

SHARK TAPE

Two characters. One tape machine. A practical guide to track coloration, stereo finishing and moving-tape texture.



Start with the music

Use Studio for firmer saturation and stronger low-end weight. Choose Master for more headroom and a restrained bass rise. Drive sets how hard the tape responds; Output sets the final level. Compare at similar loudness so the louder option does not automatically win.

About this edition

This guide describes source checkpoint v0.1.2. SHARK TAPE is an original tape-inspired processor, not a certified recreation of any particular recorder. Mac AU/VST3 validation and listening approval remain pending. A source ZIP is not an installer.

Your first session

1 / Load an audible starting point

Insert SHARK TAPE on a track or bus. Open the preset browser and choose START HERE - Warm Tape. Init - Clean Start sets Mix to zero, so Init alone will not demonstrate the tape character.

2 / Choose the job

Select Studio for tracks, drums and stronger color; try Master on a mix bus or for a gentler response. These are musical starting points, not restrictions.

3 / Set the amount

Raise Drive slowly. Listen to transient attack, bass weight and high-frequency texture. Enable Gain Match and allow 1-3 seconds for it to settle. Use Output for the final trim.

4 / Compare fairly

Store alternatives in A/B/C. Switch Bypass to compare processed and delayed dry audio. Check your DAW output meter: tape saturation is not a limiter and hot settings can exceed 0 dBFS.

5 / Add movement if needed

Start with Wow, Flutter and Noise off for a stable comparison. Add motion for sustained instruments or worn-tape texture. Try Mix below 100% for parallel color.

The main controls

Drive / -24 to +24 dB

Input gain into the recording path. More Drive increases both saturation and level; use Gain Match or Output when comparing.

Output / -24 to +24 dB

Final output trim, after gain matching. It remains active with Gain Match enabled.

Speed / 3.75, 7.5, 15, 30 IPS

Changes bandwidth and the frequency and amount of the bass head bump. Lower speeds are useful for darker color; higher speeds offer a more open starting point. The visual reel speed also follows this selection.

Tone / -100 to +100%

High-frequency shelving before saturation, up to +/-6 dB. Darker settings reduce treble driving the tape; brighter settings increase it.

Bias / -100 to +100%

Offsets the nonlinear response. Positive settings also reduce bandwidth and headroom. Use it as a character control; it is not a hardware calibration measurement.

Mix / 0-100%

Blends latency-aligned dry audio with the complete tape path. At zero the tape contribution is absent. Wow and Flutter change wet timing, so partial Mix can produce creative comb filtering.

Character and calibration

Studio / Master

Studio uses firmer saturation and a stronger bass rise. Master increases headroom and restrains the bass rise. Match levels before judging the difference.

Formula / four choices

Vintage, Classic, Modern and High Output progress toward greater saturation headroom and bandwidth. They are original character choices, not branded tape-stock models.

CAL / +3, +6, +7.5, +9

Sets operating level. Higher calibration reaches saturation sooner. Click the selector to cycle choices.

EQ / NAB or CCIR

Selects simplified original record-emphasis curves. When Noise is enabled, the selection also changes hum between 60 Hz and 50 Hz. Click to cycle.

HEAD / 1/4, 1/2, 1 inch

Changes bass head-bump amount for a width-related character. It does not claim physical track-width accuracy. Click to cycle.

Auto Cal / cream switch

Enables complementary playback compensation for the record emphasis. It does not overwrite manual Bias or perform a hardware alignment procedure. A green indicator means enabled.

Movement, noise and meters

Wow and Flutter

Wow adds slow, stereo-coherent delay modulation, up to 2.5 ms deviation. Flutter adds faster modulation, up to 0.22 ms. Both range from 0-100%. Use small amounts first on sustained material.

Noise and Transformer

Noise adds low-level hiss and hum; all factory presets start with Noise off. Transformer adds a separate rounded saturation contribution. Click anywhere on either cream-key housing. Green means on; a dark indicator means off.

The moving transport

Reels follow host playback and IPS with a short start/stop ramp. When host timeline information is unavailable, incoming audio triggers motion. Menu > Reel animation enables or freezes motion; Animate while stopped previews it without playback. These saved visual preferences do not alter audio. Animation updates at 30 FPS while the editor is open.

Reading the VU meters

The two meters show output RMS with a 300 ms averaging time constant. A 1 kHz sine with sample peak at -18 dBFS reads approximately 0 VU. Other signals read according to RMS power. These are not LUFS or true-peak meters.

Gain Match

RMS-based level compensation is bounded to +/-12 dB and usually settles in 1-3 seconds. It avoids lifting silence and is not a loudness-normalization or clipping-protection system. Finish with your DAW meters and ears.

Presets and everyday operation

Find a starting point

The 58 factory presets cover START HERE, drums, bass, guitars, vocals, keys, synths, Mix Bus, Mastering and Special categories. Click the preset name for category and text search, favorites and user presets. Arrows browse the factory bank. Presets are authored starting points awaiting listening approval.

Save your own sound

Use the browser to manage user presets. Factory presets cannot be renamed or deleted. User presets are stored in the operating system application-data folder under Shark Plugs/SHARK TAPE/Presets.

A/B/C and Undo/Redo

Changing A/B/C first saves the outgoing slot, then loads the selected slot. Undo/Redo covers parameter transactions. The preset name identifies the last loaded preset; it is not a separate parameter-undo history.

Precise adjustment

Drag knobs vertically. Hold Shift for fine adjustment. Double-click to reset. Right-click a knob, or press Enter while focused, for numeric entry. Up/down arrow keys adjust values. Speed accepts 3.75, 7.5, 15 or 30.

Themes, zoom and recall

Click the center Shark logo to switch black and silver without changing audio. The hamburger menu includes 50-100% zoom, animation options, Quick Manual, Credits/About and the website. Popups close on outside click or Escape. Sessions save audio parameters, A/B/C slots, theme, zoom and animation preferences.

Three useful starting points

Drums / density and weight

Studio / Classic / 15 IPS. Try Drive +5 to +10 dB and Mix 70-100%. Enable Gain Match, then compare attack and room sustain. Back off Drive if the snare loses too much bite.

Mix bus / gentle finishing

Master / High Output / 30 IPS. Start at Drive +1 to +3 dB with Wow, Flutter and Noise off. Compare at matched level and check low-end balance. Keep final peak control elsewhere in the chain.

Texture / a worn machine

Studio / Vintage / 3.75 IPS. Add modest Wow and Flutter, beginning with Mix below 50%. Listen for pitch movement and phase coloration on held notes.

A listening checklist

Compare bypass, Studio and Master at similar loudness. Check transients, bass, vocal clarity, stereo stability and output peaks. Try several sources, then save what works. These recipes are starting points, not tested release endorsements.

Signal flow

Input > Drive > Record emphasis / Tone > 4x oversampled saturation and optional Transformer > Repro emphasis > Bass head bump > Bandwidth filtering > Tape modulation > Optional Noise > Mix > Gain Match > Output.

Troubleshooting and specifications

I cannot hear a difference

Check Bypass and Mix. Init sets Mix to zero; load START HERE - Warm Tape or raise Mix. Confirm that the host is sending audio through the plugin.

The reels do not move

Enable Reel animation in the menu and start playback. Use Animate while stopped to preview motion. Frozen visuals do not stop the audio engine.

The sound changes at partial Mix

With Wow or Flutter active, wet timing moves relative to dry timing. This can cause comb filtering. Reduce modulation or try 100% Mix for a different result.

Latency and oversampling

Saturation uses fixed 4x oversampling. Reported latency is $\text{ceil}(\text{sample rate} \times 0.006) + 16$ samples: 304 samples at 48 kHz, about 6.33 ms. Dry and bypass use the same fixed delay; modulation deliberately varies wet timing.

Build and release status

The source targets AU, VST3 and standalone, with a macOS 12.0 deployment target. Included records report Linux VST3/standalone compilation and runtime checks. Mac builds, DAW validation and real-material listening checks remain pending. Signed installers and commercial activation are not included in this source checkpoint.

Credits and support

Plugin Creator: Alex Raven. Product Design & Production: Sharky. SHARK AUDIO | SHARK PLUGS. Visit sharkplugs.com. Documentation based on the v0.1.2 source, working guide and included QA records.