

De-Mystifying MIDI 101 (what you always wanted to know but were afraid to ask)

Q – What, exactly, is MIDI anyway?

A - Think of it mainly as an electronic triggering and control system for your organ. It replaces a mechanical, pneumatic or electric triggering system that links your keyboards to the sound generator. The beauty of using MIDI as a base for your control system is how flexible your organ becomes to maintain and upgrade.

Q – What can MIDI do?

A – Only if you program it to. With a MIDI based control system in your organ you can program it to control real pipes, chimes, pedals, pistons, keyboards, pedalboards, bells, 36bit/192KHz digital samples, sound modules, and even Lights.

Q – How does using MIDI affect me as a musician?

A – If you are asking that you probably wonder if Dylan was better before he went electric. MIDI is primarily an electronic way of controlling musical events. It's all about what you are putting into your music that matters. MIDI gives out exactly what you give it; especially when it comes to the organ.

Q – So what about the “sound quality” of MIDI?

A – What people mostly worry about when it comes to “organs and MIDI” is sound quality which actually has little to do with MIDI. MIDI is simply a control system language. MIDI, however is able to control both “real-pipes” and “high quality digital samples” either exclusively (i.e. only pipes or only digital) or simultaneously in a hybrid organ.

Q – Why would anyone want a hybrid system?

A – Well it usually comes down to either cost or space. Upgrading with new pipe stops can be prohibitively expensive. Usually the cost of digital stops is about 1/10 to 1/3 the cost of real pipes. For many churches they simply get much more for their money by going digital or they end up simply doing it for less.

The other reason is a lack of space. Adding a new rank of pipes can take up a lot of area. Some venues simply do not have the space. Also, the more ranks, the more space.

Q – Do you sacrifice sound quality by going digital?

A – This is the big debate right here and there is lots of baggage on both sides. The short answer is “it depends”. Let's face it! There are, and have been, some bad digital organs out there. I might also point out there are some bad real pipe organs as well out there. Luckily now there are exceptionally GOOD digital organs out there as well. Try the Marsall & Ogletree Opus 1 at Trinity Wall Street or, in Canada, the organ at St. Georges Anglican in Ajax, Ontario. They are not just organs that are “great for being a digital”. They are Simply Stunning as Organs Period!

Q – What makes a “good” digital organ?

A – Air! Air? Yes Air. One of the major problems for digital is to create the visceral, gut-shaking movement of air that a 32 foot pipe can produce. Coupled with that is the fact that every individual pipe is a “sound generator”. So if you have 4 ranks going, with a 5 note chord, you have 20 sources of sound. You cannot recreate that with the puny stereo output (2 sources) of most digital organ “packages” that are sold to churches. The good news is that as the sounds get higher, less air has to be moved. Therefore it is much easier for digital to produce the same sonic results as a pipe organ as the stops get smaller.

However, with some thoughtful design and some cutting edge technology it is now possible to produce sounds and an experience that can satisfy even a true organ connoisseur; even a 32ft stop!

Next Newsletter I will show you how that can be achieved. You can even show that article to your budget committee.....