

URL: <http://music.northwestern.edu/links/projects/midi/expmidiindex.html>

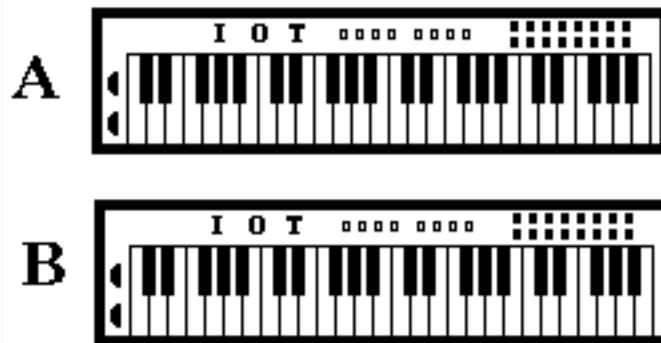
## MIDI Connections

Now it is time to try connecting a few different MIDI studios. Listed below are four different MIDI studios that are Java-enabled. Start with Studio A, which has two MIDI keyboards, and then go to Studio B, which consists of three MIDI keyboards. Studio C continues the concept of a daisy-chain, but the studio is more sophisticated and contains a computer, interface, keyboard, and three tone generators. Studio D is the last studio in the series. It resembles Studio C but a MIDI star network is added to the system.

### *Studio A*

Both keyboards have MIDI connections. Synthesizer A is the Master keyboard and Synthesizer B is the MIDI slave device.

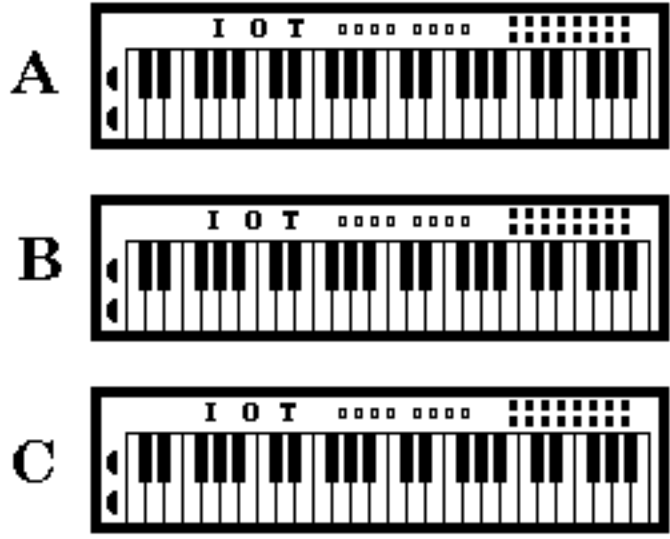
Which connections would you use so that **synthesizer A** is sending MIDI information to **synthesizer B**.



**Studio B**

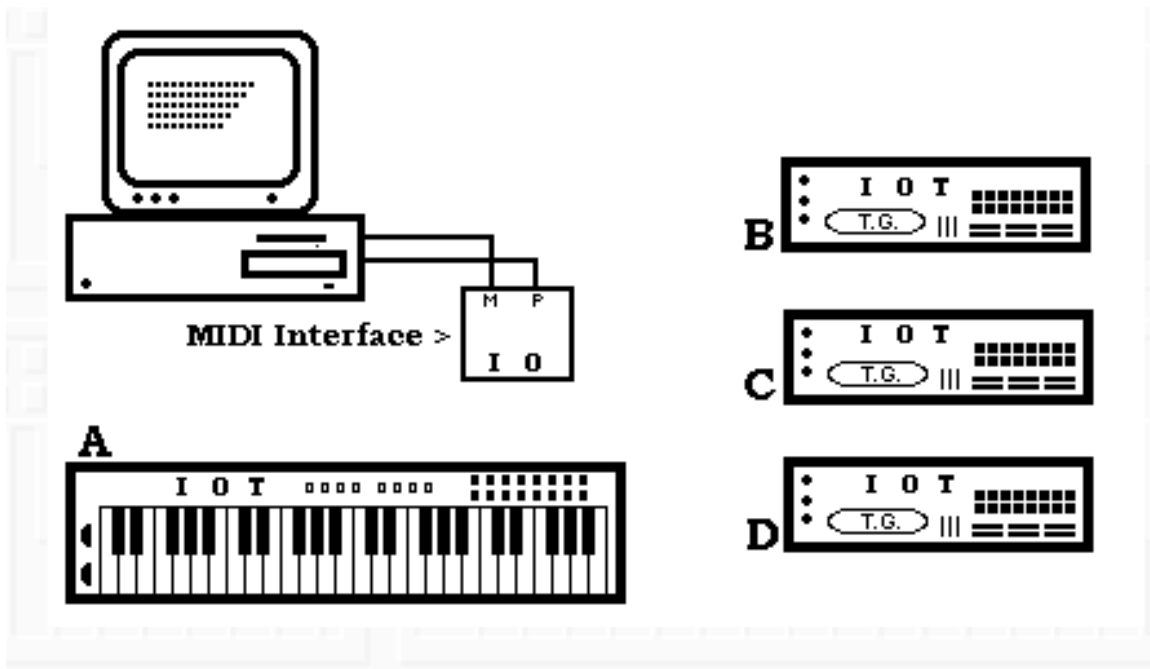
All three keyboards have MIDI connections. Synthesizer A is the Master keyboard and Synthesizer B & Synthesizer C are the MIDI slave devices.

Make the connection to send MIDI information from **Synth A** to **Synth B**, and then pass the MIDI information on to **Synth C**.



### Studio C

In this example we have added a computer and MIDI interface. The first order of business is to use the MIDI interface to connect the master keyboard to the computer so they communicate with each other. Next connect the three tone generators (synthesizers without keyboards) The MIDI Out on the MIDI interface is acting as a MIDI Out/Thru. It not only sends new information out from the computer, it sends a copy of all MIDI In information as well. This allows the keyboard to communicate with the computer and the three tone generators. Use the concept of the **daisy-chain network** set-up from the MIDI Thru port of the keyboard.



### Studio D

In this diagram, some connections are in **gray**. They are not working for this particular studio. A **multi-port Star Interface** receives MIDI data at the MIDI In ports and then copies the information and sends it out to one or more Thru ports. Each MIDI Thru port may be assigned to a specific MIDI In port. Connect the keyboard controller so that it sends information to the MIDI interface, then connect the MIDI interface to the Keyboard. Finally, connect the three remaining tone generators using a star set-up. You must follow a specific order of connections, so pay attention to the directions.

**Remember, do not use a daisy-chain set-up for the connections.**

