Chapter 43: Tempo Tool

Tempo Tool 🗒️

What it does

The Tempo Tool lets you create or edit a stream of data describing tiny, moment-by-moment tempo fluctuations within the playback of your piece. You generate this tempo information when you record a real-time performance in Transcription Mode of HyperScribe. You can also use this tool to create a swing effect, although the Playback Controls provides a much more efficient and effective method of creating swing (see SWING PLAYBACK). NOTE: Tempo Tool adjustments will only save to MIDI files with a "Play Tempo Tool Changes" Expression in the file. See TEXT EXPRESSION DESIGNER DIALOG BOX.

Special mouse clicks

- **Click a measure** to display the Tempo Adjustment dialog box, where you can edit the moment-by-moment tempo changes within the measure.

Tempo Adjustment dialog box

How to get there

From the Window Menu, choose Advanced Tools. Click the Tempo Tool 📐 , and click a measure.

What it does

The Tempo Tool lets you edit tiny, moment-by-moment tempo fluctuations within the playback of a piece. You'll rarely need to know about the fairly technical concept of the Tempo Tool; nonetheless, you can use it to create certain unique temporal effects.

You can use it, for example, to create a swing effect, although the Playback Controls provide a much more efficient and effective method of creating swing (see SWING PLAYBACK).

In the Tempo Adjustment dialog box, "beats" refers to the beat in the current time signature, rather than assuming a quarter note is the beat. The measure range defaults to this measure only (instead of through the end of the piece). Most tempo adjustments, except for "swing", should be placed only at the beginning of the area they are supposed to affect.

Tempo data is what you "capture" in Transcription Mode from your real-time performance (by clicking Save Tempo) so that Finale can recreate your tempo changes when it plays back the transcription. In this dialog box, however, you can directly edit the Tempo data for the measure you clicked.
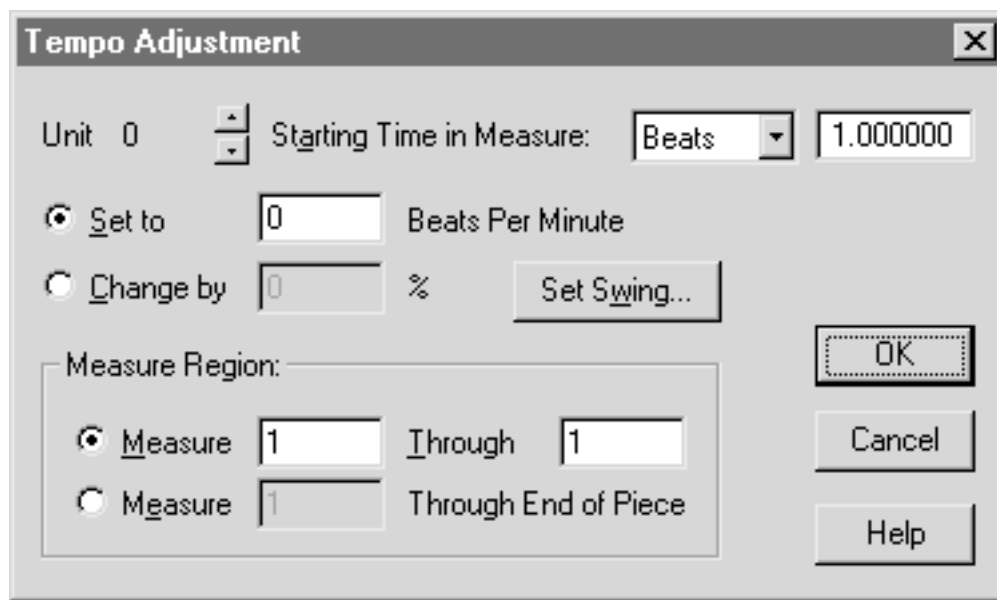
- **Unit (#).** You can change the tempo as many times as you want within a single measure. Each tempo change is called a Unit; this indicator specifies the Unit whose data is displayed in the dialog box. Scroll among the Units you've created by clicking the small up and down arrow buttons.

- **Starting Time in Measure: Beat • EDUs.** This drop-down list and text box allow you to specify the precise moment in the measure where you want the tempo to change. You can enter any beat or EDU value, even one that corresponds to a point in the measure where no note is being struck. For example, in a $\frac{4}{4}$ measure (even an empty one), you can specify a tempo change on the third beat by setting these controls to say Beat 3.
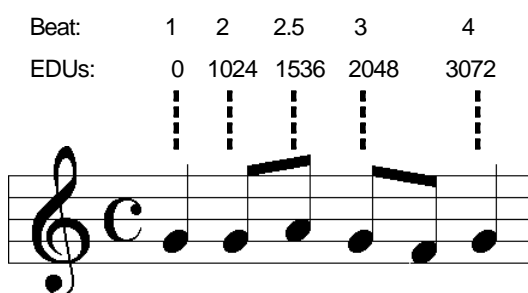
- **Set to ___ Beats Per Minute.** Click this option if you want Finale to store each tiny tempo change as an absolute tempo change. In other words, Finale might think to itself, over the course of a single measure: "60 beats per minute… 65… 70." This is the most precise method of tempo programming. Enter the metronomic tempo marking in the text box (120, for example, for 120 beats per minute).

- **Change by ___ %.** Use this option if you want Finale to establish a new tempo as a percentage of the tempo that preceded it. In other words, Finale might think to itself: "60 beats per minute... 8% faster than that... 10% faster than that." Enter the amount of tempo change into the text box. While this kind of tempo change is slightly less precise than the Set To kind, it

lets you change the starting tempo (with an expression, for example), while still preserving the relative tempo changes over the course of the piece.

- **Set Swing.** Click this button to display the Set Swing dialog box, where you can specify a degree of swing for the measures. For standard triplet-feel, eighth-note swing, just click OK. (See SET SWING RATIO DIALOG BOX.)

- **Measure ___ Through ___ • Measure ___ Through End of Piece.** Using these controls, specify what range of measures you want to affect with this tempo change. The change you specified will be repeated in each measure of the range.

- **OK • Cancel.** Click OK (or press enter) to confirm, or Cancel to discard, your tempo settings and return to the score.

Set Swing Ratio dialog box

How to get there

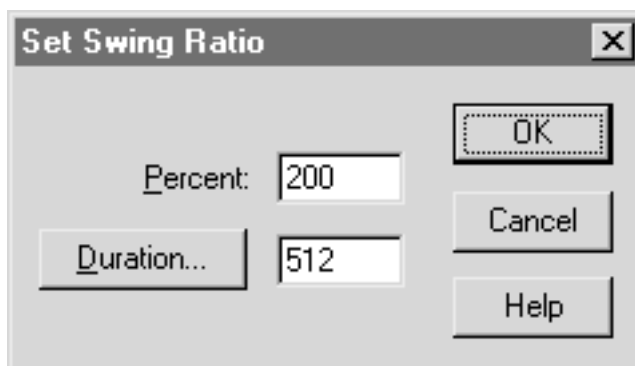From the Window Menu, choose Advanced Tools. Click the Tempo Tool ⎢𝄞⎥ . Click a measure, then click Set Swing.

What it does

The Tempo Tool offers a method for creating a swing playback feel in your music. You'll rarely need to use this method, however, because you can use the Playback Controls much more directly and easily to produce a true swing feel. See SWING for full instructions.

In this dialog box, you can specify the degree of swing you want applied to your music.

- **Percent.** The number you type in this text box indicates the amount of swing you want. Briefly, the higher the number, the later the second eighth note in a swing pair. (A value of 200 produces perfect, triplet-feel swing.) Because of the method the Tempo Tool uses to create the swing effect, the overall tempo of your piece also drops. Note that you'll also hear erratic results when Finale attempts to apply Tempo to a triplet. For these reasons, you'll probably want to use the MIDI Tool (instead of the Tempo Tool) to create a true, quick and easy swing effect that preserves the overall tempo of the piece and plays triplets correctly.

  Technical note: The Tempo Tool creates swing by actually slowing the tempo while playing the first eighth note of each pair. The number in the Percent box is the reciprocal of the amount by which Finale first slows the tempo. Thus if the value is 200%, the tempo drops to half its

speed. If the Percent is 300%, the tempo drops to 1/3 its speed. (The second eighth note is always played at the regular tempo. But because the tempo during the first eighth note was much slower, the effect is that the second eighth note sounds delayed.) The higher the Percent, the more a pair of eighth notes sound like a dotted-eighth-and-sixteenth pair.

- **Duration.** The number in this text box specifies the durational value of the notes to which you're applying swing, in EDUs (1024 per quarter note). For standard eighth-note swing, for example, this number should be 512. (This text box is provided in case you want to swing your sixteenth notes, for example, or any other value.)

  Instead of having to calculate the EDU equivalent for the rhythmic value you want to specify, you can click Duration. Finale displays a palette of note durations; click the one you want to select and click OK.

- **OK • Cancel.** Click OK (or press enter) to confirm the swing setting you've made and return to the Tempo Adjustment dialog box, where Finale has filled in the text boxes according to your swing specifications. Cancel tells Finale to ignore any changes you made to the swing setting. You return to the Tempo Adjustment dialog box.