

USB power hack, adding usb ports to a DX052 mixer

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Intro: USB power hack, adding usb ports to a DX052 mixer

This is another usb power hack. It demonstrates how to attach a couple usb ports on a DX052 mixer board for powering your ipod(s) or any USB device. I bought this mixer recently and love using it.



step 1: Equipment

The following equipment can be bought at just about any radioshack or electronics store.

Electronics:

- Soldering Iron
- 2 10K resistors
- LM7805 +5V voltage regulator

Other equipment:

- 2 port USB connector with pci bracket (taken from a computer case)
- drill and bits that can cut through metal
- rotozip



USB Connector



LM7805 Regulator

step 2: Take apart the DX052 and tap power supply

The DX052 comes apart very easily, unscrew the top and disconnect all cables. The cables that connect the mixing controls to the power supply are socket connections.

With a multi-meter find a connection near the power supply to pull DC voltage. The one I used was 16v. Carefully solder a wire to it to feed the voltage regulator.

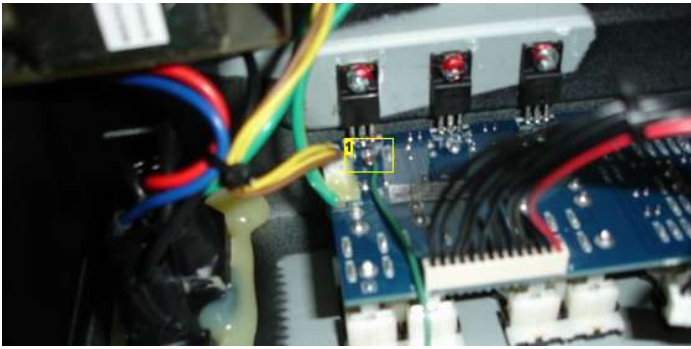


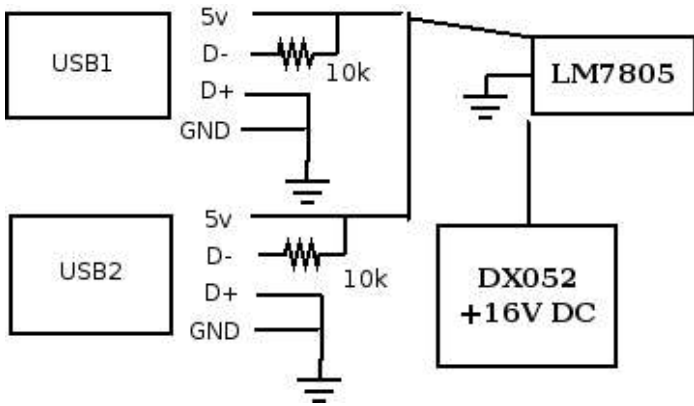
Image Notes

1. Solder a wire to the 16V supply on the power supply board.

step 3: Create the 5v circuit to supply the USB connector

You may want to lay this out on a breadboard first. Make sure you connect the pins to the LM7805 in the right order.

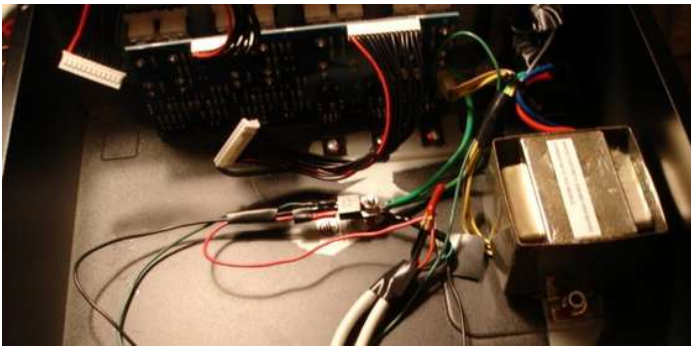
The pull up resistors for D- are required for some ipods charge but aren't needed for most usb devices.



step 4: Place the circuit in the DX052 mixer

There is plenty of room. I conveniently mounted the LM7804 on the ground tap.

Strip the USB connector and solder GND, 5v, D- and D+ to it



step 5: Drill holes in the DX052 for the usb connections

With a drill bit that can cut through metal make holes for the usb screws and connections, fill them out with a rotozip or dremel.

Cut the PC USB PCI slot bracket on both ends.



step 6: Putting the mixer back together

Attach the USB bracket and connect the USB ports.

