

Lab 3 - Pd and MIDI: Button Music

Music 250a - CCRMA 2002

DUE WEDNESDAY OCT 22, 2002

- **Read through the entire lab first, because items in later parts may affect your strategy on earlier parts.**

1. MIDI->Pd:

- Compile and download demo8 from the lab 3 code.
- Connect Pin D2 on your avrmini to the MIDI out connector on your protoboard. The MIDI out is probably a white wire plugged into one of the last rows of your solderless breadboard.
- Start Pd and open the miditest.pd patch that is in the pd subdirectory of demo8.

2. Buttons->MIDI->Pd:

- The purpose of this lab is to control and create music or sound in Pd. Using buttons as inputs to your Atmel microcontroller, you will send messages from the Atmel that relay your button presses to your Pd patch via MIDI. You can use as many buttons as you want, and you must use at least one button on the solderless breadboard. The result should be music, either a short composition or a framework for improvising. Think about the system as whole: the inputs, the processing of the inputs, and the output sounds you will produce. Your choices in any one of these aspects will affect all the others.
- You will need to write a C program for your Atmel and create a Pd patch. Use the avr-lib-demo programs to help you get started. See the website for Pd patches as well.

3. Performance:

- Find one of your classmates and teach him/her how to use your system. They will need to perform your composition or improvise with your system for one or both of the TA's. Note that this is mandatory, we are not joking.