Flašipis – EN manual v0.97

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1   Desktop

Desktop (Picture 1.1) is divided in a few sectors which are described in the following chapter.
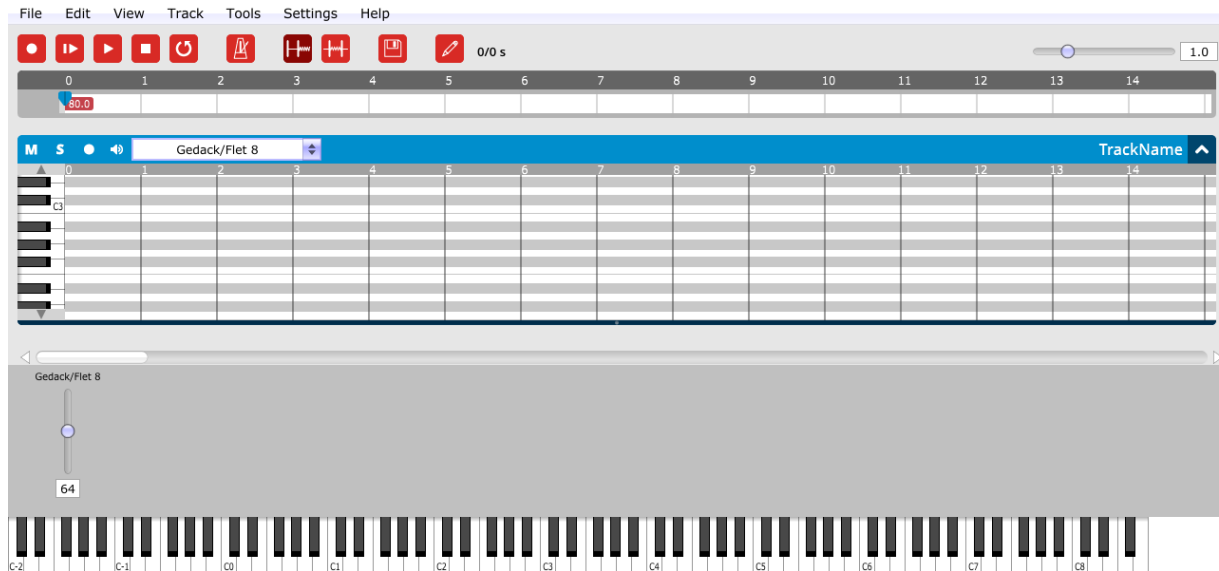
Picture 1.1

1.1   Tool bar

Tool bar (Picture 1.2) is the first of the *Desktop* sectors. It is right under the *Main menu* bar.

Picture 1.2

1.1.1 Record

The first button on the *Tools panel* is the *Record* function. It launches MIDI notes recording to selected tracks (See 4.1).

1.1.2 Play all

Another function is *Play all.* It starts the playback of your song from the very beginning.

1.1.3 Play/Pause

The third button is *Play/Pause*. It launches the playback of your project from a selected point. During the playback it can be paused with the same button (the icon changes accordingly). When the playback is resumed, it will continue from the point where it was paused.

1.1.4 Stop

You can stop the playback by clicking a *Stop* button. This will change the position of the *playhead* (vertical line designating the current position) to the point where the playback originally started. Clicking the *Stop* button for the second time in a row will move the *playhead* to the beginning of the song.

1.1.5 Loop timeline selection

When activated, playback will loop the bars selected on the time line (see 4.3.2).

1.1.6 Metronome

This toggle button activates/deactivates the metronome. Metronome clicks on the beats of the bar based on the current time signature. It is deactivated with another click on the button.

1.1.7 Record from a selected point

After the activation of this button you can record from the selected point during the next recording.

1.1.8 Punch-in

While Punch-in is switched on, you can record only in the selected sector (see 1.2).

1.1.9 Save the current project ⊞

The current project is saved by pressing this button. The keyboard shortcut is Ctrl+S.

1.1.10 Insert notes mode ✏

Mouse notes insertion mode is turned on when activated (see 4.1.1).

1.1.11 Time indicator 262 ms / 1 min 11 s

Time indicator shows the time of the current point in a song.

1.1.12 Tempo settings ○———— 1.0

The tempo of the project is made slower or faster by changing this setting. (The value 1.0 is a default tempo. The value of 0.5 is a half of it and the value of 2 is two times faster than the default one.) This value is relative. The overall BPM is calculated as current BPM (see 1.2.1) multiplied by relative tempo. Use this to slow down the tempo during recording if it is too difficult to record in the full tempo or to experiment with the final tempo before exporting.

1.2 Time line
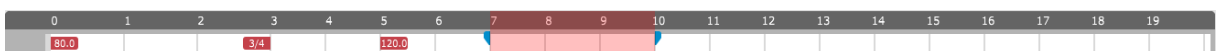
The *Time line* (also called *meta track*) shows the bar numbers and the current playhead position. By left clicking on the axis you can choose the point from which you want to start playing or recording. Punch-in selection can be made using the two blue sliders (drag them to the desired location). A more detailed view of the time line grid (for instance with quarters or quavers) can be activated in the *View* tab in the *Main menu* by clicking on *Grid*.

1.2.1 Tempo change in the middle of the composition

Tempo change can be also set on the *Time line*. By clicking on the *Time line* with the right mouse button a pop-up menu (Picture 1.3) is expanded.

```
Add tempo event
Add time signature event
```
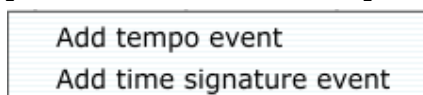
Picture 1.3

A new window (Picture 1.4) is opened by clicking on *Add tempo event*.

BPM:

Division time:

Add   Cancel

Picture 1.4

Enter the new BPM (beats per minute) value and the time position where the change should occur. The first field is the index of the bar. The second is the beat position and the third is the MIDI division position within that beat. The last field is therefore not very important as you probably always want to place the tempo change aligned with some beat. If you do not exactly know what you are doing, always leave the last field empty. You should also see the tooltip if you hover over any field. After clicking *Add* the event is placed on the timeline. It is represented as a red flag pointing from the place it is located to the right. You can now drag the event with mouse if you need to change its location. Or you can right click the event and edit it with dialog.

1.2.2 Time signature change in the middle of the composition

Start similarly as if you want to change the tempo (see 1.2.1). Right click the timeline and select *Add time signature event* (Picture 1.3). Now you can see the window below (Picture 1.5):
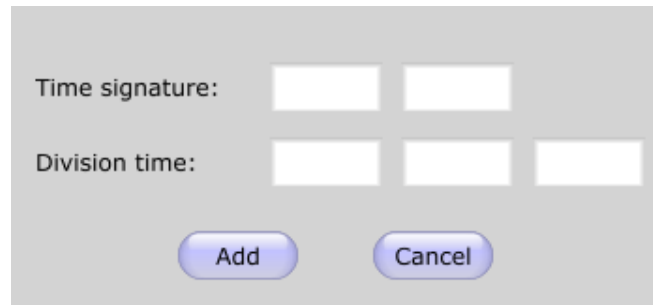
Picture 1.5

In the *Time signature* fields insert the numerator and denominator of the time signature fraction (e.g. 4/4, 3/4, 3/8 and so on…). The Division time setting is the same as in 1.2.1. Note that you should always place the time signature event at the beginning of some bar. Therefore only the first field should be filled in (yes, we will definitely make this more user friendly in the future releases), otherwise you can end up with some strange behaviour of the timeline. By clicking Add you confirm your settings and the event is placed to the specified point on the timeline. You can that edit it as described in 1.2.1.

1.3   Track

Tracks are placed below the timeline (Picture 1.6).
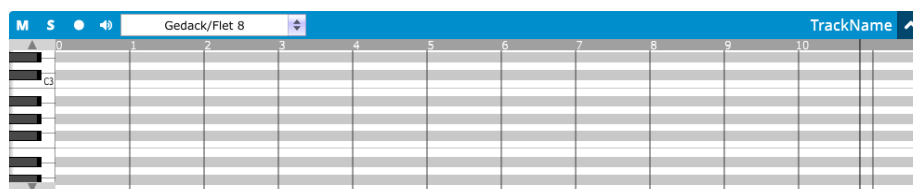
Picture 1.6

You can import the notes in the track (see 4.2) or record your own notes (see 4.1). Also you need to assign a register to the track. This tells the barrel organ which sound (register) to use for the track reproduction on playback. Use mouse wheel to zoom on the track (horizontal zoom) or Ctrl + Mouse wheel to zoom vertically (this affects the keyboard size on the left). Use Ctrl+Shift+T or *Track→New* in the main menu to add a new track.

You can also duplicate the selected track with Ctrl+Shift+C (or *Track→Duplicate*), which will create the exact copy of the track only with different register. You can than reassign the register to what you need. This is useful if you

want to duplicate the same melody for two different barrel organ registers. Often you also want to duplicate the melody and transpose the track of a quint.

You can delete the track with Ctrl+Shift+D or in the main menu. You can also do all the things described above and much more by right clicking the track header. (Picture 1.7)

delete track
duplicate track

select all notes
select all bars
transfer selection to other tracks

transpose track   ▶
snap track notes   ▶

collapse track

reset vertical zoom
focus content

rename track
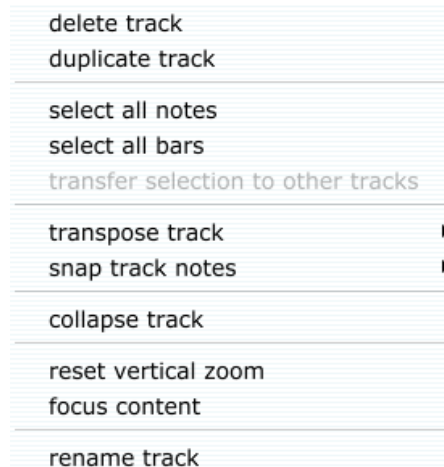
Picture 1.7

Now let's look at the track tool panel.

1.3.1 Mute M

This toggle button deactivates the track for playback. That means this that muted track will be omitted when playing. Use this when searching for some mistake or if the track is irrelevant for what you do at the moment. Upon next click the track is activated again.

1.3.2 Solo S

This puts the track to the solo mode. That means only this track will be audible during the playback. All the other tracks will be muted. Note however, that this does not affect their mute state. Solo state has just higher priority than mute. Only one track (or none) can be put to solo state at a time.

1.3.3 Record track

Toggling this button to the on state puts the track to the *recording mode*. When you then start the recording by pressing the record button in the tool bar (see 1.1.1), notes will be recorded to this track. Otherwise recording has no effect on the track. You can record to multiple tracks at a time if that's of any use to you, but you can as well record to one track and then copy the content to the other. Toggle the button back to off state to cancel the recording state of the track.

1.3.4 Monitor track

Tracks marked as *monitor* will be audible when recording. Basically this acts as the opposite of mute for recording. Mute affects only playback, monitor only recording.

1.3.5 Choosing registers (instruments)

To change the barrel organ register assigned to the track use the combo box right of the monitor toggle button. Click on the two small arrows and the list of usable registers will appear.

Picture 1.8

Choose whatever the register you want from the list (Picture 1.9).
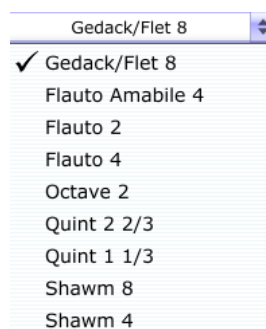
Picture 1.9

1.3.6 Track name
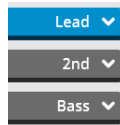
You can rename the track by right clicking the track header and selecting the option *rename track*. This serves mostly as a label for your better orientation. Use descriptive names such as "solo", "bass", "main theme" and so on…

1.3.7 Collapse/Expand track

Use this toggle button to expand/collapse the track. Expanded track looks like the one depicted on the Picture 1.6. Of a collapsed track, only the header is visible. Use it to save the workspace when needed. You can collapse the tracks that you do not work with at the moment. You can collapse all the tracks at once by *View->Collapse All*. Similarly you can expand all the tracks at once.

1.4 Audio mixer

Audio mixer is located at the bottom of the program window, and can be hidden (to save the work space when needed) or shown using F3 key or in the View tab of the main menu bar. Use it to control the volume of individual tracks.
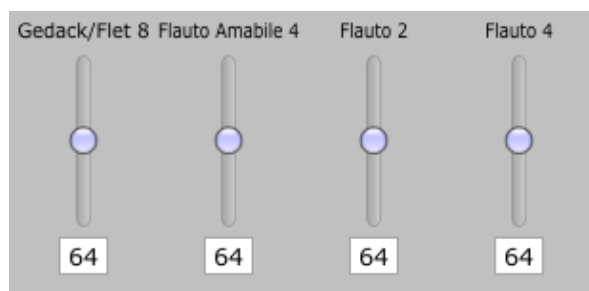
Picture 1.10

Drag the slider up or down to set the volume. Zero is the minimum (track completely muted), 127 is the maximum.

1.5 On screen keyboard

On screen keyboard (Picture 1.11) is one of the possibilities (not a very good one though) to record notes to the track.

Picture 1.11

When you click any key of the keyboard the respective sound is played back. If you have the barrel organ connected and set up as a MIDI output, the keyboard will use the barrel organ register of the last selected track. If your MIDI output (see 3.2) is set to any synthesiser (typically Microsoft GS) you will hear a piano sound. The lower you click on the keyboard the louder the sound.

On screen keyboard is not a good tool for recording the track (see 4.1) for better options), but you can use it to find the tone you are thinking of when composing a song.

2 New project

Now that we know the basic functions, let's create a new project. You can do this with Ctrl+N shortcut or *File→New* (Picture 2.1) in the main menu bar. A new project is also implicitly created when you launch the application. You can save your project with *File→Save* (Ctrl+S) and then later open it with *File→Open* (Ctrl+O).

Picture 2.1

10
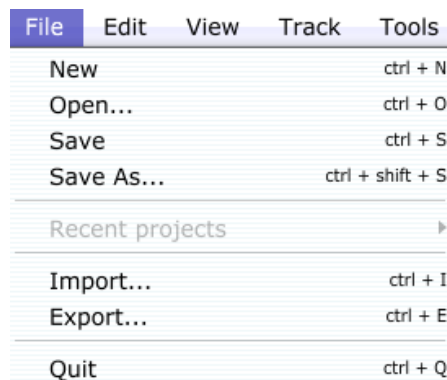
3   Settings

Now we have our project all set up but we may need to look at the settings too. Settings are not project dependent and it should be enough to set the things up just once unless anything changes (e.g. we connect/disconnect our barrel organ).

3.1   Language

Use Settings->Language (Picture 3.1) to set the language you want. Currently supported languages are English, Czech and German. If your language is not supported, you can translate the program yourself by creating your own *lang* file (see e.g. german.lang in the installation folder on how to do it). If you see any language related problems (e.g. incorrect translation) please report the problem to flasipis@organ-service.cz.
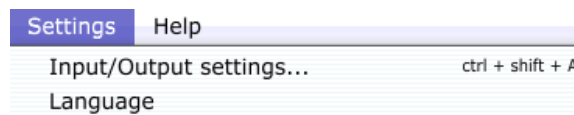
Picture 3.1

English is the default language. If you check the *use extension language pack* option (Picture 3.2) you can select from the displayed languages. The language will change right after you click any item in the list. To revert back to English uncheck the *use extension language pack* checkbox.
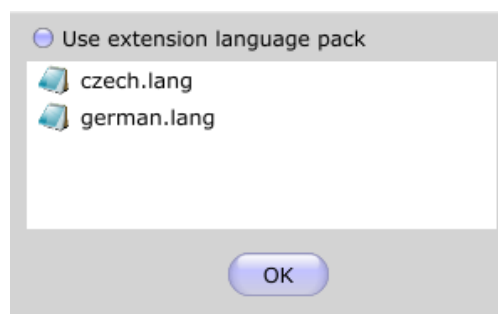
Picture 3.2

3.2   Input and output settings

You can get to input and output settings by selecting *Input/Output settings* (Picture 3.1) in the settings tab of the main menu or by Ctrl+Shift+A shortcut. A new window is opened (Picture 3.3).
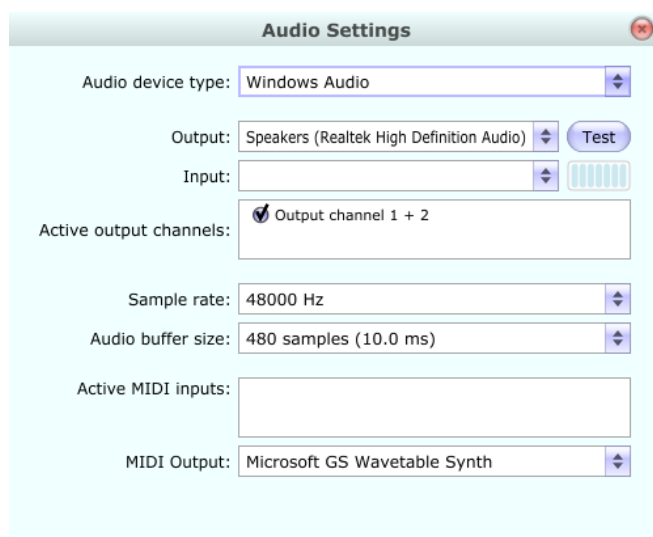
Picture 3.3

You can ignore most of the options here. Important are Active MIDI inputs (your external MIDI keyboard) and MIDI Output (your barrel organ). Read more in the chapter 4.1.2.

4   Work with MIDI

There are four ways to get MIDI notes into our project. In this chapter we are going to explain how to do that, and also how to work with the project and MIDI events and how to export the final result of our work.

4.1   Recording MIDI notes

As explained in 1.5 you can use *on screen keyboard* to record the noted, but we do not recommend that. Instead use external MIDI controller/keyboard (see 4.1.2). You can also "click in" the notes directly to the place you want them to be in the track using the *insert notes mode* (see 4.1.1).

4.1.1 Insert notes mode

Use this mode in the case you don't have the MIDI keyboard with you. In many cases it is also easier to use this mode than any other (e.g. you need to fill in a few notes). There is also a great advantage of putting the note exactly where you want it. It is aligned with the displayed grid (see end of this section) so there is no recording error. Activate it on *Tools* tab (Picture 4.1) of the main menu or by pressing B key. There is also a pencil icon in the tool bar that lets you do the same.
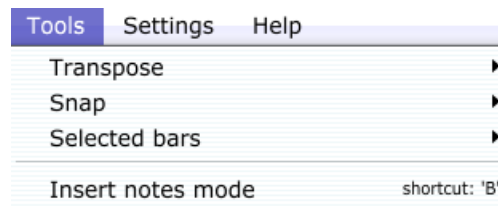
Picture 4.1

After turning the mode on, your cursor should change to the pencil-like icon shown at the picture (Picture 4.2). Now click on the grid to place the note.
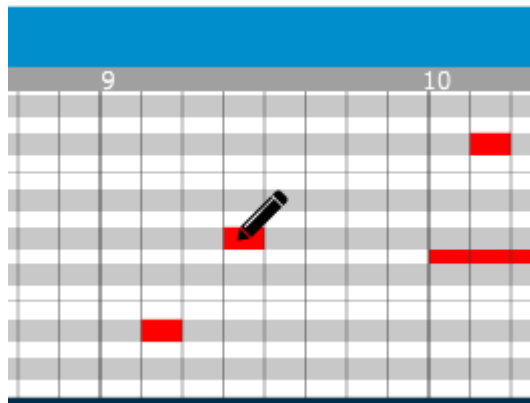
Picture 4.2

Exact note position and length are determined only by the displayed grid. To change these settings go to View->Grid and select the resolution you want. If you for example select *quarters*, all the notes you insert from now on will be quarters. If you select quavers, the grid will become twice as dense, and all the subsequently added notes will be quavers and so on…

4.1.2 Connecting external MIDI controller/keyboard and barrel organ

First connect the device (most probably MIDI keyboard) to the computer and install the drivers supplied by the vendor. Now let's launch Flašipis (if it is already running you may need to restart it to refresh the device list) and activate the device. Select *Input/Output settings* (Picture 4.3) from the *settings* tab of the main menu.
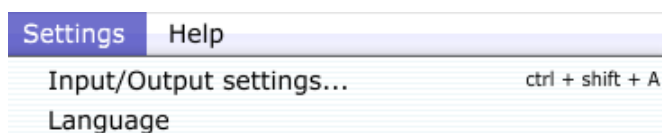
Picture 4.3

This will show the following window (Picture 4.4).
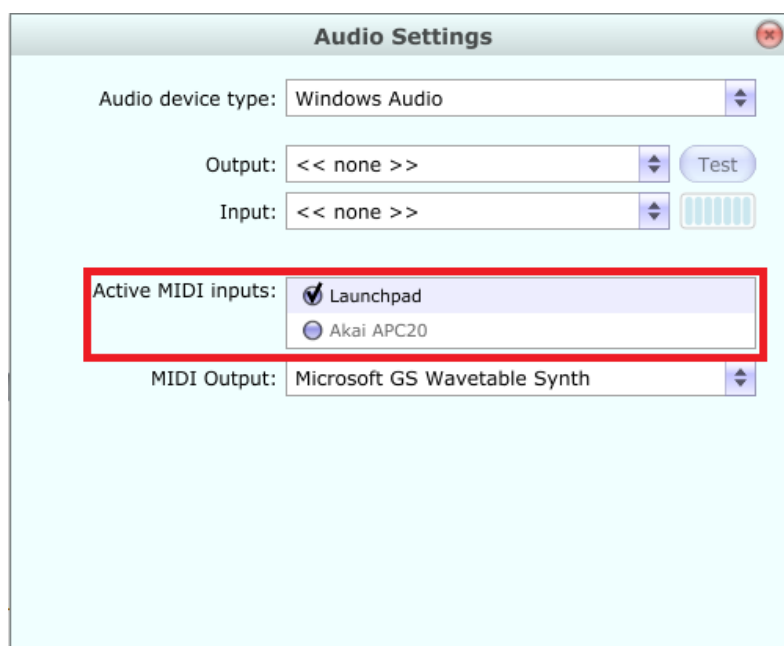
Picture 4.4

From the *Active MIDI inputs* box select the input device (MIDI keyboard) you want Flašipis to work with (Picture 4.4). From the *MIDI Output* list box select the MIDI output that is connected to your Organ Service barrel organ. You can work on your projects even without the barrel organ being connected but you will not hear the correct sound (determined by the selected register) it will make. When on the go, select Microsoft GS Wavetable Synth to replace the barrel organ sound for piano. Now close the window and you are ready to record.

4.2   MIDI import

Yet another way to get MIDI events to your project is by importing a MIDI file downloaded from the internet or recorded with some other software. From the *File* tab of the main menu select *Import*. (Picture 4.5).
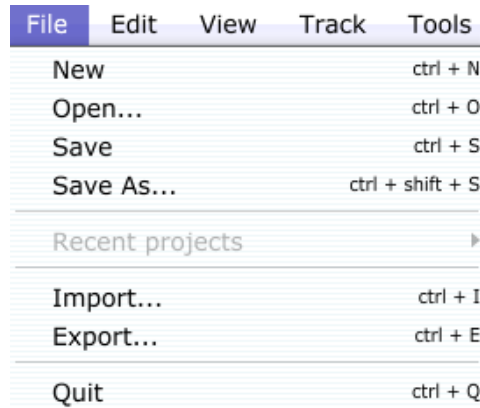
Picture 4.5

Alternatively you can also use Ctrl+I shortcut. If your current document has unsaved changes you will be prompted to save it.   After that the *import dialog* will appear (Picture 4.6).

Picture 4.6

Now select the file you want and confirm by clicking open. This will close the previous project and create a new one with imported tracks. MIDI file is split into

several tracks based on the channels, not tracks from the MIDI file (because of the way the barrel organ works).

4.3   Editing MIDI notes

Now that we have our project populated with some notes, let's begin with some editing.

4.3.1 Selecting notes

You can select one or more notes in the track. To select a note, just click on it. It will turn green to indicate the selection. To select a group of coherent notes, click and hold some free place on the track and drag the mouse over the notes you want to select. The *rectangular selection tool* (Picture 4.7) will include all the notes contained within. You can easily check the notes that will be selected as they turn green when considered inside the selection. Once you are satisfied with the selection release the left mouse button and the notes are selected. To select a group of non-coherent notes, hold Ctrl key and click all the notes you want to select individually. To select all the notes in the track use Ctrl+A keyboard shortcut. You can also do this by right clicking the track header and clicking the *select all notes* option.
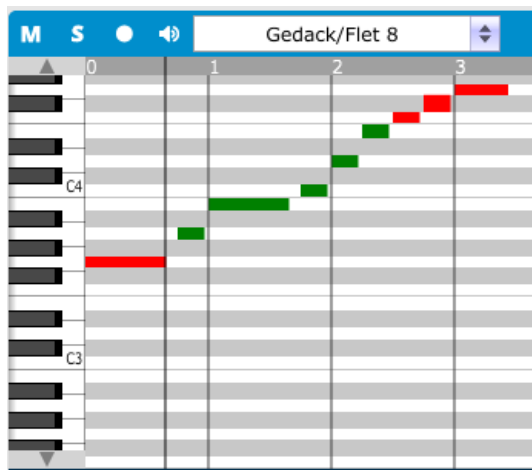
Picture 4.7

4.3.2 Selecting bars

Selecting a bar will also select all the notes that begin in the bar. You can do this by clicking on the grey bar with bar number located on the top of the piano roll (Picture 4.8). You can select more consequent bars by clicking the first bar then pushing and holding the shift key and then clicking the last bar (Picture 4.9).
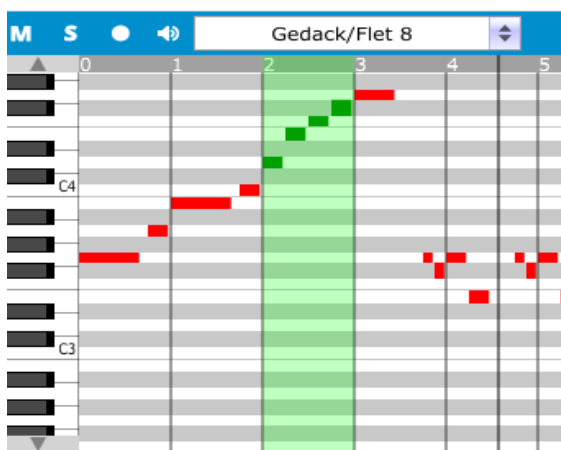
Picture 4.8

Picture 4.9

If you need to select some bars in all the tracks at once, use the *timeline* for the selection.
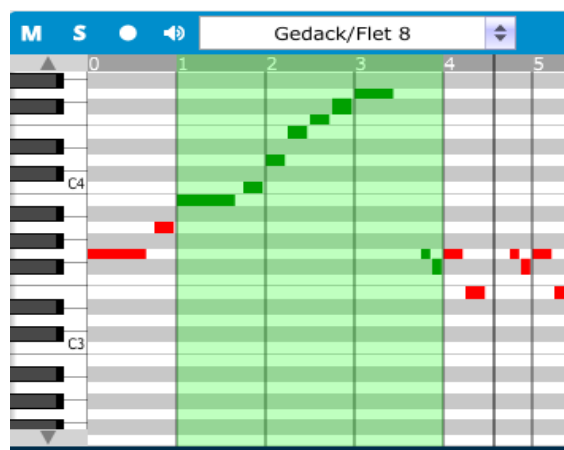
4.3.3 Shifting selected notes

Having selected a note or a group of notes you can transpose them up or down using cursor keys up and down. Single ↑ or ↓ stroke will transpose the note a halftone. Use cursor keys left and right to shift the notes horizontally (in time). You can also click and hold a note or a one of the group of the selected notes and drag them to a place you want them to be. You can achieve both transposition and time shift with this function. To transpose a note by some standard interval, you can use *Transpose* submenu from the *Tools* tab of the main menu. When editing songs for the barrel organ, you will often need to transpose some track of an octave. Therefore learn to use the Page up / Page down shortcut to do this. Hit Ctrl+A to select the entire track and then push Page Up or Page Down to transpose the track. You can also transpose the entire track (without having to make the relevant selection) by right clicking the track header and selecting the desired interval from the *transpose track* submenus.

4.3.4 Copying and deleting notes

To copy the selected notes use Ctrl+C shortcut. To insert them on a specific place, click somewhere in the track (not necessarily the same track you copy from) and hit Ctrl+V. This procedure will place the notes on the playhead position. To cut the selection use Ctrl+X. This will copy the notes to the clipboard and delete them from where they were. You can delete the selection by pushing the Delete key. You can also do all the above operations from the *Edit* tab of the main menu.

4.3.5 Copying bars

The difference between copy and paste functions of the notes and bars is that it behaves differently when pasting the selection. The copy/paste mode of bars is used if you have selected some bars. If the selection is notes only then the copy and paste mode for notes is used (see 4.3.4). The bar selection also contains the information about the selection length and can be used to shift the consequent bars instead of rewriting them (it will be explained further). You can copy the selected bars using Ctrl+C shortcut. You can then place them on some position shifting the rest of the track (meaning the bars at the paste position are not lost, only shifted) by selecting a single bar and hitting Ctrl+V. If you select more bars and launch the paste action, the selected bars are deleted and replaced by the bars you have copied.

You can delete the selected bars by pushing the Delete key. This will only remove the notes within. To remove the bars completely shifting the rest of the track to the beginning of the selection (meaning there is now empty place left) use *tools →
selected bars→delete*.

You can insert empty bars to the track shifting the consequent bars (meaning they are not lost) by selecting the bars where you want to insert the new ones and the use *tools → selected bars→Insert*. This function is applied to all the selections in all the tracks. So if you want to insert the bars in just one track, make sure nothing else is selected. Often you may want to insert empty bars at some place in all the tracks. In this case select the bars in the *timeline* and then use the *Insert* function (see 4.3.2).

4.3.6 Notes length

You can change the length of the selected notes with mouse wheel. Up to increase the length, down to shorten the note.

4.3.7 Snapping the notes to the grid

When recording the notes from the external keyboard you almost never hit the key exactly on time. You either hit it a bit sooner or a bit late. Humans are just not as precise as computers. If you need to fix this problem, you can use the *snap* function which will snap all the selected notes to the nearest "correct" position. Go to *Tools→Snap* and select the note length to which you want to snap to. Note that if the note is too short, it may be deleted completely. For example if you have a semiquaver note and choose to snap to quarters, both the note beginning and end align to the same position and therefore the note has zero length and will be automatically deleted. It is highly recommended to save the project before doing this action as the current Flašipis version does not support undo action.

4.4   Export of a finished song

Once you are satisfied with your project state, you can export it in the format for your barrel organ. Choose *Export* from the *File* tab (see Picture 4.10) of the main menu or hit Ctrl+E.
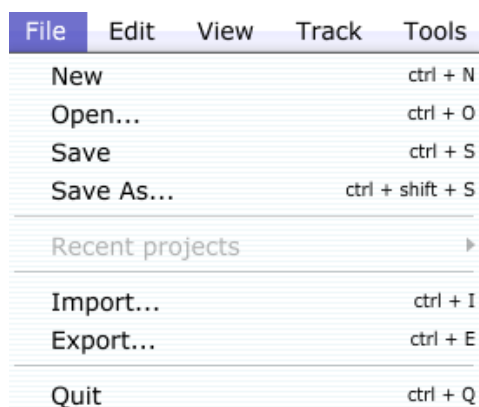
Picture 4.10

In the Export window that gets opened navigate to the folder you want to store your exported file to and name the file using 3 digits, e.g. 320 (the first number defines the category of the song and the two others the order of the song within that category). Click the *save* button and you are done. Now you can copy the exported file to a memory card and insert it to your barrel organ.