

------

**Grassroots Emergency Communications Operations** 

## **Field Battery Box Upgrade**

© 2017, KI6GIG. All rights reserved.

www.neighborhoodlink.com/GECO

<u>gecoradio@gmail.com</u>

Ready to Serve and Sustain Our Community

Two GECO Field Battery Boxes were upgraded with an Anderson Powerpole SB50 connector. This replaced the previously installed P30 connectors linking battery boxes for inline charging. The SB50 connector allows the Field Battery Boxes to be charged in-line with the main station battery bank.



Upgraded field battery box with new SB50 connector (left) and P30 connector (right).



The P30 connector harness with foam as a chaffing / pinch guard.



Previous field battery boxes using P30 connectors for in-line charging

Field battery boxes have an SB50 at one end and a P30 connector at the other end. All GECO radios are equipped with P30 connectors. The dual connectors on field battery boxes allows for flexibility. The battery boxes can be used with radios or connected to other GECO DC power distribution panels using SB50 connectors.

The main station battery boxes are fitted with 2 SB50 connectors. This allows the battery boxes to be connected end to end to form the station battery bank. When

field battery boxes need to be charged, they can be added to one end of the station battery bank.

The anticipated duty allocation is for one field battery box deployed to the field or on rapid deployment stand-by while the second battery box is on maintenance charge. Each battery box holds three 12 VDC 16 Ah sealed lead acid batteries for a theoretical maximum of 48 Ah. The actual available battery duration would be less. GECO operations mode is to use 20% of the available power before recharging.