

Installation and Operations Manual

BP-8 Internal Battery Module Replacement



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BP-8 Internal Battery Module Replacement

Note: Please review the following instructions in their entirety before attempting to replace the BP8 Internal Battery Module. 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. Chassis Connector Assembly
3. 8" Black Wire with Fast On connectors

Remove Old Battery Module

1. Remove the panel mount fuse from the fuse holder.
2. Remove the four 8/32 cover screws and remove the front cover.
3. Remove the two to four 8/32 screws that hold the battery module tray to the chassis. There are two screws on the right side and two screws on the left side.
4. If necessary pull the battery module out an inch or so to gain access to the connecting wires.
5. Disconnect both wires from the battery module.
6. Carefully remove the battery module from the chassis.
7. Disconnect the black wire from the chassis connector to the fuse holder. Be careful when removing the wires from the fuse holder, do not use excessive force.
8. Remove the chassis connector. To remove the chassis connector use a pliers to squeeze the plastic tabs on the outside of the chassis and pull the connector towards the inside.
9. Remove the last wire from the fuse holder.

Install New Battery Module

1. Install the new chassis connector and wire assembly with the black wire towards the front.
2. Attached the black wire from the chassis connector to the metal tab on the end of the fuse holder.
3. Carefully slide the new battery module into the chassis and push the battery module against the back of the chassis.
4. While holding the right side of the battery module plate against the back of the chassis install an 8/32 screw in the bottom right side battery module mounting hole.
5. While holding the left side of the battery module plate against the back of the chassis install an 8/32 screw in the bottom left side battery module mounting hole.
6. Connect the red wire from the chassis connector to the Fast On tab marked "LVD" on the battery module PCB.
7. Connect one end of the 8" black wire to the open metal tab on fuse holder and connect the other end to the open negative terminal of the battery module.

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8. Install the fuse in fuse holder.
9. Install the four cover screws but do not tighten.
10. Install the cover and tighten all four screws.

Adjust Power Supply

When new batteries are installed in the BP-8 the power supply output voltage that the BP-8 is connected to must be adjusted to insure proper charge voltage.

DP-240 / DP-140 Power Supply Adjustment

1. Remove the front cover of the DP-240/140.
2. Apply AC power.
3. Apply the normal telephone and NT1 load. (The DP-240/140 must have a load connected to properly adjust the power supply output voltage.)
4. Connect a DVM, Digital Volt Meter, to one of the external battery connectors.
5. Turn the power supply voltage adjustment pot to obtain a battery charge voltage of 54.6 volts. Turn the pot CCW to increase the voltage and CW to decrease the voltage.
6. Replace the front cover.

DP-700 Power Supply Adjustment

1. Remove the front cover of the DP-700.
2. Apply AC power.
3. Apply the normal telephone and NT1 load. (The DP-700 must have a load connected to properly adjust the power supply output voltage.)
4. 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.)
5. 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.
6. 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.
7. 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.
8. Replace the front cover.