

## CFX Time/Pitch Stretcher

You can stretch the time and pitch of the selected audio independently. When you choose this command, you may specify the amount of time and pitch stretch in several ways:

- By typing in value(s) into the Time and Pitch edit boxes.
- By dragging the time/pitch track bars.
- By dragging the crosshair in the time/pitch grid. Holding the Shift key down while dragging snaps the crosshairs to the nearest axisX (time), Y (pitch), or the diagonal axis (equal-time-pitch).

Note that diagonal values can be processed very quickly and with very high quality, but have the trade-off that changing pitch will not preserve duration and vice-versa.

Tip: Choose low settings for Time and Pitch Stretch. Its generally a good idea to transpose audio no more than a third or fourth.

### Source Material

When you choose an audio type from the Source Material field, Cakewalk Pro Audio loads the Advanced settings that best suit the source audio.

### Time

Time (%) lets you change the length of the audio event, from 50% to 200%. This can help you if you need to sustain a vocal take a little more, or tighten up a snare drum.

### Pitch

The Pitch control can raise or lower the pitch by one octave (+/- 12 semitones.)

### Preset

Use this field to choose and enter presets.

### Audition

Click on this to hear the results of the command on the first three seconds of the selected audio.

### **See Also:**

**[Time/Pitch Stretch | Advanced  
Generating Mono or Stereo Output](#)**

## Time/Pitch Stretch | Advanced

The first four options are special; they define how Time Stretch expands or shrinks the samples in an audio event.

**Block Rate** (Hz) defines the size of each sample that Time Stretch processes in the audio clip.

**Overlap Ratio** defines how much to overlap the samples in an event.

**Crossfade Ratio** sets a crossfade amount for the samples. Using values that are too high or low may cause unwanted flanging or chorusing in some sounds. Use higher crossfade values for long, sustained audio events, and lower values for sharp, percussive events.

There are two **Accuracy** options: *Normal* and *High*. Normal is good for most sounds. High Accuracy gives you slightly better quality, but takes longer to process.

**Algorithm** applies only to Pitch stretch, and is intended for vocals. Two algorithms are available: *Normal* and *Formant-Preserving*. Choosing normal means that pitch-shifted vocals will have a chipmunk effect that is, they will lose the formant, or defining characteristic, of the original voice. By choosing the Formant-Preserving algorithm, you retain the voices properties. This helps vocals sound more natural and human when you pitch-shift them.

### Preset

Use this field to choose and enter presets.

### Audition

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### See Also:

**[Time/Pitch Stretch](#)**

**[Generating Mono or Stereo Output](#)**

