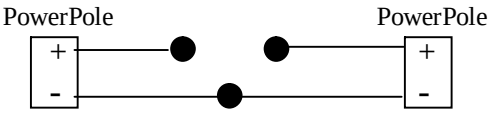
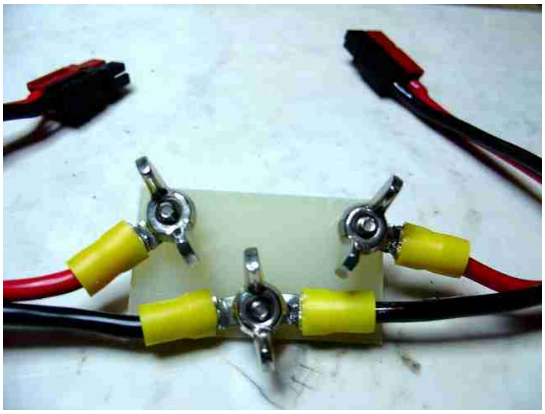
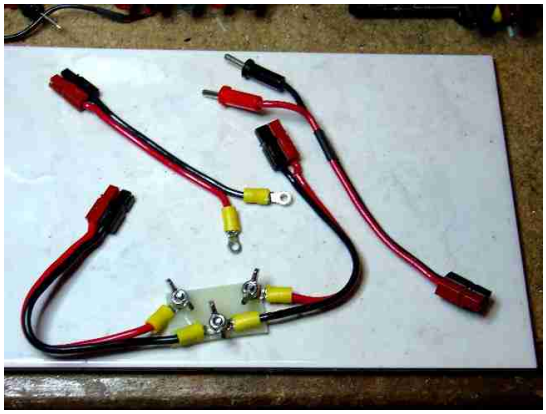
Simple in-line current/voltage monitoring fixture
By Phil Salas – AD5X

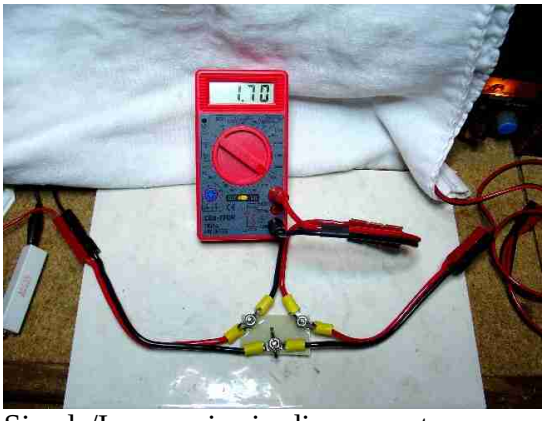
It seems that I frequently need to measure current drain and power supply voltage on various projects, and so I usually wind up with a messy bunch of clip leads when I try to do this. Since I've now converted everything to Anderson PowerPole DC connectors, I've built-up a simple PowerPole-based fixture that easily lets me make these types of measurements with little trouble. You can measure voltage across it, put in various series resistors to measure current with a voltmeter, or connect in a series ammeter. I just took a piece of non-plated printed circuit board (any non-conductive material can be used) and mounted #6 screws, nuts and wing-nuts as can be seen in the photos. I also built-up lug-to-PowerPole and a PowerPole-to-banana plug adapter cables as also seen in the photos. You can almost build this fixture in less time than it takes to kludge together the typical clip-lead mess. The last photo shows a very inexpensive current measuring set-up using a $4 Harbor Freight digital meter.



Simple Schematic


Fixture close-up


Fixture & adapter cables


Simple/Inexpensive in-line ammeter