

BUILDING A 12 VDC POWER PACK FOR HAND-HELD RADIOS

Power packs like this can be built in many ways. Here's an idea to try. Have a better design? Please, share it!

NOTE: Use with hand-held radios designed to operate from a 12 VDC source.

Parts list:

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| 1 ea. 12 VDC cable for your radio. | 2 ea. Anderson PowerPole connectors RED |
| 2 ea. 4 C-cell battery packs ¹ . | 2 ea. Anderson PowerPole connectors BLACK |
| 2 ea. 1/8" Zip ties at least 4" long. | 1 ea. Anderson PowerPole retention clip |
| 8 ea. Size "C" alkaline or lithium cells. | 4 ea. 16-18 AWG inserts for PowerPole connectors |
| 1 ea. Plumbers Goop or silicone seal (Type II ² only) | |

1. [] Use a 12 VDC power cable for your radio. Install ARES PowerPole connectors on the free end of the power cable, observing correct polarity. Make sure the cable is long enough to reach the battery pack.

2. [] Put the two C-cell battery packs back-to-back, wires at the same ends, and bind the packs together with two Zip ties – one from each side through the two small, round holes near the centerline of each pack. Tighten into place.

3. [] Connect a red wire from one pack to a black wire from the other pack. Twist or crimp these wires together and insulate. Tuck out of the way.

4. [] Attach the remaining red/black wires to PowerPole connectors of matching color.

5. [] Coat the complete bundle of wires at end of the pack with silicone seal or Plumbers Goop or other sticky insulating material. Keeps tinned wire ends from moving and breaking off.

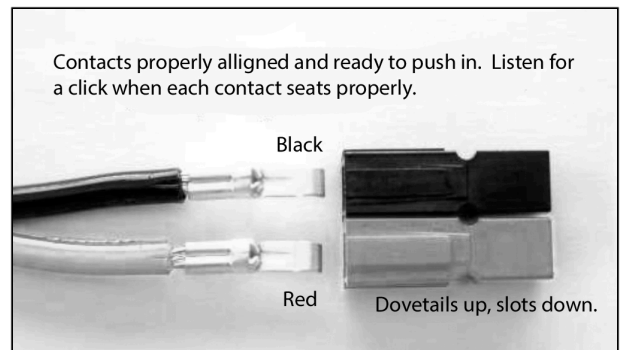
6. [] Slide the red and black PowerPole connectors together in the ARES arrangement.

7. [] Put eight fresh C-cells into the packs.

8. [] Use a voltmeter to double check: 12 VDC with correct polarity from the power pack.

9. [] Connect the finished 12 VDC power pack to the charging cable and the radio.

10. [] Insert the retention clip (or use a Zip tie or rubber band) to keep the PowerPole connections from pulling apart unintentionally.



Enjoy!! (Should run well for several days!)

NOTE: Test with your particular radio.

Known OK: Kenwood TH-F6 (start with fully charged internal battery).

Yaesu VX-7R (with internal battery removed!).

¹ Example: [Digikey BH24CW-ND](#) four "C" cell packs. (8-cell packs are available in 100-lot quantity.)

² Type II silicone seal does not give off fumes of acetic acid (vinegar). Type I silicon emits acetic acid, which can corrode copper wire and soldered connections..