

# Tutorial 6

Tips and tricks

# VSL GENERAL

# General Questions

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# VSL General

Dear VSL-user

The following pictures, texts and sound examples will show you solutions and suggestions to general questions around the production of music with samples.

**This tutorial will grow up in the course of time. I'll pick up most asked questions in the forum and try to give answers here.**

Yours

**Beat Kaufmann**

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## Contents

- [1. Velocity <> Volume <> Controller No 7](#)
  - [2. Why a Midi-Router](#)
  - [3. Demo of depths with VST Gigapulse](#)
  - [4. Panning / Panorama / Stereo / Mono Services](#)
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## 1. Velocity <> Volume <> Controller No 7 ?

### Introduction

Playing audio samples is a complete different thing from playing midi sounds. Unfortunately we have to control a midi instrument which plays the audio samples (the sample player).

Because of that we sometimes think we could handle the sample notes in the same way.

All the controller functions influence only the sample player itself but not the sounds (samples).

So it isn't possible to have sustain via controller 64, vibrato via C01, expression with C11,

portamento with C65?, hold with C?... Once more: If you have an effect with these controllers

then it must be the sample player which must be able to change the sound in the desired way.

Compared to the midi world: There you influence the sound directly.

### How to control sample volume

There are lots of possibilities to amplify (not influence) the sound of samples.

With...

...the velocity value (0 - 127 steps) (midi signal)

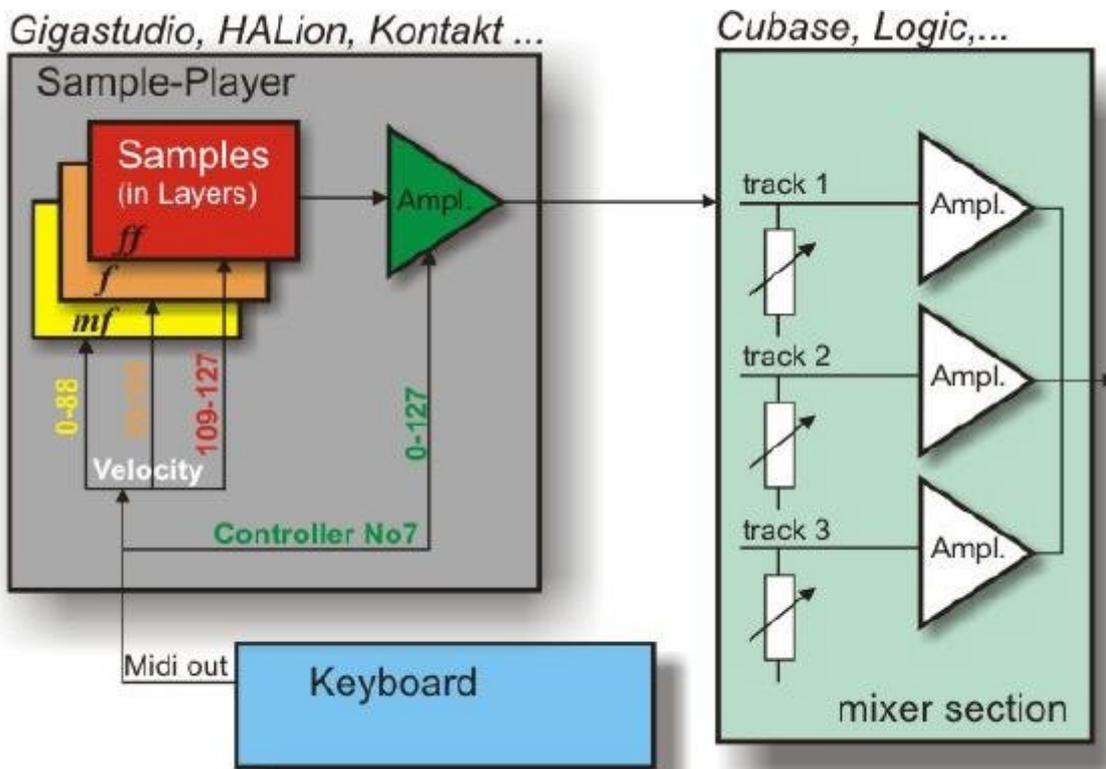
...the controller No7 value (0-127 steps) (midi signal)...

...the volume knob of the sample-player

...the mixer fader of your host program (Cubase, Logic, ...)

...inserted effects...

Please observe the following diagram(*double click if you want to enlarge it*)



Of course it is possible to play very loud with *p* sample (low velocity value). You can reach this result by amplifying this sample with all the amplifiers in the line (incl. cc No7 value 127).

But that is not as VSL people planned to use their samples.

As mentioned above

I recommend playing the loud tones of instruments with its loud samples and inverse the quiet ones with piano samples. Because of instruments also change their overtones with their volume, VSL recorded in different volume - layers. Please(only?) use the velocity-levels to control samples. All other control signals belong more to midi sound-modules or other midi music instruments.

The following example shows audibly what I try to explain. VSL-Flute 1" has 5 layer levels (stac-/ 03,s-/ 0,5s-samples / Pro Edition). The louder the flute sounds the more its tone colours changes and the more wind noise you have. For that reason people at VSL have probably decided to generate 5 level layers for this instrument instead of the common 4 levels.

Listen now to the Flute-sound. 5 times the same melody but every repetition with the next higher layer-level:

Click for [General velocity Flute 5 Layer](#) [1'086 KB]

or play:

 VSL Flute1 stac p, mp, mf, f, ff

Listen to the same melody.

1st part: Melody played by *p* -samples but amplified with cc 7 and the mixer on the *ff* - level.

2nd part: Melody played by *ff* - samples.

Click for [General velocity Flute 5 Layer p ff](#) [500 KB]

or play:



VSL Flute1: Part1 ff played with p / Part2 ff played with ff

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Further on I recommend adjusting the volume differences with the final mixer of your sequencer.

With Cubase you get a separate trimmer. Use it to equalize all levels while leaving the mixers fader at 0dB. > Very useful in my opinion.

**In other words: You don't need the midi-controller No7.** Set the Sample-Player output-level once and directly with your mouse.

Remark:

Starting your Sample-player its volume position is probably set on a correct level. So it is not necessary to adjust it.



You will get further information at:

VSL LONG NOTES 1 [4. Long notes - dynamics by a mixer](#)

Back to the [Top](#)

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## 2. Why a Midi-Router ?

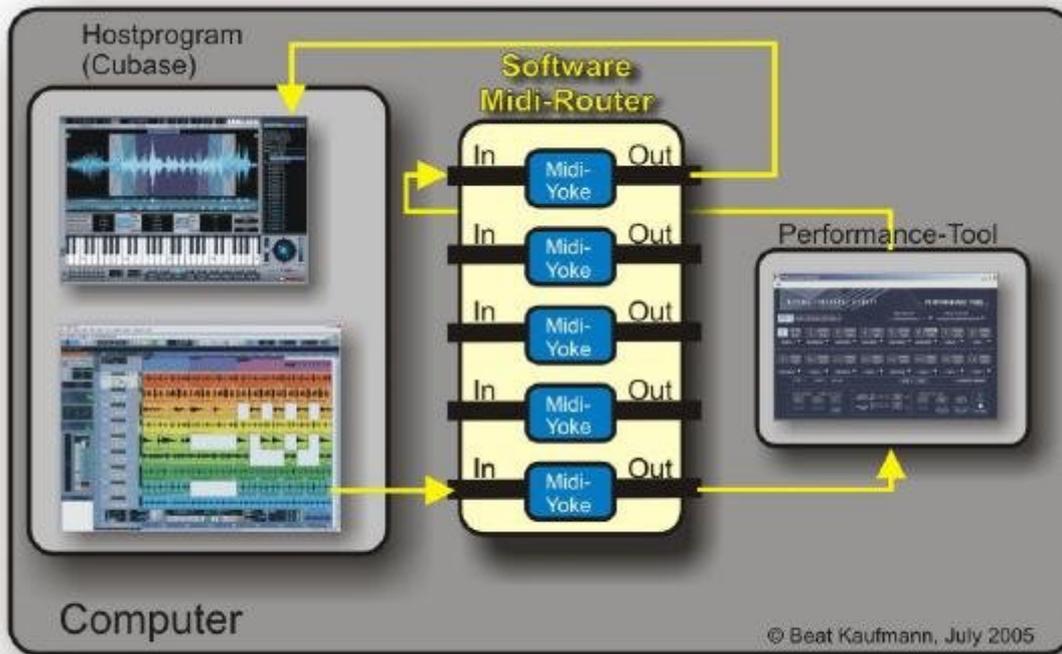
Midi-Routers are used to make midi links between software midi programs.

The midi-routeing of the *VSL Performance Tool* is a typical application for such a "Software-Midi-Router".

**Maple Midi-Router V3.52** [Download](#) [571 KB]

or

**Midi Yoke** > Link: <http://www.midiox.com/>



Back to the [Top](#)

### 3. Demo of depths with VST Gigapulse

Windows users have got a new convolution reverb:

The effect PlugIn **VST Gigapulse** (Tascam).

It is similar to Altiverb on the MAC side. You also have the possibility to set positions and perspectives. The rest does Gigapulse itself...

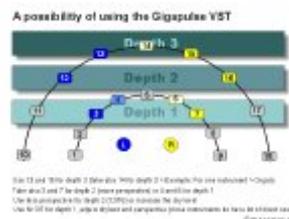


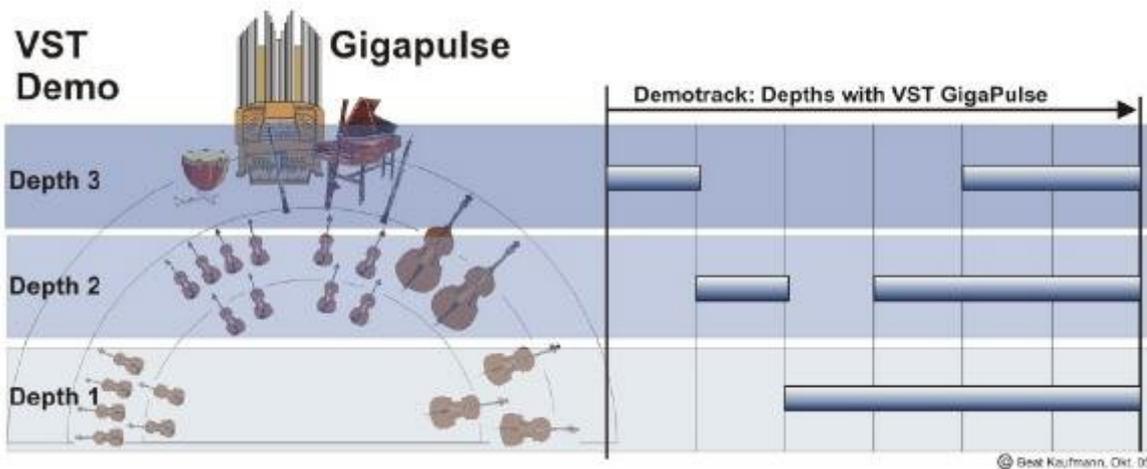
I created 3 virtual depths with VST Gigapulse

Depth 3 = **Far distance** > Position 13 and 15

Depth 2 = **Mid distance** > Position 3 and 7  
(more perspective than depth 1)

Depth 1 = **Near distance** > Pposition 3 and 7





The baroque orchestra (Stage Layout)

Please listen to different depths which I produced with VST Gigapulse, or listen to the whole piece...

▶ Large Hall: Depth3 > Depth2 > Depth1 > 1+2 > 1+2+3

▶ Small Hall: Depth3 > Depth2 > Depth1 > 1+2 > 1+2+3

But it works also with imported IRs. Listen first to the impulses which I used...

▶ Music Hall    ▶ Auditorium

And the results:

▶ Music Hall: Depth3 > Depth2 > Depth1 > 1+2 > 1+2+3

▶ Auditorium: Depth3 > Depth2 > Depth1 > 1+2 > 1+2+3

For more information click:

[Technical information >Ode for the Birthday of Queen Anne<](#)

Back to the [Top](#)

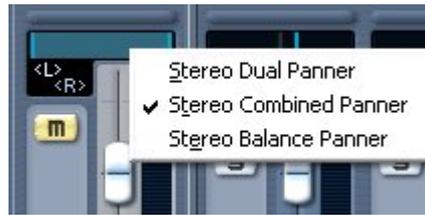
## 4. Panning / Panorama / Stereo / Mono

With VSL we always have to "pan" instruments to their places - from left to right. Very often it is necessary to "monoize" instruments or instrument ensembles too. Please have a look at the tutorial "VSL AUDIO"[Step 4: Place strings at their positions](#) and [Step 5: The farther the mono / place the winds](#) .

In *VSL AUDIO* I recommended to take the *Surround Panner VST-effect* for "monoizing" instruments/ensembles. Perhaps you have much tracks with different instruments and every track is equipped with such a *Surround Panner* you will use up to much of "precious" CPU-Power.

If you are using Cubase SX 3 or higher you are able to save CPU power by managing the pan-monoizing-effect with the following possibility:

"Right Click" on the pan frame and it appears the following menu.  
(For Mac-users: [Ctrl] + right? click)

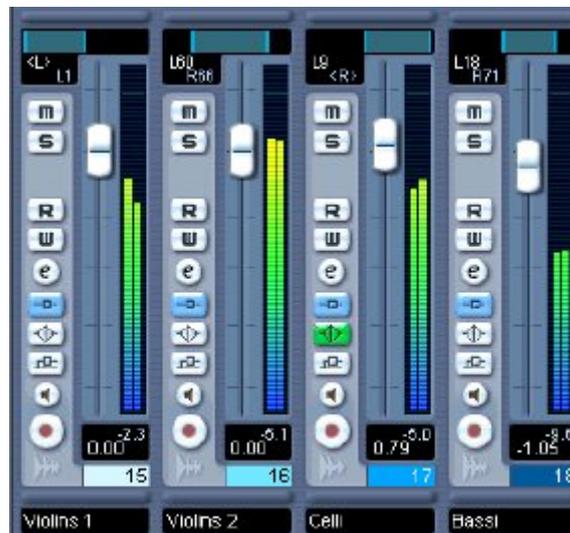


Select the "**Combined Pan Mode**".  
By pressing [Alt] you are able to set the right and the left panorama limiting.  
By clicking on the blue panorama bar you can shift it to and fro.



On the right you have an example of a small Orchestra *Pan - Setup*.

So you have killed two birds with one stone:  
Stereo-width and the Position between L and R  
...without really using more CPU - power.



Neverthe'less: Here are some nice tools which are connected with the theme

### C-SuperStereo

It is quite an oldie. But either way it doesn't exist another free VST effect with such a lot of possibilities around the theme Stereo, Mono, Phase, Stereo-Widthness, etc.

*Attention:* This VST effect uses pretty CPU power. If you switch off the display functions you can save some CPU-consumation.

Homepage with a couple of VST - Effects (Also C\_Superstereo)

<http://userpage.fu-berlin.de/~thman/VST/vst-eff1.htm>



### The Stereo Tools

VST Plug-in is a simple to use utility plugIn that allows you to pan or position both the left and right channels independently of one another.  
For instance with the Stereo Tools plug-in you can MUTE one side of the file and then pan or position the other side to the center.

### The Pan Controls

The Pan Sliders will allow you to adjust the position of each channel in the stereo file. It uses CONSTANT POWER panning which can go over 0dB if you pan both the left and the right channels to the same position.

[http://www.kellyindustries.com /stereo\\_tools.html](http://www.kellyindustries.com /stereo_tools.html)



### Bass-Lane

Basslane is a simple, yet very handy little utility to control the stereo field of lowerfrequencies in your audio material. So it is possible to "monoize" the lowest frequencies. Even you find the position of a doublebass on the right (high freq.) the powerfull low frequencies are centered > mono.

Same situation: A stereo with a subbass speaker.

<http://www.otiumfx.com/downloads.php>



### Stereo Expander

If you own Steinberg's WaveLab then you are also able to use the *Stereo Expander VST* effect. It uses less of CPU-power. Therefore I often take it for my mixes.

Last but not least, [here you get the link to a Homepage with a couple of Stereo / Panning - Tools](#)

<http://www.sadglad.com/stereo.html>