

MMA Technical Standards Board/ AMEI MIDI Committee

Letter of Agreement for Recommend Practice

Default Pan Curve

Primary Authors: Tom Savell, E-Mu/Creative Advanced Technology Center

Editors: _____

Abstract:

This Recommended Practice (RP) standardizes the response to CC#10 – Pan. The purpose is to ensure that all devices will follow the same panning curve. The formula matches the formula already used in DLS-2 and GML, and includes a recommendation to amend the GM2 specification to comply with this Pan formula.

Background:

Over the course of the development of MIDI, different manufacturers have implemented their own responses to CC#10. In addition, various AMEI/MMA Specification (such as GM2 and DLS2) have recommended response curves that are not all the same. The different pan curves produce an equal power distribution between the left and right channels, but in some cases, a true center could not be achieved by following the recommended equation directly.

The formula in this RP does achieve a true center and uses an equal power distribution, which is desirable.

Proposal:

The default desired synthesizer response to CC#10 – Pan for AMEI/MMA specifications shall be as follows, and shall override all previous recommended practices, including, but not limited to, GM1, GM2, DLS1, and DLS2.

[CC#10: Pan]

Default Value: 64 (40H)

[Note] 64 (40H) is Center.

Sets the stereo position for notes of the specified channel. This message causes subsequent notes on that channel to be positioned anywhere in the stereo field from hard left (value 0,1) to hard right (value 127). It is not necessary to pan a note that is currently sounding. However, if a currently sounding note is panned, the panning shall be done without audible artifacts, clicks or “zipper” noise.

