeating a selection

The repeat/loop button repeats the active slice. Enable repeat first, then S to repeat the selected slices as a sequence. Turning S off also stops repeat. Select the slices before starting a sequence.

Waveform navigation

Use the wheel to zoom around the pointer and horizontal scrolling to pan. Trackpad pinch zoom is supported. Zoom changes the view, not the sound or length of the audio. Do not confuse a zoomed view with a cropped sample.

> MIDI note 60 triggers slice 1, note 61 triggers slice 2, and so on. Use MIDI numbers when octave names differ between DAWs.

Play a sample across the keyboard



ONE SHOT plays the entire source from MIDI notes instead of assigning consecutive notes to slices. ROOT selects the MIDI note that reproduces the original pitch; its default is 60. Other notes transpose relative to ROOT without changing the sample duration. Global PITCH adds another pitch offset. Slice controls are replaced by the relevant one-shot tools.

The ONE SHOT / AMPLITUDE panel provides ADSR:

- ATTACK: time to rise from silence to full envelope level, 0-10000 ms.

- DECAY: time to move from that peak to SUSTAIN, 0-10000 ms.

- SUSTAIN: level during the held part of the note, 0-100%.

- RELEASE: time to fade after note release, 0-10000 ms.

Drag these controls vertically; Shift allows fine adjustment of times. The envelope drawing illustrates the settings. A short sample can reach its end before a long envelope completes. Sustain does not automatically loop the sample. In the host parameter list, Note playback selects GATE or ONE SHOT behavior: GATE responds to note release, while ONE SHOT allows the triggered sample to finish.

For a softer onset, increase ATTACK. For a gentler ending, increase RELEASE. DECAY controls the transition to the held level, not the fade after note-off. MIDI loop slices also use built-in edge smoothing; this is separate from the ONE SHOT ADSR controls.

Pitch and sample glide



PITCH

The vertical pitch fader beside the waveform changes global pitch from -24 to +24 semitones. It becomes usable after a sample has loaded. Testing it with an empty sampler will not produce a pitch change or sound.

In LOOP/SLICE editing, the slice pitch control adjusts the focused slice from -24 to +24 semitones. Global and slice offsets combine. Pitch editing preserves duration. A PREPARING indication can appear while new pitched audio is prepared; wait for preparation to finish before judging the result.

GLIDE EDIT / PITCH RISE

Open GLIDE EDIT to create a pitch bend into the current pitch:

- ON/OFF enables or disables the bend.

- START is a relative offset from -24 to +24 semitones. A negative value rises into the target; a positive value falls into it.

- TIME sets the transition duration, 0-2000 ms. Zero is instantaneous.

- CURVE chooses LINEAR, SOFT or FAST movement toward the target.

Double-click TIME to reset it to zero. APPLY TO LOOP affects the whole loop; APPLY TO SLICE applies the same enabled glide settings to selected slices. Glide does not change the overall sample duration. This sample glide is separate from the GLIDE control inside Granular EDIT.

Build a granular texture



Granular processing reads short pieces of audio called grains. The combination of duration, generation rate and scan movement determines how continuous, scattered or cloud-like the result sounds.

MIX: 0-100% granular contribution. At zero, the granular contribution is removed; the other effect sections can still be active.

DENSITY: 0.5-250 grains per second in Hz mode. DENS SYNC switches to host-synced divisions: 1/2, 1/4, 1/8, 1/16, 1/32 and 1/64.

SIZE: 1-500 ms in millisecond mode. SIZE LINK instead expresses grain length as a multiple of the grain interval, from 0.125x to 4x. At 1x, consecutive grain durations meet; above 1x they overlap. The resulting grain length still has a 500 ms maximum. Changing density in LINK mode therefore also changes duration; use DENS SYNC for tempo-linked behavior.

SCAN: the center/LIVE position follows the current incoming sample audio. Moving left or right changes scan travel through the available audio history. Double-click SCAN to return to LIVE. The screen shows relevant grain status; its animation is a visual guide, not an additional sound parameter.

Fine-tune the grains



EDIT opens these detailed controls:

- RHYTHM: STRAIGHT, TRIPLET or DOTTED timing for synced grain density.

- SPRAY: TIGHT (0%), NATURAL (5%), WIDE (10%) or DIFFUSE (20%) scatter in grain start positions around the scan position.

- ENVELOPE: PUNCH uses a firmer middle with short fades; CLOUD uses a smoother grain envelope across its duration.

- SCAN TRAVEL: WRAP jumps to the other end of the history; BOUNCE reverses direction at an end. Move SCAN away from LIVE to hear the difference.

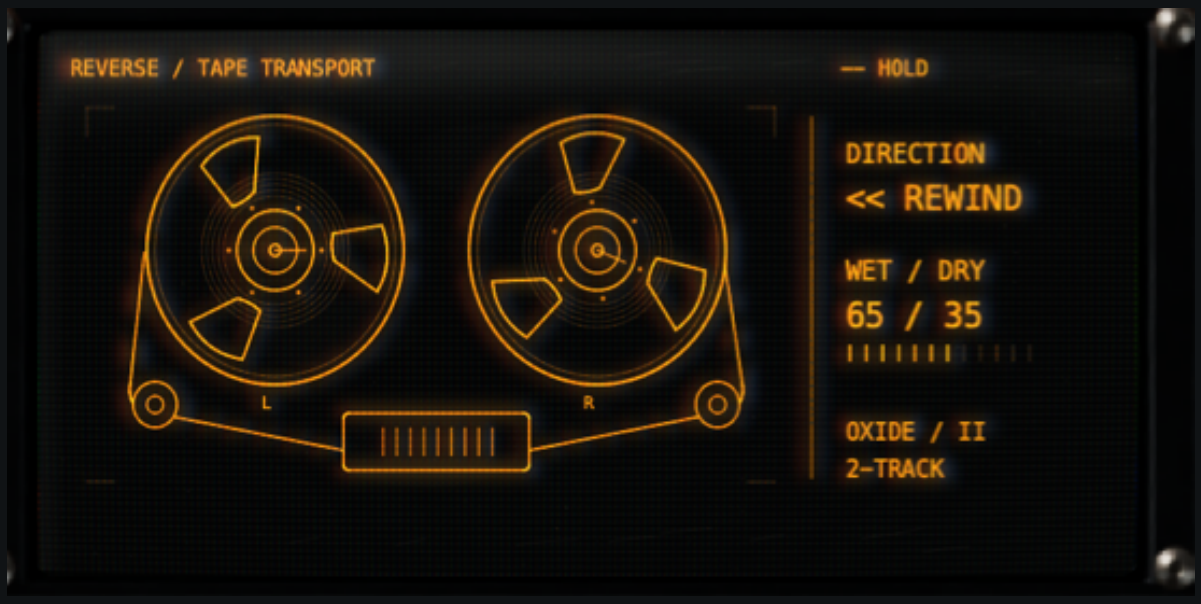
- PITCH DRIFT: OFF or random per-grain offsets of +/-5, 15, 30 or 50 cents.

- GLIDE: a per-grain rise from seven semitones below the target pitch. Enable it and set 1-100 ms; double-click its time to return to 80 ms.

A cent is 1/100 of a semitone. Pitch drift creates variation; it does not replace the global sample PITCH control. Grain glide and sample glide can be used independently.

> Try CLOUD with a longer SIZE and moderate DENSITY for a smoother texture; use SPRAY and PITCH DRIFT to add variation.

Reverse the motion



REVERSE enables backward playback processing. MIX blends its contribution from 0 to 100%. The reversed read follows the current playback region: the full source or active slice, according to playback and scope. The reel display indicates the effect's state and blend.

The MIX knob is a wet/dry balance, not a tape-speed control. Turning the effect off restores the forward path. LOOP and MODE knobs in the lower right section belong to Half Time, not Reverse.

> Start with a loaded loop. Enable REVERSE, bring up MIX, then compare it with the forward version by toggling the button.

Shape rhythmic volume



Tremolo modulates volume over time.

- MIX sets the modulation contribution, 0-100%.

- RATIO sets a tempo-synced cycle: 1/2, 1/4, 1/8, 1/16, 1/32 or 1/64.

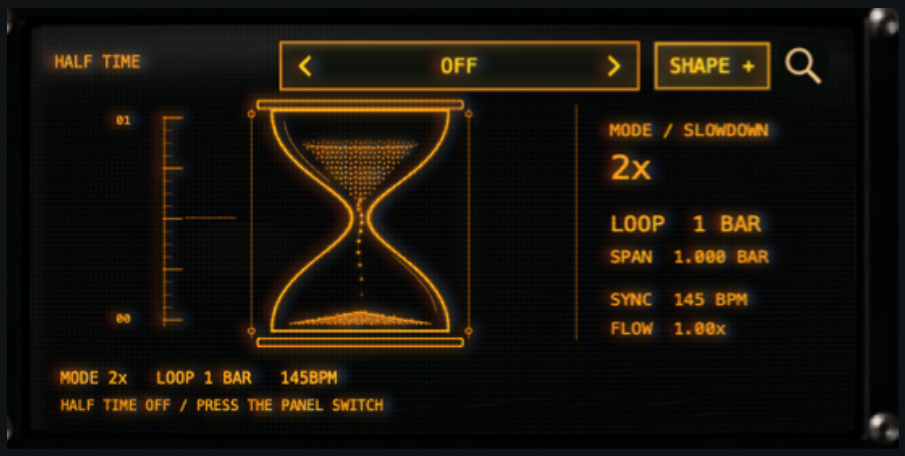
- SMOOTH rounds the transitions, 0-100%.

Touch a Tremolo knob to display its screen. SHAPE offers CLASSIC, SINE, TRIANGLE, SQUARE, RISE, FALL, PULSE and CUSTOM. CLASSIC retains the original CATHODE tremolo behavior. EDIT opens the editable shape; the magnifying glass opens a larger view. See the LFO editor chapters on pages 19-20 for drawing instructions.

A shallow MIX creates gentle motion. Larger MIX with a sharper shape creates more pronounced gating. RATIO sets speed; SMOOTH changes transition character without changing the selected rhythmic division.

> For a subtle pulse, begin with a low MIX. For pronounced gating, raise MIX and try a sharper SHAPE.

Slow down and reshape



The HALF TIME button enables the slowdown effect.

- MODE: 1.5x, 2x or 4x slowdown, with corresponding pitch lowering.

- LOOP: retrigger length of 1/16, 1/8, 1/4, 1/2, 1 BAR, 2 BARS, 4 BARS or 8 BARS, following host tempo and meter.

Touch LOOP or MODE to display the Half Time screen. The effect works with audio history and musical retrigger points; audition changes with the transport running and allow the selected loop interval to be heard.

SHAPE OFF maintains the ordinary constant slowdown. Other shapes move between normal and slowed audio over one LOOP cycle. High points mean more Half Time; low points mean normal playback. The HALF TIME button must be enabled for this modulation to be audible.

SOFT rounds the Half Time LFO transitions: 0% holds and then changes sharply; 100% curves across each segment. It is separate from audio-buffer crossfade smoothing. EDIT and the magnifying glass open the shape editor.

The CUSTOM library contains ten editable Half Time LFO shapes. Click the library name or use its arrows. Choosing a shape recalls only its points, CURVE and SOFT; LOOP and MODE remain unchanged. UNDO restores the prior shape. These are modulation templates, not factory sound presets.

Additional host parameters, available if your DAW exposes the plug-in's parameter list, include Half Time Mix (0-100%), Smooth (0-100%) and Fade In/Fade Out (0-16 bars). Mix blends the slowdown; Smooth controls buffer transitions; Fade In/Out control its entry/exit. These are not extra knobs on the main front panel.

Draw your own modulation



The Tremolo and Half Time editors share the following editing gestures:

1. Open the effect's SHAPE editor or magnifying-glass view.

2. Click the graph to add a point. Drag a point to change timing and level.

3. Alt-click (Option-click on Mac) removes an interior point.

4. Choose CURVE to control how the points connect.

5. Adjust Tremolo SMOOTH or Half Time SOFT to shape the transitions.

6. Close the enlarged view when finished. Edits are applied live; closing the window does not cancel them.

There can be up to 12 points per cycle. The cycle endpoints remain joined to make a repeating shape. Editing a standard shape produces a custom editable shape.

Curves, grid and templates



CURVE choices:

- LINEAR: straight connecting slopes.

- SINE: rounded ends.

- EXP: fast initial movement.

- SYMMETRIC: eased movement at both ends.

- REVERSE EXP: slow initial movement.

GRID snaps point timing to FREE, 1/4, 1/8, 1/16 or 1/32 of one LFO cycle. Changing GRID does not move points already placed. Tremolo's cycle follows RATIO; Half Time's follows LOOP. GRID changes editing precision, not tempo.

RESET returns the shape to SINE and its smoothing to 100%. Use UNDO to recover the previous edit. Custom shapes are stored in the DAW session and CATHODE presets.

> The same drawing gestures apply to Tremolo and Half Time. A Tremolo curve changes volume; a Half Time curve changes the slowdown blend.

Presets, RANDOM and Undo



Click the name in the top bar to open the preset browser. Choose a saved preset or open a .cathode file. The Factory area is empty in this release. Use SAVE to name and store the current settings. Save in the suggested Presets directory to have the file appear in the browser. The top-bar arrows step through the available presets. An asterisk means settings have changed since the remembered preset state.

Presets store effect settings and custom shapes, along with included sampler/envelope settings and gain parameters. They do not contain audio. Loading a preset preserves the loaded sample, slice cuts and selection, slice/global pitch edits, SYNC, effect scope and comparison bypass. A preset is therefore different from a full DAW project state.

RANDOM changes effect settings in LOOP mode. In ONE SHOT mode it also randomizes ADSR. It preserves the sample, slice edits, sample mode, root note, MIDI/note behavior and INPUT/OUTPUT levels. Random results can sound very different; use a moderate listening level. UNDO restores the prior settings. SAVE stores a result you want to keep.

The plug-in's Undo covers supported parameter/edit operations; it is not a substitute for saving your DAW project or backing up sample files.

Export the processed result



To drag an audio result into your DAW or a folder:

1. Load a sample, start your trial or activate CATHODE and set the desired sound.

2. Press and hold on the waveform, then drag outward. Wait briefly if the screen says PREPARING WAV - KEEP HOLDING.

3. Once WAV READY appears, drop the file into an audio track or folder. If the host does not accept the first drag, use the indicated ready file and drag again.

Normal waveform dragging exports the whole loop/sample with processing, not only the slice beneath the pointer. APPLY TO still determines which slices receive effects. With repeat and S enabled, dragging exports the selected sequence instead. You can also hold and drag the S button to export that selected sequence.

The export is a 24-bit WAV at the active processing sample rate. Settings are captured when export begins; later edits do not change that export. The exported WAV is a rendered audio file, not a MIDI pattern or preset. To capture a complete arrangement, polyphonic performance or downstream DAW effects, use your DAW's audio-render/bounce feature.

> An exported WAV is audio. It does not contain the editable CATHODE settings or a MIDI performance.

Save and move your projects

Save the DAW project to recall CATHODE's state, including the sample path, slice edits, effect settings and custom curves. The source audio is referenced by its path; it is not embedded in CATHODE's saved state or in a .cathode preset.

Keep source files in a stable project location. When moving a project to another computer, copy its samples too. If a source is missing, locate it and load it again, then verify the slice edits and save the project. Do not assume a DAW's collect-files command automatically collects samples loaded internally by third-party instruments; verify your project archive. A rendered WAV can be used to preserve a finished result independently.

DAW project

Recalls the full instrument state and references the source audio by path.

.cathode preset

Recalls supported sound settings and curves. It does not package your audio.

Rendered WAV

Captures the processed sound as audio. It cannot restore editable settings.

> A .cathode preset is not a sample archive. Keep your original audio alongside your DAW project.

Automation and performance

Use your DAW's automation system for exposed CATHODE parameters. Record or draw automation using the parameter names supplied by the instrument. The host controls scheduling and the way parameters are listed. Legacy parameters may appear for old-session compatibility; use the named current controls described here for new work.

Standard and High graphics are selected during installation. Standard uses lighter visual treatment, particularly in preset and LFO panels. High adds fuller CRT effects. Both use the same audio processing and sound quality. There is no graphics-quality selector inside the plug-in.

To change graphics quality, close your DAW, uninstall CATHODE and reinstall it with the other choice. Installing over an existing copy preserves its choice. Follow the platform-specific uninstall instructions in the installation chapters on pages 4-6. User presets and activation are preserved by the supplied uninstall process; back up your projects and audio separately.

Graphics load and audio-processing load are different. Closing the editor can reduce display work while the instrument continues to play. More voices, overlapping grains, other instruments, sample rate and audio buffer size can affect the real-time workload. A DAW's CPU/audio meter does not measure the same thing as total CPU usage in the operating system.

If playback crackles under load, test a larger buffer in your DAW's audio settings and compare the same session. This increases monitoring latency. Use Standard graphics when responsive editing is your priority. No single CPU percentage or High-mode performance level is guaranteed for all systems.

Activation and file locations

KEY opens license activation/status. Paste the complete purchased license code and activate it. Activation is validated offline; an internet connection is not required for the validation step. A personal license code is supplied separately from the installer. It is not included here.

The KEY panel also provides removal of the locally stored activation. Removing it prevents that local copy from operating until activated again. Ordinary uninstallation preserves activation and user presets.

Default user preset locations:

Windows: %APPDATA%\RawPulse Audio\CATHODE\Presets

macOS: ~/Library/Application Support/RawPulse Audio/CATHODE/Presets

Activation is stored as activation.license in the corresponding user CATHODE directory above the Presets folder. User data belongs to the operating-system account. A different account may need activation again. Use SAVE to choose another preset destination if desired.

Installed plug-in and uninstaller locations are in the installation chapters on pages 4-6.

> Removing activation in KEY is separate from uninstalling the plug-in. Keep your purchased key available if you choose to remove it.

Troubleshooting: getting sound

CATHODE does not appear in the DAW

Check that you installed the format supported by the host and scanned the correct location. Restart the DAW after installation. Choose the CATHODE instrument entry. VST3/AU installation does not provide an AAX plug-in.

No sound

Check KEY for an active trial or purchased activation, a loaded waveform, MIDI routing, note number and track/master output routing. In LOOP mode, use MIDI 60 onward for slices. In ONE SHOT, check ROOT and ADSR. Check muted tracks, gain, held/released notes and the DAW's selected audio output. Audio-device selection belongs to the DAW, not to this installed instrument. Compare with another known working instrument in the same session.

Pitch does not move

Load a sample first. Confirm whether you are editing global pitch or an individual selected slice. Allow pending pitch preparation to finish.

An effect seems inactive

Check its enable button, MIX and APPLY TO scope. Half Time SHAPE needs the HALF TIME button on. Grain drift/glide needs an audible granular mix. Check sampler BYPASS and any host automation that restores a value.

Clicking or rough note endings

First distinguish audio overload from the sample's own edges. For ONE SHOT, try gentler ATTACK and RELEASE. Check that DECAY/SUSTAIN are suitable for the source. For audio overload, test the DAW buffer and other plug-ins.

Troubleshooting: working smoothly

The loop does not follow the expected tempo

Check SYNC, host transport and tempo, and whether the source is trimmed to a whole musical loop. Slice division changes slicing, not source tempo.

Preset list is empty

This is normal before you save presets. There are no factory sound presets. Save .cathode files in the suggested Presets folder or use Open file.

LFO or preset panel is slow

Compare with playback stopped and with fewer other instruments active. If using High graphics, reinstall with Standard using the installation chapters on pages 4-6. Close the editor when it is not needed. Report the platform, plug-in version, DAW, graphics choice, audio buffer and exact steps if it persists.

Missing sample after opening a project

Restore the original source file/path or reload the sample, verify the edits and save again. Presets do not include audio.

Export does not drop into the host

Keep holding until WAV READY; try dragging again or dropping into a folder and importing the WAV. Check activation and that at least one slice is selected for a sequence export.

Trial access has stopped

Open KEY and read the status. Reconnect for a failed internet check, or enter a purchased key if the 48-hour period has expired. Reinstalling does not renew the trial.

When requesting help

Include your operating system, CATHODE version, DAW version, graphics mode, audio buffer, sample rate and the exact steps that reproduce the issue. Do not send your private license key.

Control ranges

CONTROL	RANGE / CHOICES
INPUT / OUTPUT	-60 to +12 dB
Granular / Reverse / Tremolo MIX	0-100%
Density (Hz)	0.5-250 grains/second
Grain SIZE	1-500 ms
SIZE LINK	0.125x-4x interval (500 ms grain maximum)
Sample / slice PITCH	-24 to +24 semitones each
Sample glide TIME	0-2000 ms
Grain glide TIME	1-100 ms
ONE SHOT attack/decay/release	0-10000 ms
ONE SHOT sustain	0-100%
Half Time MODE	1.5x / 2x / 4x
LFO custom points	up to 12 per cycle

The numerical limits here describe the controls in this release. Ranges are not computer-performance requirements.

Terms and everyday gestures

Wet/dry: balance between processed and original audio.

Grain: a short audio segment used by granular synthesis.

Hz / gr/s: grain events per second in the Density context.

LFO: a repeating control shape; here it modulates volume or Half Time blend.

ADSR: Attack, Decay, Sustain and Release amplitude stages.

Root: MIDI note that reproduces the sample's original pitch.

Slice: a region of the loaded loop assigned to a MIDI note.

Scope: whole loop or selected slices targeted by effects.

Semitone: one chromatic pitch step. Twelve semitones equal one octave.

CRT: the visual screen treatment; it does not change audio quality.

Everyday gestures

Drag a knob: change its value.

Shift-drag: fine adjustment where supported.

Double-click a main knob: restore its default.

Click a slice: select it. Shift-click/drag: extend selection.

Hold and drag the waveform: prepare a processed WAV for export.

Click an LFO graph: add a point. Drag: move a point.

Alt-click / Option-click an interior LFO point: remove it.

Click the preset name: browse. SAVE: store a .cathode preset.

KEY: trial, purchased activation and local license status.

Keep exploring

Begin with a familiar sample. Change one control at a time, compare with BYPASS, and save the results you want to return to.