11. Encoder Options

Encoder Resolution and M-P-R Options

This options are accessible via the right click menu by enabling Encoder Options. Each encoder has a number of options and these become visible by each MPH encoder when the M-P-R checkbox is checked and each encoder has two working modes, Absolute and Relative.

Absolute mode is activated if Abs checkbox is checked. In absolute mode, the encoder receives and sends standard MIDI cc messages, each message contains the value, hence it is absolute. There are 128 CC values, therefore the standard resolution (steps) of the encoder is 128, 0 to 127. If Abs is checked, the M option becomes available.

M checkbox for Magnitude for Absolute mode. This is a scaling factor for each encoder when it receives MIDI messages from the controller, ranging from 1 to 50. So your incoming CC can be scaled accordingly. If you set the Magnitude to high values, such as 50, then the encoder will behave like an on/off switch.

Relative mode is activated if Abs is unchecked. Relative mode interpretes MIDI messages from the controller as pulses of plus or minus (-1 or +1) and sends them to the software encoder and to the target plugin parameter. In Relative mode we can set the resolution (shown as Res) of each encoder in the Resolution box from 1 step to 999 steps. Absolute and relative modes may seem the same but with the In absolute mode, values transmitted from the controller are absolute (0,1,2,3..127) once we reach CC max or min (value 0 or 127) anything sent after max/min will not make any difference, but in relative mode there is no max or min, it just keeps on increasing or decreasing.

The following can be used whether in absolute or relative encoder mode.

P checkbox for Polarity. For inverting the incoming midi CC message. Moving the hardware controller clockwise, moves the virtual encoders anticlockwise.

R checkbox for Range. Set the minimum and maximum range, from 0 to 127, you want the Virtual Encoders to respond. If Polarity is checked then the range is inverted (the min becomes max and max becomes min).

CC checkbox for Control Change Number. Set the same CC number, by clicking in the CC box, to multiple virtual encoders and create macros. Combine this feature with M-P-R and you can create complex macros.

Red font number for multiplugin automation ID (explained above). Shows up only in Multiplugin host.

High Resolution Button

The Hi Res button located on the bottom right of the big window allows you to temporarily select a higher resolution factor for the encoders. The right button allows the selection of the factor from 2 to 10 and the left button enables/disables the function. This setting is saved in the MPH xml presets.

Oversampling (deprecated after version v1.7-39f136c1--H2025-07-14--B2025-07-15)

Oversampling will operate the hosted plugin in a sample rate multiple to that of your DAW project. This is a unique feature of the MPH, and it is made possible because MPH hosts the 3rd party plugin. The Oversampling options are 2x, 4x, 8x. MPH features anti-aliasing filters when using oversampling. Oversampling tends to be most useful and shows results when pushing a plugin to its limits or when using overdrive/distortion type of plugins. It is standard that the oversampling process will consume CPU and introduce some latency, which is reported to the DAW. When you choose an oversampling option, the hosted plugin will automatically reload in MPH. If you plan to use oversampling with specific plugins, it is best to test that it works well with the hosted plugin, prior to using it in a work project. Some plugins, when oversampled too high, will create problems, even crash the DAW. This is outside of our control.

> **This video** explains well the process of oversampling a plugin.

Linked Parameters List

The Linked Param button displays a searchable list with all the parameters that have been mapped to an encoder. This is useful when a lot of parameters have been linked and you want to check the corresponding encoder of a parameter, or to reference automation of an encoder.

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