## How to use the Advanced Copy/Paste tool in SynthFont2

This tool lets you copy, paste, move delete blocks of MIDI events between tracks. You can display this tool by pressing the button Copy/Paste to the right of the toolbar above the tracks on page Plug & Play:

<u>.                                    </u>														
[FIT]	Fit 🔒	Play Sc	ilo 🎁 Play all	🕂 New trac	k 🟾 🚝 Add Iaye	r 🚡 Delete track	🔍 File M	anager	🖽 Virtua	al keys	🞹 Player	Piano 📑 Pia	anoroll 🛛 🚿	Copy/paste
Voic	e limit:	No limit	-	Voices	0	Peak: 0			CPL	J	(	)	100%	
ÔÔ	Track	Color	Name	Num Notes	CHN BANK	MIDI Program	VOL	PAN	Sound File	VST Instr	MIDI Out	SF2 Preset	Fx Bus	PSM
	01		/Cina	0	0	M /A	107	C.	N ZA			M 7A	VM site	CTD.

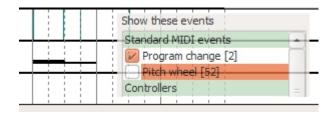
Alternatively you can use this button on the page Pianoroll, in Copy/Paste, far right:

🔟 Controllers 🍬 Edit note 🔪	💊 Draw note 🔍 Copy / Paste 🖾	🌡 Batch edit 🏽 😽 Edit track	<b>1</b>	fiscellaneous	
Copy to buffer	Copy selected events Paste copied events Delete selected events	Copy these events:  Notes  Program changes  Pitch wheel  Aftertouch  Channel Pressure	=	Select events by using any of the three methods: 1) drawing a rectangular area (to select ALL events, not only notes), 2) CTRL-click individual notes (notes only), 3) right clicking on a key in the keyboard window (notes only), 4) select ALL events using the Select All button.	Copy / Move / Paste multiple tracks using drag/drop
	🍓 Select All	All Controllers	-	Nothing selected	

The window may looks like this, depending on the number of MIDI tracks you have:

💽 Copy / Move events in multi	iple tracks				- 🗆 X
Show these events	Copy / Move	-		From tracks:	
Standard MIDI events	All shown events	The region you are pasting events into	The region you are pasting events into has events at a later time (or overlapping).		Paste
Program change [2]	Snap to grid	already contains other	Decide what you want to do with these:		Cancel
Pitch wheel [52]	- Action	events ("old"), so please decide what to do with	Move events up ("insert") (4)	(5)	Cancer
Volume (coarse) [2]		old events: 3	All tracks		Delete
Pan position (coarse) [2]	Copy events	Merge old and new	Amount (Bars / Beats / Ticks)		Undo last
Meta events	Move events	O Delete old (replace			move/copy
🗾 Text [7]		with new)			actions
Play selected track solo Play selected track solo () Sing () No notes (3) Slap Bass 1 Slap Bass 1 Viola		③		Bar 8 in track 2 contains ots of Pitch wheel events. Each event is drawn as a green colored vertical line.	
Start 1: (/Sing) [001:01:000] 2: [001:01:000] 3: [001:01:000]	Add Marker Play from Marker Pause		(except percussion)		Close

Top left is a box (① *Show these events*) that lists all different kinds of MIDI events found in the file. The events are grouped into *Standard MIDI events*, *Controllers* and *Meta events*. Only event types actually found in the file are shown. Here you can select which events to show in the track's Pianorolls at the middle of the screen (⑨). By default a copy, move or delete procedure will always act on all events checked in this box. Uncheck *All shown events* in box *Copy/Move* ② if you want to act on notes only.



The image above shows how bar 8 in Track 2 with Pitch wheel events looks if you uncheck *Pitch wheel* in the *Show these events* box.

Further to the right you see a box ③ with the some text and two radio buttons for alternative choices. This box is enabled only if the region you want to paste into is not void of events. In this case you can choose between *Merge old and new* and *Delete old (replace with new)*. In the first case the events will be mixed together, in the second case new events will replace the existing ones ("old").

The region to paste into may be empty, but still you can choose between two paste methods: paste into the empty region and leave everything else untouched, or move events above (later) than this region up a certain amount. This later approach can be compared to INSERT text in a text editor, when pasting text. Box ④ gives you some options. Check the box *Move events up* to move all events a desired amount. You may choose to move only the events in the tracks you are pasting into, or all tracks at the same time. Here you can also determine how much events should be moved. Normally this amount would correspond to the length of the region you have defined to copy and paste, but not always, as we shall see later.

Box ⑤, *From tracks*, which is so far empty, shows you some statistics related to the region you have selected. It will list all selected tracks and numbers of events. In front oc every track there will be a check box which you can toggle. For example, you may have selected tracks 3-5 but only want to copy tracks 3 and 5 - uncheck track 2 in this list then. To the right of this list you find four action buttons. Before you Paste anything, move the selection to the position you want to paste into. NOTE: even if you have selected to copy from tracks 3-5 you can still decide you want to paste everything into tracks 4-6 (or anything else suitable).

In the middle of this window you find data for the tracks. Starting from left: check boxes (6) for muting a track during playback, (7) name of track (and color), (8) default MIDI Program (you can change it here), and finally the pianorolls (9) - one for each track. The pianoroll for a track does not only show notes (as black horizontal lines) but also the other selected events, as colored vertical lines. Above the tracks there is an area (8) that displays bar numbers and Karaoke lyrics - if available and check box (1) checked.

The bottom part contains, from left: <sup>(1)</sup> a box with markers, a button for adding a new marker, a button to start playback from the selected marker, and a button to pause playback. If you want to add a marker at a certain position, do this: click somewhere in bar area <sup>(3)</sup>. A small down arrow will appear. You can move this around before creating the new marker. Press "Add marker" when you are ready.

**Tutorial example #1**: Lets start by selecting some events. We will click in the top left corner of bar 8 for track 2 and pull out a region covering one bar (four quarters in this case). As we now have Pitch wheel events hidden we will only mark the two notes in this bar, one short and one long. The image far right shows the same notes in SynthFont2's actual Pianoroll.



В	ar: 3,	Beat	: 3, Tio	:k: 0	-	
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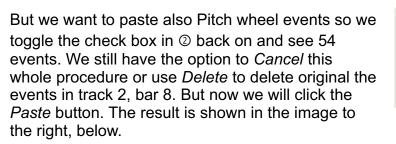
Look at the box (5) now. It tells us that we have selected track 02, 2 events, of which 2 are notes. But we know that the bar contains Pitch wheel events also, but because the check box in ① is unchecked these events are currently not marked for copying, neither drawn. If we check the box in ① we will immediately see the Pitch wheel events in the selection and also in box (5) as 52 new events.

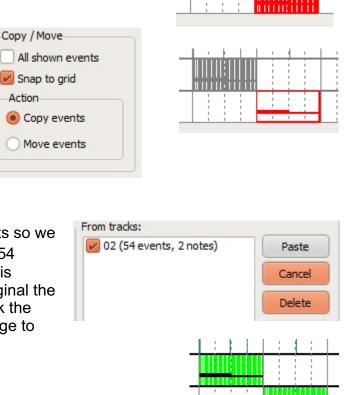
Next we want to paste a copy of these events into bar 9 of track 3. So we drag this area down and to the right to see this:

Copy / Move-

Action-

If we now uncheck the All shown events in box 2 we see only the notes (and can paste only notes):





From tracks:

From tracks:

02 (2 events, 2 notes)

02 (54 events, 2 notes)

**Tutorial example #2**: Look at bar 4 and 5 in track 2. There is a whole note (selected) in bar 4 directly followed by another whole note of the same key in bar 5. Beneath these there is a double note extending over both bars. Lastly, there is a whole note in bar 5.

We will start the selection at the top left corner and drag down/right to cover the whole of bar 5 and a few beats of bar 5. When we release the mouse something will happen.

The selection will automatically be extended to cover the whole length of the single double note. This is maybe not what you would expect but it is a natural behavior. This is definitely the selection you want if the area also contains events that have a real time impact on how notes sound during playback - for example Pitch wheel events.

The region you are pasting events into has

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events at a later time (or overlapping).

Move events up ("insert")

Amount (Bars / Beats / Ticks)

0

2

All tracks (4)

Decide what you want to do with these:

The region you are

pasting events into

old events:

already contains other

decide what to do with

Merge old and new

with new)

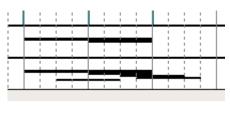
Delete old (replace

events ("old"), so please

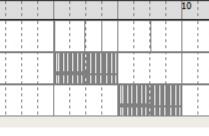
(3)

Next we will pull the selection into track 3. As both bars 4 and 5 of track 3 already contains some events, the box ③ becomes enabled (see image above). As the are not only the two alternatives depicted in box ③, also box ④ becomes enabled. If we press *Paste* now the four notes will be mixed with the other notes already in bars 4 and 5. The result is shown in the top image to the right. If we select *Delete old* ... in box ③, the notes (events) in bars 4 and 5 will be deleted and overwritten by the new ones. Notice that even if it looks like note in bar 6 have been deleted as well, this is nit the fact. The "notes" in bar 6 are only the tails of notes starting in bar 5. Hence these tails disappear.





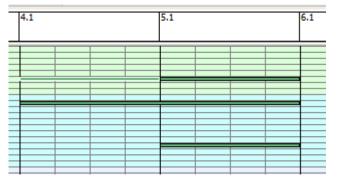
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From tracks:

02 (4 events, 4 notes)



The third option is to move all events later than bar 4 up by a certain amount. In this example we will move events for all three tracks.

Notice that also events in tracks 1 and 2 are moved up 2 bars. Thus the notes originally copied from bar 4 in track 2 are now in bar 6. Thus, be careful with thsi option!

The region you are pasting events into has
events at a later time (or overlapping).
Decide what you want to do with these:
Move events up ("insert")
All tracks
Amount (Bars / Beats / Ticks)

÷ 0

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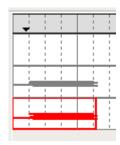
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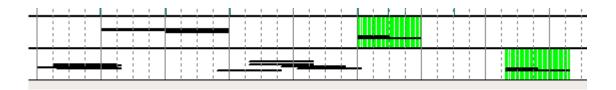
**Tutorial example #3:** We will start by selecting bar 1 in track 3. Notice how the selection is automatically exended to cover the full lengths of all selected notes.

We pull the selection to a later time in track 3.



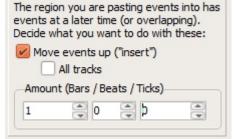
ts	The region you are pasting events into already contains other events ("old"), so please decide what to do with old events: 3 Merge old and new Delete old (replace with new)	The region you are pasting events into has events at a later time (or overlapping). Decide what you want to do with these: Move events up ("insert") All tracks () Amount (Bars / Beats / Ticks) 1 1 24 24
	5	10

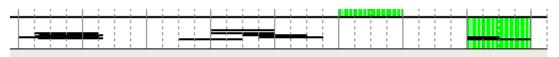
We can see now that the length of the selection is 1 whole bar, 1 whole beat and 24 MIDI ticks. As this area (bars 3 and 4) are empty the selections in box ③ are disabled. But as there are events at a later moment in track 3 we are allowed to move them up. We can do so, but moving them 1:1:24 would probably not be a clever idea:



Note that only events in track 3 were now moved.

A better choice is probably to select to move just one whole bar, so we set Beats and Ticks to 0:





An additional feature in this tool is the possibility to edit Karaoke lyrics. Activate the display of Karaoke lyrics in <sup>(1)</sup>. You can now drag the lyrics events along the bar area <sup>(3)</sup>. The selected event is shown in green. Pull it left or right to change position.

