

# SHARK CASSETTE

Vintage tape color, pitch movement and recording texture.



## YOUR FIRST MINUTE

1. Load Warm Cassette.
2. Raise Drive until the sound has the weight you want.
3. Allow Auto Gain a few seconds to settle, then compare with Bypass.
4. Use Output to match level and Mix to blend in the dry signal.
5. Set Wow and Flutter to zero for stable pitch; leave Noise off for no hiss.

An original cassette-inspired musical model. The sound is not a measured replica of a specific hardware deck.

02 / CONTROLS

# Shape the signal.

## Drive / 0 to 24 dB

Level into the saturation stage. Increasing Drive produces denser harmonics and rounded peaks. Compare at a similar output level to judge the color rather than the loudness.

## Tone / -100 to +100

A record high-shelf control mapped to -6 to +6 dB. Negative settings darken the input to the tape stage; positive settings add top-end emphasis.

## Mix / 0 to 100%

Blends latency-aligned dry and processed audio. At 0% you hear the dry path; at 100% you hear the processed path.

## Output / -20 to +20 dB

Final level adjustment after Auto Gain. SHARK CASSETTE is not a limiter: high input levels or positive Output settings can exceed 0 dBFS.

## Auto Gain

Gradually compares processed RMS level with the input and applies up to +/-12 dB of correction. Let it settle before comparing. It does not match perceived loudness or protect against peaks.

## Bypass

Plays dry audio with the same reported latency. Use it for comparisons, with your DAW output meter as the reference for digital peaks.

# Choose the character.

## Normal / Type I

Lower headroom and a darker response. A 120 microsecond-inspired emphasis corner and nominal 9 kHz bandwidth create the softest, most closed-in voice.

## Chrome / Type II

Balanced headroom and bandwidth, with a 70 microsecond-inspired emphasis corner and nominal 12.5 kHz bandwidth.

## Metal / Type IV

The highest headroom and most open response of the three, with a 70 microsecond-inspired emphasis corner and nominal 16 kHz bandwidth.

## Wow and Flutter / 0 to 100

Wow adds slower pitch motion; Flutter adds faster instability. Modulation is shared across stereo channels. Start low on full mixes and exposed piano. Set both to zero for stable pitch.

## Hiss and Noise

Hiss sets the noise amount from 0 to 100. Noise enables it. Left and right hiss are generated independently. Noise starts off and stays optional when switching tape types.

Tape types differ in saturation threshold and bandwidth. Nominal bandwidth is constrained at low sample rates; these are musical voicings, not circuit-identical reproductions.

# Presets & comparisons.

## Move the controls

Drag vertically to adjust a knob. Hold Shift for finer moves, use the mouse wheel, or double-click to reset to its default. The yellow readout appears during adjustment in the label area. Engraved scales are visual guides; use the numeric readout for exact values.

## Browse the 42 factory presets

Click the preset name to open category menus. Selecting a preset loads it and closes the menu. The arrows step through factory presets. Click the star to favorite the current label; factory favorites appear in the Favorites submenu.

## Save your own settings

Use the preset or hamburger menu to save and load user presets as XML. Delete User Preset lists user-saved files and asks before deleting. Factory presets cannot be deleted.

## A/B/C and undo

A/B/C hold three parameter snapshots, saved with the session. Undo and redo cover parameter edits and preset loads. Command-Z and Shift-Command-Z work while the editor has keyboard focus.

## Make the interface comfortable

The menu offers 60%, 80%, 100%, 120% and 140% zoom, the quick manual and About/Credits. Click outside a popup to close it. Close the credits plate with its X, Escape or an outside click.

# Meters, timing & help.

## Read the VU meters

The meters use RMS-style 300 ms ballistics. A sine wave with a peak of -18 dBFS is defined as 0 VU. These are not true-peak or clipping meters; check your DAW output meter for peak levels.

## Tape animation and counter

The reel hubs and counter move during host playback, or with signal activity when transport information is unavailable. They pause in bypass. The counter is a visual elapsed-time display, not a saved transport position.

## Latency and parallel processing

The saturation stage uses fixed 4x oversampling. Reported latency is  $\text{ceil}(\text{sample rate} \times 0.006) + 16$  samples: 304 samples at 48 kHz. Your host should compensate for it. Dry and bypass paths share this latency, while Wow and Flutter deliberately vary the wet delay and may create moving phase coloration in parallel blends.

## If the sound is too noisy, wobbly or loud

For no hiss, turn Noise off. For stable pitch, set Wow and Flutter to zero. For excessive level, reduce Output or Drive and watch your DAW meter. Auto Gain helps with RMS comparisons but does not stop clipping.

## CREDITS

Plugin Creator: Alex Raven

Product Design & Production: Sharky