

Simple PowerPole Adapter for Gamma HPS-1a Phil Salas – AD5X

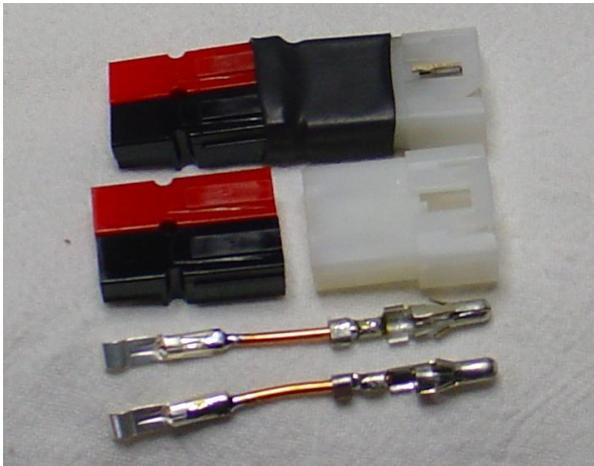
The Gamma HPS-1a power supply is a nifty unit, especially for powering portable equipment due to its tiny size. The only problem I have with it is that it uses a Molex 20-amp connector for the DC output. All of my equipment has been modified for the much more popular (and semi-standard) Anderson PowerPole connector. In my review of the HPS-1a, I modified that unit by removing the Molex connector and soldered in a pigtail wire with PowerPoles. However, this is not an easy modification for many folks (plus it will undoubtedly void the warranty). Therefore, I decided to build a short PowerPole adapter that plugs directly into the existing Molex connector.

You'll need the mating Molex connector. One is supplied with the HPS-1a. This is also a Radio Shack 274-151 (Molex connector with pins), or you can purchase the Molex housing (Mouser 538-03-12-2022) and male pins separately (Mouser 538-18-12-2222). You will also need the Anderson PowerPole red housing Mouser 879-1327, black housing (Mouser 879-1327G6), and terminals (Mouser 879-1331-BK).

To build the adapter:

- 1) Cut two 1.2" lengths of 14-gauge solid copper wire.
- 2) Solder or crimp one end of each wire into a PowerPole terminal.
- 3) Crimp on the Molex male terminal (use long-nose pliers to crimp).
- 4) Adjust the length from the end of the PowerPole terminal to the end of the Molex terminal to be 2.1".
- 5) Solder the #14 wire to the Molex terminal.
- 6) Insert the PowerPole terminals into the PowerPole housing.
- 7) Insert the Molex terminals into the Molex housing.
- 8) Place heat-shrink tubing or use hot-glue to insulated the wires.

The photos below show the details of the adapter, and the adapter plugged into the HPS-1a.



Separate pieces (below), complete adapter (above) Adapter plugged in to HPS-1a