MIDI 2.0: the Benefits and the Challenges

Paul D. Lehrman, Director of Music Engineeering, Tufts University, Medford, MA

MIDI, the Musical Instrument Digital Interface, now in its 37th year and used by billions of devices, is the most successful method of digitally recording musical performance data. It represents performances as highly precise and reproducible parameters, encompassing timing, duration, dynamics, pitch, timbral changes, and physical gestures such as pedals, sliders, and finger motion and pressure. The Standard MIDI File (SMF) format is a highly accurate and efficient way for composers and performers to exchange musical information among their various platforms. Now, after several years of negotiations, MIDI 2.0 has been officially released, and offers even more resolution and a greater number of musical parameters, as well as a standard protocol for MIDI programs and devices to communicate their capabilities to each other. The 2.0 version of SMF, however, has yet to be written. What are the new features of MIDI 2.0 and what are the issues around codifying them in a new file format?