

## *Wiring USB Connector*

### **Purpose**

To enable access to the Arduino NANO's USB port from the external USB connector.

### **Parts**

USB cable with mini-B connector  
Soldering iron  
Solder  
RTV or epoxy

### **Procedure:**

1. Using the USB cable with mini-B connector, open the uBITX and directly connect the cable to the Arduino NANO and verify that your computer recognizes the device. You should be able to find it in the Arduino IDE and display board information. This verifies that the cable, connectors, and your computer configurations are all good. Note that you may need to download the Arduino drivers.
2. Measure approximately 15 inches from the mini-B connector on the USB cable and cut the cable at this point. This length will give a bit of extra cable.
3. Carefully trim back approximately  $\frac{1}{2}$  to  $\frac{3}{4}$  inch of the outer jacket being careful not to cut, nick, or strip the four internal wires.
4. Strip the ends of each of the wires approximately  $\frac{1}{8}$  inch, twist each to help prevent stray strands, and lightly "tin" with solder.
5. Looking from the top of the case's input/output board, solder the wires into the four holes so that the black wire is on the extreme left, followed by the red wire, followed by the white wire, followed by the green wire on the extreme right.
6. Before installing the boards back in the uBITX, verify that you can connect to the NANO through the input/output board.
7. Using RTV, epoxy, or other means, mechanically secure the cable to the input/output board.

# Result:

