Project Corner—Power Umbilical

Temporary vehicle set-up, getting power

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One of the tools that is highly recommended to have in your go kit or portable setup is a power umbilical. It is an awesome tool that allows you to power your radios directly from a vehicle battery without spending a lot of time wiring it up.
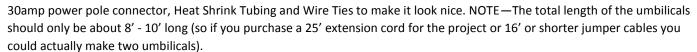

Let me emphasize that this particular power umbilical is intended for temporary setups. This could be for a public service event, temporary travel, or to support emergency communications in a vehicle you may get assigned to.

The cable is simple to construct and all of the parts can be obtained from your local hardware and/or auto parts stores. The cables I have constructed only cost me about $20 or less. You may already have all of the parts in your various junk drawers and spare things all hams seemed to always have. The wire comes from your typical pre-wired orange or yellow extension cords **(12awg or higher).** They are a great source for wire, just cut the ends off. The extra insulation on the outdoor extension cord helps protect the wires when you run them through the door of a vehicle or other location (it is very rugged).

I have also had success using lower gauge jumper cables for the wire **(12awg or higher gauge—i.e. 10awg, 8awg, etc.)**. Cut the battery clips off of one end of the jumper cable and use the rest of the cable for the umbilical—be sure to insert fuses after each battery clip. The clips on the jumper cables hold much better then the smaller clips you would by at the auto parts store.

The components are as follows: 2 Large Alligator Clips, 2 Blade Fuse Holders (12awg wire), 2 Wire Connectors (crimp on), 25' 12awg extension cord cut in half and the ends cut off, 30amp power pole connector, Heat Shrink Tubing and Wire Ties to make it look nice. NOTE—The total length of the umbilicals should only be about 8' - 10' long (so if you purchase a 25' extension cord for the project or 16' or shorter jumper cables you could actually make two umbilicals).

Connect the parts together as shown in the pictures. **MAKE SURE YOUR RED ALEGATOR CLIP CONNECTS TO THE RED POWER POLE**. The cable is connected directly to the battery and then run inside the cab. The path you take will depend on the vehicle, but usually involves coming through the front passenger door.