

Jniz - HowTo

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Most of the graphical components have tool tips, just move your mouse on components and you will get their actions.

1. Items creation and update

A right or left-click on the note at the left top corner:



Allows you to bring up the menu for editing items:



You can also launch this menu thanks to a right-click on the editing area of items:



The default value in the top left corner immediately changes:

Sequencer Scale S



Rules to know in using the accidentals symbols

An accident (including natural) for an item will be stored.
For instance a C5# in C Major will stay a C5# if you change the Key into Cbm.

Rules to know in using dot and tie symbols

The dotted item duration must already exist on the staff.
For instance, if you wish to add a C5 dot quarter, the selected staff location must exactly contain a quarter duration and an eighth duration.

The tie option is only possible with adjacent notes. Notice that you have often the possibility to replace a tie by a (dotted or not) note with same duration.

Shortcuts keys are also available:

0 to 4: Sixteenth to Whole note.

5 to 9: Sixteenth rest to Whole rest.

"s": sharp.

"f": flat.

"n": Natural.

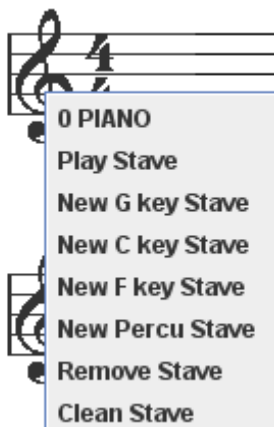
"d": dot.

"t": tie.

Space key: standard item without accident, dot and tie.

2. Staves

A left or right-click on one key allows you to bring up the voices menu:



3. Time Signature

It is possible to change the time signature only at the start up (empty staves).

A left or right-click to the time signature area allows you to bring up the time signatures menu:



The default value in the top left corner immediately changes depending on the time signature you choose:



4. How to play the song

With the buttons in the left top corner:



Play Pause Stop

It is also possible to hear a single voice through the staves menu (cf. **2.** 'Play Stave').

You can change the tempo before playing the song, in the right top corner of the screen:



5. Song navigation

Ticks / Items scrolling:

The scroll wheel of the mouse (middle button) applied on the editing area of notes allows you to move left (scroll wheel up) / right (scroll wheel down) in the song.

- Shortcuts keys are also available:

Left arrow ←: move in the left.

Right arrow →: move in the right.

Staves / Voices scrolling:

The mouse wheel (middle button) applied to the left of the editing area of notes allows you to move up (scroll wheel up) / down (scroll wheel down) in the display of voices.

- Shortcuts keys are also available:

Up arrow ↑: move up.

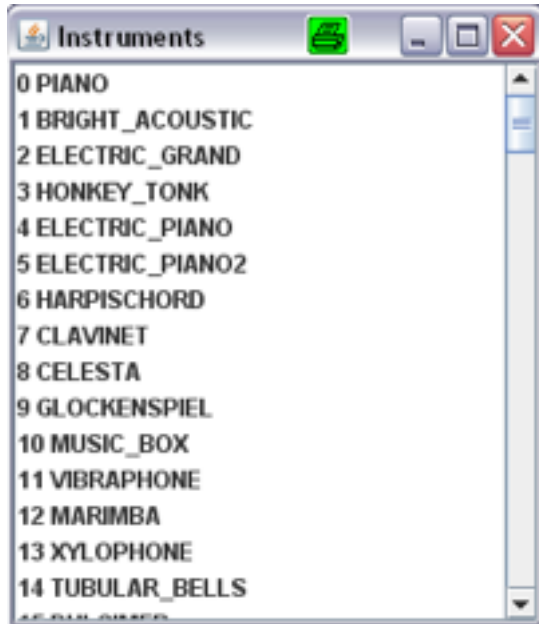
Down arrow ↓: move down.

6. How to change the MIDI instrument

You can easily change the midi instrument for each stave by left or right-click on one key:



Just click on the first line (which is the Instrument used in this stave). A new window appears:



Just click on the Instrument you wish, the window will be closed and the Instrument of the staff immediately updated:

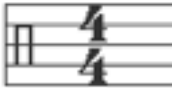


7. How to add a percussion layer

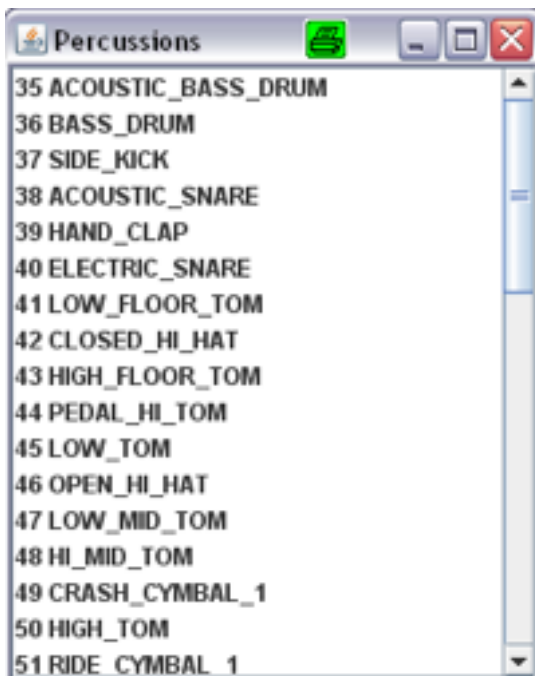
A left or right-click on one key allows you to bring up the voices menu:



Click on "New Percu Stave":



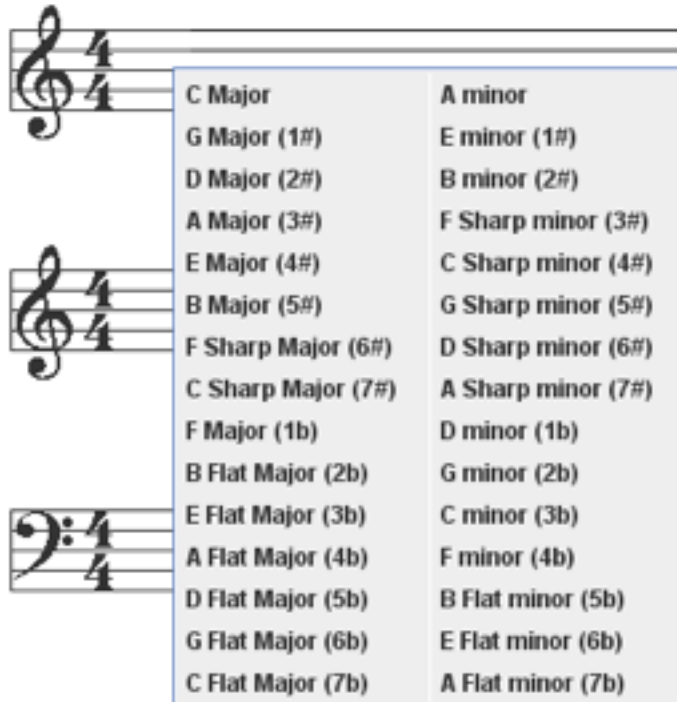
A new Percussion staff will appear. You can change the percussion instrument as explained in the last paragraph 5:



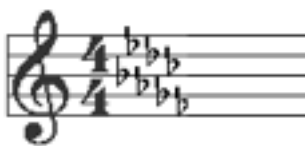
8. Keys and modulations

How to change the root key

A left or right-click close to the Time Signature (on the right) allows you to bring up the keys menu:



Click on the Key you want, the accidentals area will be automatically filled up:



How to insert or change a key during the song

A left or right-click on the Tonality panel above the staves area allows you to bring up the keys menu:



Click on the Key you want, the accidentals will be automatically added:



The new key takes effect until the next encountered Key.

9. Volume setting

Just left/right click on the tempo at the right top corner of the window to change the tempo:



10. Intervals panel

To show / hide the intervals panel just click on the Settings menu and 'Show the intervals panel'.



Move your mouse on an item will show you the intervals panel of this item:

1:1 1:2 1:3

CM



minor Second		minor Third
Major Second	Major Third	minor Second
Tritone	Major Second	Perfect Octave
Perfect Fifth	Major seventh	Major sixth

The first column gives the melodic intervals with the items of the previous Tick.

The second column gives the harmonic intervals with the other items of the current Tick.

The third column gives the melodic intervals with the items of the next Tick.

This panel is automatically updated if you the change any value of the selected item.

11. Harmonic correction tool

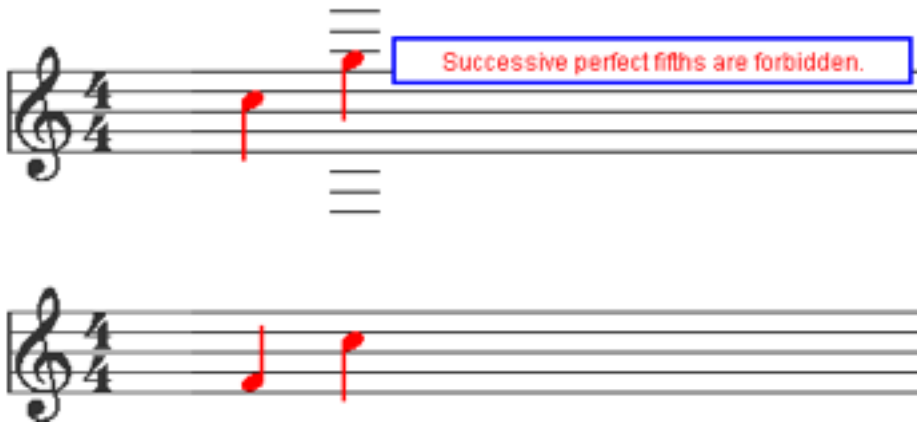
To show / hide the errors panel just click on the Settings menu and 'Show the errors settings panel'.



You can enable / disable the rules of your choice, the result will take effect immediately on the staves.

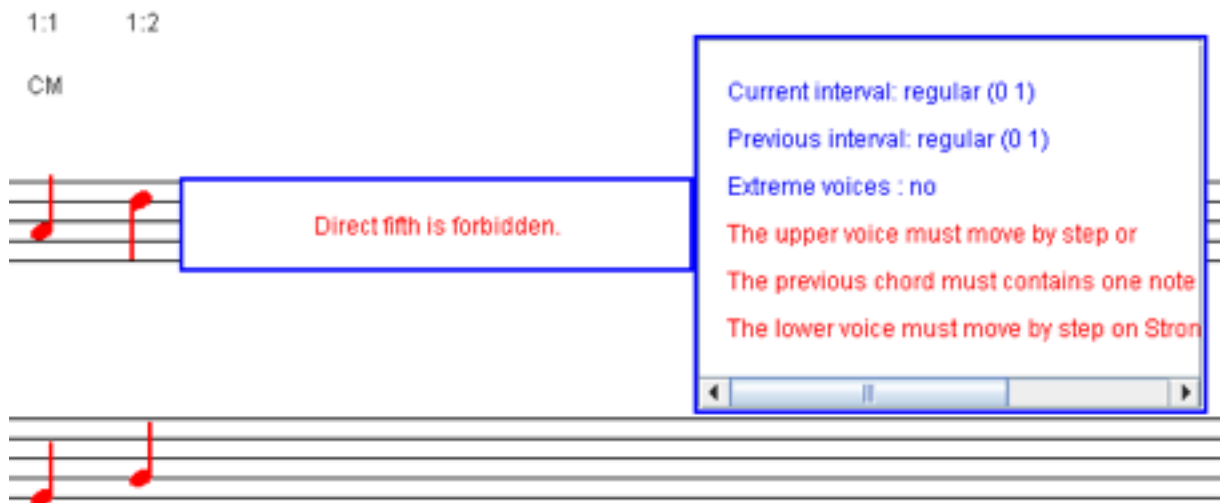
Intervals errors

Successive perfect fifths are forbidden:



Just move your mouse on the error panel and you will see the items involved in that specific error. The other errors will be temporarily hidden.

Continue to move your mouse to the right info panel:



Current and previous intervals: could be regular or crossed. The involved voices are between brackets (here voices number 0 and 1). The red messages give to you some possibilities to solve the error.

12. Chords analysis and visualization

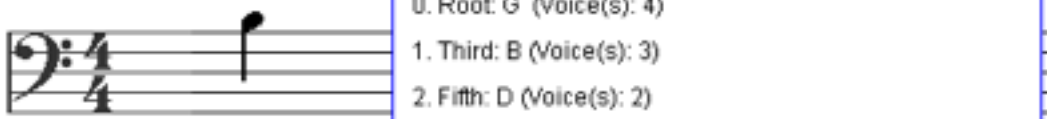
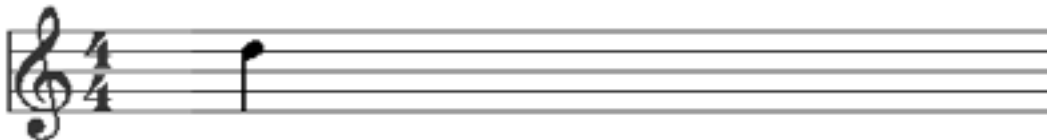
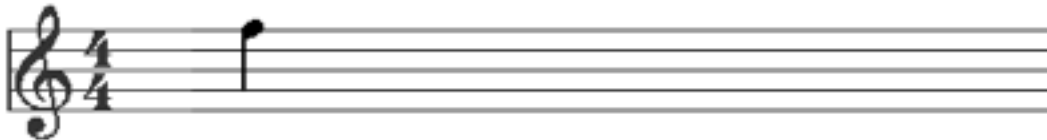
The chord is showed at the bottom of the screen:



F
7

Move the mouse on the chord symbol will show you the features of the chord:

⏪ ⏩ ⏴ ⏵ ⏶ ⏷ CM

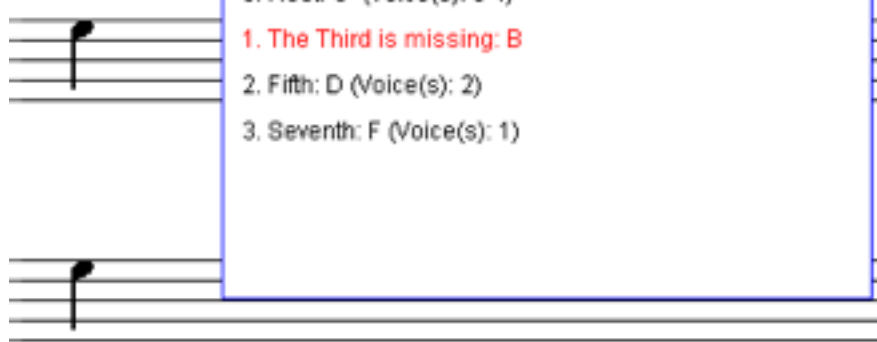


Chord: Seventh - inversion: root (none)

- 0. Root: G (Voice(s): 4)
- 1. Third: B (Voice(s): 3)
- 2. Fifth: D (Voice(s): 2)
- 3. Seventh: F (Voice(s): 1)

G
7

A missing third will be indicated with a red exclamation mark close to the root note:

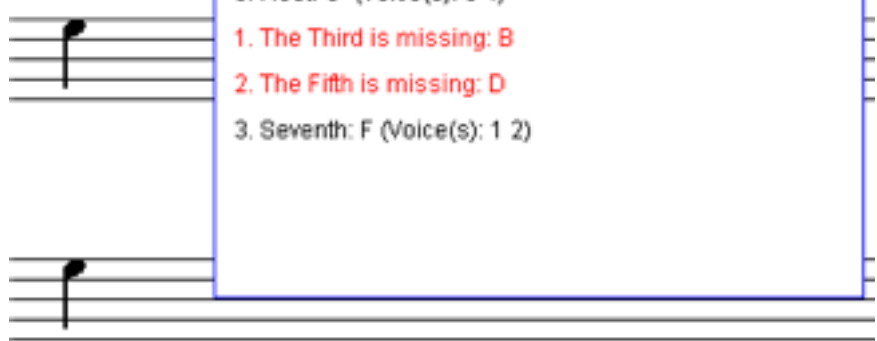


The image shows two staves of music. The top staff has a single note on the second line (G4). The bottom staff has a single note on the first space (F3). A blue-bordered box is overlaid on the right side of the staves, containing the following text:

Chord: Seventh - inversion: root (none)
0. Root: G (Voice(s): 3 4)
1. The Third is missing: B
2. Fifth: D (Voice(s): 2)
3. Seventh: F (Voice(s): 1)

G (1)
7

And an unstable chord will be completely red (more than one missing harmonic note):



The image shows two staves of music. The top staff has a single note on the second line (G4). The bottom staff has a single note on the first space (F3). A blue-bordered box is overlaid on the right side of the staves, containing the following text:

Chord: Seventh - inversion: root (none)
0. Root: G (Voice(s): 3 4)
1. The Third is missing: B
2. The Fifth is missing: D
3. Seventh: F (Voice(s): 1 2)

G (1)
7

Any chord inversion will be indicated in the title:

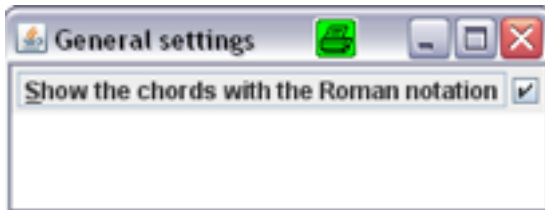
The image shows two musical staves. The top staff has a G note on the second line, and the bottom staff has a G note on the second line. A blue-bordered pop-up window is overlaid on the right side of the staves. The window contains the following text:

Chord: Seventh - inversion: fifth

- 0. Root: G (Voice(s): 3)
- 1. Third: B (Voice(s): 2)
- 2. Fifth: D (Voice(s): 4)
- 3. Seventh: F (Voice(s): 1)

G
7

To show the chords in roman notation just click on the Settings menu and 'general settings'. Click on the checkbox:



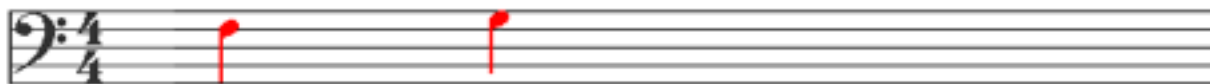
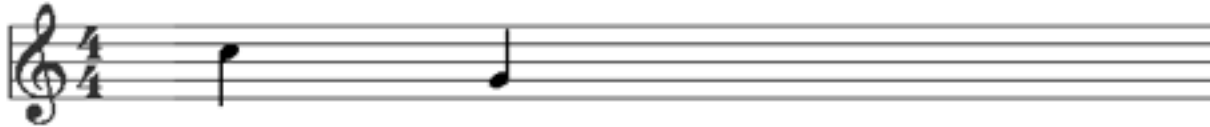
13. Non harmonic tones

It is important to recognize the non harmonic tones because the chord notation does not include this kind of notes.

Jniz will detect automatically the non harmonic tones which will be orange coloured:



But you must confirm these tones so as to change their colours. Just click closely and on the left of the tone and a confirmation panel will appear:



F F (F) F G

Note that you have only two choices: harmonic tone or non harmonic tone (here an appoggiature).

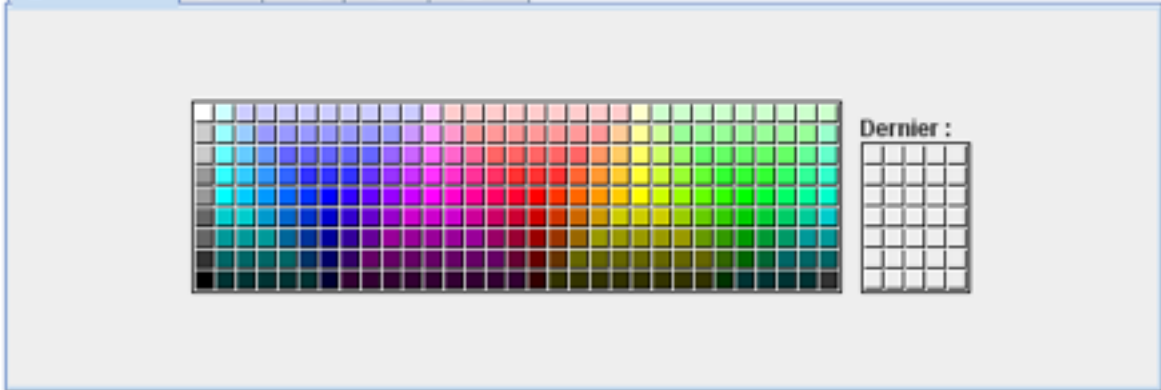
You can easily change the colour of these non harmonic tones by clicking on the settings menu and general settings:

Show the chords with the Roman notation

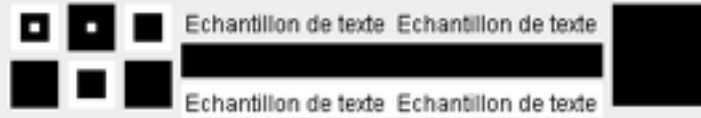
Non harmonic tones

- Appoggiature
- Passing tone
- Auxiliaire (broderie)
- Suspension tone
- Anticipation
- Echappee
- Cambiata
- Harmonic tone

Echantillons TSV TSL RVB CMYK



Aperçu



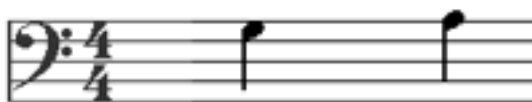
Non harmonic tones recognition

To correctly analyze the chords notations, Jniz must ignore the non harmonic tones (confirmed or not).

Anticipation

The tone must be on a weak beat or a weak part of a beat; it is a kind of advance sounding of a tone. It is rhythmically like an up-beat to the tone anticipated. The tone must have an oblique motion with the next tone which is on a strong beat or a strong part of beat.

The anticipation does not share the same chord root with its next tone:

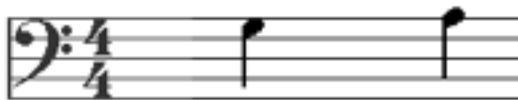


G G F

Appoggiature

1. If the tone is on a strong beat or a strong part of beat (strong appoggiature) and without preparation (no tie with the previous tone):

The motion must be by step with the next tone which must be on a weak beat or a weak part of a beat. The appoggiature and its next tone must share the same chord root:



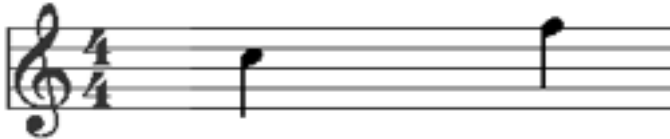
G G F

2. If the tone is on a weak beat or a weak part of a beat (weak appoggiatura) and without preparation (no tie with the previous tone):

The motion must proceed by step with the next tone which must be on a strong beat or a strong part of a beat. The previous tone, the appoggiatura and its next tone must share the same chord root. The motion between the appoggiatura and its previous tone must proceed by leap.

Auxiliary (Broderie)

It is approached by either a half or a whole step from the tone it ornaments and it returns to that tone. The auxiliary tone is on a weak beat or a weak part of a beat. It must be prepared by a step motion and also continued with a step motion but opposite. These three involved tones must share the same chord root:

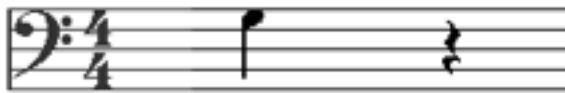


F F F G
7

Cambiata

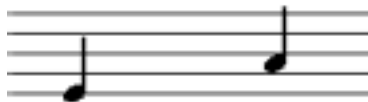
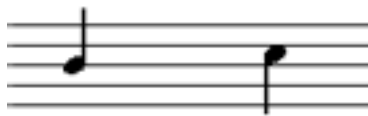
The Cambiata is the result of having gone too far so that it is necessary to turn back by step to the note of destination.

This tone is on a weak beat or a weak part of a beat and continued with a motion by step to a strong beat or a strong part of beat. The Cambiata does not share the same chord root with its next tone:



Echappée

The Echappée is like a note escaping from the direction of the melodic movement and having to return by skip, that is, by an interval larger than a second. This tone is on a weak beat or a weak part of a beat, prepared by a motion by step and continued with a motion by leap to a strong beat or a strong part of a beat. The Echappée does not share the same chord root with its next tone:



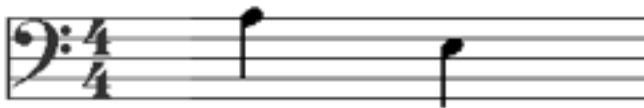
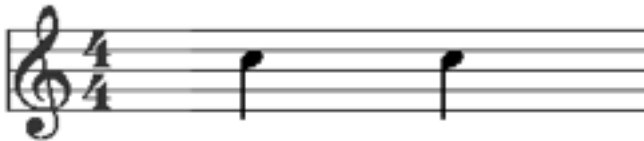
G
7

G
7

C

The suspension

The suspension is on a strong beat or a strong part of beat and tied with the previous note. It is resolved with a step motion on a weak beat or a weak part of a beat. The suspension shares the same chord root with its next tone:



F F C C

14. Solver

To launch the solver left-click on the chord notation at the bottom of the screen:



The solver screen will appear:

Note that the number of possible combinations is displayed depending on the default settings (here 40887 combinations).

Check or uncheck the options you desire:

Authorized chord roots: the solver will return solutions with chords including only the checked roots.

Chords complexity: the solver will return chords with a particular complexity. For instance, if 'Third' and 'Fifth' are checked the returned chords must only and absolutely contain a third and a fifth.

If you wish chords with third, seventh and ninth just check these three items. Take care to have enough voices to get complex chords: it doesn't make sense to return complete ninth chords with only 4 voices.

Voice(s) to ignore: the solver will ignore these voices during its process. It is a good way to reduce drastically the number of combinations. It is usual to keep the Soprano and Bass voices for instance.

After that, you can run the solver by clicking the 'Search' button. Depending on the number of combinations, it could take a long time...

You can navigate in the solutions list thanks to the 'Next' and 'Previous' buttons. You have also the possibility to play the showed staves by checking the 'Sound' checkbox.

The 'Repeated Tones' drop down List allows the Solver to repeat some previous tone(s) (zero by default). This option doesn't concern the dissonance preparations.

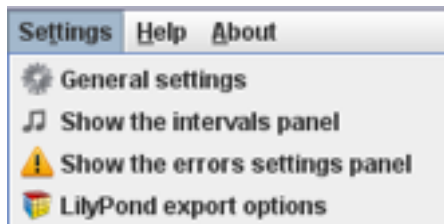
The following items are ignored by the solver:

- Non harmonic tones
- Tied tones
- Rests

If you are interested in the complete Solver module (multi-cores support) you can send a request to the Jniz staff by email (contact@jniz.org) to get it.

15. Lilypond options

You can easily merge your voices in your Midi, Pdf or Lilypond files. Click on the Settings menu and Lilypond export options:



If you wish to merge the G keys on a same staff and F keys on another staff, you can proceed like this:

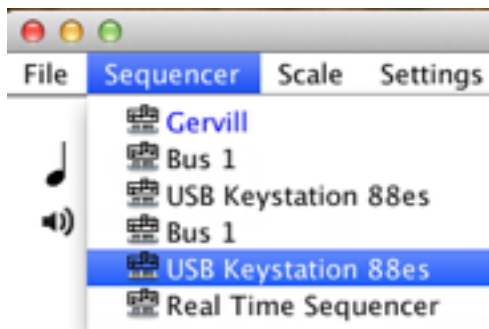
And the generated Pdf will be:

The 'Export midi' checkbox will also generate a midi file (Lilypond and pdf export).

16. Midi input

Midi input proceeds here by step. The default duration at the left top corner of the screen will be chosen by default. So do not forget to change the rhythm you wish before. You can also choose rests instead of tones.

You have to plug your midi keyboard BEFORE running Jniz. You will recognize your keyboard in the sequencers list:



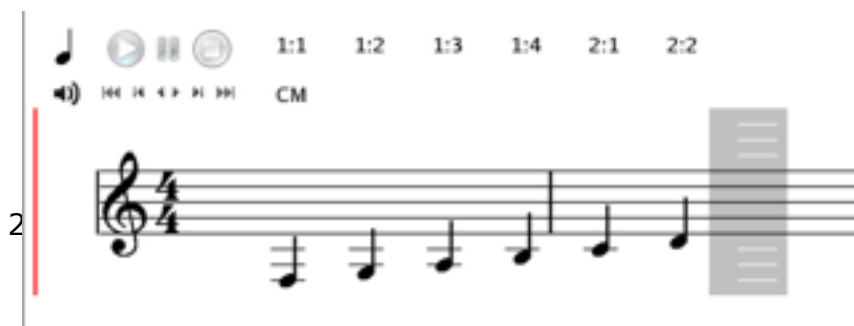
In second step, click on the left area of one staff to initialize the midi input. A vertical red bar will appear:



After that, click on the staff where you wish to input some tone or rest. The cell's background will change into gray color:



Type on your keyboard, the tones or rests will be displayed on the staff:



Important: to be displayed, the tone must be in the chosen key. For instance and because Jniz is deeply tonal, it will be impossible to insert a B flat in C Major with the keyboard.