EMC204 DC Connectors Standard

To: Emergency Communications Units - Information Bulletin
To: Emergency Management Agencies via Internet and Radio
By: Auxiliary Communications Service (ACS) of the
California Governor's Office of Emergency Services

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Following the bulletins on Battery Power we were asked more about the cable connectors adopted for our ACS unit.

We recognize there are a variety of opinions, so this is what we've learned and decided. Whatever connector you use we recommend that you have several of them made up with the other end unconnected, but stripped bare ready to connect. That way you will have the clear opportunity to match whatever needs may unexpectedly occur.

At State OES ACS we use the Anderson Powerpole for our standard use. We do recommend them for use by County and City ACS, RACES and ARES personnel in California so there will be fewer problems when units are working under mutual aid in support of each other. Obviously it is not mandatory. For those who use a different connector we urge you acquire some Anderson Powerpole connectors and make up a few "jumper" cables to interconnect between yours and the Andersons (or vice versa). That's prudent planning and reduces the stress when in a tight situation. It helps to show others that you are professionally prepared for the unexpected.

For our purposes we use 15 or 30 ampere sizes; however, Anderson lists sizes of 10, 15, 30, 45, 75, 120 and 180 amperes.

The connectors come in Red and Black. Due to the way they are mated they are genderless, in that the mating process can be altered to those cases where someone wants red (positive) on the right and black (negative) on the left instead of the other way (Red on left, Black on right) when viewing from the contact end.

To help more fully understand these connectors please refer to:

The OES web site: http://www.oes.ca.gov/ and select the "OES Divisions, Regions and Partners", then "Telecommunications" and then "ACS Reference Materials" and click. The ACS Connector page will open if you have Adobe Reader. If not, it's provided. Also:
http://www.andersonpower.com/
http://home.earthlink.net/~kbourne/races/sca/powerpole.html
http://www.94.cyberhost.net/depwr/info.html

Most users find them easy to assemble, change and dissemble. They are cleverly designed. Until you use and assemble one it's difficult to appreciate how - and why - they work so well. They can be connected to the wire by either solder or crimp. Personally, I prefer solder. Just be frugal with it to avoid oversizing the pin that will be inserted into the rear of the connector. A small blade screwdriver can be used to assist the insert process when placing the wired terminal into the plastic connector halves.

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Thanks for your input to these bulletins. It's always a help.
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