

# Installation and Operations Manual

## DP-700B Internal Battery Module Replacement



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# DP-700B Internal Battery Module Replacement

Note: Please read the following instructions in their entirety before attempting to replace the DP-700B Internal Battery Module. It is recommended that AC power be removed before starting this procedure. The replacement module batteries may have a different appearance than the old batteries. Please call SEI Technical Support at 800-765-4734 if you have any questions.

## Items Included in the Battery Module Replacement Kit

1. Battery Replacement Module.
2. 9.5" red wire with one Fast On connector and one red plastic connector.
3. 16" Black Wire with Fast On connectors on both ends.

## Remove Old Battery

1. Remove the fuse from the panel mount fuse holder .
2. Loosen the eight 8/32 cover screws and remove the front cover.
3. Remove the lower two cover screws on the left side.
4. Disconnect the red wire from the battery module.
5. Remove the red battery connector attached to the PCB on the right side of the chassis. If the red and black connectors are attached to each other, remove both, slide them apart and re-insert the black connect.
6. Remove the wire that runs from the battery module to the fuse holder. Be careful when removing the wire from the fuse holder, do not use excessive force.
7. Remove the four 8/32 hex nuts and lock washers on the top of the battery module plate.
8. Remove the 8/32 screws that attach the battery module plate to the bottom of the chassis. Depending on the year of manufacture there will be two or four screws. These screws may be discarded as they are not needed to mount the new battery module.
9. Carefully remove the battery module from the chassis.

## Install New Battery

1. Carefully slide the new battery module into the chassis such that the 3 holes in the top of the battery module plate fit over the right three 8/32 studs.
2. Fit and tighten three 8/32 hex nuts and lock washers on the right three 8/32 studs.
3. Connect the new red wire with the red connector from the Fast-On terminal marked LVD on the battery module PCB to the battery connector on the PCB mounted on the right side of the chassis.
4. Connect one end of the new black wire to the open metal tab on the fuse holder and connect the other end to the open negative terminal of the battery module.
5. Install the fuse in the panel mount fuse holder.

## **DP-700B Internal Battery Module Replacement**

**Adjust Power Supplies** – When new batteries are installed in the DP-700B the power supply output voltage must be adjusted to insure proper charge voltage

1. Apply AC power.
2. Apply the normal telephone and NT1 load. (The DP-700B must have a load connected to properly adjust the power supply output voltage.)
3. Connect a DVM, Digital Volt Meter, to the power supply sense voltage. The sense voltage is measured between the white and black wires on the bottom of the power supply. (There are two sets of wires going to the power supply. The top wires are white, green, and black for 120 VAC input. The bottom wires are red, black and white for nominal 55 volts DC output.)
4. Turn the power supply voltage adjustment pot to obtain a sense voltage of 56.0 volts. Turn the pot CCW to increase the voltage and CW to decrease the voltage.
5. Repeat this procedure for each power supply. To get the power supplies properly balanced you may have to repeat this procedure 2 or 3 times.
6. Verify that the battery charge voltage is now 54.6 volts by connecting a DVM to the external battery connector. The battery charge voltage will be approximately 1.4 volts less than the sense voltage. If the battery charge voltage is not 54.6 volts, adjust the sense voltage on each power supply the necessary amount up or down to get the required 54.6 volts. The sense voltage of each power supply must be the same so that they equally share the load.

### **Replace Cover**

1. Install the two lower cover screws on the left side.
2. Install the cover and tighten all eight cover screws.