

About Effect-SysEx: Variation - System - Insertion

Many midifiles - especially those recorded with the keyboard - contain effect sysex that have no effect and are therefore superfluous. The individual cases are examined below.

Variation in System Mode

Example:

F0 7E 7F 09 01 F7	Turn General Midi System On
F0 43 10 4C 00 00 7E 00 F7	(XG) XG System On
F0 43 10 4C 02 01 40 06 00 F7	(XG) Variation Type DELAY LR
F0 43 10 4C 02 01 5A 01 F7	(XG) Variation Connection: System

The system effect "DELAY LR" is defined correctly here. However, it only comes into play for one or more MIDI channels if the corresponding controllers 94 "Variation Send Level" are present and assigned values > 0.

In some midifiles you can still find SysEx that concern a part assignment, such as

F0 43 10 4C 02 01 5B 7F F7	(XG) Variation Part OFF
or	
F0 43 10 4C 02 01 5B 00 F7	(XG) Variation Part 1

These SysEx are only effective in insertion mode, i.e. not in system mode.

Variation in Insertion Mode

Example:

F0 7E 7F 09 01 F7	Turn General Midi System On
F0 43 10 4C 00 00 7E 00 F7	(XG) XG System On
F0 43 10 4C 02 01 40 06 00 F7	(XG) Variation Type DELAY LR
F0 43 10 4C 02 01 5A 00 F7	(XG) Variation Connection: Insertion
F0 43 10 4C 02 01 54 00 7F F7	(XG) Variation Dry/Wet D<W63
F0 43 10 4C 02 01 5B 00 F7	(XG) Variation Part 1

In order for the DELAY LR effect to take effect on Part 1, all of these SysEx are required except for "Variation Connection: Insertion" (= default for Variation). To make the effect audible, "(XG) Variation Dry/Wet" must be assigned a value > 0 (here 7F). Controller 94 is ineffective in insertion mode, i.e. superfluous. The SysEx "Variation Return" also only works with the system, so you can delete it in this case.

Variation insertion does not have an effect if

1. variation Dry/Wet has the value 0 or is missing or
2. variation part is set to OFF (7F) or missing.

Insertion SysEx

Example:

F0 7E 7F 09 01 F7	Turn General Midi System On
F0 43 10 4C 00 00 7E 00 F7	(XG) XG System On
F0 43 10 4C 03 00 00 56 03 F7	(XG) Insertion Type, Eff. Block 1, Amp Simulator + 2way Rotary Speaker
F0 43 10 4C 03 00 0C 00 F7	(XG) Insertion Part, Eff. Block 1, Part 1

To insert an insertion effect, an unused effect block (DSP number -1) must be specified that is suitable for insertion. One or more suitable insertion effects are then assigned to this block. Finally, the effect block must be assigned to a part.

Effect Block 0 (DSP 1) is reserved for variation effects, so it cannot be used for insertion.

Note :

With

F0 43 10 4C 03 02 0C 7F F7 (XG) Insertion Part, Eff. Block 2, Part OFF

the effects assigned to the block are overridden. This also applies if there is no part assignment.

About Parts and Channels

By default, each part is assigned to the channel with the same number. With the MultiPart-SysEx Receive Channel

F0 43 10 4C 08 <part> 04 <chan> F7

the part can also be assigned to another channel. This SysEx is practically never used in midifiles.

Several parts can be placed on a specific channel at the same time:

F0 43 10 4C 08 02 04 05 F7 Part 3 on channel 6
F0 43 10 4C 08 03 04 05 F7 Part 4 on channel 6

The controller 94 must be set to 0 by default for midifiles, since it has undesired effects on the channels that should not have this effect if a variation system is present.

If no variation effect is available as SysEx is automatically switched by the XG System On the DelayLCR2 is set as the variation effect.

If there is also a Sys Ex somewhere in the file the set the variation to System (F0 43 10 4C 02 01 5A 01 F7).

End