What is MIDI?

Musical Instrument Digital Interface

The **MIDI** standard grew out of the Audio Engineering Society in the early 1980s and was formally ratified as an industry standard in 1983. The interface allows for communication between digital instruments, computers, and other electronic devices, in order to produce sound. The MIDI interfaces themselves do not carry sound or produce music, but, rather, they carry sets of instructions for one device or another to produce the sound or music (including specific commands for various pitches, rhythms, durations, tones, vibrato, tempo, and so forth).

MIDI is the interface used by Sibelius, Finale, and many other music-authoring programs to speed input of musical notation. It can also be used with programs such as Sonar Home Studio.

It needs to be clearly understood that all MIDI information includes *no* actual sound. The information (digital, binary information) is later translated by a synthesizer (or software on a computer), that then turns the MIDI instructions into actual sound and music. A sample is if you press the middle C on a MIDI keyboard. The computer (through the MIDI interface) records the following instruction: *Note-On* for middle C. Then, when you release the key, it records the following instruction: *Note-Off* for middle C. Then, if you play back what was just "recorded," it turns *on* middle C for the duration you held it, and then it turns *off* middle C.

Compare this to an **audio** recording. A recording of sound (such as by putting a microphone in front of a trumpet, above a piano, or in a singer's hand) is made by turning the sound waves into electrical impulses, which create a *waveform* (such as pictured at left). The audio waveform, then, is played back by turning those digitally-stored waves into waves that you can hear (through speakers or headphones).

→ Remember, **audio** is recorded in *waveforms*, and **MIDI** is recorded as *instructions*.

More Information:
MIDI Manufacturers Association - http://www.midi.org/
All About MIDI - http://www.aboutmidi.com/
How MIDI Works - http://www.chrisbsmusic.com/howmidiworks.html
Musical Instrument Digital Interface (Wikipedia) - http://en.wikipedia.org/wiki/Midi