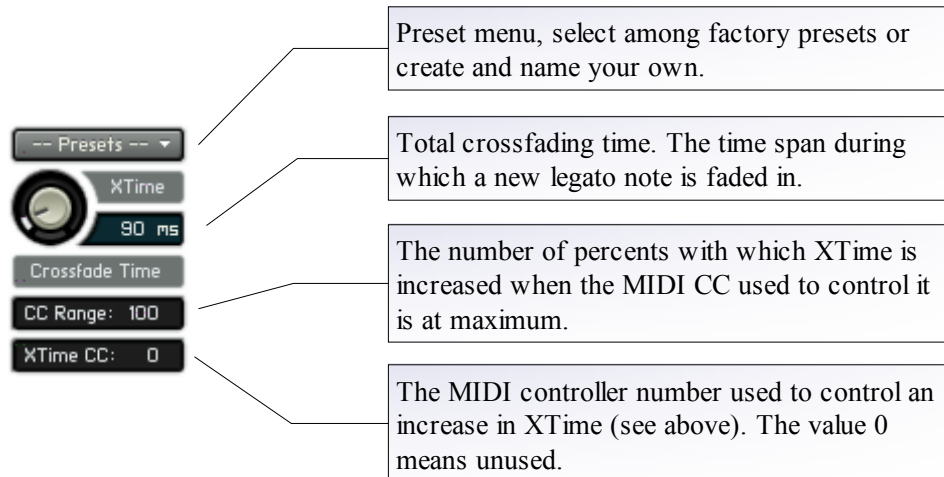


Overview of SIPS Legato settings

Script author: R. D. Villwock

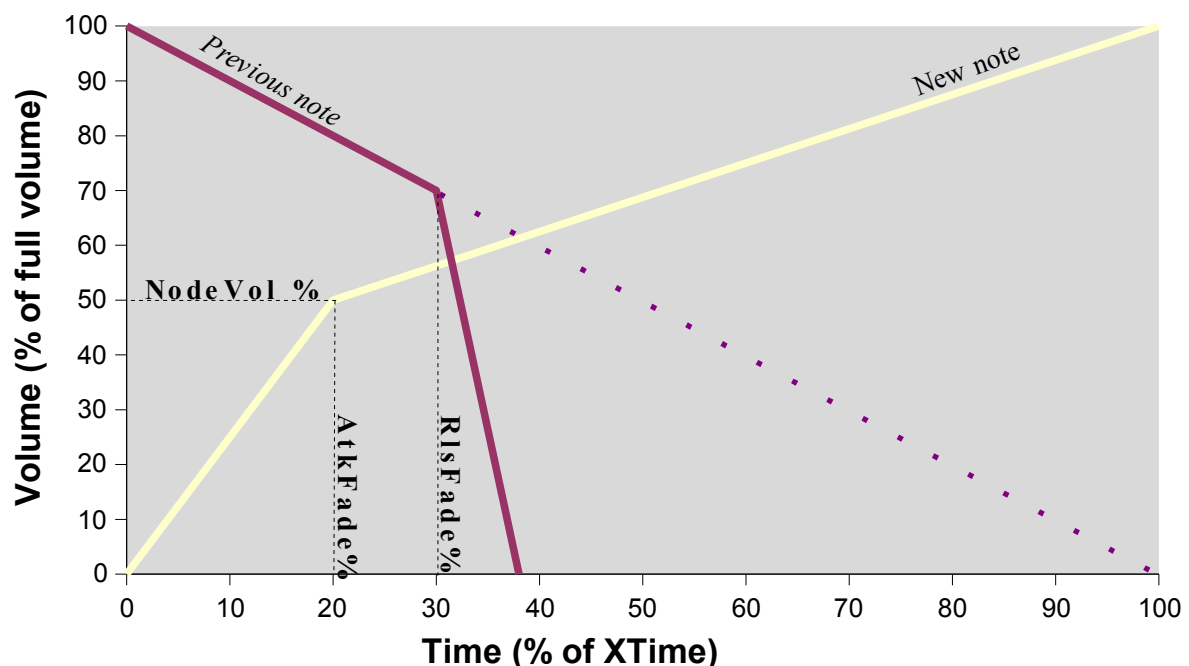
(a.k.a Big Bob)

Current maintainer: Nils Liberg



During a legato transition the old note is faded out and the new note is faded in. The fade-in consists of two phases as shown in the diagram below. *NodeVol* describes the percent of full volume to be achieved when *AtkFade* percent of the crossfading time (*XTime*) has been reached. By setting these two parameters you may control the shape of the fade-in volume during the crossfade. Likewise, the fade-out of the previous note consists of two phases. First there is a linear fade-out and then a note-off message is issued causing the note to enter the release part of it's envelope. By setting *RlsFade* you can determine at what time the second phase is entered. As you see, the breakpoint's volume and timing can be set for both the old note and new note. This lets you fine-tune the volume and makes it possible to avoid unwanted dips.

Fade in/out of new and previous note



Crossfade contouring

See *AtkFade* in the diagram above. It is expressed in percent of the full crossfading time (*XTime*).

See *RlsFade* in the diagram above. It is expressed in percent of the full crossfading time (*XTime*). How it is used is controlled by the menu below.

When set to "Knob setting" the value of the *RlsFade* knob is used to control the time at which the first release segment (see diagram) ends. When set to "Key-Up/BTime" the first release segment ends when the key which triggered the previous note is released or when the bending is completed, whichever happens first.



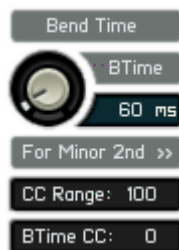
See *NodeVol* in the diagram above. It is expressed in percent of the full volume.

Sample start offset used to skip the attack part of the sample for notes played legato. How it is used is controlled by the menu below.

The sample start offset can be determined by the total time offset to the start of the first note in the phrase or the last note played. Or it can be determined by the setting of the *Offset* knob, or by using *Offset* plus a random component for greater variation.

Bending

During a legato transition there is a certain amount of bending of the pitch. When a new note is played the prior note's pitch is bended towards the new note and the new note is also bended towards its target value from the direction of the previous note. This bending starts at the time the new note is played and goes on during a certain time interval specified by the parameter *BTime*. Typically the value of this parameter is close to that of *XTime* so that the bending occurs more or less during the whole crossfading. However, for instruments with very long crossfading times it can be desirable to make *BTime* smaller than *XTime* in order to make the effect more subtle. Because of the relationship between these two parameters you may find it useful to assign the same CC controller to them.



The time during which bending occurs (bending starts at the time a legato note is played).

The number of percents with which *BTime* is increased when the MIDI CC used to control it is at maximum.

The MIDI controller number used to control an increase in *BTime* (see above). The value 0 means unused.

Bend amount and how it's increased for greater intervals

The factor with which the Bend (in cents) is increased for every octave the legato interval increases. Eg. a value of 1.0 gives the same Bend for all intervals, while a value of 2.0 doubles the Bend for each octave.

The amount of bending (in cents) to use when the interval played is a minor 2nd. The actual bend used is then determined by this setting times the number of half-notes in the interval times the *Slope* divided by 12.

The number of percents with which the Bend is increased when the MIDI CC used to control it is at maximum.

The MIDI controller number used to control an increase in Bend (see above). The value 0 means unused.



Instrument range and activation/deactivation of the script



The playable range of the instrument. If your instrument contains keyswitches you can exclude them from this range so that they won't interfere with the legato.

Whether the legato script is active, is simply making the instrument monophonic (needed by the vibrato script) or is completely deactivated.

The MIDI CC used to control the setting above. The value 0 means unused.

Appendix - Overview of all settings

