Chapter 9: Plug-ins

Plug-ins Menu

How to get there

The Plug-ins Menu will display if you have Finale plug-ins available to your system. Finale ships with a number of plug-ins that are installed for you when you install Finale. Unless you have done a custom install, or removed or changed the name of the Plug-ins folder in your Finale folder, you should see the Plug-ins Menu.

What it does

Finale Plug-ins are small "mini-programs" that you can use to extend Finale's abilities. We have provided a number of Plug-ins along with Finale for you to use. Plug-ins are placed together in the folder C:\Finale\Plug-ins. A different path can be specified in the Program Options dialog box, reached from the Options Menu. All Plug-ins are accessed from the Plug-ins Menu. Finale will look in the specified folder for your Plug-ins and list them in the Plug-ins Menu.

Plug-ins operate on the entire document or on a specified region. You can select this region with the Mass Mover Tool or with any other tool that supports region selection (such as the Key or Time Signature Tools). Plug-ins that require a selection will notify you if a selection has not been made.

If you are interested in writing your own Plug-ins, visit our website (WWW.CODAMUSIC.COM) for more information on how to write a program to work with Finale. Note: You must be familiar with both programming and Finale, or work with someone who is, to be able to write Plug-ins success-fully.

Configurability

The Plug-ins Menu can be configured easily into submenus by placing the plug-ins you would like to have grouped together in a folder included in the plug-ins folder. The Plug-ins Menu then will use the name of the subfolder as the name of the submenu. We've added an empty folder named My Favorite Plug-ins, as well as grouped some of the plug-ins into other folders to provide exam-ples. For a list of Plug-in filenames, see PLUG-IN FILENAMES in the Appendix.

Plug-ins
- Composer's Assistant ▶
- Lyrics ▶
- Measure Numbers ▶
- My Favorite Plug-ins ▶
- Note, Beam, and Rest Editing ▶
- Repeats ▶
- TG Tools ▶
- Add Cue Notes...
- Auto-Dynamic Placement...
- Automatic Barlines
- Automatic Tablature...
- Band-in-a-Box Auto Harmonizer
- Canonic Utilities...
- Cautionary Accidentals...
- Change Fonts...
- Check Range...
- Command Line...
- Count Items...
- Create Tempo Marking...
- Find Parallel Motion...
- Find Range...
- Global Staff Attributes...
- Ledger Lines (Hide)
- Ledger Lines (Show)
- Number Repeated Measures
- Patterson Beams...
- Piano Reduction...
- Split Point...
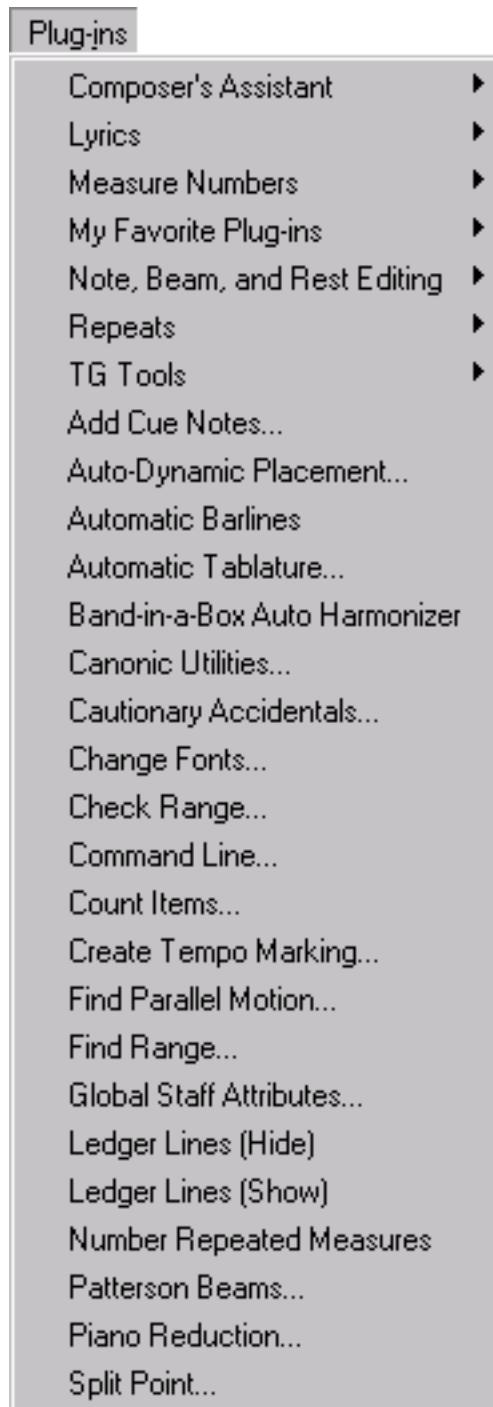
- **Add Cue Notes.** This plug-in allows you to easily place cue notes in any number of staves See ADD CUE NOTES.
- **Align/Move Dynamics.** This plug-in vertically aligns dynamics, including expressions and hairpin crescendos. Part of the TGTools plug-ins. See ALIGN/MOVE DYNAMICS.
- **Auto-Dynamic Placement.** This plug-in allows you to place dynamics in your score automatically based on the MIDI key velocities associated with each dynamic. See AUTO-DYNAMIC PLACEMENT under the Expression Tool.

- **Automatic Barlines.** This plug-in will automatically add double-barlines before every key change and a final barline at the end of the piece. See Automatic Barlines under Measure Tool.

- **Automatic Tablature.** This plug-in allows you to easily create a Tablature staff with notation of the selected staff for a wide variety of stringed instruments. See Automatic Tablature under Guitar Notation.

- **Band-in-a-Box Auto-Harmonizer.** This plug-in takes a selected melody line with chord symbols and outputs a harmonized melody in dozens of musical styles. See Band-in-a-Box Auto-Harmonizer.

- **Canonic Utilities.** This plug-in transforms the selected region using inversion, retrograde, transpositions, or a combination of the above. You can also use this plug-in to apply accidentals to all the notes in a selected region, remove accidentals in the selected region, or remove ties in the selected region. See Canonic Utilities.

- **Cautionary Accidentals**. This plug-in allows you to add cautionary accidentals in various forms to your document including having accidentals displayed on all notes. See Cautionary Accidentals.

- **Change Fonts.** This plug-in allows you to globally change the font for Text blocks, Staff names, Group names, and Lyrics — all at once, and separately for verse, chorus and section. See Change Fonts.

- **Change Noteheads.** This plug-in allows you to change the notehead for the notes in the selected region. See Change Noteheads.

- **Change to Default Whole Rests.** This plug-in allows you to change all the whole rests in the selected region to Default whole rests. See Change to Default Whole Rests.

- **Change to Real Whole Rests.** This plug-in allows you to change all the Default whole rests in the selected region to Real whole rests. See Change to Real Whole Rests.

- **Check Range**. This plug-in allows you to verify that the staff you have selected is within the range of a specified instrument or voice. There are different ranges for beginning, intermediate and advanced. See Check Range.

- **Check Region for Durations**. This plug-in checks the selected region for any measures that have too many or too few beats. See Check Region for Durations.

- **Chord Morphing.** This plug-in generates a variety of smooth between-chord transitions. Part of the Composer's Assistant Plug-ins. See Chord Morphing.

- **Chord Realization.** This plug-in generates four-part realizations of a triad based on the major key and scale degree specified. Part of the Composer's Assistant Plug-ins. See Chord Realization.

- **Chord Reordering.** This plug-in finds new placement options for chords. Part of the Composer's Assistant Plug-ins. See Chord Reordering.

- **Chord Splitting.** This plug-in creates subsets of the original chord. Part of the Composer's Assistant Plug-ins. See Chord Splitting.

- **Classic Eighth Beams.** This plug-in allows you to beam eighth notes in the selected region in groups of 4 when in Common Time. See Classic Eighth Beams.

- **Clear Lyric Positioning.** This plug-in allows you to clear any individual positioning of lyrics for the selected lyrics. See CLEAR LYRIC POSITIONING under Lyric Tool.

- **Clear Measure # Positioning.** This plug-in allows you to clear all individual positioning of measure numbers in the selected region. See CLEAR MEASURE # POSITIONING under Measure Tool.

- **Command Line.** This plug-in allows note entry from a command line. See COMMAND LINE.

- **Common Tone Transposition.** This plug-in creates a series of transpositions of the chord where one note is equal to one note of the original chord. Part of the Composer's Assistant Plug-ins. See COMMON TONE TRANSPOSITION.

- **Composer's Assistant.** These plug-ins from OpenMusic provide compositional manipulation of chords and melodies. See COMPOSER'S ASSISTANT plug-ins.

- **Count Items.** This plug-in displays a count of various items in your score such as measures, notes and articulations. See COUNT ITEMS under File Menu.

- **Create Tempo Marking.** This plug-in allows you to easily create tempo markings as expressions and set their playback features for the selected measures. See CREATE TEMPO MARKING under Expressions Tool.

- **Easy Harmonics.** This plug-in searches for intervals of a perfect fourth or third and turns the upper note into a diamond. Part of the TGTools plug-ins. See EASY HARMONICS.

- **Easy Measure Numbers.** This plug-in allows you to easily place measure numbers over a region of the score. See EASY MEASURE NUMBERS under Measure Tool.

- **Easy Repeats.** This plug-in allows you to easily place a repeat in the selected region. See EASY REPEATS under the Repeat Tool.

- **Easy Tremolos.** This plug-in converts all consecutive identical pitches into a tremolo. Plug-in options allow fine-tuning of tremolo notation, such as the number of beams. Part of the TGTools plug-ins. See EASY TREMOLOS.

- **Extract Lyrics.** This plug-in saves all lyrics, as found in the Edit Lyrics dialog box, to a text file. See EXTRACT LYRICS.

- **Find Parallel Motion.** This plug-in analyzes the selection for parallel fourths, fifths and octaves between voices, layers and staves and offers you the choice to fix them or leave them alone. See FIND PARALLEL MOTION.

- **Find Range.** This-plug-in reports the highest and lowest notes in the selected region. See FIND RANGE.

- **First Ending Repeats.** This plug-in allows you to easily place a repeat with first endings in the selected region. See FIRST ENDING REPEATS under the Repeat Tool.

- **Flat Beams.** This plug-in allows you to flatten all the beams in the selected region. See FLAT BEAMS under the Speedy Entry Tool.

- **Flat Beams (Remove).** This plug-in allows you to restore all beams flattened with Speedy Entry in the selected region. See FLAT BEAMS (REMOVE) under the Speedy Entry Tool.

- **Frequency Modulation Chord Generator.** This plug-in generates a series of chords with increasing complexity and texture. Part of the Composer's Assistant plug-ins. See FREQUENCY MODULATION CHORD GENERATOR.

- **Global Staff Attributes.** This plug-in allows you to change the Staff Attributes and Group Attributes for a number of staves or groups at a time, including changing the font for selected Staff and Group names. See GLOBAL STAFF ATTRIBUTES under the Staff Tool.

- **Ledger Lines (Hide).** This plug-in allows you to hide all the ledger lines in the selected region. See LEDGER LINES (HIDE).

- **Ledger Lines (Show).** This plug-in allows you to restore any hidden ledger lines in the selected region. See LEDGER LINES (SHOW).

- **Melodic Morphing.** This plug-in creates a melodic transition from one melody to another. Part of the Composer's Assistant plug-ins. See MELODIC MORPHING.

- **Menu Shortcuts.** Remaps keystrokes to menu commands. Part of the TGTools plug-ins. See MENU SHORTCUTS.

- **Midline Stem Direction.** This plug-in allows you to change the direction of stem for the note on the center line of the staff to match the stem direction of the previous note. See MIDLINE STEM DIRECTION.

- **Move Rests.** This plug-in allows you to move rests in the selected region to a specified location. See MOVE RESTS.

- **Notes and Rests (Hide).** This plug-in allows you to hide all the notes and rests in the selected region. See NOTES AND RESTS (HIDE) under the Speedy Entry Tool.

- **Notes and Rests (Show).** This plug-in allows you to show all hidden entries in the selected region. See NOTES AND RESTS (SHOW) under the Speedy Entry Tool.

- **Number Repeated Measures.** This plug-in places small measure attached expression numbers over any repeated measures in the selected region. See NUMBER REPEATED MEASURES.

- **Patterson Beams.** This plug-in adjusts both stem length and beam angles based on the staff positions of the notes and the number of notes in the beam. See PATTERSON BEAMS.

- **Piano Reduction.** This plug-in condenses the selected staves into a piano grand staff at the bottom of the staff system. See PIANO REDUCTION.

- **Rhythm Generator.** This plug-in creates up to six staves of percussion to accompany your score. Part of the Composer's Assistant Plug-ins. See RHYTHM GENERATOR.

- **Rhythmic Subdivisions.** This plug-in will subdivide the notes in the selected region by the specified amount, either by a division (such as in half) or to a selected subdivision of the beat such as eighth notes. See RHYTHMIC SUBDIVISIONS.

- **Single Pitch.** This plug-in changes all the notes in the selected region to the specified pitch. See SINGLE PITCH.

- **Slash Flagged Grace Notes.** This plug-in allows you to slash all the flagged grace notes in the selected region. See SLASH FLAGGED GRACE NOTES under the Speedy Entry Tool.

- **Slash Flagged Grace Notes (Remove).** This plug-in allows you to remove the slashes of all the flagged grace notes slashed in Speedy Entry in the selected region. See SLASH FLAGGED GRACE NOTES (REMOVE) under the Speedy Entry Tool.

- **Smart Playback.** This plug-in creates a playback effect for glissandi, hairpins, trills and tremolos. See SMART PLAYBACK under Smart Shape Tool.

- **Split Point**. This plug-in allows you to change the split point between the two staves of a piano grand staff over the selected region. See SPLIT POINT.

- **TGTools.** These plug-ins are a sample of the TGTools plug-in collection. They include: ALIGN/MOVE DYNAMICS, EASY HARMONICS, EASY TREMOLOS, MENU SHORTCUTS, and SMART PLAYBACK. For the complete collection, see WWW.TGTOOLS.DE.

- **Tie Common Notes.** This plug-in inserts a tie between any two successive notes if the notes have the same pitch. Part of the Composer's Assistant plug-ins. See TIE COMMON NOTES.

- **Virtual Fundamental Generator.** This plug-in gives you the appropriate "root" for any selected group of chords. Part of the Composer's Assistant plug-ins. See VIRTUAL FUNDA-MENTAL GENERATOR.

- **Voice 2 to Layer.** This plug-in allows you to move notes and rests in voice 2 to the selected layer. See VOICE 2 TO LAYER.

- **Word Extensions.** This plug-in allows you to easily add word extensions to your lyrics. See WORD EXTENSIONS under the Lyrics Tool

- **Word Extensions (Remove).** This plug-in removes any word extensions in the selected region. See WORD EXTENSIONS (REMOVE) under the Lyrics Tool.

Add Cue Notes Plug-in

How to get there
Select a region with the Mass Mover Tool that you would like to use as a cue. Select Add Cue Notes from the Plug-ins Menu.

What it does
The Add Cue Notes plug-in allows you to easily place cue notes of the selected region in any staff in the score.
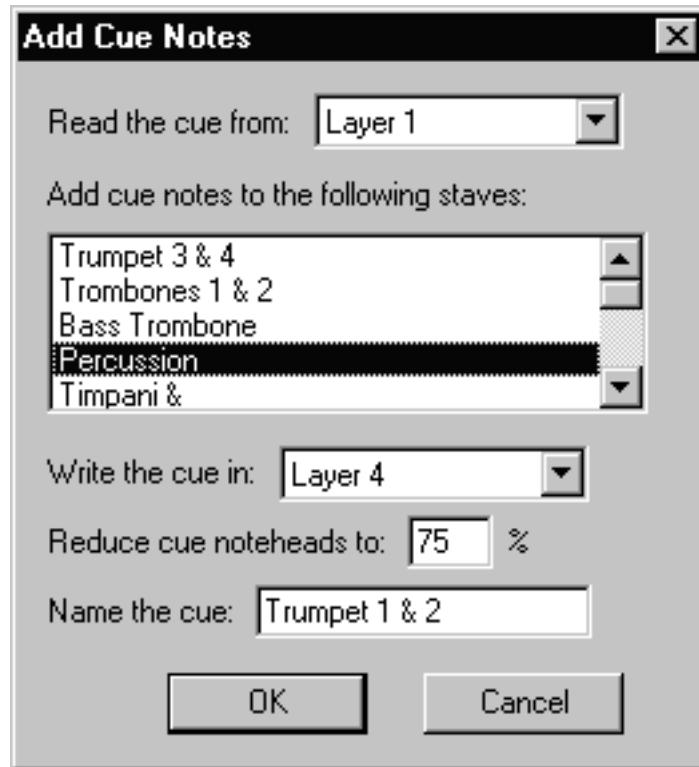
- **Read cue from Layer.** Select from the drop-down list a layer for the source of the cue notes.

- **[List of Staves].** Select the staves in which you wish to place the selected region as cues. Click to select one, shift click to select several at a time, even if they are not sequential. Press ctrl to select non-consecutive staves.

- **Write the cue in:.** Select from the drop-down list in which layer you would like the place the cue.

- **Reduce cue noteheads.** Type in the Percentage reduction for the cue noteheads in this text box.

- **Name the cue.** If you would like the cue identified by an instrument name or other text, type the text in this text box. The plug-in will use the staff name as a default. Text is inserted as a note attached expression attached to the first note of the cue.

- **OK • Cancel.** Click OK to place a cue note with the selected options and return to the score. Click Cancel to return to the score without making any changes.

Align/Move Dynamics Plug-in

How to get there
Select a region with the Mass Mover Tool. From the Plug-ins Menu, choose TGTools, then Align/ Move Dynamics.

What it does

The Align/Move Dynamics plug-in allows you to easily align various elements, such as hairpin crescendos and f expressions, of the selected region in any staff in the score. Collisions with staff lines are avoided. Items from below the staff are never moved above the staff and vice versa. Because of this collision avoidance, the final position may not be the one specified in the dialog box.
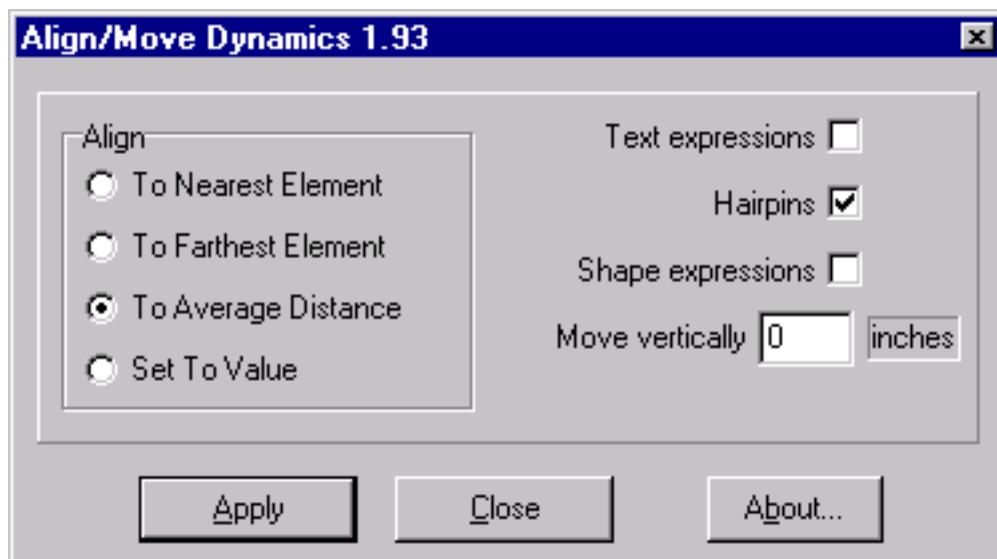
- **Align: To Nearest Element • To Farthest Element • To Average Distance • Set To Value.**
  Choose **Nearest Element** to align the expressions or hairpins to the closest element to the
  staff. Choose **Farthest Element** to align the expression or hairpins to the farthest element
  from the staff. Choose **Average Distance** to align the element at an average distance from the
  staff. Check **Set To Value** to move all of the selected dynamics to the distance specified in
  "Move vertically" from the bottom staff line. When Set To Value is unchecked, the specified
  value will be added to the distance. Repeatedly clicking Apply can be used to nudge dynamic
  markings.

- **Text expressions • Hairpins •Shape expressions.** Select Text expressions to align dynamic
  markings, such as cresc. or *mf*. Select Hairpins to align Smart Shape crescendos or decrescen-
  dos. If selected for alignment, hairpins will be straightened. Select Shape expression to align
  shape expressions, such as crescendos or decrescendos created with the Expression Tool.

- **Move vertically __ inches.** Enter the value you would like to move the expressions or hair-
  pins vertically. The measurement unit will be determined by the settings chosen for Measure-
  ment Units in the Options Menu. Negative for lower and positive for higher. A very high value
  is required for items above the staff, such as 200 EVPUs or .7 inches. If the value entered
  would cause a collision with a staff line or move the marking to the other side of the staff, the
  final position may be different from the specified value.When "Set To Value" is chosen, the
  dynamics are moved to the specified distance from the bottom staff line.

- **Apply • Cancel • About.** Click Apply to align the elements with the selected options and
  leave the dialog box available for the next alignment. Click Cancel to return to the score with-
  out making any changes.

Band-in-a-Box Auto-Harmonizer Plug-in

How to get there

Select a region containing at least one note with the Mass Mover Tool (for best results, the region should contain at least one Chord Symbol). The notes selected can be of any duration and rhythm. From the Plug-ins Menu, choose Band-in-a-Box Auto Harmonizer.

What it does

The Band-in-a-Box Auto Harmonizer plug-in will add a number of new voices to an existing melody, based on chord symbols (or based on the key signature of the piece if no chord symbols exist in the selected region). The plug-in's harmonies are based on those found in the PG Music software Band-in-a-Box. The resulting music is generally homophonic, meaning all harmonies will be the same rhythm as the melody. Exceptions, such as piano/guitar presets, will be detailed below.

• **Number of Voices.** Use this drop-down list to determine how many voices (including the input melody) your harmonized music will include. You'll also notice that changing this selection affects the available harmonizations. After choosing the desired number of voices, select a type of harmonization from the list below the menu.

• **Style.** Select a preset style of harmony. For a list of all available presets, see HARMONY PRESETS in the Appendix.

Here are the naming conventions used in the Generic presets:

Drop Two- Transposes the first harmony note below the melody down an octave

Drop Three- Transposes the second harmony note below the melody down an octave

One Above, Two Above, Two Below, etc.- The number (One, Two) represents how many (non-octave) harmony voices are placed above or below the melody

3rds Above- Typically adds a note a third above the melody

3rds Below- Typically adds a note a third below the melody

6ths Above, 6ths Below- Typically adds a note a sixth above or below the melody

3rds & 6ths- Harmony typically uses a mixture of thirds and sixths

Alt- Provides an alternative harmonization including sevenths and ninths

8va- Double the melody an octave above.

8vb- Double the melody an octave below.

8va & 8vb- Double the melody both an octave above and below.

#1, #2, #3- Some harmony stacks have alternate permutations. For instance, in a dense harmony preset, Variation #1 might play a third interval, while Variation #2 plays a sixth, and Variation #3 plays alt tones.

Examples:

1. Three Part, 3rds & 6ths Below 8vb
The first harmony voice is a mixture of 3rds and 6ths below the melody. The second harmony voice is the melody transposed down one octave.

2. Four Part, 6th Above 8va #2
The first harmony voice is a sixth interval above the melody. The second harmony voice is below the melody. The third harmony voice is the melody transposed up one octave. This preset is the second variation of this harmony stack.

3. Six Part, 3rd Above 8va & 8vb
The first harmony voice is a third interval above the melody. Two harmony voices are below the melody. The remaining two harmony voices double the melody an octave above and an octave below.

Instrument Preset Names, such as Guitar or Super Brass, create harmony stacks typical for the instrument. These presets may also be useful on other instruments.

Guitar and Piano presets will harmonize long notes without harmonizing short notes. This emulates performance techniques when it is artistically undesirable (and difficult on the fingers) to harmonize all notes in a melody. The following presets are Guitar/Piano harmonizations: Two Part: Guitar 3rds and 6ths; Three Part: Guitar; Four Part: Jazz Piano, Guitar Drop 2, Swing Guitar; Five Part: Jazz Piano; Six Part: Guitar. Remember to place the notes into the appropriate number of staves.

Some Instrument presets limit the low and high note range of harmonies. For instance, if a Drop Two harmony note extends below an instrument's range, this low harmony note might be transposed up to fit in the instrument range.

Most of the Generic Presets harmonize all melody notes, and the harmony high-low note ranges are not restricted.

- **Place New Voices Into: Selected Staff • Staves Added to Bottom of Score • Existing Staves Starting with Staff.** The Band-in-a-Box Auto Harmonizer gives you the option to place the new harmony voices into any of three places. Choosing **Selected Staff** (all Voices) will place the harmony voices into the same staff as the melody staff. This option is required for Piano/ Guitar harmonizations. **Staves Added to Bottom of Score** will create one staff for each harmony voice. The number of staves is one less than the Number of Voices because the Auto Harmonize plug-in is only interested in placing the new voices, and will leave the melody (considered one of the voices) alone. Note that these added staves will need to be subsequently defined in the Instrument List for optimal playback. **Existing Staves Starting With Staff** allows you to choose consecutive staves already in your score. For instance, if you are working on an arrangement for Jazz Ensemble, and already have your score set up, you can enter a melody and chord symbols in your Trumpet 1 staff, then automatically harmonize to your Trumpets 2-4 staves.

  Hint: Note that the plug-in relies on the Set Play values assigned to chord suffixes. If your file contains chord suffixes that have been created without a Set Play value defined, the associated chords will not have any impact on the harmony. See CHORD SYMBOLS and SUFFIX KEYNUMBER OFFSETS DIALOG BOX.

- **More Info • Cancel • OK.** Click More Info for a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Canonic Utilities Plug-in

How to get there
Select Canonic Utilities from the Plug-ins Menu.

What it does
The Canonic Utilities plug-in transforms the selected region using inversion, retrograde, transposition or a combination of the above.
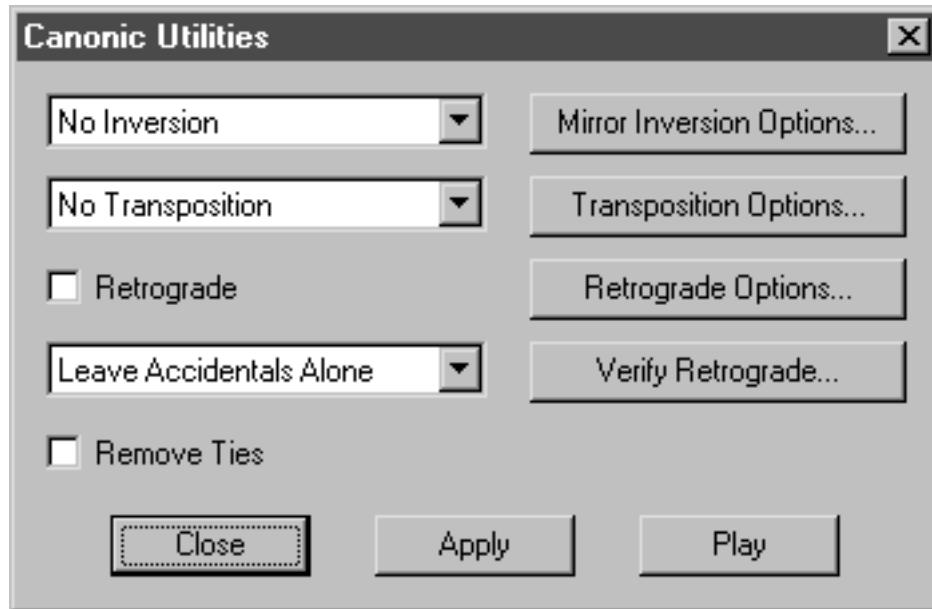
- **No Inversion • Diatonic Mirror Inversion • Chromatic Mirror Inversion • Chord Inversion Up • Chord Inversion Down.** Select **No Inversion** from the drop-down list to have no inversions applied to the select region. If you would like to change the setting for Mirror Inversions, click the Mirror Inversion Options button and the Mirror Inversion Options dialog box appears. See MIRROR INVERSION OPTIONS below.

  Select **Diatonic Mirror Inversion** from the drop-down list to invert the selected region of music based on a pivot note selected in the Mirror Inversion Options dialog box. When Diatonic Mirror Inversion is selected the notes will change to their diatonic inversion. For example, if you have the note B in the key of C, and pivot around the note C the B will be inverted to D (rather than a D♭ as in Chromatic Mirror Inversion). Please note that if you select a non-diatonic note as your pivot point with the Diatonic Mirror Inversion selected, the pivot note used will be the nearest diatonic note instead of the selected non-diatonic note. Select the Apply button to apply your inversion settings to the selected region.

Select **Chromatic Mirror Inversion** from the drop-down list to invert the selected region of music based on a pivot note selected in the Mirror Inversion Options dialog box. When Chromatic Mirror Inversion is selected you are free to select any note to act as the pivot note. The selected region of music will then be inverted based on the chromatic (major or minor) interval between the pivot note and the note to be inverted. Select the checkbox the Apply button to apply your inversion settings to the selected region.

Select **Chord Inversion Up** or **Chord Inversion Down** to invert chords up or down in the selected region. In selecting Chord Inversion Up, the bottom note of the chord is moved to the top of the chord, creating the next inversion. If you select Chord Inversion Down, the top note of the chord is moved to the bottom of the chord, again creating a new inversion.

*   **No Transposition • Transpose Diatonic • Transpose Chromatic • Transpose Semitones.** Select **No Transposition** from the drop-down list to have no inversions applied to the select region. If you would like to change the setting for Transpositions, click the Transposition Options button and the Transposition Options dialog box appears. See TRANSPOSITION OPTIONS below.

Select **Transpose Diatonic** from the drop-down list to transpose the selected region up or down the selected number of lines and spaces ignoring whole and half steps in the key signature.

Select **Transpose Chromatic** from the drop-down list to transpose the selected region up or down the selected interval taking into account half and whole steps.

Select **Transpose Semitones** from the drop-down list to transpose the selected region with the specified numeric interval (0-11) selected in Transposition Options.

*   **Retrograde.** Select this checkbox then the Apply button to apply retrograde to the selected region. This will notate the selected passage backwards. If you would like to change the retrograde settings click the Retrograde Options button. The Retrograde Options dialog box appears. See RETROGRADE OPTIONS below.

*   **Leave Accidentals Alone • Default Accidentals • Show All Accidentals • Hide All Accidentals • Clear Frozen Accidentals • Remove All Accidentals.** Select **Leave Accidentals Alone** to prevent the plug-in from making any changes in frozen accidentals. **Select Default Accidentals** to show only default accidentals and ignore any forced accidentals. Select **Show** or **Hide All Accidentals** to show or hide all the accidentals in the selected region, even the naturals. Select **Clear Frozen Accidentals** to remove all the frozen accidentals in the selected region. Select **Remove All Accidentals** to remove every accidental in the selected region.

*   **Remove Ties.** Select this checkbox to remove all the ties in the selected region.

*   **Verify Retrograde.** Click on this button to see if your selections for retrograde can be accomplished on the selected region. If the selected region contains slurs attached to notes, mirrored measures or voice 2, the dialog box will display a message indicating that these cannot be accounted for in the Retrograde operation.

Verify Retrograde ☒

Selected measures: 2 - 2

Cannot operate on area containing note-attached
Smart Shapes.

Do not attempt to retrograde any measures that are
sources of mirrors.

[OK]
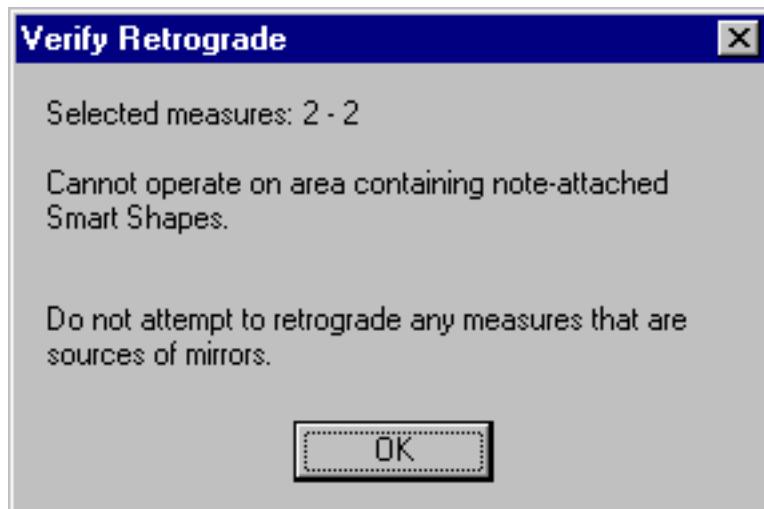
- • **Apply • Play • Close.** Click Apply to make the selected changes in your dialog box and keep the Canonic Utilities dialog box open. Click Play to playback the selected region using the current settings in the Playback Controls. Click Close to exit the dialog box without making any changes to your document.

Mirror Inversion Options

Mirror Inversion Options ☒

Pivot Note [C ▼]   [Listen]

Octave [3]

[OK]

☐ Simplify Spellings   [Cancel]
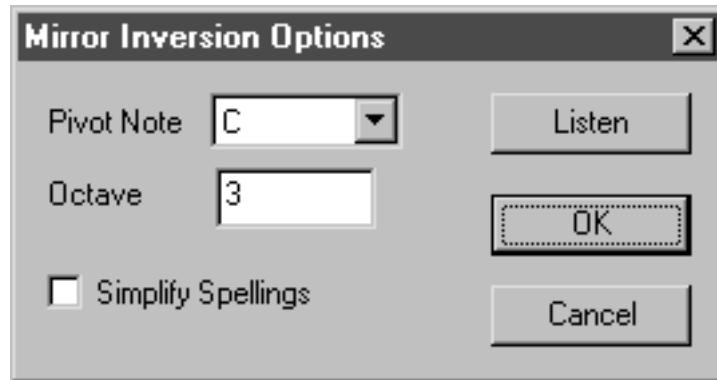
- • **Pivot Note • Octave • Listen.** Select the note and octave around which you would like the mirror inversion to pivot. If you prefer you can click on the Listen button and play the note on your MIDI keyboard. The note and correct octave will be selected for you.

- • **Simplify Spellings.** Click Simplify Spellings to prevent the plug-in from creating double-sharps and flats when inverting the selected region.

- • **OK • Cancel.** Click OK to change the settings and return to the Canonic Utilities dialog box. Click Cancel to return to the Canonic Utilities dialog box without changing any settings.
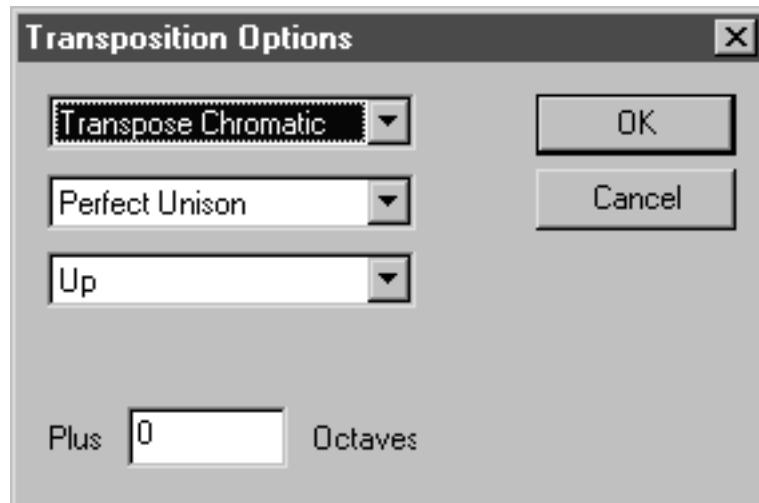
Transposition Options

- **No Transposition • Transpose Diatonic • Transpose Chromatic • Transpose Semitones.** This is the same drop-down list as in the main dialog box.

- **Transpose Diatonic: Unison • Second • Third • Fourth • Fifth • Sixth • Seventh • Octave • Other.** Select the interval you desire from the drop-down list or choose Other and type in the interval you prefer.

- **Transpose Chromatic: Perfect Unison • Augmented Unison... • Other.** Select the interval you desire from the drop-down list or choose Other and type in the interval and alteration you prefer.

- **Transpose Semitones: 0 - 11.** Select the interval you desire from the drop-down list. This serial music option is similar to Chromatic Transposition in that each semitone is a half step, but there is no diatonic implications of the intervals. It refers only to the total number of half steps.

- **Up • Down.** Select whether to transpose up or down from the drop-down list.

- **Favor Sharps • Favor Flats (Transpose Semitones only).** Select which option you prefer for your transposition. This is only available when Transpose Semitones is selected.

- **Plus _ Octaves.** Type the number of octaves over which to transpose the selected region.

- **OK • Cancel.** Click OK to change the settings and return to the Canonic Utilities dialog box. Click Cancel to return to the Canonic Utilities dialog box without changing any settings.

Retrograde Options

- **Key Changes • Time Changes.** Deselect these options to prevent the plug-in from including key and time changes when you apply the retrograde to your selected region.

- **OK • Cancel.** Click OK to change the settings and return to the Canonic Utilities dialog box. Click Cancel to return to the Canonic Utilities dialog box without changing any settings.

Cautionary Accidentals Plug-in

How to get there

Select a region with the Mass Mover Tool. Select Cautionary Accidentals from the Plug-ins Menu.

What it does

The Cautionary Accidentals plug-in allows you to add cautionary accidentals in various forms to your document. Click all the options (with or without parentheses) to have accidentals display on all notes. The plug-in works only on standard major and minor keys.
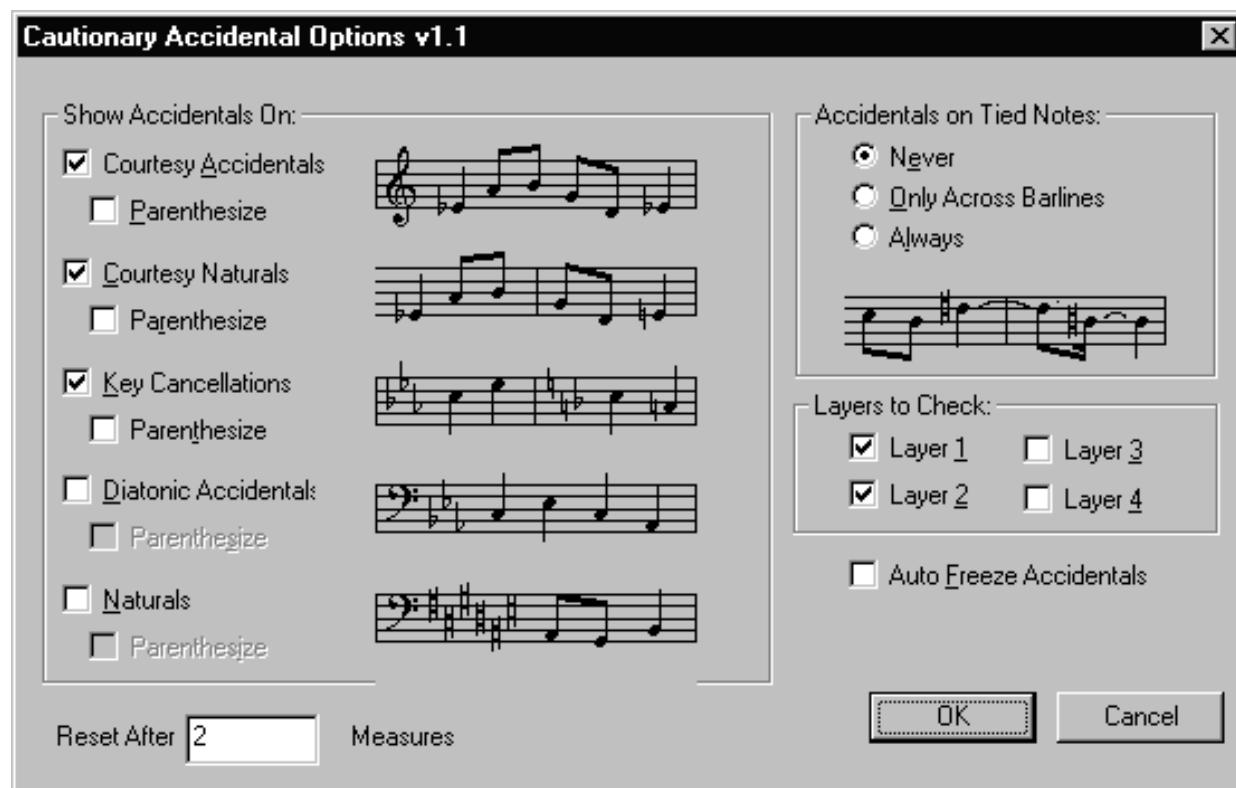
- **Courtesy Accidentals • Parenthesize.** Select this checkbox to force courtesy accidentals to display on notes after an accidental within a measure and in following measures. Checking Parenthesize will cause the courtesy accidentals to have parentheses.

- **Courtesy Naturals • Parenthesize.** Select this checkbox to force the courtesy cancellation of an accidental from the previous measure. Checking parenthesize will cause courtesy naturals to have parentheses.

- **Key Cancellations • Parenthesize.** Select this checkbox to force courtesy accidentals on notes after a key change. Checking parenthesize will cause key cancellation courtesy accidentals to have parentheses.

- **Diatonic Accidentals • Parenthesize.** Select this checkbox to force diatonic accidentals (such as B♭ in F major) to display. Checking parenthesize will cause diatonic accidentals to have parentheses.

- **Naturals • Parenthesize.** Clicking this button will force naturals to display. Checking parenthesize will cause naturals to have parentheses.

- **Reset After ___ Measures.** Type in the number of measures Finale should continue looking for cautionary accidentals. For example, Reset After 1 Measures will only show cautionary accidentals in the next measure, not any measures after that. Reset After 2 Measures will only show cautionary accidentals in the next 2 measures, and so on.

- **Accidentals on Tied Notes: Never • Only Across Barlines • Always.** Select how you want accidentals displayed on tied notes.

- **Layers to Check: Layer1 • Layer 2 • Layer 3 • Layer 4.** These four checkboxes allow you to specify which layers to apply the options you have selected. This will allow you to have a layer hidden for playback without affecting your displayed notation.

- **Auto-Freeze Accidentals.** Checking this option will make Finale "freeze" the changes made by the plug-in. (This option is identical to Auto-Freeze in the Speedy Menu.)

- **OK • Cancel.** Click OK to make the selected changes. Click Cancel to return to the score without making any changes.

Change Noteheads Plug-in

How to get there
Select a region with the Mass Mover Tool. Select Change Noteheads from the Plug-ins Menu.

What it does
The Change Noteheads plug-in allows you to change the noteheads of all the notes in the selected region.
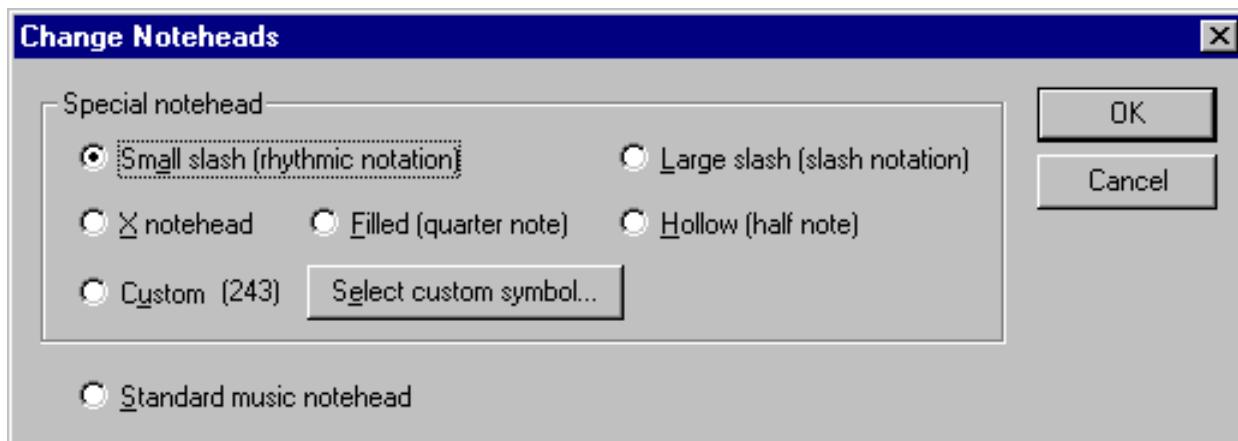
- **Small slash (rhythmic notation) • Large slash (slash notation) • X notehead • Filled (quarter note) • Open (half note) • Custom: Select custom symbol • Standard music notehead.** Select one of these options to change your noteheads to in the currently selected region. The slot number of the currently selected notehead is shown in parenthesis.
- **OK • Cancel.** Click OK to make the selected changes. Click Cancel to return to the score without making any changes.

Change to Default Whole Rests Plug-in

How to get there

Select a region with the Mass Mover Tool. Select Change to Default Whole Rests from the Plug-ins Menu.

What it does

The Change to Default Whole Rests plug-in allows you to change all the whole measure rests in the selected region to default rests. See also CHANGE TO REAL WHOLE RESTS and WHOLE RESTS.

Change to Real Whole Rests Plug-in

How to get there

Select a region with the Mass Mover Tool. Select Change to Real Whole Rests from the Plug-ins Menu.

What it does

The Change to Real Whole Rests plug-in allows you to change all the whole measure rests in the selected region to real whole measure rests (as opposed to default measure rests, see above). See also CHANGE TO DEFAULT WHOLE RESTS and WHOLE RESTS.

Check Range Plug-in

How to get there

Select Check Range from the Plug-ins Menu. If you prefer to apply Check Range to a specific region, select the region using the Mass Mover Tool before selecting the plug-in from the Plug-ins Menu.

What it does

The Check Range plug-in allows you to verify that the staff you have selected is within the range of the specified instrument or voice. It will operate on the current selection, or the entire document if there is no region selected. In either case, the plug-in will go through the score (or selected region) on a staff by staff basis, comparing the notes to check if they are within the range of the instrument specified for each particular staff. For every note that is outside the specified range, you may either change the note, erase it, or simply leave it alone.

There are three pre-defined ranges for each instrument the Check Range plug-in knows about: Beginner, Intermediate, and Advanced. If the pre-defined ranges do not suit your needs you may

specify other values for the highest and lowest pitches of the range the Check Range plug-in will use.

The Check Range plug-in will suggest an instrument based on the Full Staff Name attribute of the staff currently under examination. If there is no Full Staff Name, the plug-in will try the Abbreviated Staff Name attribute of the staff, then the Full Group Name and Abbreviated Group Name attributes of the group to which the staff belongs. If, for some reason, the suggestion does not suit your needs, you can choose another instrument from the list of available instruments.
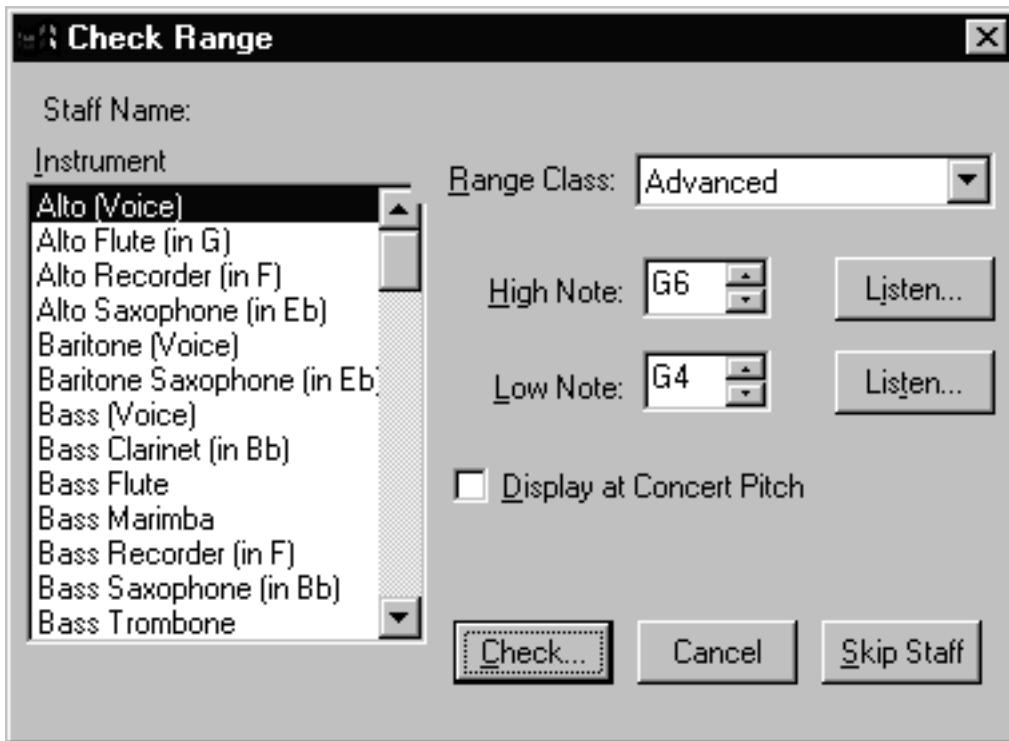
- **Staff Name.** Check Range suggests an instrument and range based on the Full Staff Name attribute of the staff under examination. (If the Full Staff Name attribute is not set, the plug-in will try to find an instrument name by examining the staff's Abbreviated Staff Name attribute, then the Full Group Name and Abbreviated Group Name attributes of the group to which the staff belongs.) If the instrument suggested does not suit your needs, you can select another instrument from the list.

- **Range Class.** You can specify one of three pre-defined ranges for the selected instrument by choosing an item in the Range Class drop-down list.

- **High Note • Low Note.** You can also modify the extent of the instrument range by editing the values in the High Note and Low Note fields directly. Use the arrows next to the text fields to change the values a half-step at a time, or click on the Listen… buttons to enter pitches from a MIDI instrument.

- **Display at Concert Pitch.** If the current staff is a transposing staff, the Display at Concert Pitch Checkbox under the Low Note field is active and you can use it to alternate between displaying pitches at concert pitch or at the staff's transposition.

- **Skip Staff.** If you decide you want to skip the current staff and have the Check Range plug-in continue its operation with the next staff, click on the Skip Staff Button.

- **Check • Cancel.** Click Cancel to cancel the Check Range operation immediately. Click Check to check notes on the current staff against the range you have specified.
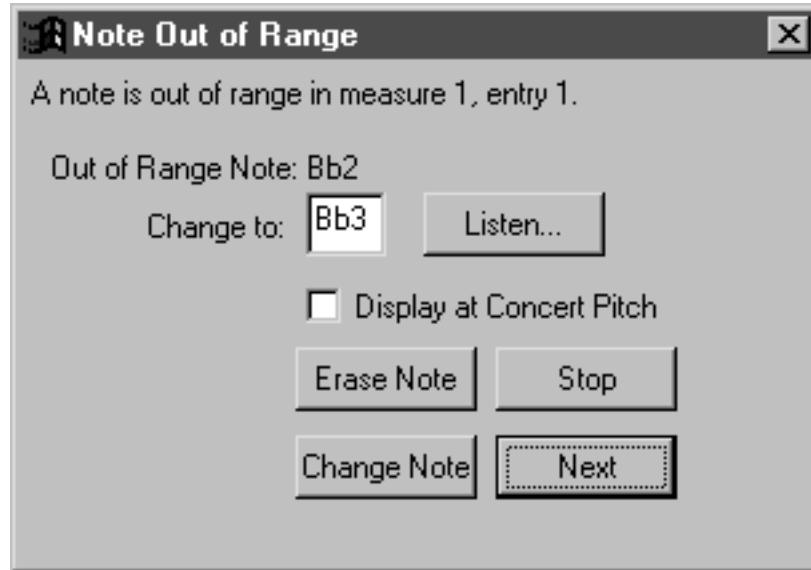
- **Out of Range Note.** If a note is found that is too high or too low for the range specified, Finale will scroll to the measure and staff where the offending note was found and you will be presented with a dialog in which you can modify the pitch. (In this example, the Beginner's range for Flute was selected, so the B natural below middle C was out of range; the Professional Range for Flute includes the B natural.)

- **Change To • Listen.** The dialog suggests a pitch within the specified range as an alternative to what is written in the score. You can override this suggestion by typing in a different value in the Change To text field. You can also use the arrows next to the text field to change the value a half-step at a time, or click on the Listen button to specify a pitch from a MIDI instrument.

- **Display at Concert Pitch.** If the current staff is a transposing staff, the Display at Concert Pitch Checkbox under the Low Note field is active and you can use it to alternate between displaying pitches at concert pitch or at the staff's transposition.

- **Change Note • Erase Note.** Click Change Note to change the pitch to the value you've specified. Click Erase Note to delete the note. In most cases, the entry will consist of a single note, erasing it will replace it with a rest. If the entry was a chord, the note will simply be deleted.

- **Next.** Click Next to leave the offending note unchanged, the Check Range plug-in will then continue checking the staff at the next note. The plug-in will continue looking for out of range notes until it reaches the end of the current staff. Then the Check Range dialog will be displayed for the following staff and you can continue the range checking operation.

- **Stop.** Click the Stop Button to stop the range checking process immediately.

Notes:

- The Check Range dialogs always use the notational conventions you specified in the Pitch Representation section of the Program Options dialog.

- The Check Range dialog uses some simple methods to guess the name of the instrument you want even if the Full Staff Name is slightly different. Most plural forms are recognized correctly, as are numbers before or after the instrument name ("Violin II" is matched to the violin and "2 Flutes" is matched to the flute). If the Check Range dialog does not match the instrument you intended, simply select the instrument you want.

- The list of instruments recognized in the Check Range dialog is quite extensive, and should cover most needs. But, if an instrument you need is not found in the list, try an instrument with a similar range; you can always adjust the values of the range to suit your needs.

Check Region for Durations Plug-in

How to get there

Select Check Region for Durations from the Plug-ins Menu. If you prefer to apply Check Region for Durations to a specific region, select the region using the Mass Mover Tool before selecting the plug-in from the Plug-ins Menu.

What it does

The Check Region for Durations plug-in checks the selected region for any measures that have too many or too few beats.
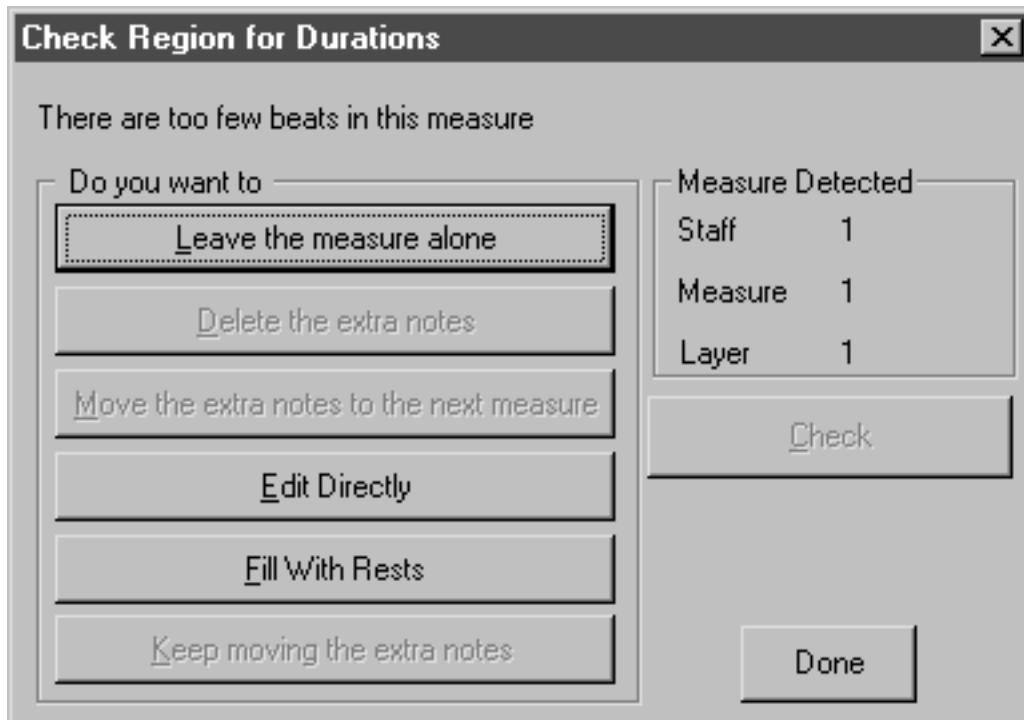
- **[Message text].** Look at this text for direction on how to proceed and the results of your actions.

- **Do you want to: Leave the measure alone • Delete the extra notes • Move the extra notes to the next measure • Edit Directly • Fill with Rests • Keep moving the extra notes.** Click on the option which corresponds to the action you would like to take when you have too few or too many notes in a measure.
- **Measure Detected: Staff • Measure • Layer.** These text boxes display where the measure with too few or too many notes is located.
- **Check.** Click this option to start or continue your search for measures with too many or too few beats.
- **Done.** Click Done to stop looking for measures with too many or too few beats and return to the score.

Chord Morphing Plug-in

How to get there

Select a sequence of chords in one staff with the Mass Mover Tool [icon]. Each chord must contain at least two notes of a quarter note duration in layer 1. From the Plug-ins Menu, choose Composer's Assistant, then Chord Morphing.

What it does

The Chord Morphing plug-in creates a new staff with a sequence of chords, each of a whole note duration. Accented notes will mark the division between sequences. The sequences will consist of the original input chords plus a number of new intermediary chords inserted between them. This plug-in was designed to be a compositional tool capable of automatically generating a variety of smooth between-chord transitions from which the user could pick and choose.
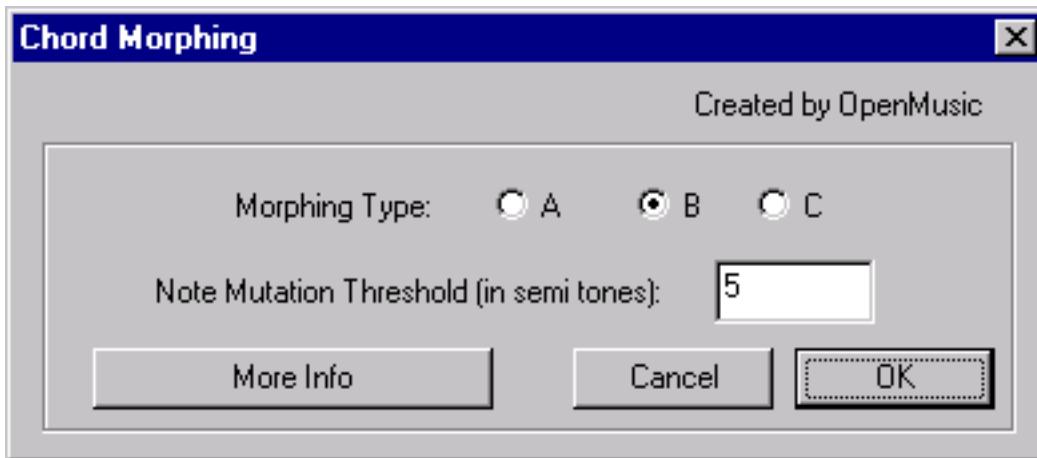
- **Morphing Type: A • B • C.** Select a morphing type. The plug-in uses three methods to create the intermediary chords: removing notes from the source chord that don't appear in the tar get chord, adding notes from the target chord, and mutating (changing) notes in the source chord to notes found in the target chord without removing notes. The morphing type determines the order in which the plug-in manipulates the chords. In **Morphing Type A**, all mutations occur first, then removals, then additions. In **Morphing Type B**, all removals occur first, then mutations, then additions. In Morphing Type C, all removals occur first, then additions, then mutations.

- **Note Mutation Threshold (in semi tones).** Use Note Mutation Threshold to define how close the notes must be in order for mutation to occur. Mutation occurs only when notes in the source are close to notes in the target.

- **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Chord Realization Plug-in

How to get there

From the Plug-ins Menu, choose Composer's Assistant, then Chord Realization.

What it does

The Chord Realization plug-in generates four-part realizations of a triad based on the major key and scale degree specified. The plug-in attempts to sort them based on classical textbook rules with best solutions first.
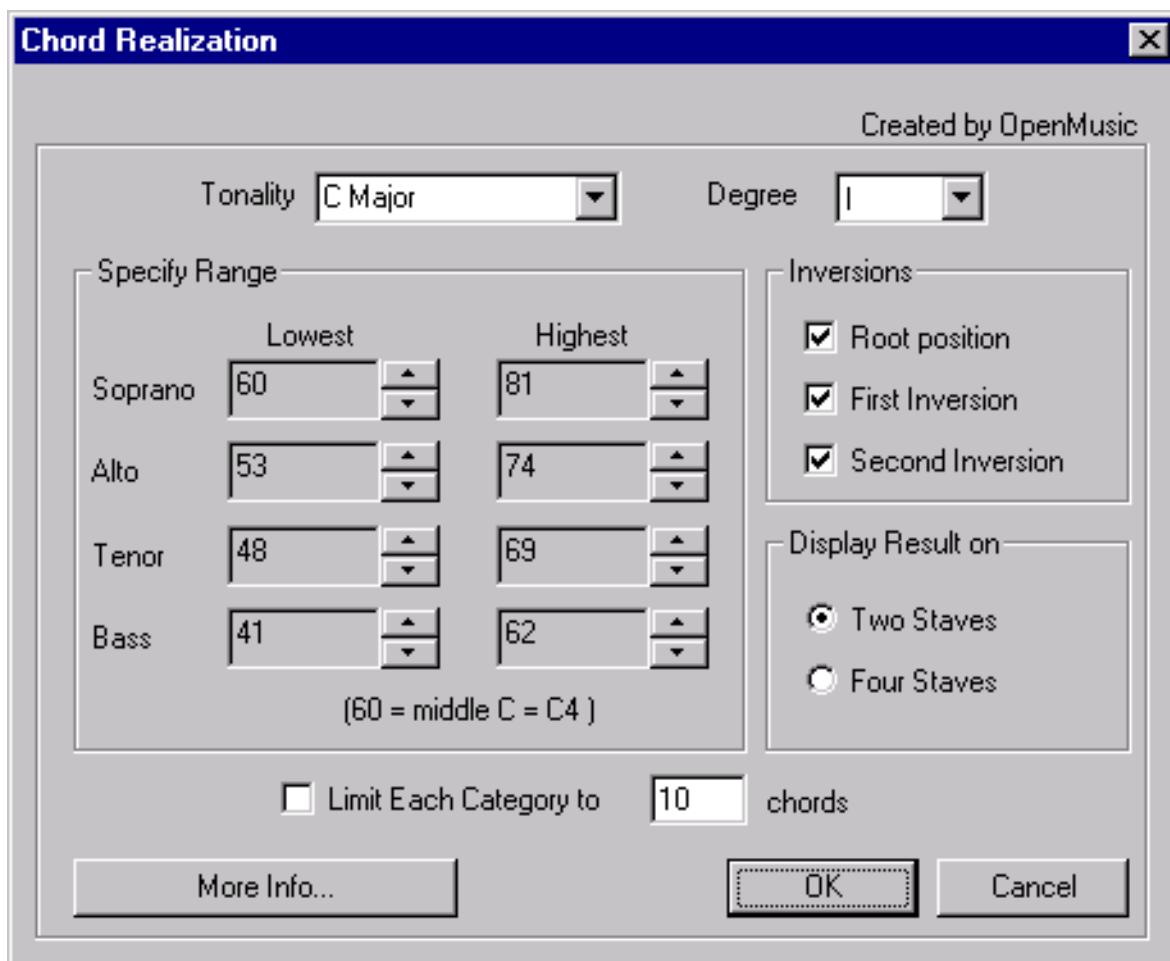
- **Tonality.** Select the major key that you wish to see chords in.
- **Degree.** Select the scale degree that will constitute the root of the chord.

- **Specify Range: Soprano • Alto • Tenor • Bass.** Specify the range for each voice. Middle C, or C4 is represented as MIDI note 60.

- **Inversions: Root Position • First Inversion • Second Inversion.** Choose the inversion(s) that will be realized.

- **Display Result on: Two Staves Four Staves.** Specify whether you want a choral score of four staves or a piano score of two staves.

- **Limit Each Category to __ Chords.** Check this box to have the plug-in create the specified number of chords or less for each inversion.

- **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Chord Reordering Plug-in

How to get there

Select a sequence of chords in one staff with the Mass Mover Tool . All chords must be in layer 1, voice 1. From the Plug-ins Menu, choose Composer's Assistant, then Chord Reordering.

What it does

The Chord Reordering plug-in creates a new staff below the selected staff. The new staff will display the chords in the selected region, but in a different order.
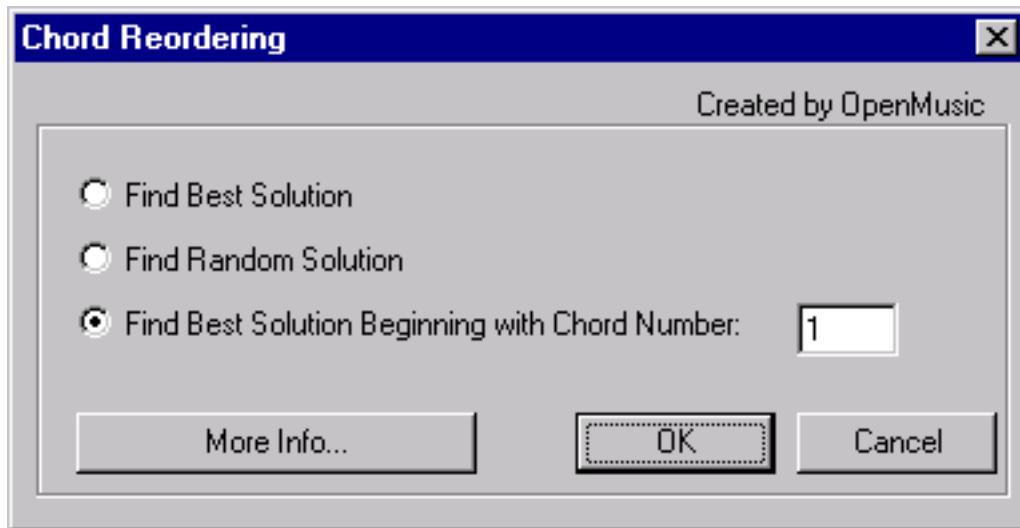
- **Find Best Solution • Find Random Solution • Find Best Solution Beginning with Chord Number ___.** Choosing **Find Best Solution** will compute the solution that contains the largest possible number of common notes between each pair of adjacent chords. Choosing **Find Random Solution** simply reorders the chords in a random fashion. Find **Best Solution Beginning with Chord Number ___** will begin the sequence with the specified chord, and then reorder the remaining chords in the way that contains the largest possible number of common notes between each pair of adjacent chords.

- **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Chord Splitting Plug-in

How to get there

Select a chord in one staff with the Mass Mover Tool ⊞. The chord must contain at least two notes and be in layer 1. From the Plug-ins Menu, choose Composer's Assistant, then Chord Splitting.

What it does

The Chord Splitting plug-in creates a new staff or staves containing subsets of the original chord, each a whole note in duration. These subsets are based on harmonic targets that were implicitly contained inside the original chord. This plug-in was designed to be a composition/orchestration utility capable of automatically generating several simplified subsets of a more complex chord.
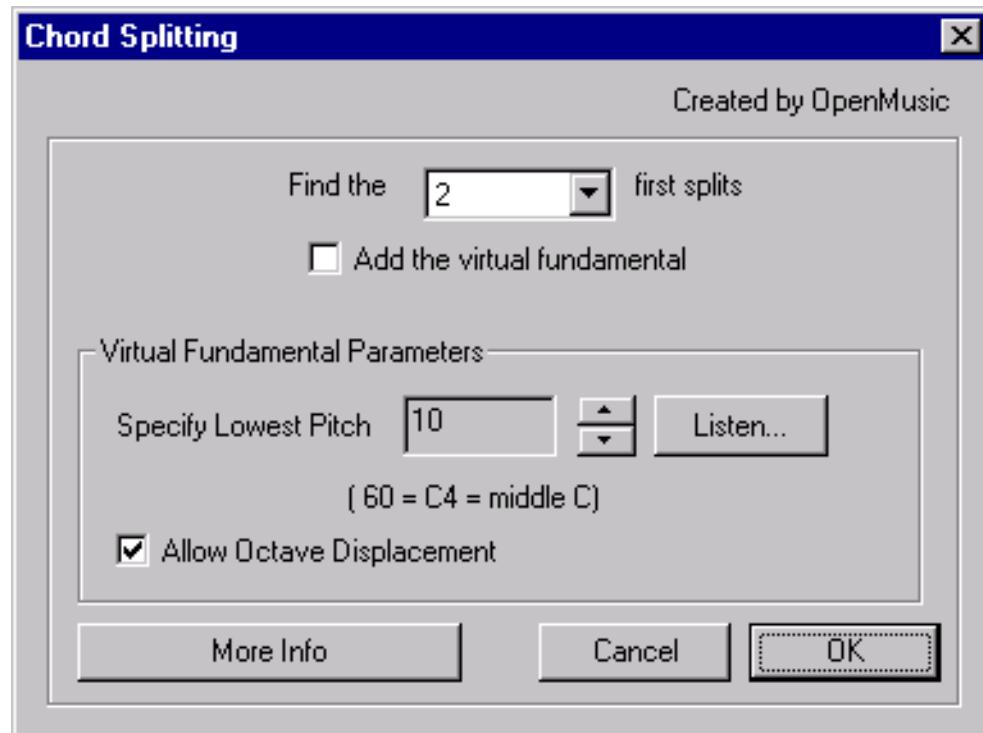
- **Find the __ first splits.** The Chord Splitting plug-in has the capacity to split the chord several times at once. The results will display the split containing the smallest number of subsets first, and then a new staff for each succeeding subset.

- **Add the Virtual Fundamental.** Check this option to add a staff containing the virtual fundamental beneath each staff of subsets. For a definition of the Virtual Fundamental, see VIRTUAL FUNDAMENTAL GENERATOR PLUG-IN.

- **Virtual Fundamental Parameters.** Use this section to modify the parameters of the virtual fundamental. This functions the same as the VIRTUAL FUNDAMENTAL GENERATOR PLUG-IN.

- **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Classic Eighth Beams Plug-in

How to get there

Select Classic Eighth Beams from the Plug-ins Menu. If there is no Mass Mover Selection when you invoke the Classic Eighth Beams command, it will ask you if you want to process the entire document.

What it does

The Classic Eighth Beams plug-in modifies the beaming of eighth notes in $\frac{4}{4}$ time. Eighth notes will be beamed as if the Time Signature were $\frac{2}{2}$

In most music, it is conventional in $\frac{4}{4}$ time to beam eighth notes in groups of four, while beaming smaller note values to the quarter note. Previous versions of Finale only supported beaming to the beat, with the result that sixteenth notes would be properly beamed (in groups of four) but eighth notes would be grouped in pairs.

The Beam Eighth Notes in Groups of Four in Common Time option solves this problem. (See BEAMING OPTIONS DIALOG BOX for new documents.) It automatically beams eighths in groups of four while beaming smaller note values to the quarter note. However, it does not modify the beaming in documents created without the option. The Classic Eighth Beams plug-in was designed to fill this need by modifying the beaming of eighth notes in $\frac{4}{4}$ time.

Using the Classic Eighth Beams Plug-in

Use the Mass Mover Tool to select a region in which you wish to modify the beaming of eighth notes.
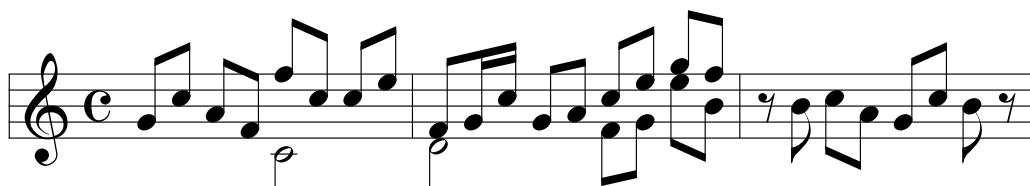
After invoking the Classic Eighth Beams plug-in, eighth notes in all 4/4 measures will be beamed in groups of four. Other note combinations remain unmodified. In the example, the eighth note groups in measure one and the second half of measure two are beamed in groups of four. The eighth-sixteenth-sixteenth rhythm in measure 2 are unchanged, in accordance with common practice. The groups of eighth notes and rests in measure 3 are beamed together.
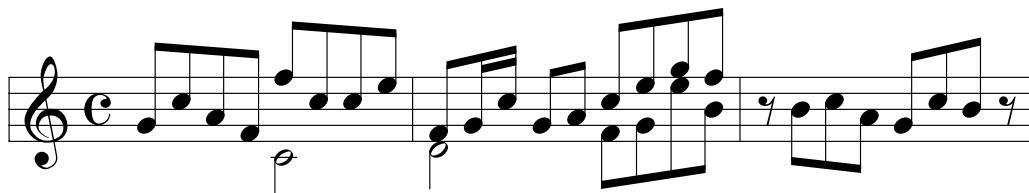
Notes:

- The Classic Beams plug-in functions similarly to the Mass Mover Rebeam command when Classic Eighth Beams has been selected in the Beaming Options Dialog. The plug-in, however, will only modify the beaming of groups of four eighth notes, any custom beaming of other rhythmic groups remains unchanged. The Mass Mover Rebeam command will reset all beaming to the values determined by the time signature and document options. Note also that the plug-in's behavior is independent of the option setting; the Classic Eighth Beams option may be turned off and you can still use the Classic Eighth Beams plug-in.

- Voice 2 eighth note Entries will be beamed in groups of four only if the all four Voice 2 entries are launched from a single Voice 1 Entry. This is a general principle of Voice 2 beaming (only Voice 2 Entries launched from a single Voice 1 Entry can be beamed together).

Command Line Plug-in

How to get there

Select Command line from the Plug-ins Menu.

What it does

The Command Line plug-in allows for quick note entry by typing in specific commands.
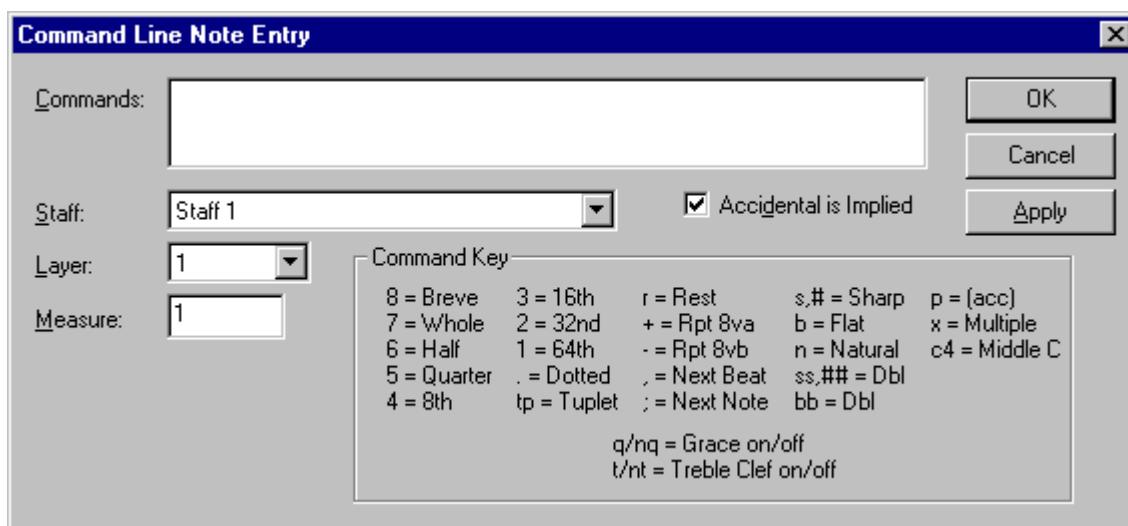
- **Commands.** Type in the string of commands for the plug-in to perform.

Commands

Duration	Note Type
8	Double-Whole note

Commands

Duration	Note Type
7	Whole Note
6	Half Note
5	Quarter Note
4	Eighth Note
3	Sixteenth Note
2	32nd Note
1	64th Note
.	Augmentation Dot
P	() around accidentals
TP	Tuplet
C4	Middle C
R	Rest
# or S	Sharp
## or SS	Double sharp
b	Flat
bb	Double flat
N	Natural
;	Note delimiter (between the notes in chords)
,	Chord, Beat delimiter
Q,NQ	Grace Note Entry
T,NT	Treble Clef Entry
X	Multiplier

Syntax:

[T/NT][Q/NQ][Tuplet]DurationPlacement[P][;[Duration]Placement[P]...][Multiplier]
[,[T/NT][Q/NQ][Tuplet][Duration]Placement[P][;[Duration]Placement[P]...][Multiplier]]

Tuplet = TP[# of Tuplet][Duration of Tuplet] e.g. TP34 = eight note triplet

Duration = Number from 1-8 where 1= 64th note and 8 = breve.

Placement =

R for rest,
Pitchname[Alteration][Octave] (Octave only needs to be used the first time in each string or to change from the current octave),
+ or - to add the previous note an octave lower or higher.

Multiplier = e.g. 4x, 2x
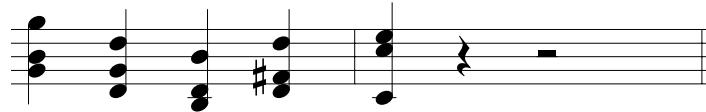
Examples:

5g4;b;g5,d4;g;d5,b3;d4;b,d;f#;d5,c4;e5;c

Above is an example that places 5 chords into the staff. Notice that the duration or octave is not required unless it is changing. The semicolon designates different notes in the chord, and the comma designates the next beat.
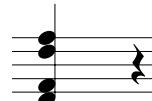
5d5;-;f-

Above is an example of using the - sign to add a note one octave lower.

5g4;b;g5;4x

Above is an example of using the multiplier function.

5.d4,4e,5d,4c,6b3

Above is an example of using the period to indicate a dotted note. Notice that to enter a tie you can use the appropriate duration of the note across a time signature beat.

T5d4,e,f,g,NTd,e,f,g

Above is an example using the Treble Clef entry mode which allows you to enter notes in any clef as if they were in Treble Clef.
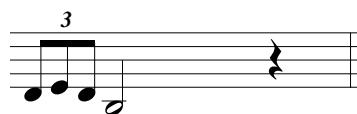
TP34d4,e,d,6b3,5r

Above is an example of entering an eighth note triplet. The first number after the TP indicates the type of tuplet and the second number indicates the duration of the notes.

5a4,Q4g,NQ5b,c,d

Above is an example of entering grace notes. Be sure to use NQ to return to entering normal notes.

- **Staff • Layer • Measure.** Select which staff, layer and starting measure your notes will be entered.
- **Accidental is Implied**. Deselect this option to place courtesy accidentals. With this option selected, only alterations outside the key signature need to be indicated.
- **Apply • OK • Cancel.** Click Apply to apply the current commands and leave the dialog box available for the next set of commands. Click OK to make the selected changes and return to the score. Click Cancel to return to the score without making any changes.

Common Tone Transposition Plug-in

How to get there

Select a single chord in layer one and voice one with the Mass Mover Tool [icon] . From the Plug-ins Menu, choose Composer's Assistant, then Common Tone Transposition.

What it does

The Common Tone Transposition plug-in creates a series of chords that share at least one common tone with the original chord.
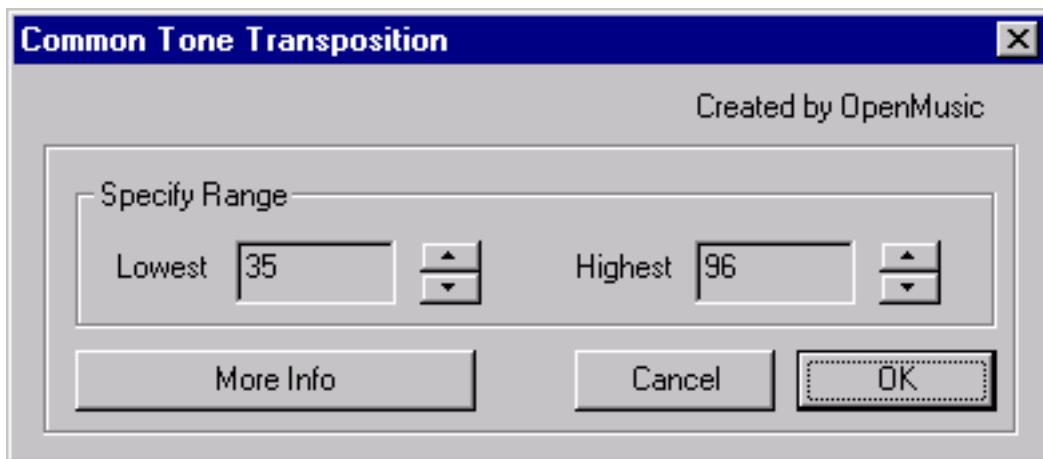
- **Specify Range: Lowest • Highest.** Use these spin controls to restrict output to a specified range. Middle C, or C4 is represented as MIDI note 60.
- **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Composer's Assistant Plug-ins

How to get there
From the Plug-ins Menu, choose Composer's Assistant.

What it does
These plug-ins provide a starting point for composition. The Composer's Assistant plug-ins are as follows: CHORD MORPHING, CHORD REALIZATION, CHORD REORDERING, CHORD SPLITTING, COMMON TONE TRANSPOSITION, FREQUENCY MODULATION CHORD GENERATOR, MELODIC MORPHING, RHYTHM GENERATOR, TIE COMMON NOTES and VIRTUAL FUNDAMENTAL GENERATOR.

As an experiment, generate a sequence of chords via the Common Tone Transposition plug in, run it through the Chord Reordering plug-in, run it through the Tie Common Notes plug-in, and play it back at a slow tempo on a string patch.

Find Parallel Motion Plug-in

How to get there
Select Find Parallel Motion from the Plug-ins Menu. If there is no Mass Mover Selection when you invoke the Find Parallel Motion command, it will ask you if you want to process the entire document.

What it does
The Find Parallel Motion plug-in is used to find the parallel fifths and octaves in a Mass Mover Selection. The plug-in compares notes found in different voices, layers and staves.

After invoking the Find Parallel plug-in, a dialog will be displayed. After clicking Find Next, the dialog will also indicate the staff, measure, and beat in which parallel occurred. The plug-in will also scroll the document so that at least one of these notes will be visible (it scrolls to the note that occurs first). The Find Parallel plug-in always uses MIDI note number, regardless of the Display Pitch setting in the Program Options dialog box. See PROGRAM OPTIONS DIALOG BOX.
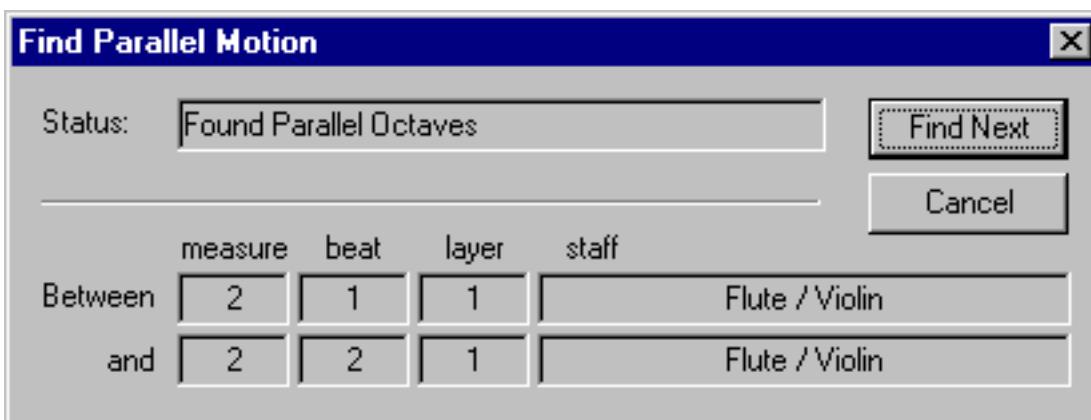
- **Find Next.** Click Find Next to have Finale search for the next occurrence of parallel motion.

- **Cancel.** Click Cancel. to dismiss the dialog box.

Find Range Plug-in

How to get there

Select Find Range from the Plug-ins Menu. If there is no Mass Mover Selection when you invoke the Find Range command, it will ask you if you want to process the entire document.

What it does

The Find Range plug-in is used to find the highest and lowest notes in a Mass Mover Selection. Typical use of the Find Range plug-in would be to select one staff to find the highest and lowest notes played by an instrument or voice in a Finale document. This is particularly useful with vocal music, when you want to check just how high or low a particular part goes.

After invoking the Find Range plug-in, a dialog will be displayed listing the highest and lowest notes found in the selection. The dialog will also indicate the staff and measure in which these notes first occurred. The plug-in will also scroll the document so that at least one of these notes will be visible (it scrolls to the note that occurs first). The Find Range plug-in always uses MIDI note number, regardless of the Display Pitch setting in the Program Options dialog box. See PRO-GRAM OPTIONS DIALOG BOX.
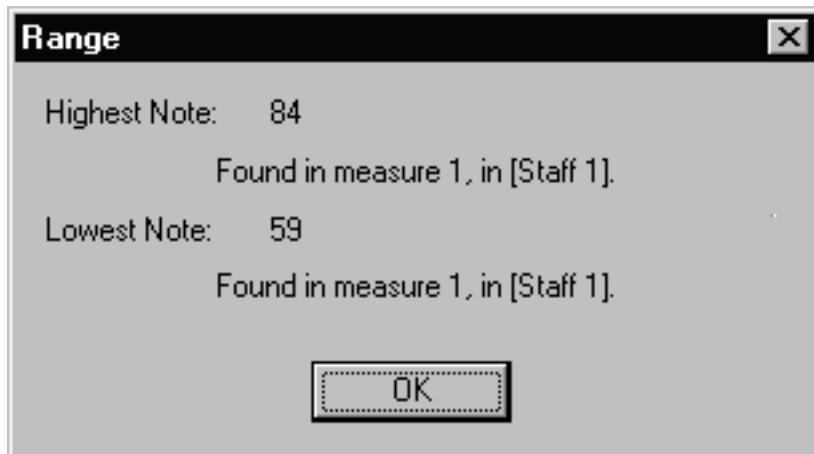
- **OK.** Click OK to dismiss the dialog box.

Frequency Modulation Chord Generator Plug-in

How to get there

Select two successive, single notes in one staff with the Mass Mover Tool ⊞ . The notes can be of any duration, but must be in layer 1, voice 1. From the Plug-ins Menu, choose Composer's Assistant, then Frequency Modulation Chord Generator.

What it does

The Frequency Modulation Chord Generator plug-in creates a new staff with a sequence of chords, each of a whole note duration. A process called Frequency Modulation determines the

notes that make up the generated chords. This plug-in was designed to be a compositional tool capable of automatically generating a series of chords with increasing complexity and texture.

Frequency Modulation, in terms of keyboard synthesizers, begins with a simple oscillator called the Carrier (frequency A). The Carrier is then altered in frequency by another oscillator called the Modulator (frequency B). A sound results, with a complex spectrum. This spectrum has energy at certain frequencies:

… A - 3B, A - 2B, A - B, A, A + B, A + 2B, A + 3B …

In this series, frequencies may become negative. In these cases, the absolute (positive) value of the frequency is taken.

The Modulation Index indicates which frequencies from the energy spectrum will be kept.

Index = 1: A

Index = 2: A - B, A, A+B

Index = 3: A – 2B, A - B, A, A+B, A + 2B

Index = 4: A – 3B, A – 2B, A - B, A, A+B, A + 2B, A + 3B

Etc.…

The Frequency Modulation Chord Generator Plug-in converts the two input notes into frequency, based on an equal temperament pitch table (pitches from one octave to the next have a 1:2 ratio, such that any note's frequency is twice the frequency of the note one octave below; e.g. A4=440Hz and A3=220Hz):

MIDI Note Number	Pitch (where middle C equals C4)	Frequency (Hz)
60	C4	261.626
61	C#4/DB4	277.183
62	D4	293.665
63	D#4/Eb4	311.127
64	E4	329.628
65	F4	349.228
66	F#4/Gb4	369.994
67	G4	391.995
68	G#4/Ab4	415.305
69	A4	440
70	A#4/Bb4	466.164
71	B4	493.883

The frequency of the first input note becomes the Carrier, and the frequency of the second input note becomes the Modulator. These frequencies are entered into the index synthesis algorithm and returned again as MIDI notes. It is these MIDI notes that make up the chords generated.
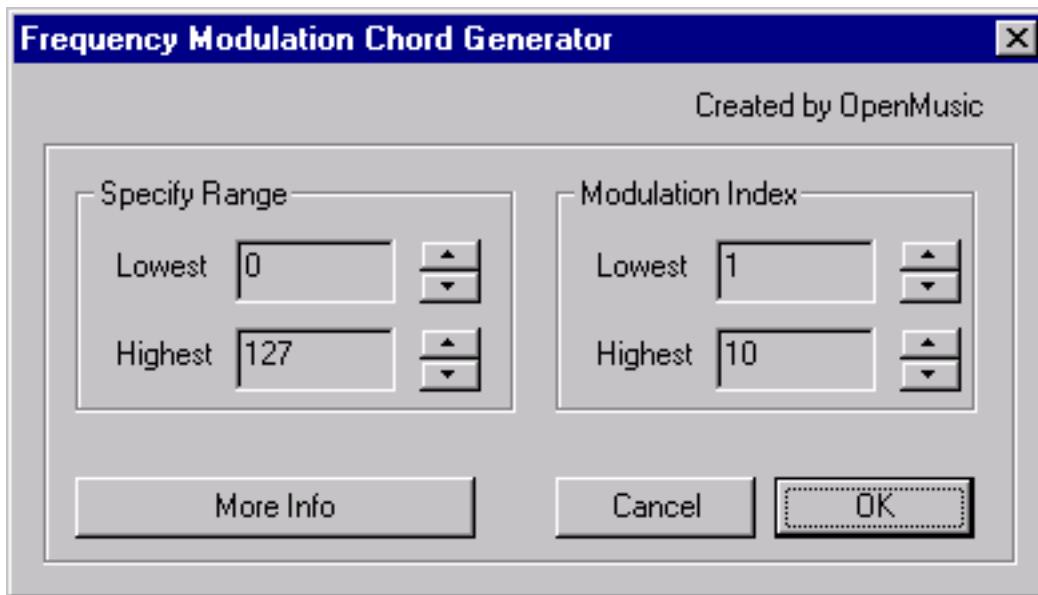
- **Specify Range.** Because of the multiplications in the synthesis algorithm, the notes of the generated chords could extend far beyond any useful range. Use the Specify Range settings to avoid such extreme pitches.

- **Modulation Index.** The values chosen for the Modulation Index will determine how many chords are generated, as well as how many notes appear in each chord. The number of chords generated is equal to one more than the Highest Modulation Index minus the Lower Modulation Index (if lowest index is 3 and highest index is 7, then the number of chords generated is 7-3+1 or 5). The number of notes in each chord will generally be one less than twice the modulation index (a chord at Modulation Index 5 will have 5x2-1 or 9 notes). However, due to the nature of frequency modulation calculations, some notes may be duplicated within one chord.

- **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Ledger Lines (Hide) Plug-in, Ledger Lines (Show) Plug-in

How to get there

Select Ledger Lines (Hide) or Ledger Lines (Show) from the Plug-ins Menu. If there is no Mass Mover Selection when you invoke Ledger Lines (Hide) or Ledger Lines (Show), it will ask you if you want to process the entire document.

What it does

Use the Mass Mover Tool to select a region from which you wish to hide ledger lines from all entries, then choose the Ledger Lines (Hide) command from the Plug-ins Menu. The plug-in will go through all entries in the selected region and hide the ledger lines.

Use the Mass Mover Tool to select a region from in which you want hidden ledger lines to be made visible, then choose the Ledger Lines (Show) command from the from the Plug-ins Menu. This would typically be a section where you had previously hidden ledger lines with the Ledger Lines (Hide) command. The plug-in will go through all entries in the selected region and make the ledger lines visible. (This is analogous to using the Undo command after the Ledger Lines (Hide) command, with the difference that you can use the Ledger Lines (Show) command any time after hiding the ledger lines; the undo command would everything after hiding the ledger lines.)

Notes

- If you "hide" ledger lines from a note on the staff, then later modify the note such that it is above or below the staff, it will be drawn without ledger lines. Analogously, if you apply the Ledger Lines (Show) command to a note on the staff, and then later move the note above or below the staff, it will be drawn with ledger lines.

- If there are no entries in the selected region, or if ledger lines have already been removed from the entries, an Alert is posted to explain that the Ledger Lines (Hide) command had nothing to modify. Similarly, if you apply the Ledger Lines (Show) command to a region where all entries are already set to have visible ledger lines, an Alert will explain that no modifications were made.

Melodic Morphing Plug-in

How to get there

Select two adjacent staves, each containing a monophonic melody in layer 1 and voice 1, with the Mass Mover Tool [icon]. From the Plug-ins Menu, choose Composer's Assistant, then Melodic Morphing.

What it does

The Melodic Morphing plug-in creates an additional staff with a single melody made up of three sections. The first section is the source melody, the second section is the morphing result and the third is the target melody. The rhythm of the source and target is ignored. The Plug-in only generates sixteenth notes.
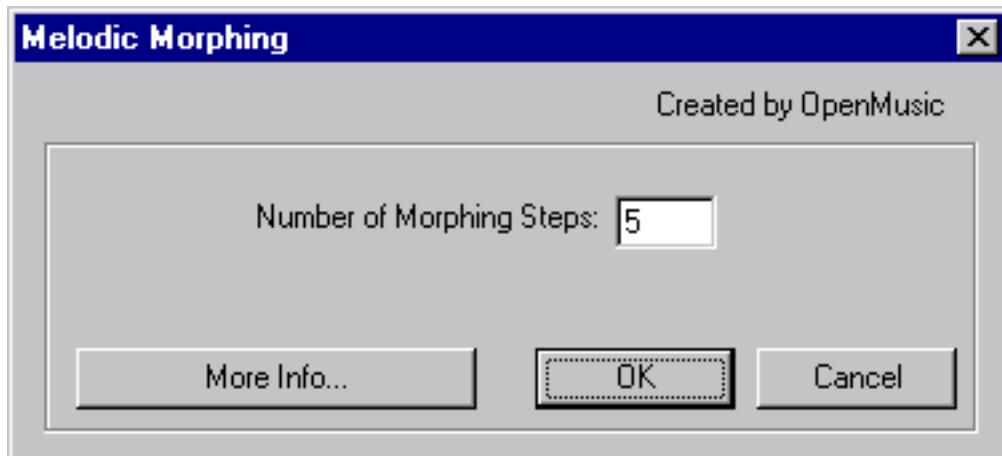
- **Number of Morphing Steps.** Specify how many mutations should be generated between the source melody and the target melody. Enter a low number to make the transition dramatic.

  Notes: The plug-in examines the melodies in a 2-D space, where y-axis is pitch, and x-axis is time. Curves are stretched so the first point and the last point of each curve have the same x-coordinate. Then the first curve is continuously warped through a number of steps (entered as Number of Morphing Steps in the dialog box) until it matches the second curve.

  Each curve resulting from a warping step is sampled in order to give a melodic fragment. The number of notes extracted from the curve is interpolated between the number of notes in the source melody and the target melody. Pitches generated are closest to those already present in the two melodies not the exact pitches from the curve generated.

- **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Menu Shortcuts Plug-in

How to get there
From the Plug-ins Menu, choose TGTools, then Menu Shortcuts.

What it does
The Menu Shortcuts plug-in allows you to assign special key combinations to any of Finale's menu items.
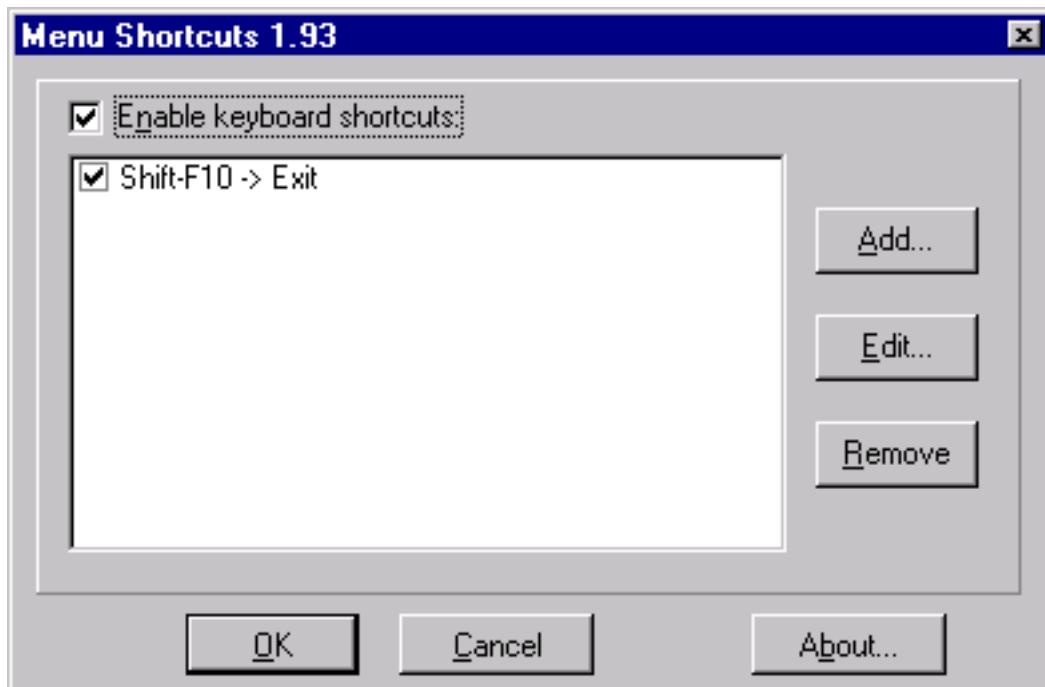
- **Enable Keyboard Shortcuts.** Check this box to use the keyboard shortcuts.

- **Add • Edit • Remove.** Click **Add** to choose the keystroke from the Key Assignment dialog box. Select an entry and click Edit to edit an existing keyboard shortcut in the Key Assignment dialog box. See Key Assignment dialog box below. Select an entry and click Remove to delete an existing keyboard shortcut.

- **OK • Cancel • About.** Click OK to apply the current commands and return to the score. Click Cancel to return to the score without making any changes. Click About for more information about the complete TGTools plug-in collection.

Key Assignment

How to get there
From the Plug-ins Menu, choose TGTools, then Menu Shortcuts. Click Add or select a shortcut and click Edit.

What it does
The Key Assignment dialog box allows you to assign a shortcut to a key stroke.
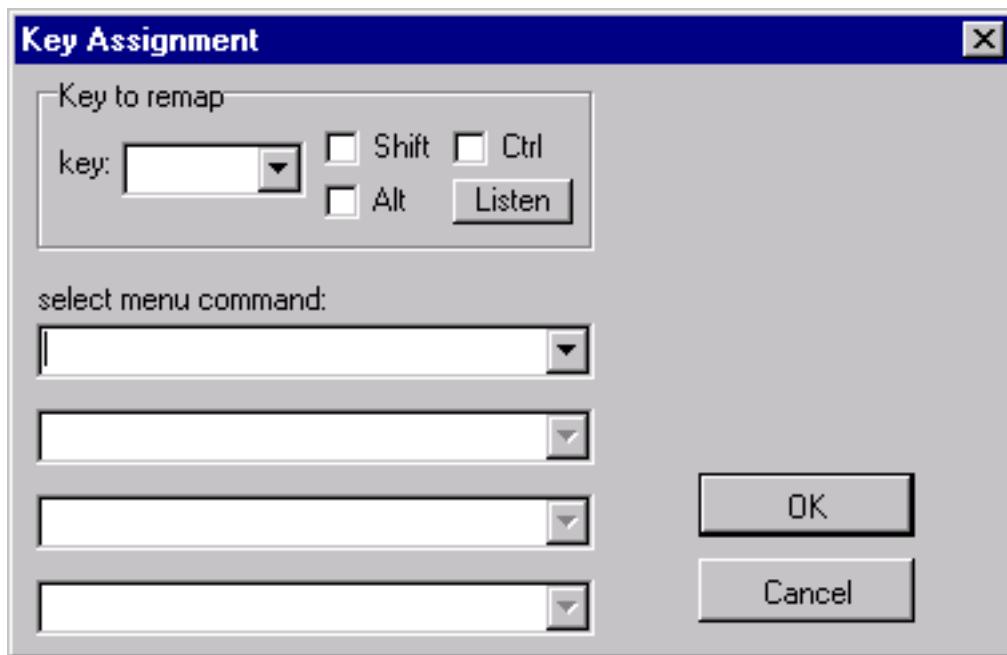
- **Key to remap: Key • Shift • Ctrl • Alt • Listen.** Enter the main letter or number into the text box or choose a keystroke from the drop-down menu. Check Shift or Alt or Ctl to add the modifier to the keystroke. Click the Listen button to record the next key you press as the shortcut key. Note that modifiers such as Shift, Ctl or Alt must be checked separated.

- **Select Menu Command.** Choose the menu item by working your way through the multiple levels of the drop-down selection lists. In order to assign a shortcut, the menu item must be visible. For example, to assign a shortcut to the Mass Mover Menu, you must first select the Mass Mover Tool and then run the Menu Shortcut plug-in.

  If you wish to assign shortcuts to the tools, make the Tools Menu visible. From the Options Menu, choose Program Options. Click on Other Options. Check the Show Tools Menu box.

- **OK • Cancel.** Click OK to accept the shortcut command and return to the Menu Shortcuts dialog box. Click Cancel to return to the Menu Shortcuts dialog box without making any changes.

Midline Stem Direction Plug-in

How to get there
Select a region with the Mass Mover Tool. Select Midline Stem Direction from the Plug-ins Menu.

What it does
The Midline Stem Direction plug-in allows you to change the direction of stem for the note on the center line of the staff to match the stem direction of the previous note.

Before running Midline Stem Direction plug-in


After running Midline Stem Direction plug-in

Move Rests Plug-in

How to get there

Select a region with the Mass Mover Tool. Select Move Rests from the Plug-ins Menu.

What it does

The Move Rests plug-in will move rests in the selected region to the specified position.
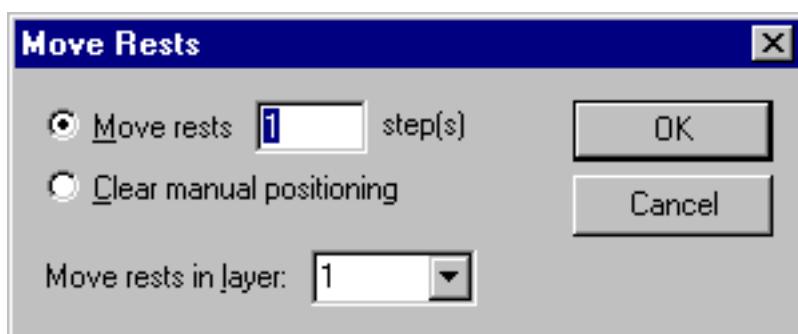
- **Move rests ___ steps.** Select this option to move rests the indicated number of steps. Type the number of steps to move into the text box. Positive numbers move the rests up, negative numbers move the rests down.

- **Clear Manual Positioning.** Select this option to clear any manual positioning of rests in the selected region.

- **Move rests in layer ___.** This item indicates which layer the rests are in that should be moved.

- **OK • Cancel.** Click OK to make the selected changes and return to the score. Click Cancel to return to the score without making any changes.

Piano Reduction Plug-in

How to get there
Select Piano Reduction from the Plug-ins Menu.

What it does
The Piano Reduction plug-in helps you to easily condense a number of staves into a piano grand staff. The piano grand staff will be added to the bottom of the staff system.
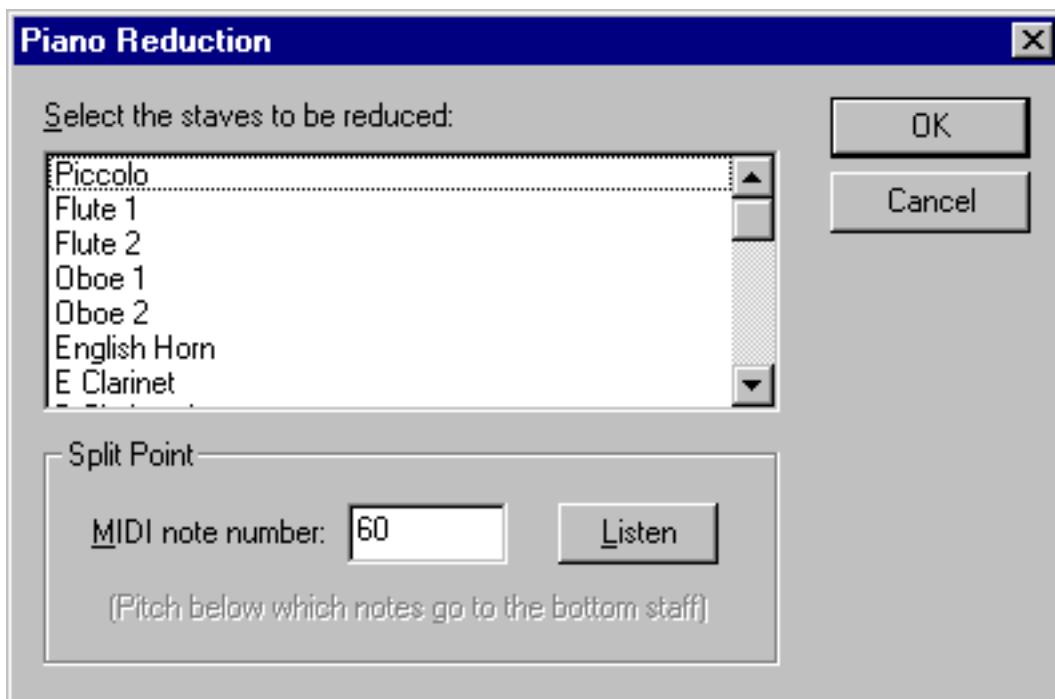
- • **[Staves].** Select the staves in your document to be included from this list.
- • **Split Point.** Set the split point for the piano staff.
- • **OK • Cancel.** Click OK to make the selected changes and return to the score. Click Cancel to return to the score without making any changes.

Rhythm Generator Plug-in

How to get there
From the Plug-ins Menu, choose Composer's Assistant, then Rhythm Generator.

What it does
The Rhythm Generator plug-in creates up to 6 single voice staves containing rhythmical patterns. These staves are added to an existing file starting at measure 1.

Each pattern is build by combining up to 3 sieves, or filters, that are applied to a steady single of sixteenth note pulses. For example, a sieve value of 2 will place a sixteenth note every other pulse starting with the first, and a value of three will place a sixteenth note every third pulse. All other pulses will become sixteenth rests.

The plug-in consists of 6 sets of controls, one for each staff that can be created, and 2 controls affect all the staves that are created.
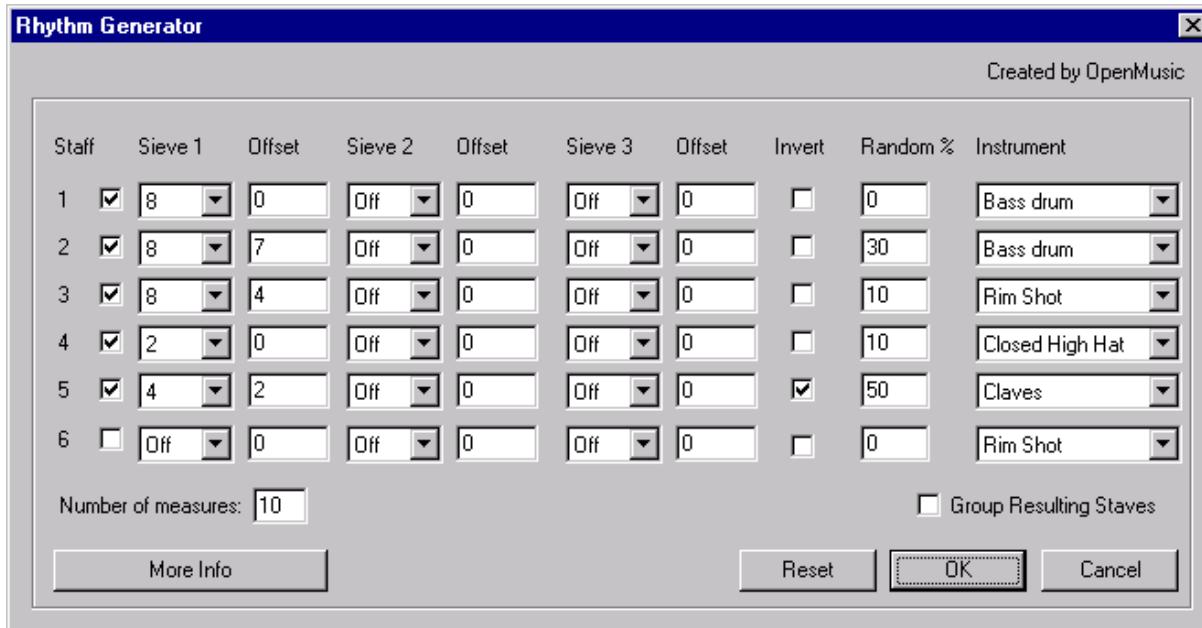
- **Staff.** This check box must be checked in order for a staff to be created.

- **Sieve (1,2,3).** The value in these spin-controls indicate how often a sixteenth note pulse will appear in the created staff. Possible values are 1 through 16.

  For example, a 2 in any single Sieve will create a note every other sixteenth pulse starting on the first pulse. This would yield a sixteenth note on pulses 1, 3, 5, 7, 9, 11, 13, and 15.

  If 3 is selected for the Sieve value, then a note would be created every three pulse, yielding a note on pulses 1, 4, 7, 10, 13, and 16.

  If you choose 2 for one Sieve and 3 of another Sieve, then you would get a combination of the just mentioned pulses. So, in the first measure a note would be created at pulses 1, 3, 4, 5, 7, 9, 10, 11, 13, 15, and 16.

- **Offset.** This value controls the first pulse that will receive the first note created by a Sieve.

- As an example, if you choose 2 for a Sieve value and enter 2 for the Sieve Offset, then the first sixteenth note will appear on the third pulse. In the first measure this would yield notes on pulses 3, 5, 7, 9, 11, 13, and 15.

- **Invert.** Checking this check box will invert the results produced by a Sieve. This will cause notes to appear in place of rests, and rests in place of notes.

  For example, if the Invert check box is checked and a value of 2 is chosen for any single Sieve a note will be created every other sixteenth pulse starting on the second pulse. This would yield a sixteenth note on pulses 2, 4, 6, 8, 10, 12, 14, and 16.

- **Random.** Values entered in this field will cause notes to be created in a random fashion. The higher the value entered the few notes created.

- **Instrument.** The General Midi name chosen from this drop down list will be used for the name of the created staff. This choice will also determine the pitch of the created notes, which will be the General Midi defined pitch for that instrument. Note that the Midi program needed to play these staves must be set in the Instrument List found on the Window Menu.

- **Number of Measures.** The value entered here will determine the length of the generated staves.

- **Group Resulting Staves.** Checking this check box will cause the created staves to be grouped with shared barlines. The default name of the group will be

- **More Info • Reset • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Reset to set the plug-in to minimum default values. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Rhythmic Subdivisions Plug-in

How to get there
Select Rhythmic Subdivisions from the Plug-ins Menu.

What it does
The Rhythmic Subdivisions plug-in provides a method of easily entering measures of repeated notes.The Rhythmic Subdivisions plug-in will go through all the note entries in the selected region, subdividing those entries into a smaller rhythmic value. The result will be a number of repeating note entries replacing the original entry. If you wish, you may specify that only entries with a certain range of rhythmic durations should be effected by the Rhythmic Subdivisions command.
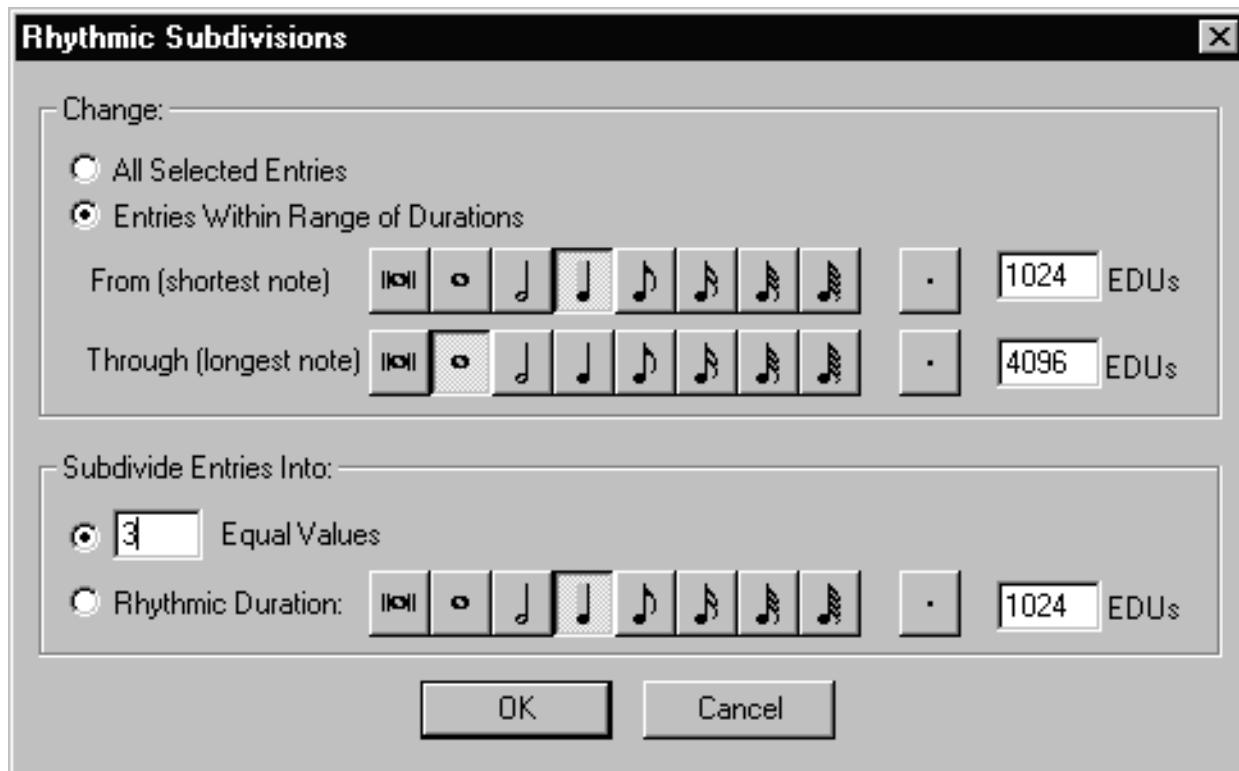
- **All Selected Entries • Entries Within Range of Durations • From • Through • EDUs.** In the top half of the dialog you can specify whether the command should be applied to all note entries within the selected region, or if you would prefer only entries within a range of rhythmic values to be effected by the command. You can specify the rhythmic values by clicking on the durations in the palettes, or you can specify any arbitrary number of EDUs by typing a value into the text fields.

- **Equal Values • Rhythmic Duration.** In the bottom half of the dialog you can specify how you wish to subdivide the note entries in the current selection. If you select the Equal Values Radio Button, each note entry effected by the command will be divided into entries of shorter value. If you select the Rhythmic Duration Radio Button, each note entry effected by the command will be divided into entries of the duration you specify. Note that in the second case, if any entries in the current selection are already of the duration you specify (or shorter), they will not be subdivided.

- **OK • Cancel.** Click OK to subdivide the selection with the specified settings. Click Cancel to return to the score with making any changes.

The two following examples show how the Rhythmic Subdivisions plug-in works. Starting with a selection as follows:

The Equal Durations option, set as follows:
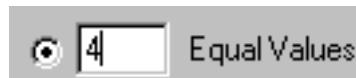
would produce:

The Rhythmic Duration option, with the settings in the following example:

would result in:

Notes:

- The Rhythmic Subdivisions plug-in beams the entries it creates according to the time signature in each measure effected by the command.

- Rests are never subdivided. Accidentals are not repeated. Articulation markings and other note details are not copied.

- When using the Equal Values option the smallest subdivision you may enter is 2; the largest is 32. You may enter any whole number in this range. The plug-in will generate tuplets if necessary. The plug-in will also generate nested tuplets properly if the selection contained tuplets before the plug-in was executed and the subdivision value is not 2, 4, 8, 16, or 32.

- When using the Rhythmic Duration option, you can generate tuplets by entering the appropriate number of EDUs into the text field (for instance, 341 EDUs will generate eighth-note triplets). Care must be taken in using this option if the selection contains tuplets before execution, since tuplet markings already present in the document will not be removed. Instead, the Rhythmic Subdivisions plug-in will generate a nested tuplet with an effective duration close to the value you specified.

- Tuplet markings generated by the Rhythmic Subdivisions plug-in are always rhythmically correct. However, in cases where multiple interpretations are possible (for instance, subdividing a whole note into twelve equal values), you may need to adjust the tuplet markings manually according to your needs.

- When using the Rhythmic Duration option, it is possible that some entries in the selection are longer than the subdivision duration you specified. If this happens, you will be alerted to the situation the first time it occurs. You may cancel the operation at this stage, otherwise the plug-in will continue its operation and simply ignore any other entries shorter than the chosen subdivision duration.

Single Pitch Plug-in

How to get there
Select a region with the Mass Mover Tool or any other tool that supports regional selection. Select Single Pitch from the Plug-ins Menu.

What it does
The Single Pitch plug-in allows you to change all the notes in the selected region to the same specified pitch.
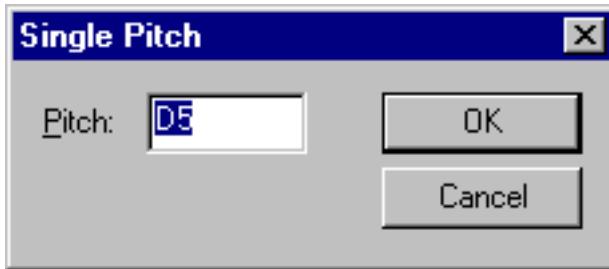
- **Pitch.** Enter the new split point using the MIDI Pitch.

- **OK • Cancel.** Click OK to make the selected changes and return to the score. Click Cancel to return to the score without making any changes.

Split Point Plug-in

How to get there
Select a region with the Mass Mover Tool that includes two adjacent staves. Select Split Point from the Plug-ins Menu.

What it does
The Split Point plug-in allows you to change the transition point between the notes on two staves. For example, if you had set your split point for HyperScribe for middle C, you can easily change measures where it makes more sense for the split point to be B below middle C.
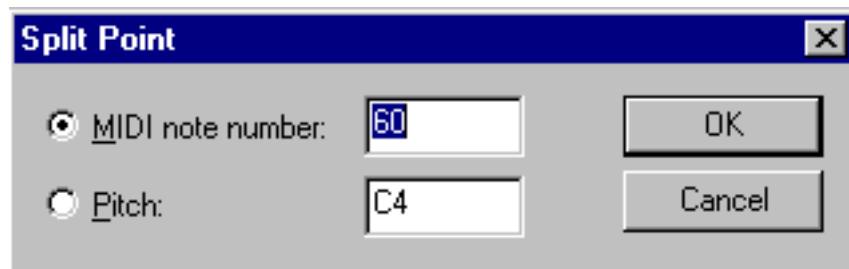
- **MIDI note number • Pitch.** Enter the new split point using either the MIDI note number or the MIDI Pitch.

- **OK • Cancel.** Click OK to make the selected changes and return to the score. Click Cancel to return to the score without making any changes.

Tie Common Notes Plug-in

How to get there

With the Mass Mover Tool ⊞ , select a measure or group of measures that contain the common notes to be tied. From the Plug-ins Menu, choose Composer's Assistant, then Tie Common Tones.

What it does

The Tie Common Tones plug-in adds a tie between adjacent notes of like pitches that are in the same Layer within the selected measures.
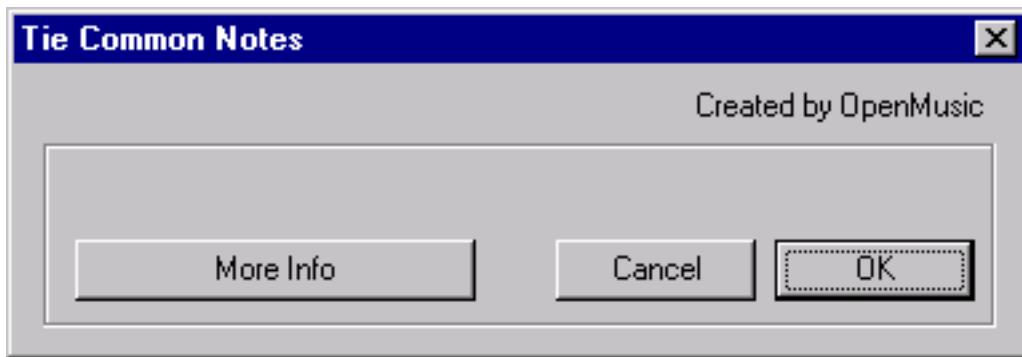
• **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

# Virtual Fundamental Generator Plug-in

How to get there

Select a sequence of chords in one staff with the Mass Mover Tool ⊞ . All chords must be in layer 1, voice 1. From the Plug-ins Menu, choose Composer's Assistant, then Virtual Frequency Generator.

What it does

The Virtual Frequency Generator plug-in creates a new staff below the selected staff. Below each chord of the selection, it displays one bass note, which is the virtual fundamental.

The virtual fundamental algorithm is a psycho-acoustical algorithm that finds a bass note (a fundamental) for which all the note of the chords may appear as harmonic partials. When adding this bass note to the chord, it makes it sound better, less tense and more homogeneous. The virtual fundamental may be thought of as a "root" for the chord.
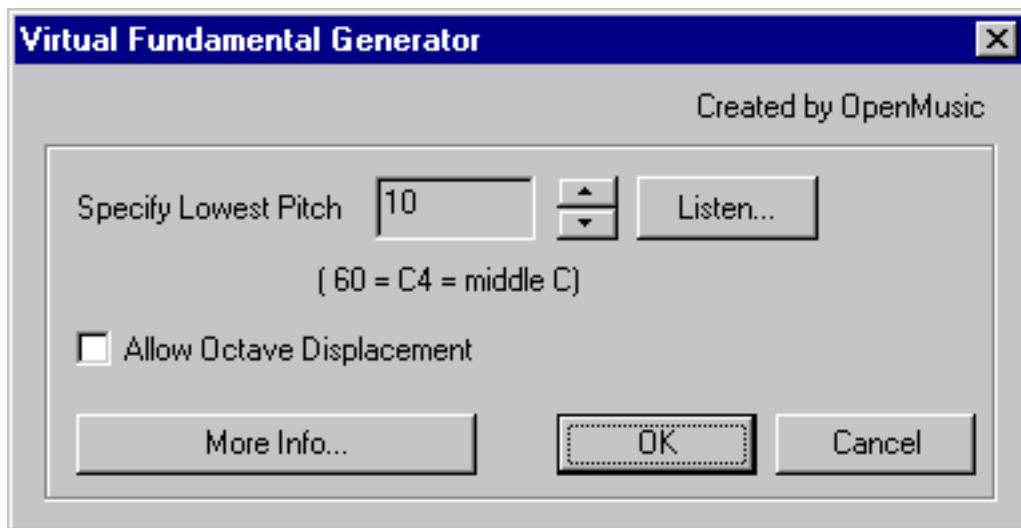
- **Specify Lowest Pitch • Listen.** The number in the Specify Lowest Pitch field represents the lowest MIDI note that will be created by the plug-in. You can either use the spin controls to change the value, or click the Listen button followed by playing a note on your MIDI device to specify the pitch. Middle C, or C4 is represented as MIDI note 60.

- **Allow Octave Displacement.** Checking Allow Octave Displacement means that if the virtual fundamental is below the 'lowest pitch' threshold given in the dialog, the plug-in will compute the closest octave of the fundamental that is above the threshold. Without checking this, any virtual fundamental that is lower than the specified lowest pitch will be ignored.

- **More Info • Cancel • OK.** Click More Info for a reminder of what input this plug-in requires and a brief summary of what the plug-in does. Click Cancel to return to the score without making any changes, or Click OK to make the selected changes.

Voice 2 to Layer Plug-in

How to get there
Select a region with the Mass Mover Tool. Select Voice 2 to Layer from the Plug-ins Menu.

What it does
The Voice 2 to Layer plug-in allows you to convert any voice 2 notes and rests to the selected layer.
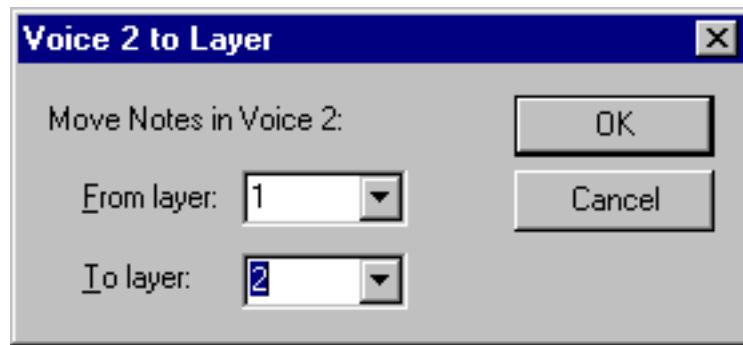
- **From layer • To layer.** Select the layer with the voice 2 notes and rests to convert in the From layer drop-down list. Select the layer to place the converted voice 2 notes and rests into in the To layer drop-down list

- **OK • Cancel.** Click OK to make the selected changes and return to the score. Click Cancel to return to the score without making any changes.

Notes:

1. All notes in the layer being written to are replaced by the new notes.
2. Hidden rests are added as needed to keep the moved notes in the same position.
3. The stem direction of the new notes is frozen down unless the new layer has a preferred stem direction or the stem is already frozen up.