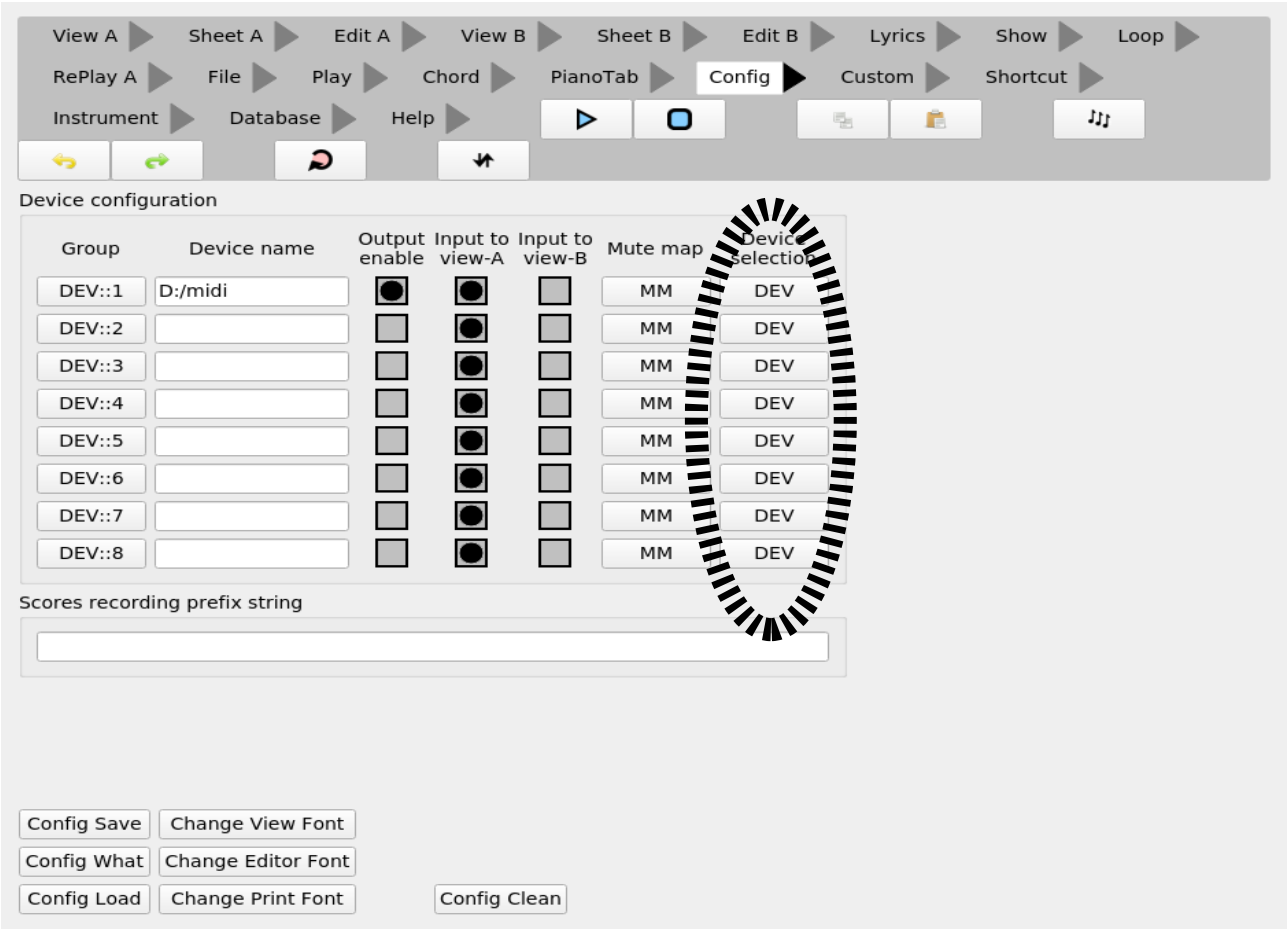
MIDI Player Pro v2.0.0 basic users guide

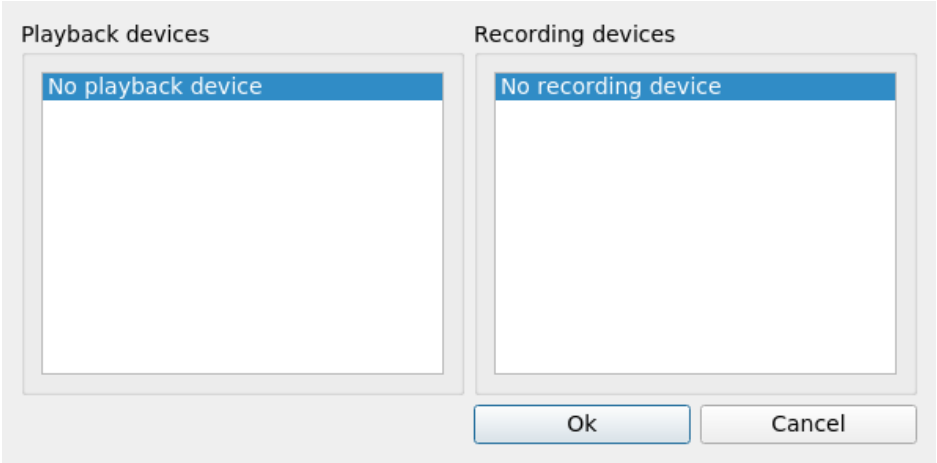
By Hans Petter Selasky, October 2018

1. Device configuration

Before you can start using MIDI Player Pro you need to select the «Config» tab and press the «DEV» button. A new window will pop up where you can select from available MIDI devices. Special character devices can be entered by typing «D:xxxx» into the «Device Name» field.



Device selection dialog:

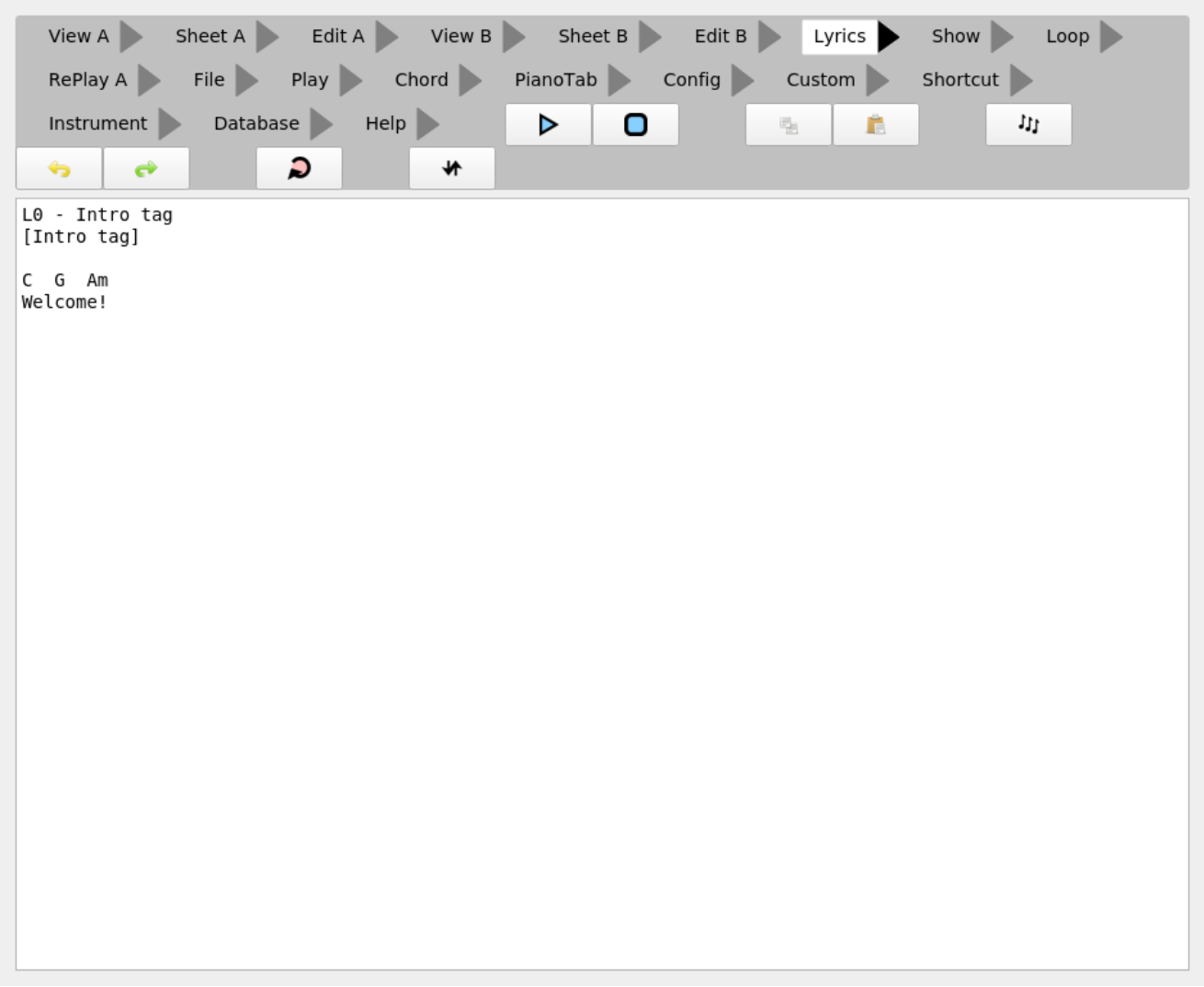


2. Loading a song

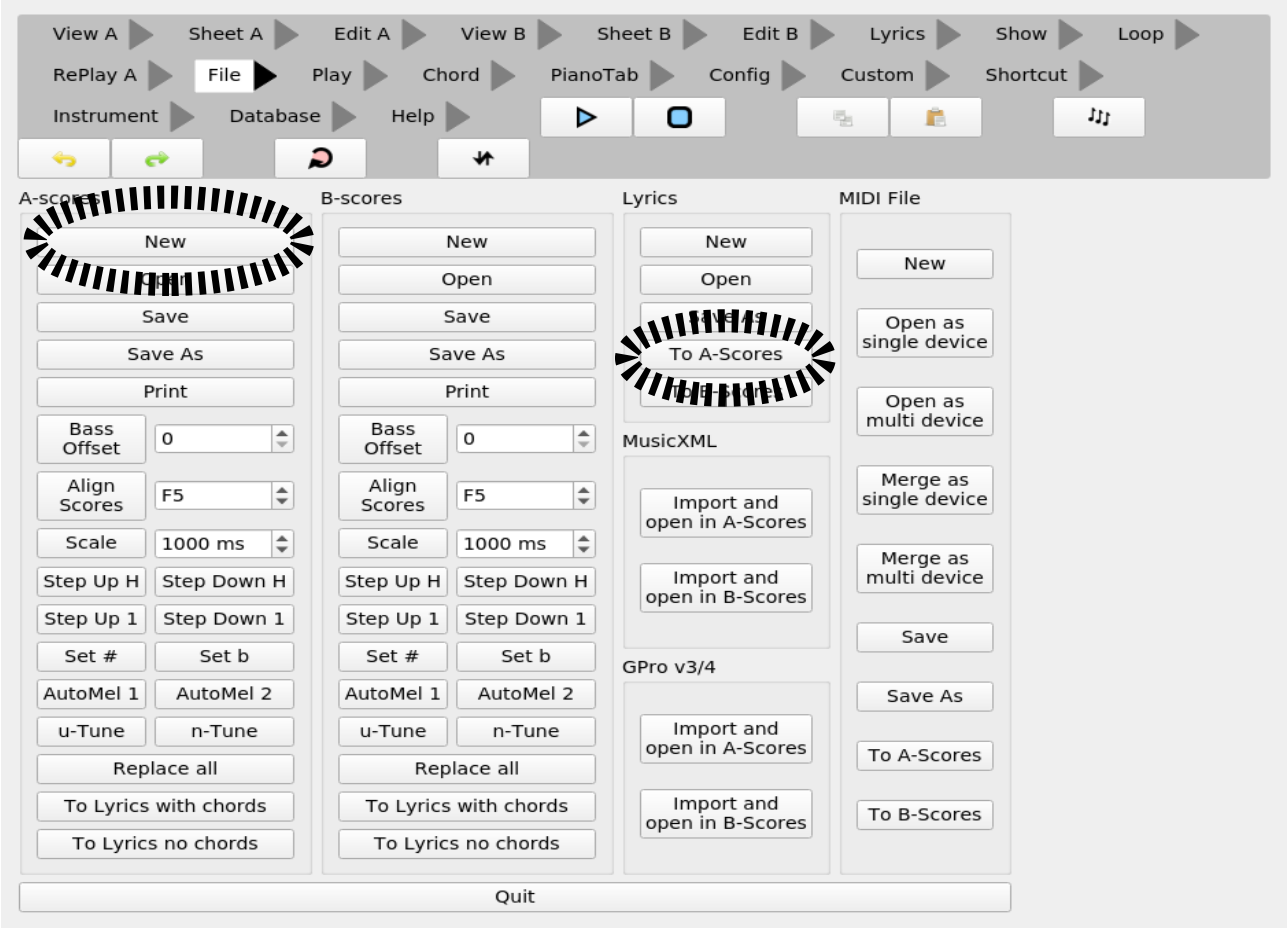
There are multiple ways to load a song into MIDI Player Pro.

2.1. Using the Lyrics tab

Type your song into the «Lyrics» tab. The format is: Chords on top and song-text below. You can select a differnt font for the editor window in the «Config» tab. Typically you want a fixed-size font for the editor window. This may or may not be the default depending on your system.



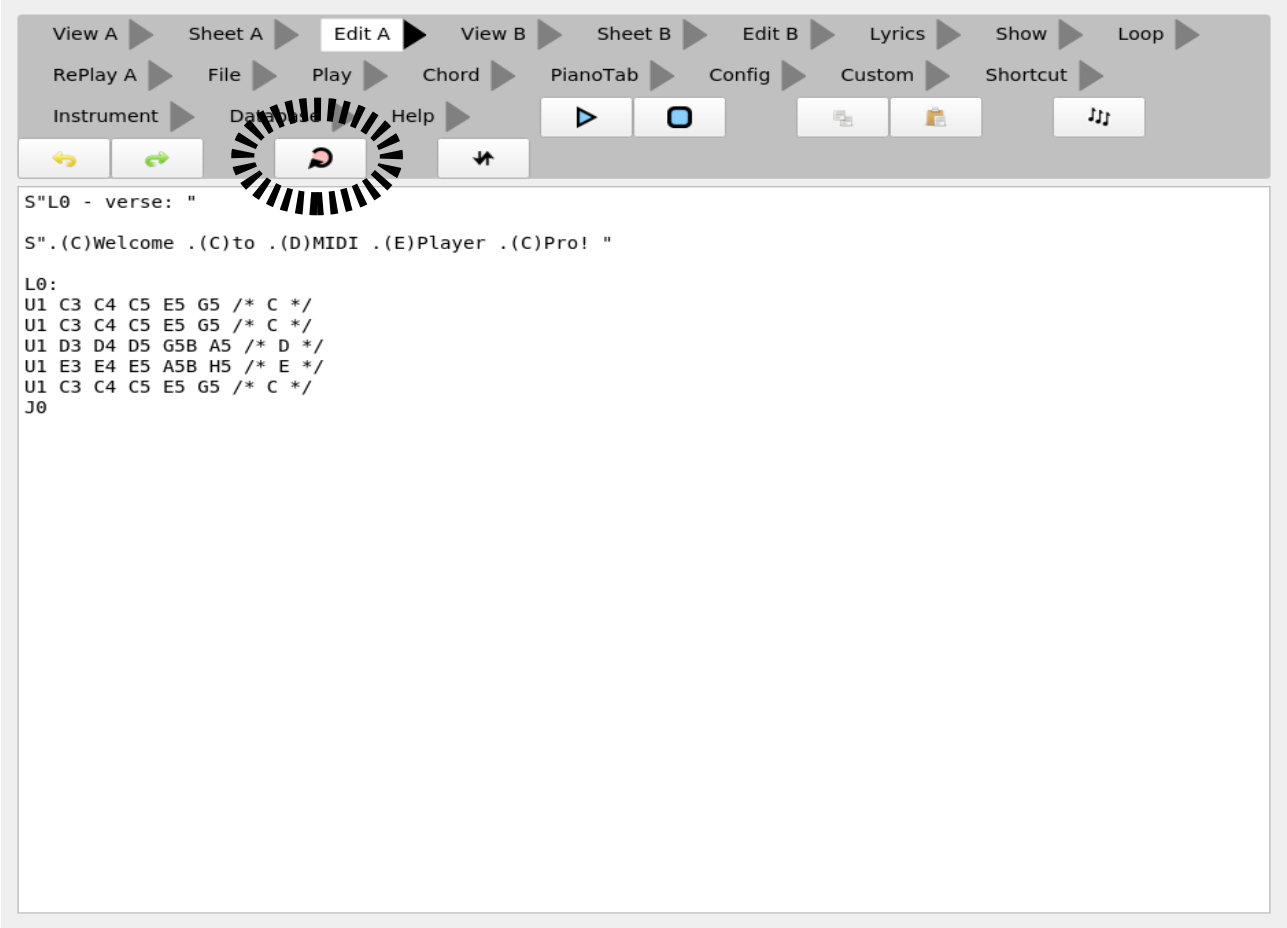
When you are done entering your song, goto the «File» tab and select «To A-Scores» under the «Lyrics» file:



Your song should now be imported into «View A» and «Edit A». You might want to press «New» in the «A-Scores» file before doing this. Else the import will append to the existing song, if any.

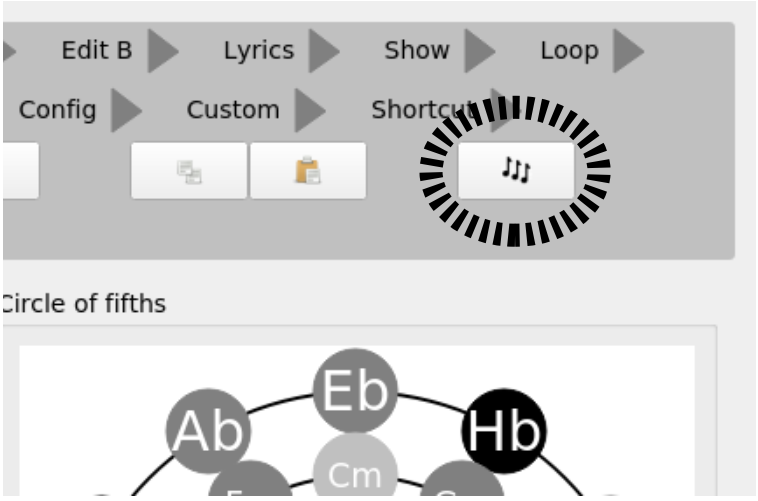
2.2. Using the «Edit A»

In the «Edit A» editor you can write and edit songs and scores in the native format of MIDI Player Pro. The score information format consist of a duration command «Ux» followed by one or more scores «[ABCDEFGH]x». Comments are denoted like this: /* this is a comment */ To get MIDI Player Pro up to date with regard to your song, you will have to press the red icon circled above or goto the «Play» tab and press the «Compile» button.

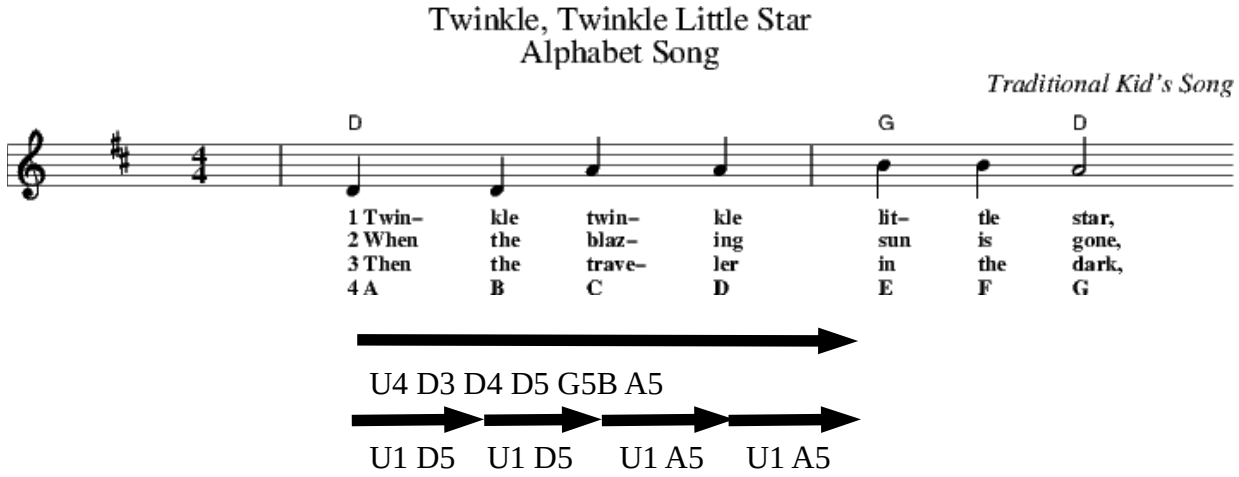


2.2.1. Editing or inserting a chord

To edit a chord make sure the cursor is at the line containing the chord you want to edit. Then either double click on the line or press the chord edit icon in the middle bar. If the currently selected line is empty a new chord will be inserted instead of edited. If it is not possible to edit the current line, no chord editor will appear.



2.2.2. Example converting from traditional notation

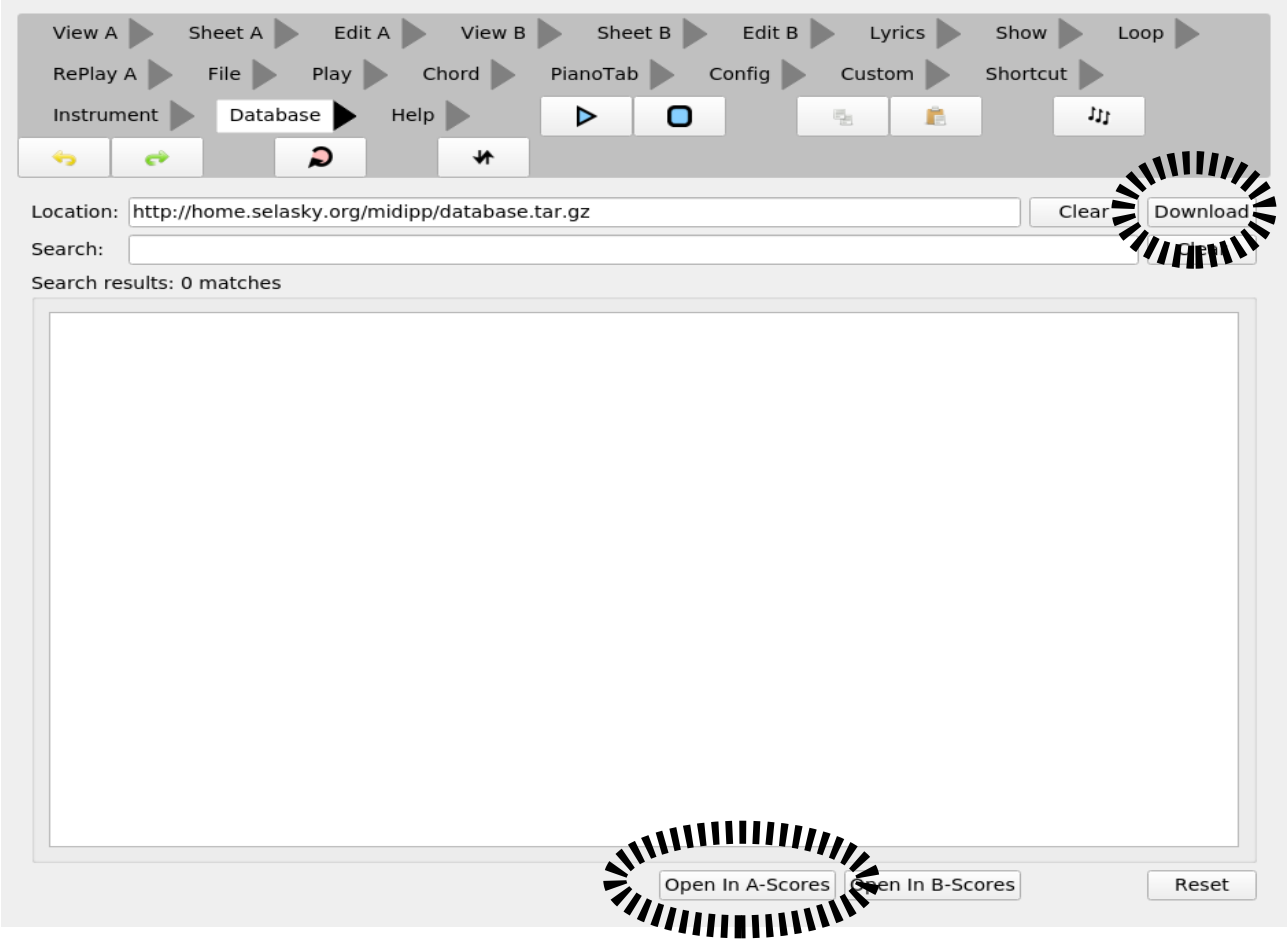


Reading the notes above we have a «D» chord followed by three melody notes. Then we have a «G» chord followed by one melody note. In the end we have a «D» chord again. Converting this into «MIDI Player Pro» syntax we get: The «D» chord counts as a single step and should last three more steps. «U4» denotes a single step added by three. Some notes in the melody also appear in the first «D» chord. We make these last a bit shorter, see «U1» and «U2» in bold below. Else the software will ignore these notes when played. The «G» chord counts as a single step and should last one more step. «U2» denotes a single step added by one. Again some melody notes appear in the active chord and the duration and need to last a bit shorter, see «U1» in bold below. In the end we have a «D» chord lasting one step followed by no more melody notes. The complete «MIDI Player Pro» code for the first beat of this song becomes:

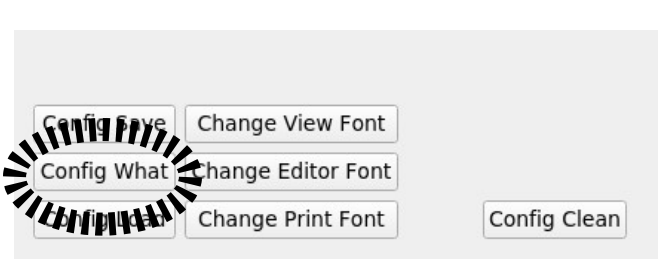
```
L0: /* start label /
U4 D3 D4 U1 D5 U4 G5B U2 A5 /* D-chord, multi-step duration */
U1          D5              /* melody, 1-step duration */
U1                      A5 /* melody, 1-step duration */
U1                      A5 /* melody, 1-step duration */
U2 G3 G4 D5 G5 U1 H5        /* G-chord, multi-step duration /
U1 H5                       /* melody, 1-step duration */
U1 D3 D4 D5 G5B A5          /* D-chord */
J0 /* jump to L0 */
```

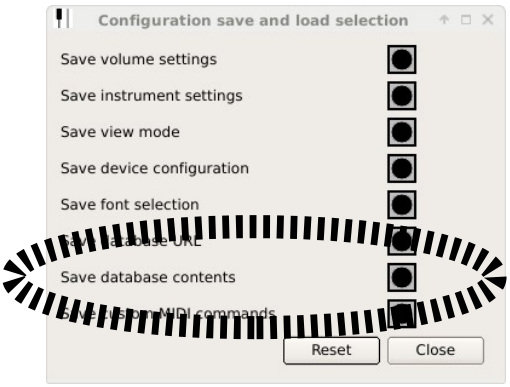
2.3. Using the database

MIDI Player Pro comes with a simple database feature where you can download ready made songs from a default or custom location:



Press the «Download» button to populate the database from the default location. After selection a song, press «Open In A-Scores» to open the song. To permanently save the database to local storage, go the the «Config» tab and press «Config What». Ensure that «Save database contents» is checked. Press «Close».





Now press «Config Save» to save the database content to local storage. To verify the database content has really been saved goto «File» and press «Quit». Start the application again.

3. Playing a song

MIDI Player Pro supports five different play modes

3.1. «ALL» mode

In this mode the MIDI piano has a 1:1 mapping on its keys and no magic transforms are happening.

3.2. «TRANS» mode

In this mode you use a single key, by default «C» key in fifth octave, C5, to single step the song. The amplitude is taken from the input and distributed to the output. In the «View Mode A» dialog you can set some options about randomness and contrast that affects the resulting output. Single stepping using another key than «C5» will cause the song to be transposed either up or down depending on whether you press a key higher than «C5» or lower than «C5». The «C5» key is configuration in the «View Mode A» dialog.

3.3. «FIXED» mode

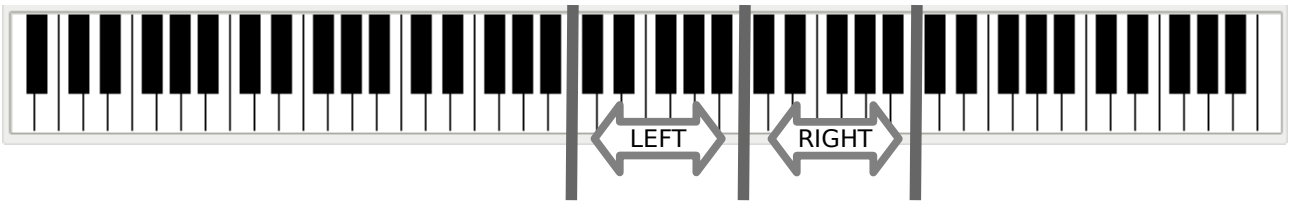
Same as «TRANS» mode, except that pressing another key does not cause any transponation of the song. In this mode you can use two fingers to output the melody, if it is going very rapid.

3.4. «ALL-SUBDIV» mode

Same as «ALL» mode, except that the interval between keys is set according to the currently selected subdivision mode.

3.5. «CHORD-PIANO» mode

This mode is most suitable for playing songs which only contain chords and no melody. In «CHORD» mode two key ranges are defined, «the left» range and «the right» range.



The base scores in a chord are mapped with rising harmonic frequency in the following order: «D», «E», «Db», «Eb». White keys first. Then the black keys.

The melody scores in a chord are mapped with rising harmonic frequency in the following order: «F», «G», «A», «H», «Gb», «Ab», «Hb». White keys first. Then the black keys.

The «C» keys are intentionally left dead to leave some room for errors when pressing keys in the two octaves, hence pressing keys in both ranges at the same time will confuse the software.

After rewind the software will wait for input in either «the left» or «the right» range. It doesn't matter in which range you start after rewind or a jump. When you make the first key press in «the left» range for example, the «MIDI Player Pro» software will fetch the first chord from the song, and re-map the keys so that it matches the loaded chord and output those keys to the configured synth devices, if any. To advance to the next chord, press a key in the opposite chord range.

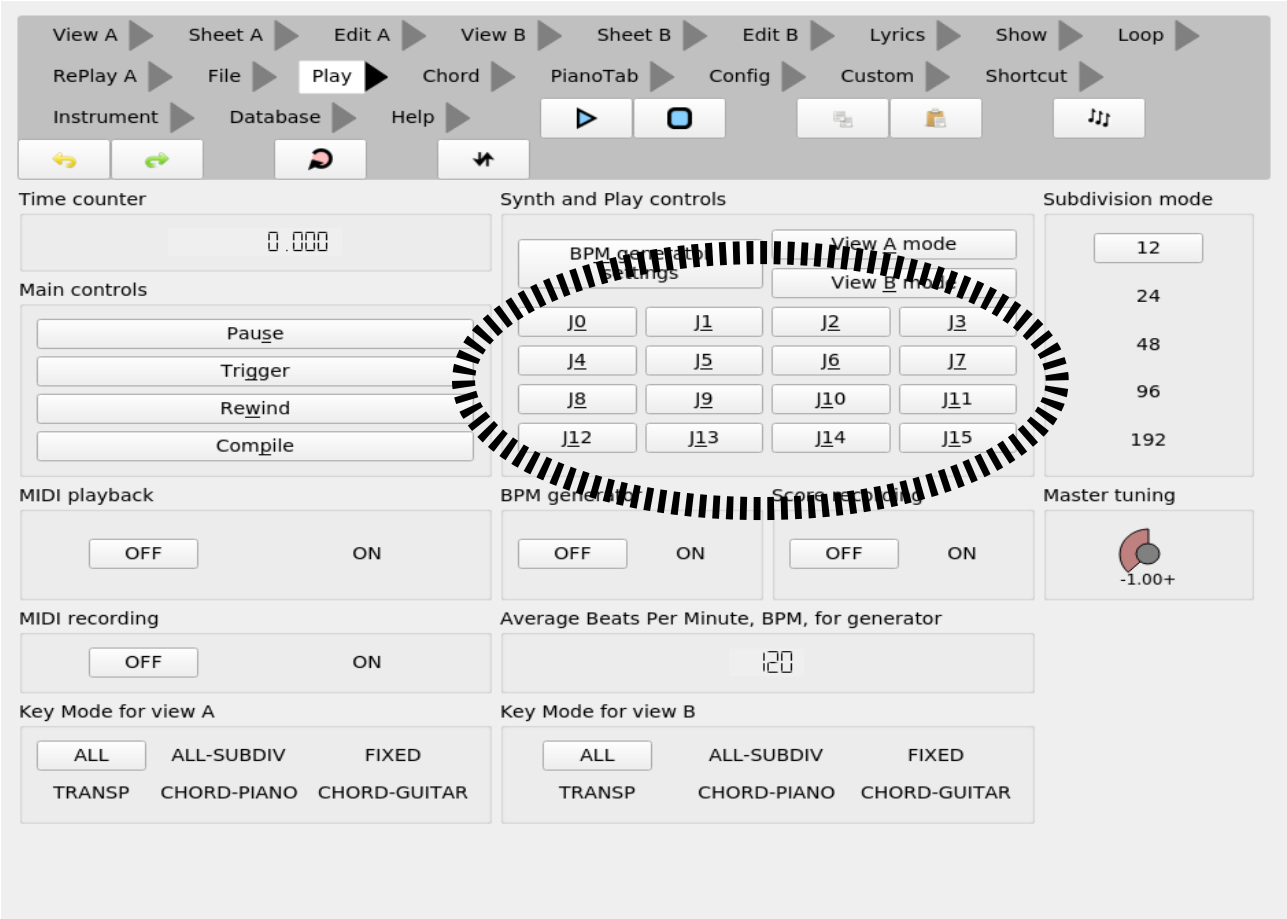
By default «the left» range starts at «C5», «C» key in the fifth octave and «the right» range at «C6», «C» key in the sixth octave. This is configurable through the «Base play key» in the «View A Mode» and «View B Mode» dialogs.

4. Playing parts of a song

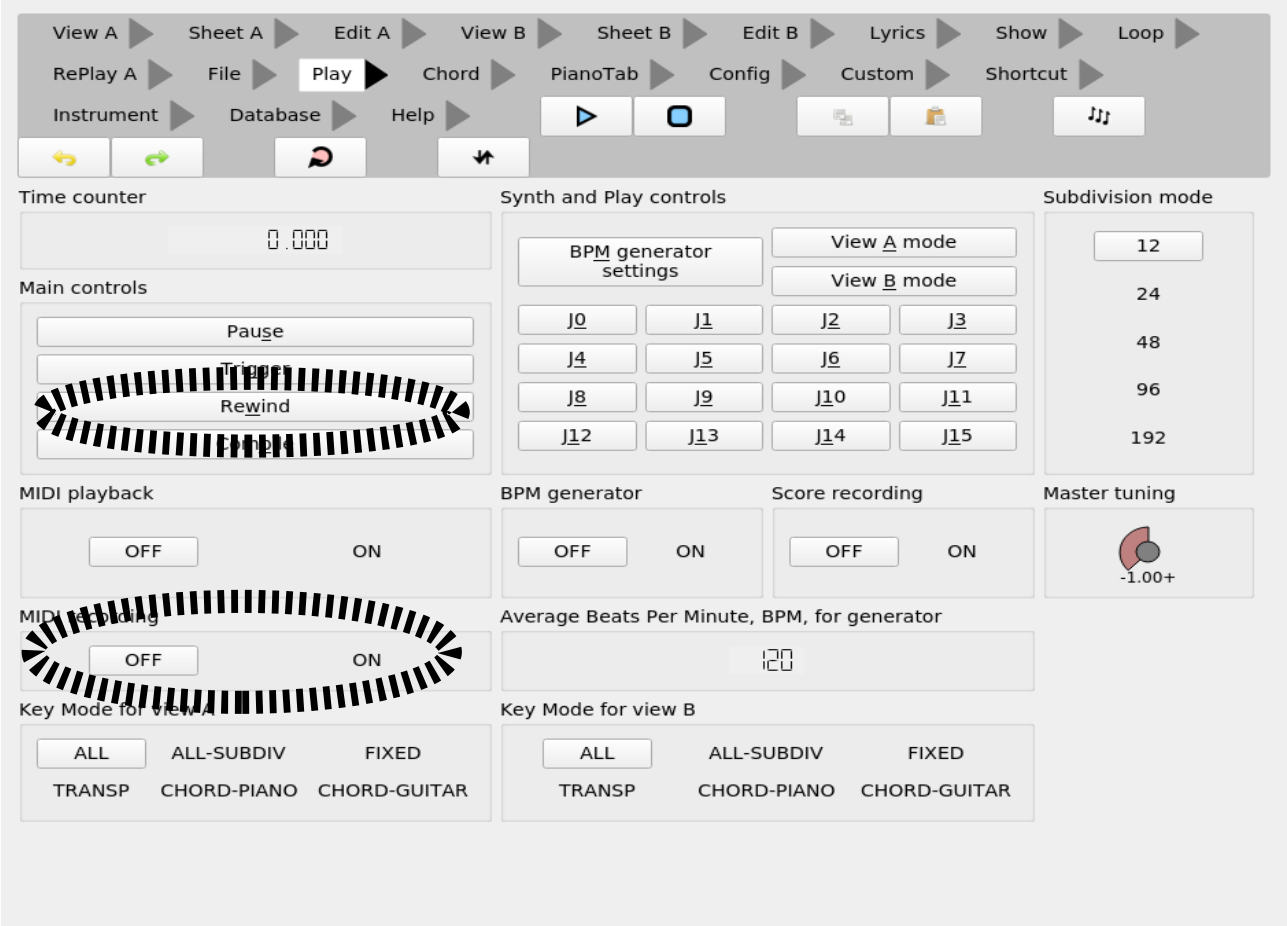
Label statments in the song, written like «Lx:» where «x» is a number in the range from 0 and up to and including 31, define starting points for playing.

Default shortcut key	Meaning
C3	Jump to label L0, if label L0 exist
C3#	Jump to label L1, if label L1 exist
D3	Jump to label L2, if label L2 exist
D3#	Jump to label L3, if label L3 exist
E3	Jump to label L4, if label L3 exist
...	Jump to label Lx, if label Lx exist

You can also jump to a verse in a song by pressing the «Jx» keys in the «Play» tab:



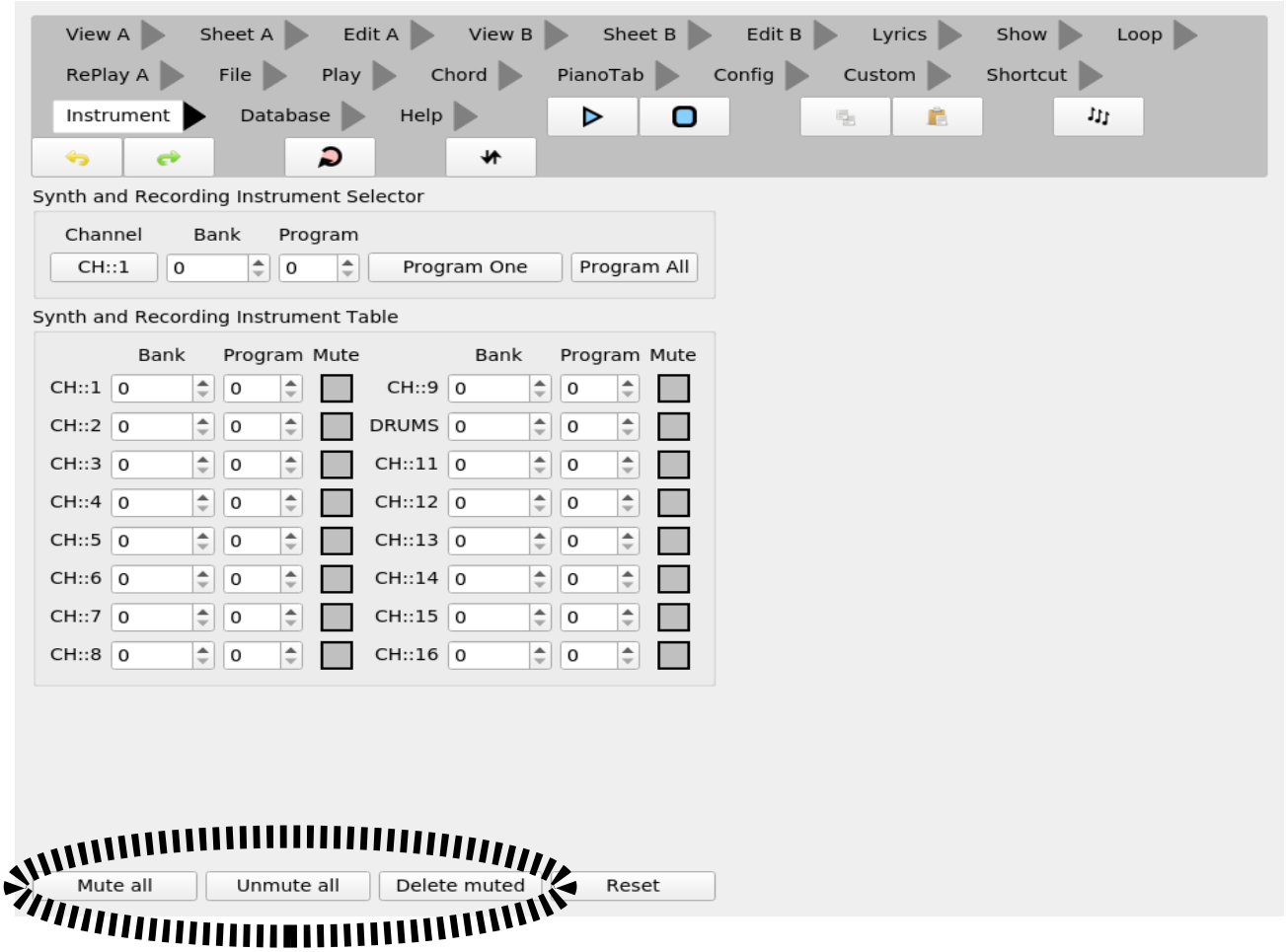
5. Recording a song



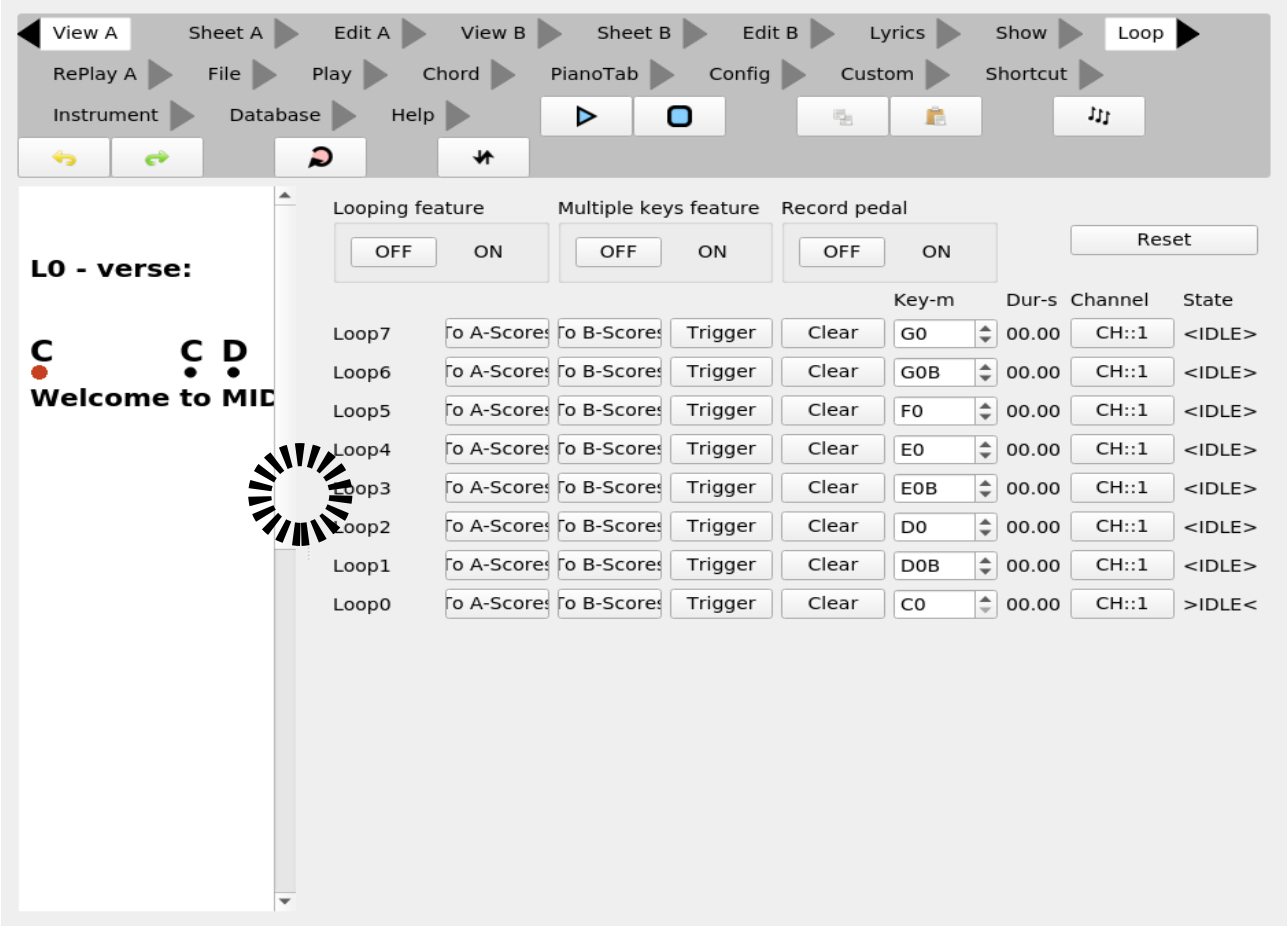
MIDI Player Pro can record everything you play. First press the «Rewind» button to get the recorder back to time zero. Then make sure «MIDI Recording» is switched to «ON». It is supported to have «MIDI playback» switched to «ON» while recording to record multiple sound tracks. The recording will automatically start when you press the first key or touch the sustain pedal or other controls that output MIDI channel events. When you are done recording press the «Rewind» button again and switch «MIDI recording» to «OFF». Now switch «MIDI playback» to «ON» and press the «Trigger» button to start the playback. If you want to save your music recording, goto the «File» tab and select «Save As» under the «MIDI File»:

6. Erasing a song or parts of a song

By pressing «New» under the «MIDI File» found in the «File» tab, you will erase any current recordings and reset all the instruments to zero. If you do not want to reset the instruments to zero, go to the «Instrument» tab and press «Mute all», then press «Delete Muted» and finally press «Unmute All»:

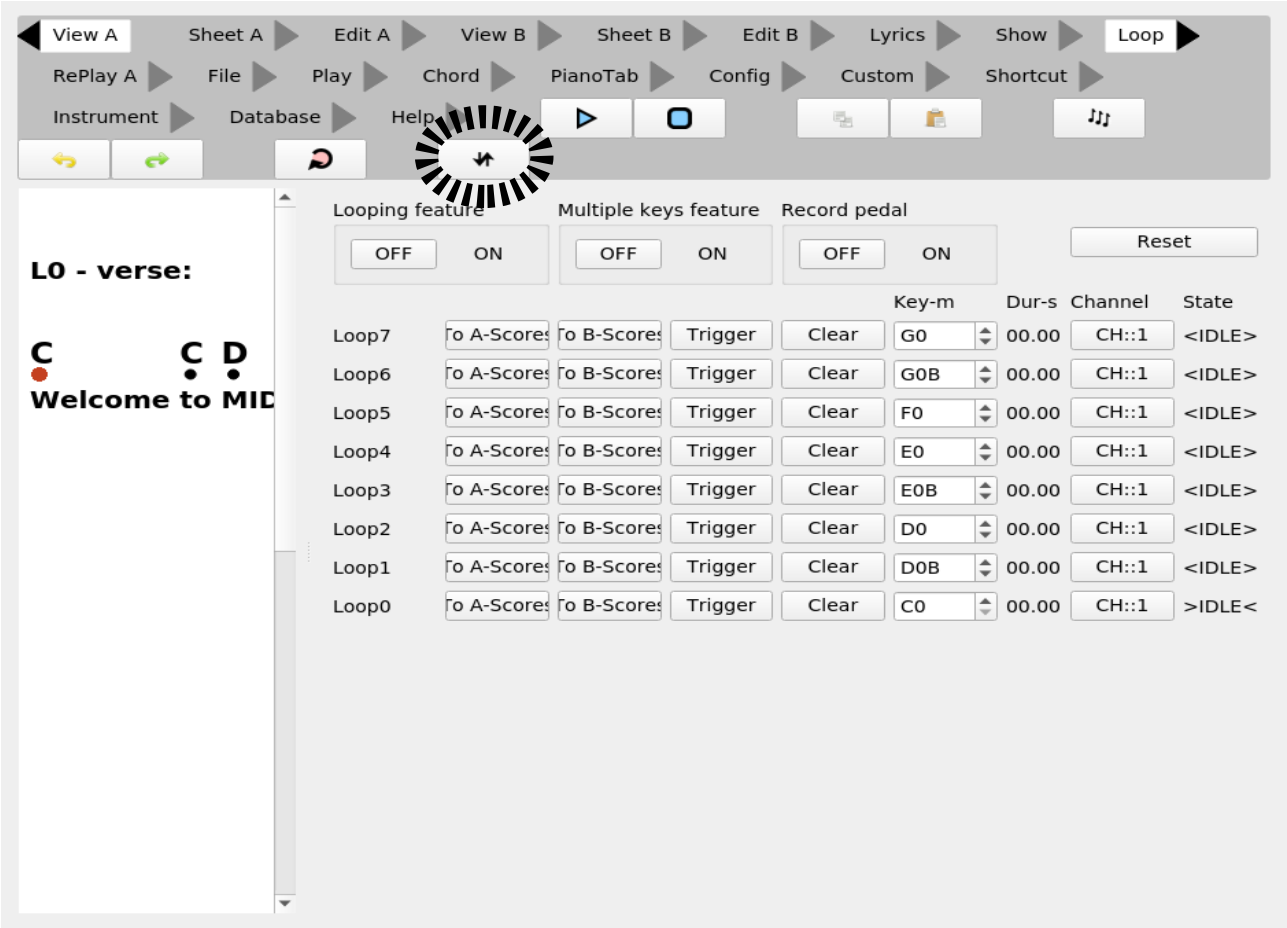


7. Splitting the graphical view



By double clicking or tapping on the menu item of any MIDI Player Pro tab, it will move to either the right side or to the left side. This can save you some tab switching when working with MIDI Player Pro. You can also drag the grey area in the middle to adjust the size of the right and left view.

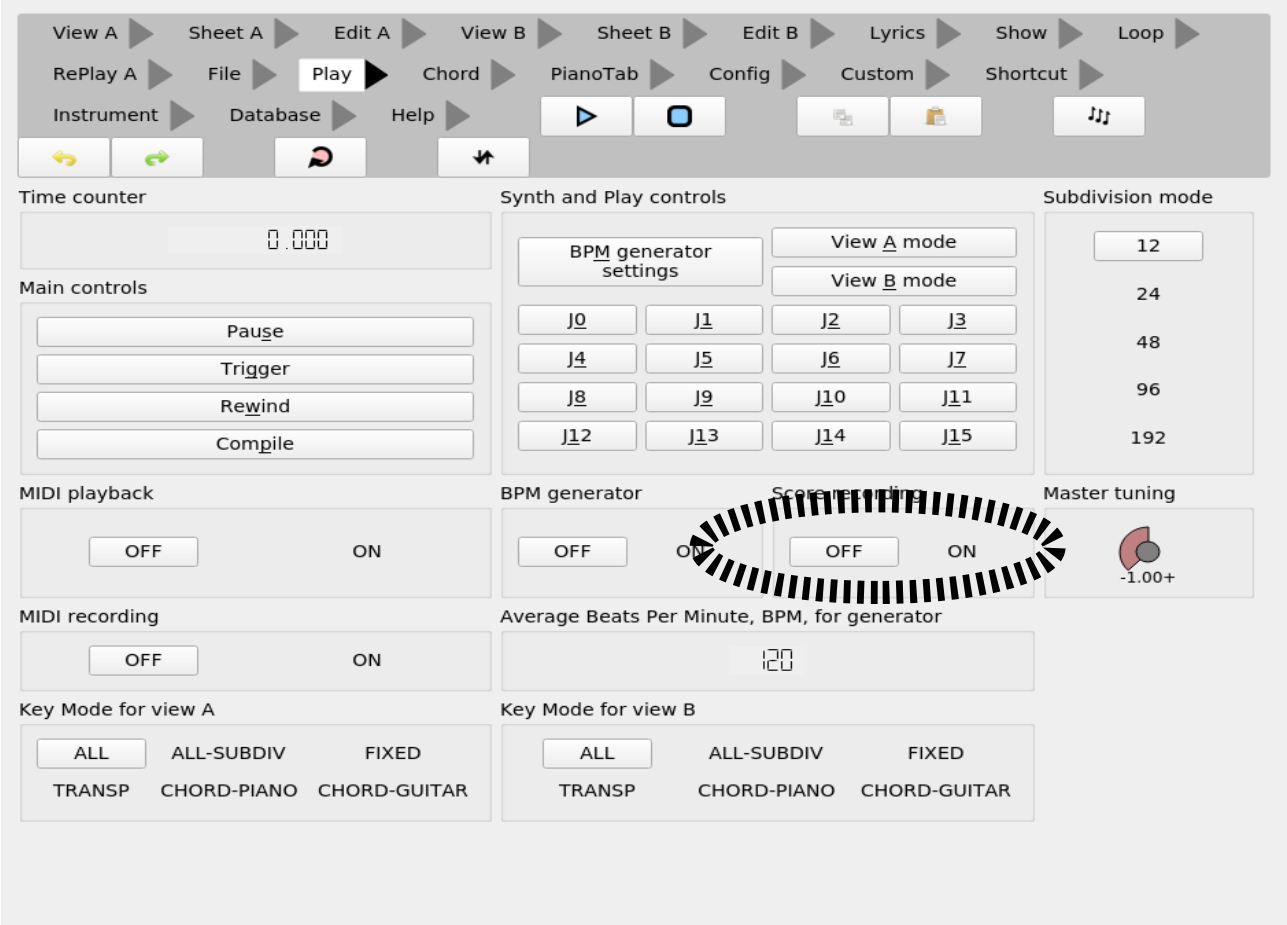
8. Moving the menu up or down



By pressing the up-down icon you can move the menu to the bottom or back up again. This is sometimes useful when editing on tablets, where the keyboard might skew the application up, making the buttons unaccessible.

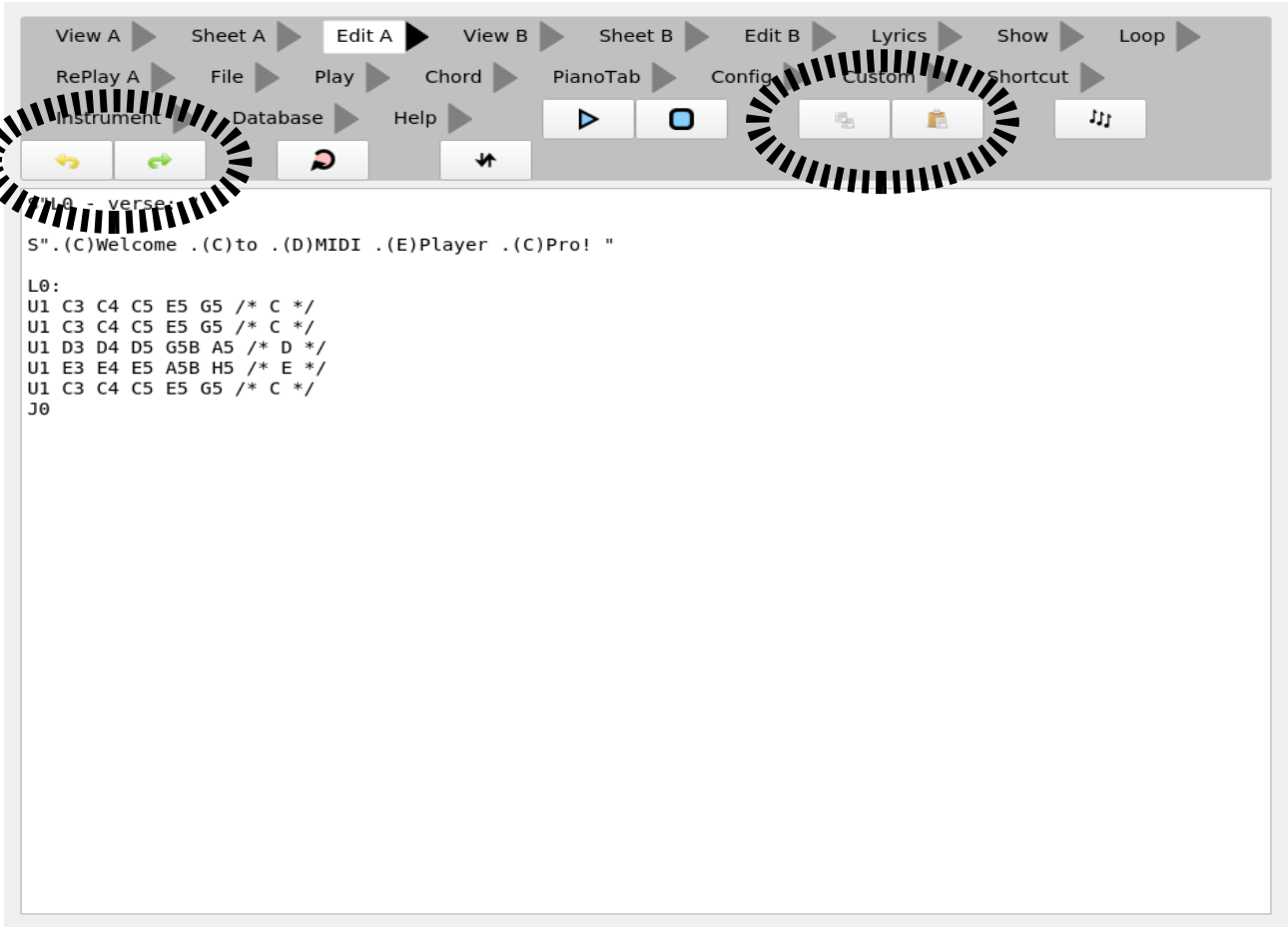
9. Print the pressed piano keys

To speed up writing a new song, MIDI Player Pro can print the scores you press in text format if you set «Score Recording» to «ON» in the currently selected editor:



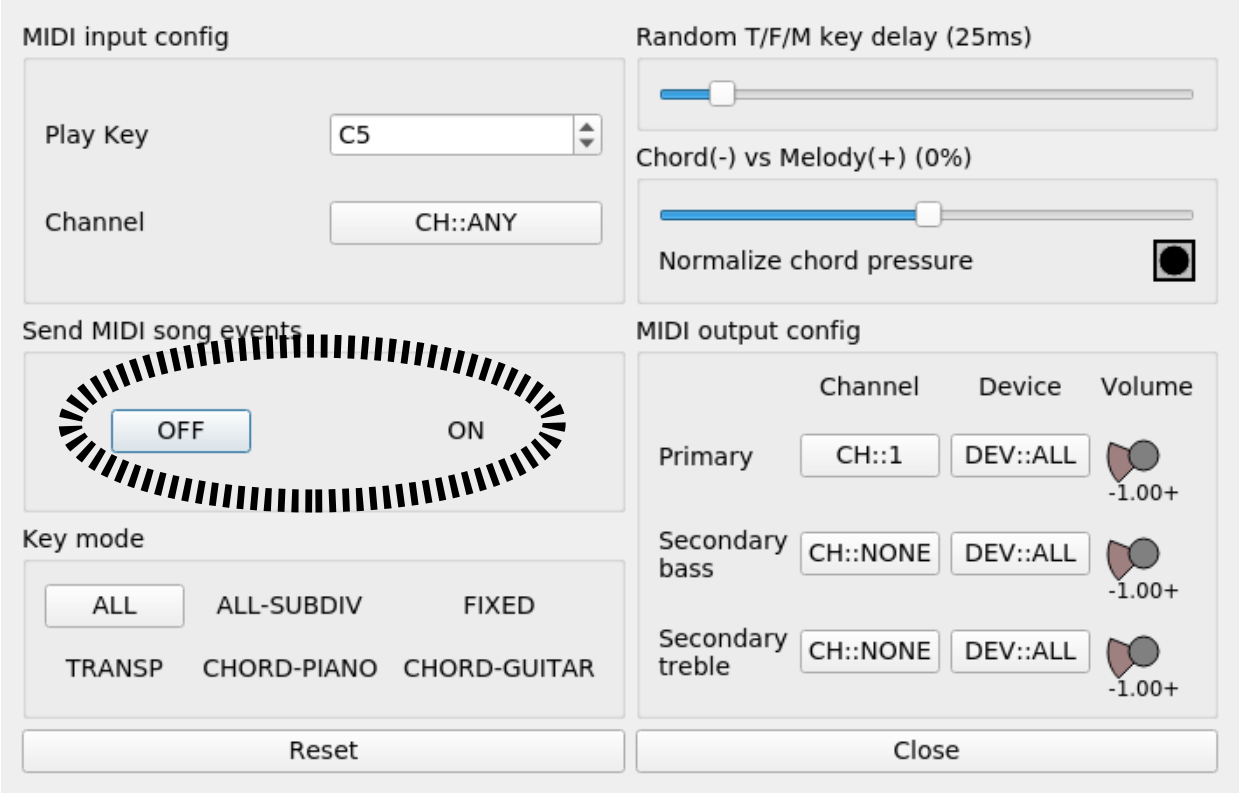
10. Undo, Redo, Copy and Paste support

All text editors inside MIDI Player Pro supports undo, redo copy and paste either via the icons or the standard shortcuts for these operations:



11. Interacting with external MIDI modules

The MIDI Player Pro can be instructed to send MIDI START/STOP and SONG position events by setting «Send MIDI song events» to «ON» in the view mode dialog which will appear when you press the «View A Mode» button the the «Play» tab:



- START event will be automatically sent when
    1. «Trigger» button is pressed
    2. Blue PLAY icon is pressed
    3. First key press or pedal event which triggers the time counter
- STOP event will be sent when
    1. «Rewind» button is pressed
    2. Blue STOP icon is pressed
- SONG position event will be sent when
    1. A label jump command is received as user input
        - By use of shortcut keys «C3», «C3#» ...
        - By use of «Jx» buttons in the «Play» tab.

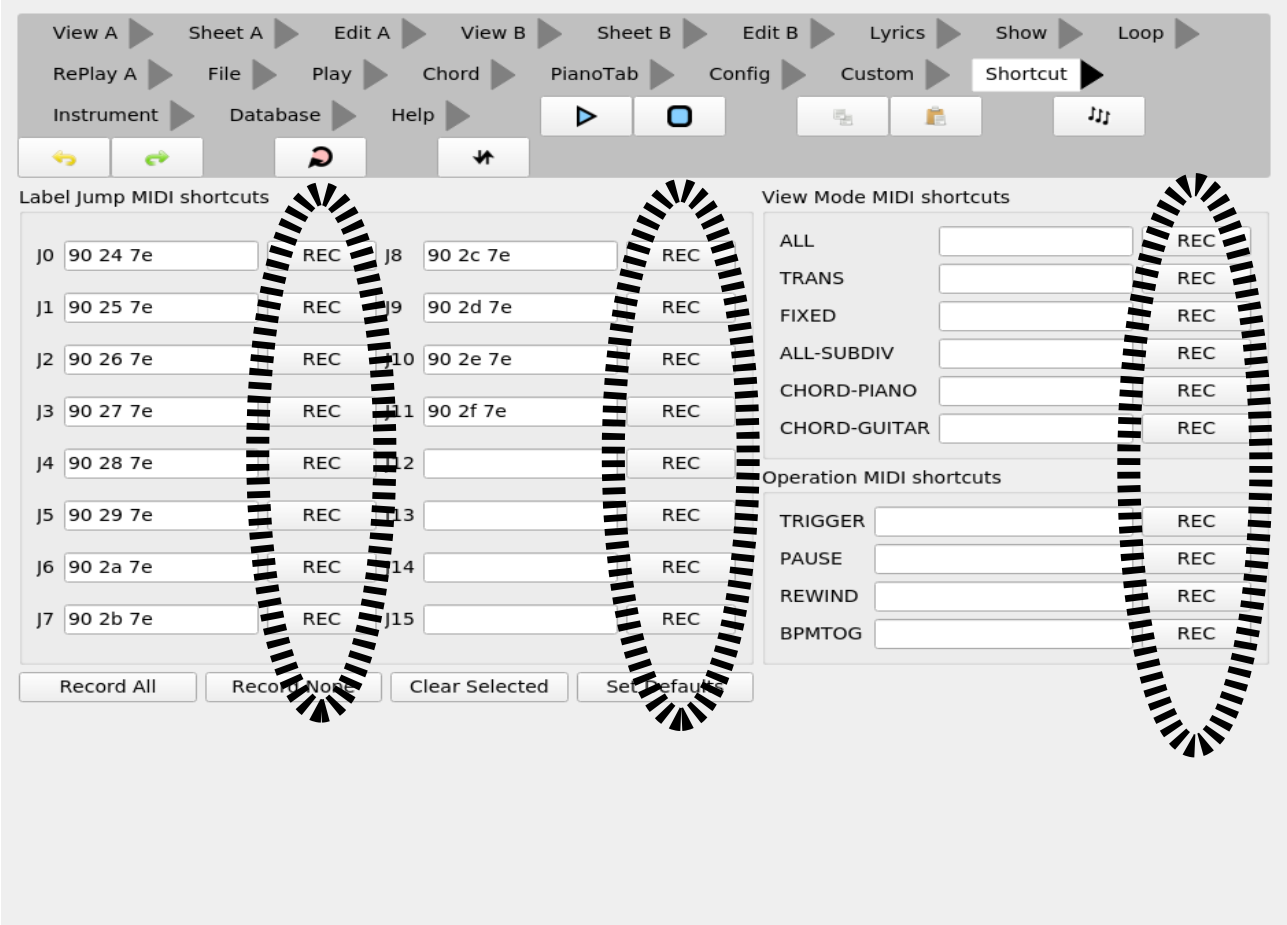
NOTE: The song position sent is the same like the label number. A SONG position event is not sent when the program executes a jump command.

12. Setting up shortcuts for common operations

By default jumping to labels through keys «C3», «C3#» ... «H3» is configured.

12.1. How to assign a key to a command

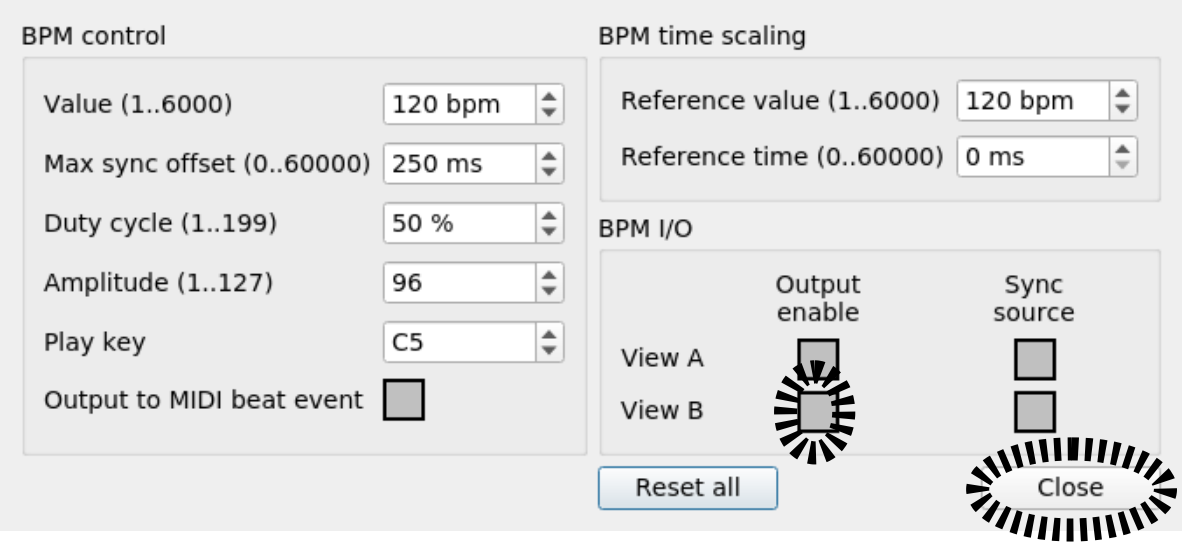
If you know the MIDI sequence in HEX you want to bind to a command, enter it in the line next to the command. Else press the «REC» button next to the command one time. Then press the wanted «button» or «key» on your MIDI instrument. The MIDI sequence should now appear in the line next to the command. Else check the configuration of your MIDI input devices. The matching algorithm will ignore all MIDI channel and key velocity information.



Keyword	*Meaning*
J0, J1, J2, J3, J4 ... J15	Jump to the given numeric label.
ALL, TRANS, FIXED, MIXED, CHORD	Select the given mode for the view connected to the instrument receiving the command.
TRIGGER	[Re-]start playback and/or recording.
PAUSE	Pause playback and/or recording.
REWIND	Move playback to start postion and stop playback and/or recording.
BPMTOG	Toggle global BPM generator ON/OFF.

13. Using the BPM generator

The BPM generator can be used to generate repeated key presses as if received through a MIDI input device, to one or more views. It can also be used to generate a MIDI beat event to all output MIDI devices configured at the same rate which is configured.



13.1. Setting up playback of a drum rythm, step by step

1. Open the wanted drum rythm in «View-B».
2. Select the «Play» tab and press «View B Mode»
    - Set «Synth Channel» to «9» which corresponds to the MIDI drum channel. This application starts counting channels from «0» and not «1»
    - Ensure the «Base play key» is **«C5»**
    - Select «TRANS» mode
    - Press «Close»
3. Select the «Play» tab and press the «BPM» button.
    - Select «BPM to view B»
    - Ensure that the «BPM play key» is **«C5»**, else the output will sound transposed
    - Press «Close»
    - Set «BPM Generator» to «ON»
4. Select the «Play» tab
    - Press «Trigger» to start the BPM generator
    - Press «Rewind» to stop the BPM generator

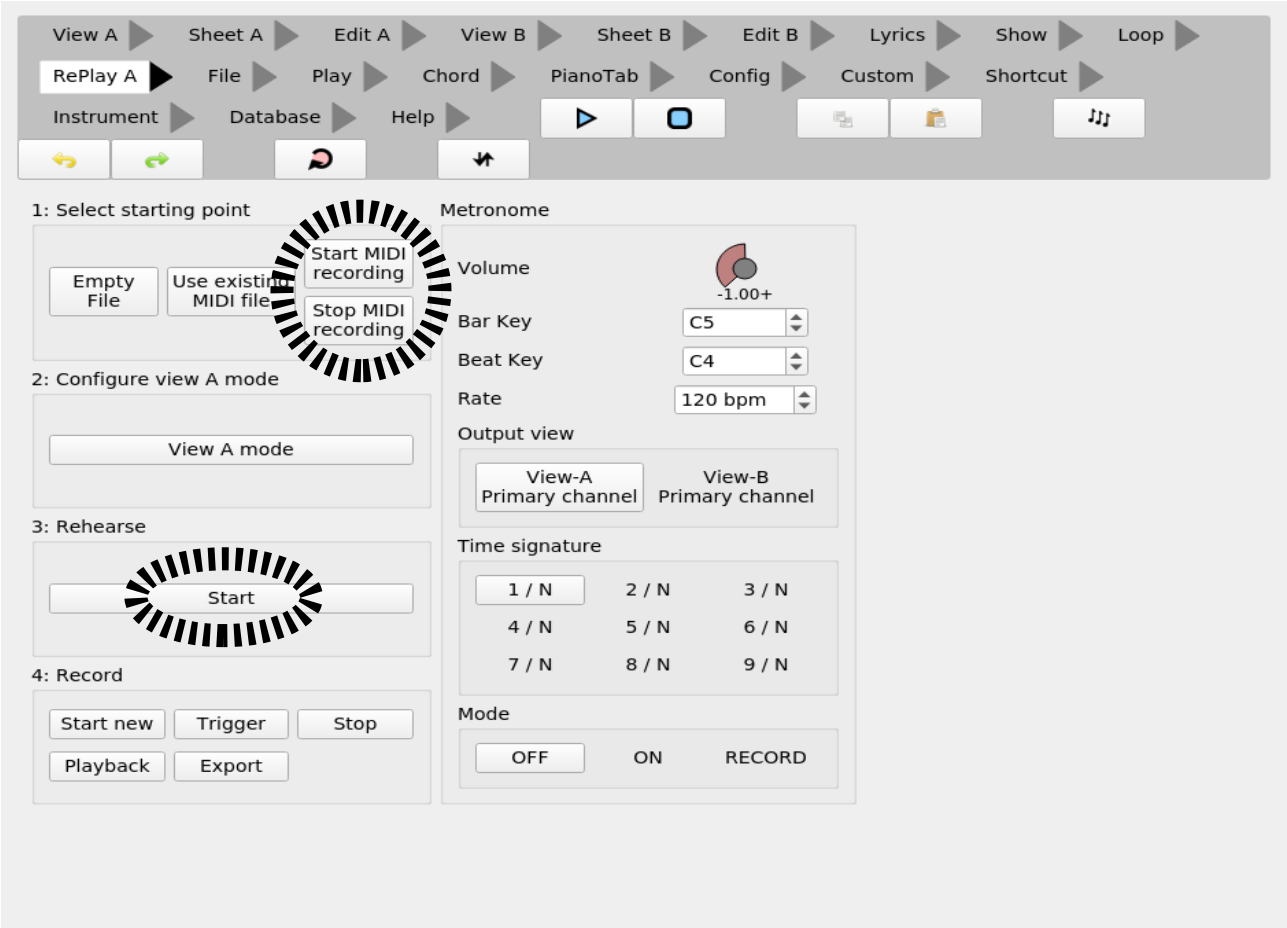
13.2. Changing the clock base of the BPM generator and auto-played parts

The «BPM period xxx» fields of the «BPM» dialog are used to set how many milliseconds equals how many beats. Because drum rythms can consist of auto-play parts, see the «Wxxx.xxx» command description on the «Help» tab, it is useful to have these parts scaled when changing the

«BPM value». Else the auto-play parts will last the same amount of time regardless how frequently they are played. To enable auto-play time-scaling set the «BPM period value» field to the length of the auto-play sequence in milliseconds. The «BPM reference value» is typically «120». When loading songs into any view, any «K3.bpm.ms» commands will automatically override these settings. To disable auto-play scaling, set the «BPM period value» to zero.

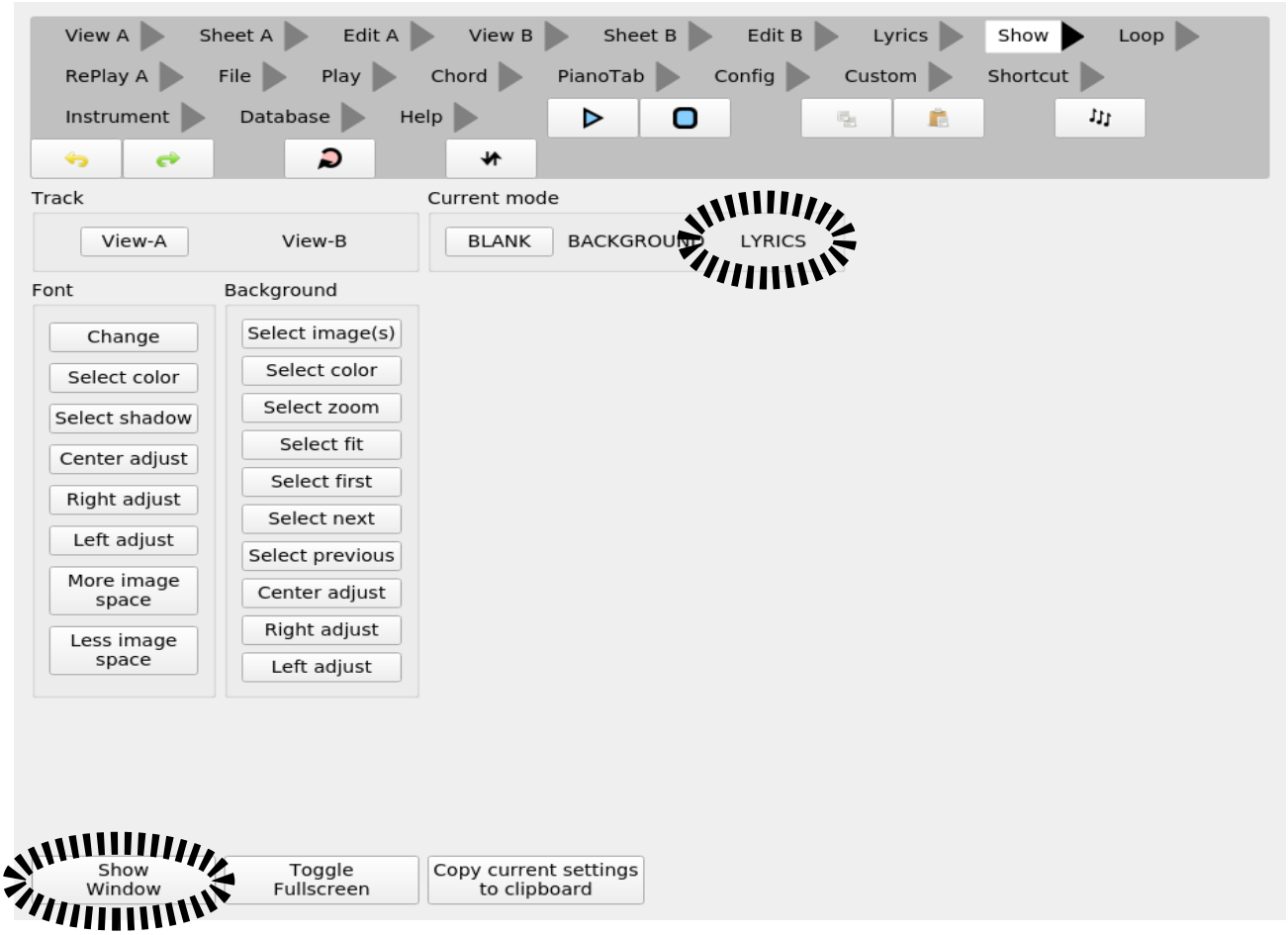
14. Using RePlay A

MIDI Player Pro allows you to record a piece of music using MIDI events and then afterwards replay it step-by-step instead of automatically. First press "Start MIDI recording". Then play your piece of music using your configured MIDI input device(s). When you're done press "Stop MIDI recording". To test single-stepping press the "Start" button in the rehearse box. Now press any key on the piano to single step the recorded piece of music.



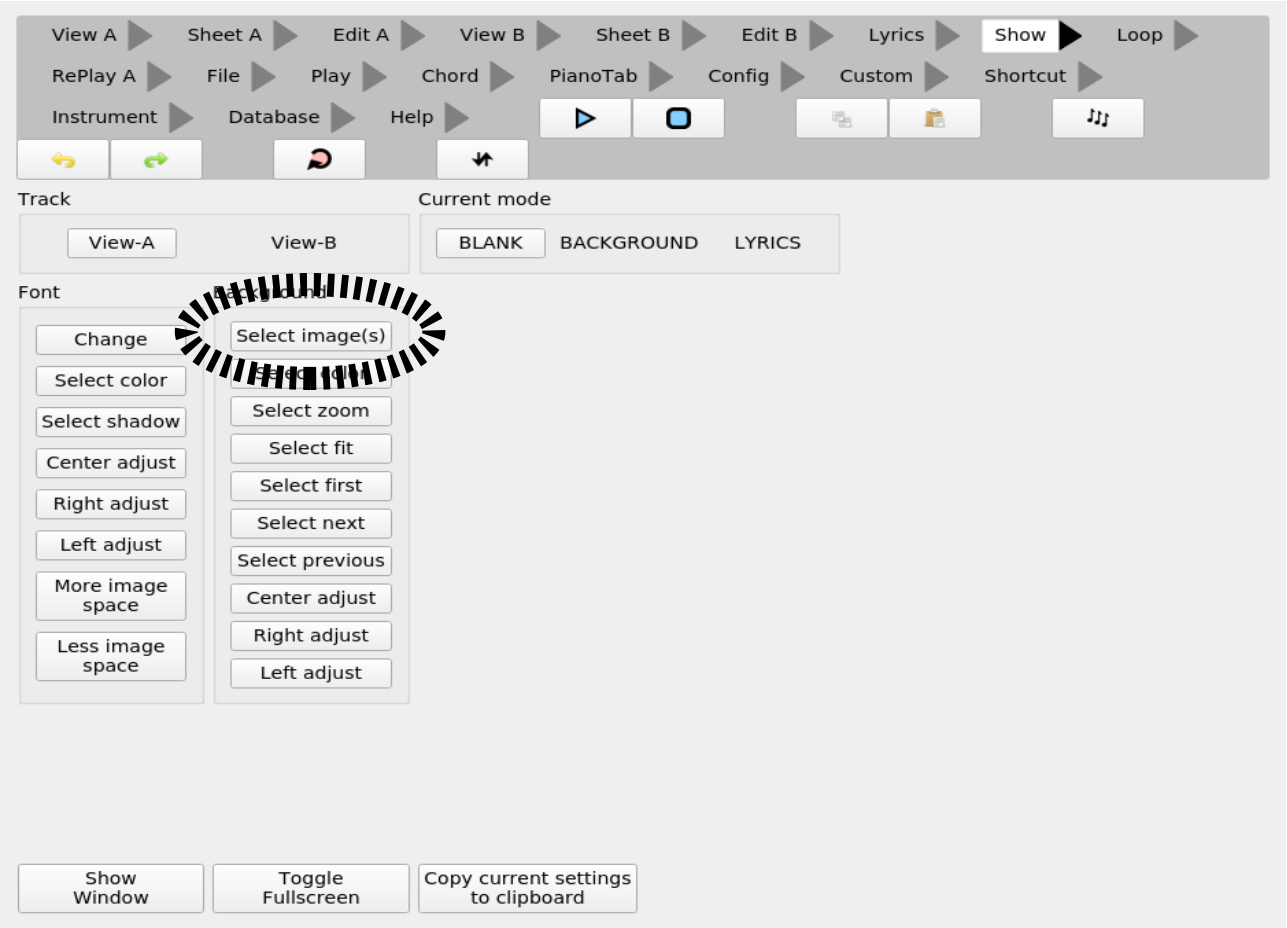
15. Using show mode

MIDI Player Pro can be configured to show the lyrics in a separate window as you play. First select the "Show" menu item. The press the "Show Window" button. The press the "LYRICS" button. The lyrics of the song in View-A should now appear in a separate window.



15.1. How to select one or more background pictures

MIDI Player Pro can be configured to render a background image as part of the show mode. First select the "Show" menu item. The press the "Select image(s)" button. The images selected will be numbered 0, 1, 2, 3, 4 and so on.



15.2. How to save the show mode font

The show mode font is part of the global configuration. To save the last used font goto the "Config" tab and press the "Config save" button.

15.3. How to toggle the show window's fullscreen property

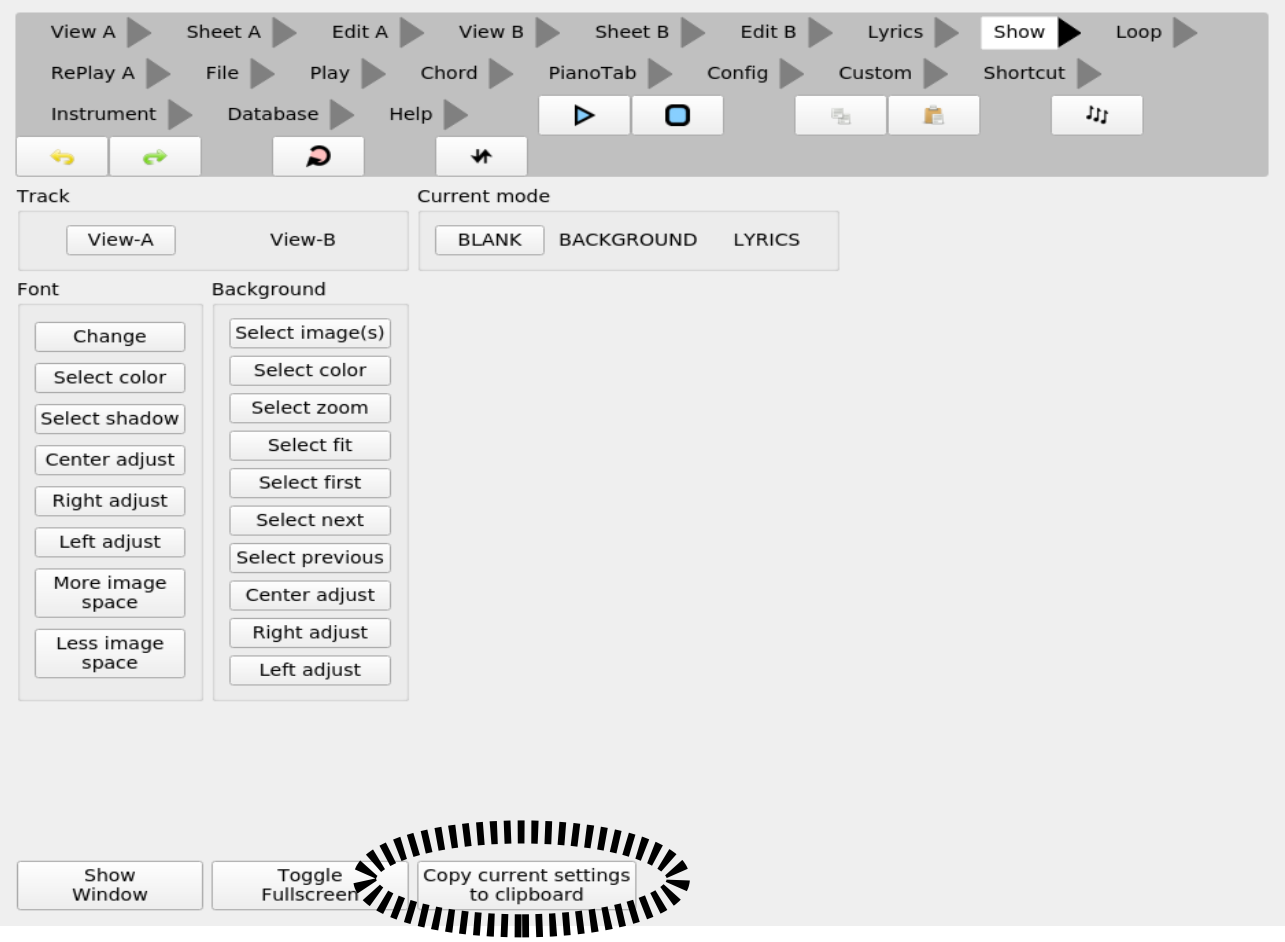
- Press the "Toggle Fullscreen" button in the "Show" tab.
- You can press "ESC" to exit fullscreen mode
- Double-click inside the show window

15.4. Advanced usage

For advanced usage refer to the description of K-commands under the "Help" menu item.

15.5. How to save the show mode settings to a song

MIDI Player Pro can copy the show mode settings to the clipboard. First select the "Show" menu item. The press the "Copy current settings to clipboard" button. All settings except the font selection and list of background images will be copied to the clipboard and can then be pasted into any of the Edit-A or Edit-B views at the location where the settings should be loaded.



15.6. Example screenshots