MIDI controller

# Materials

* 6 × potentiometers
  + *Per potentiometer:*
  + 1 potentiometer knob
  + 3 wires (5V, GND, Ain)
  + Nut and washer
    - 6 mm shaft diameter
* 6 × push button LEDs
  + *Per button:*
  + 4 wires (DigitalPin, GND, DigitalPin, GND)
  + 470 Ω resistors
  + Plastic screw-cap
    - 15 mm shaft diameter
* MIDI jack
  + 1 × 220 Ω resistors
  + 3 wires
  + **Measure hole size**
* ~~Footswitch~~
  + ~~3.5 mm male/female~~
  + Replace with button for “resend inputs”
    - **Measure size of button**
* Microcontroller
  + Arduino UNO
* Power
  + 9V battery
  + 9V battery attachment
  + **Switch – measure size**
  + LED for power on indicator
* Casing
  + Cardboard box
    - 8 edges glued (top and sides)
    - Tongue flap lock (bottom)
    - Vertical, structural support walls
  + 6 holes for buttons
  + 6 holes for potentiometers
  + 1 hole for MIDI jack
  + 1 hole for footswitch plug-in (3.5 mm)
  + 1 slot for switch
  + 1 hole for LED
* PCB
  + Ground and 5V lines
* Multiplexer if needed