

CATSTRETCH_{v2}

by Max for Cats

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Introduction:

CatStretch is a polyphonic time stretching sample playback instrument.

It uses a phase vocoder to achieve time stretching.

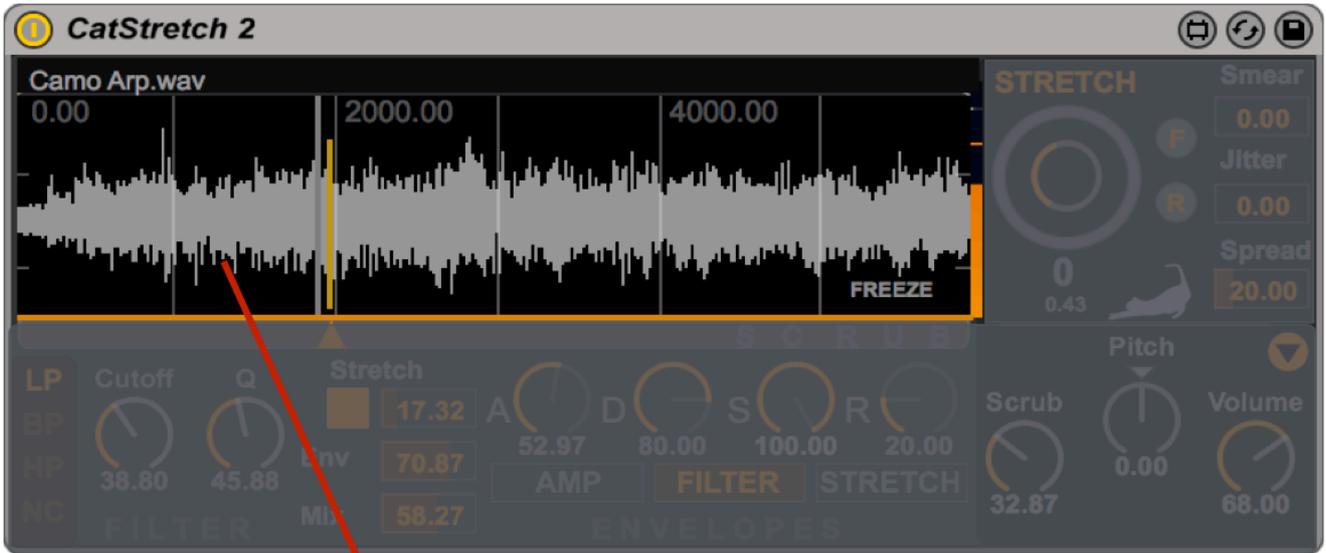
A phase vocoder is a type of vocoder which can scale both the frequency and time domains of audio signals by using phase information.

The computer algorithm allows frequency-domain modifications to a digital sound file (typically time expansion/compression and pitch shifting).

Explore the Catstretch Presets and drag your own samples on the display!

The individual parts of CatStretch:

Part 1: The Waveform Display



Waveform Display: Drop your own samples here...

Part 2: The Filter section:



Filter Section

with 4 Filtertypes:
1.Lowpass (24 dB/Octave)
2.BandPass
3.HighPass
4.Notch

Envelope Amount (adjust how much the ADSR Filter envelope affects the Filter).

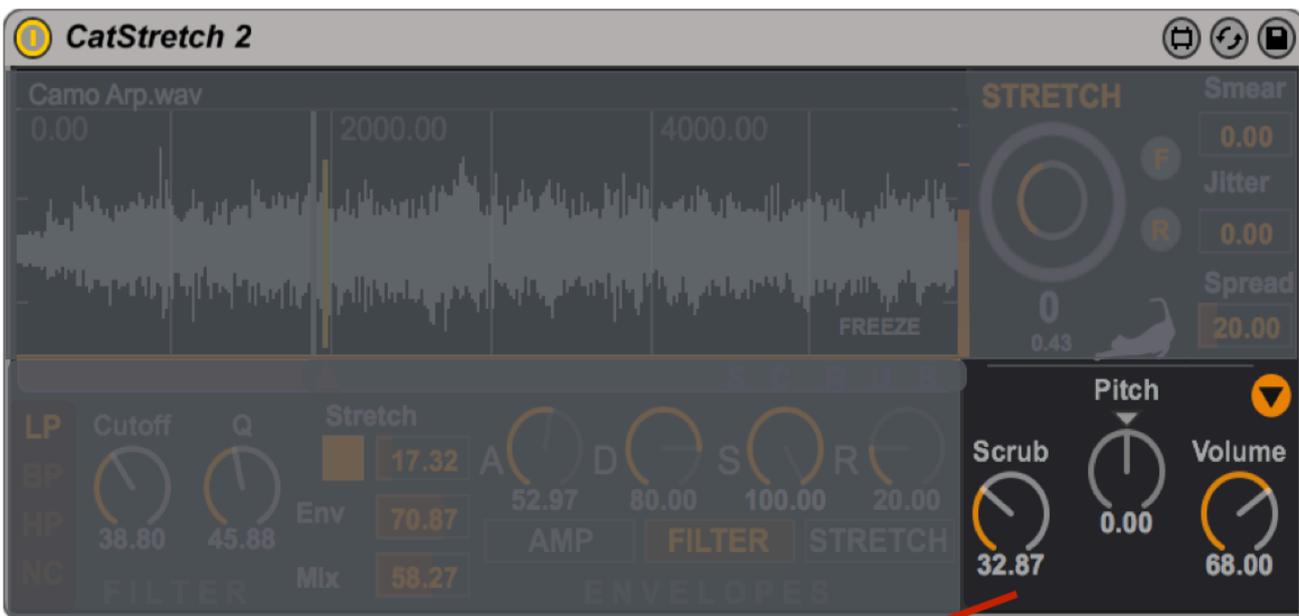
Filter Mix: Mix the filtered with the unfiltered signal

Part 3: The Envelope section:



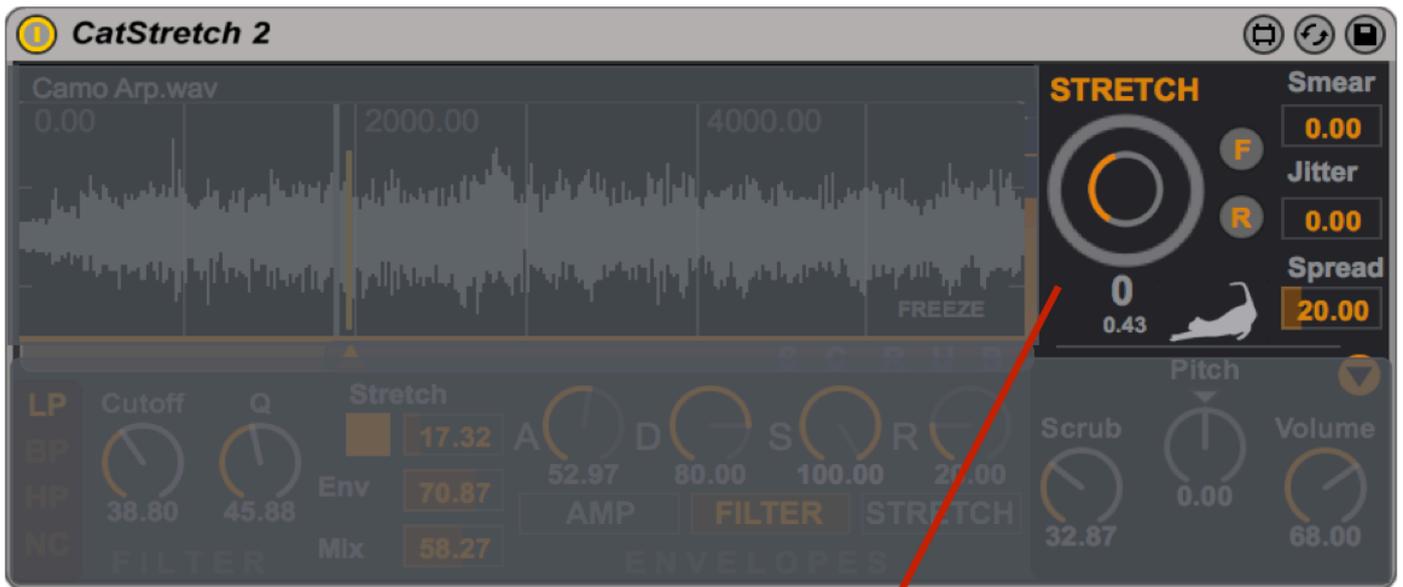
Envelope Section: 3 individual ADSR Envelopes for Filter, Stretch and Volume (Amp). The Stretch Envelope can be switched On/Off and has an Amount switch (similar to the Filter Envelope)

Part 4: Scrub, Pitch, Volume and Expansion Button:



Scrub (playback start), Pitch (+/- 12 Semitones) and Global Volume

Part 5: The Stretch and spectral section:



Stretch section: The Outer dial-ring lets you adjust the coarse Stretch amount, the inner dial-ring adjusts fine-stretching.
The 'F' Button sets the stretch factor to Zero for spectral freezing.
The 'R' Button resets the stretch factor to 1 (normal file-readout speed)
'Smear' introduces spectral blurring.
'Jitter' introduces random playback readouts within the spectrum
'Spread' will randomly position new note-on message in the stereo field.

Part 6: The Modulation section: (Hit the Expansion button to open this section)



Expanded View, Mod(-ulation) section. Modulate Reverb dry/wet, Scrub position, Pitch, Volume and Filter with 2 independent LFO's. Each LFO can run in Sync or Free.

The LFO has 7 Waveforms:

1. Sine
2. Saw Up
3. Saw Down
4. Triangle
5. Rect (= Square)
6. Random
7. S&H (= Sample & Hold)

Part 7: Reverb



Build-in algorithmic Reverb with Roomsize, Decay, Dampening and Diffusion. RevMix blends between the Dry and the Wet signal

Part 8: EQ and Spectrum Display



Three band EQ. Each Band can boost or attenuate the frequencies between 30 Hz - 18 kHz with +/- 18 dB Gain and variable Bandwidth. A spectrum Display helps here visually as well.

Thanks for using
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