



GAI-TRONICS® CORPORATION

A HUBBELL COMPANY

Solar Panel Interface Kit

Model SPK200

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General Information

The Model SPK200 Solar Panel Interface Kit is designed for use with GAI-Tronics Model RFP7784-108 Solar Panel (30 watt) and Model XB001 External Weatherproof Long-Life Battery Kit.

The Model SPK200 Solar Panel Interface Kit includes the following components:

Qty	Description
1	Cable bushing
1	Terminal block, 2-point
1	Battery charge regulator
2	Screws, #6-32 × 0.500-inch
4	Screws, #6-32 × 0.187-inch
1	Solar kit wiring harness
1	Mounting Kit

Installation

Installing the Model RFP7784-108 Solar Panel Array

1. Remove the Model RFP7784-108 Solar Array Panel from the shipping package.
2. Mount the solar panel to the bracket using the provided hardware. Instructions are included with 30LT HPM mounting kit.
3. Install the mounting kit to the desired surface. If surface mounting, two lag screws or bolts are required. If pole mounting, hose-clamps or U-bolts (up to 4-inch diameter) are required.
4. Route the cable attached to the panel into the Model XB001 Battery Enclosure.

Installing the Charge Regulator Module and Interconnection

1. Referring to Figure 1, remove the four screws from the front of the XB001 enclosure (mounted or not mounted). Open the front cover to the left and pull straight out until the hinge pins separate from the rear section. Set the front door of the enclosure aside.

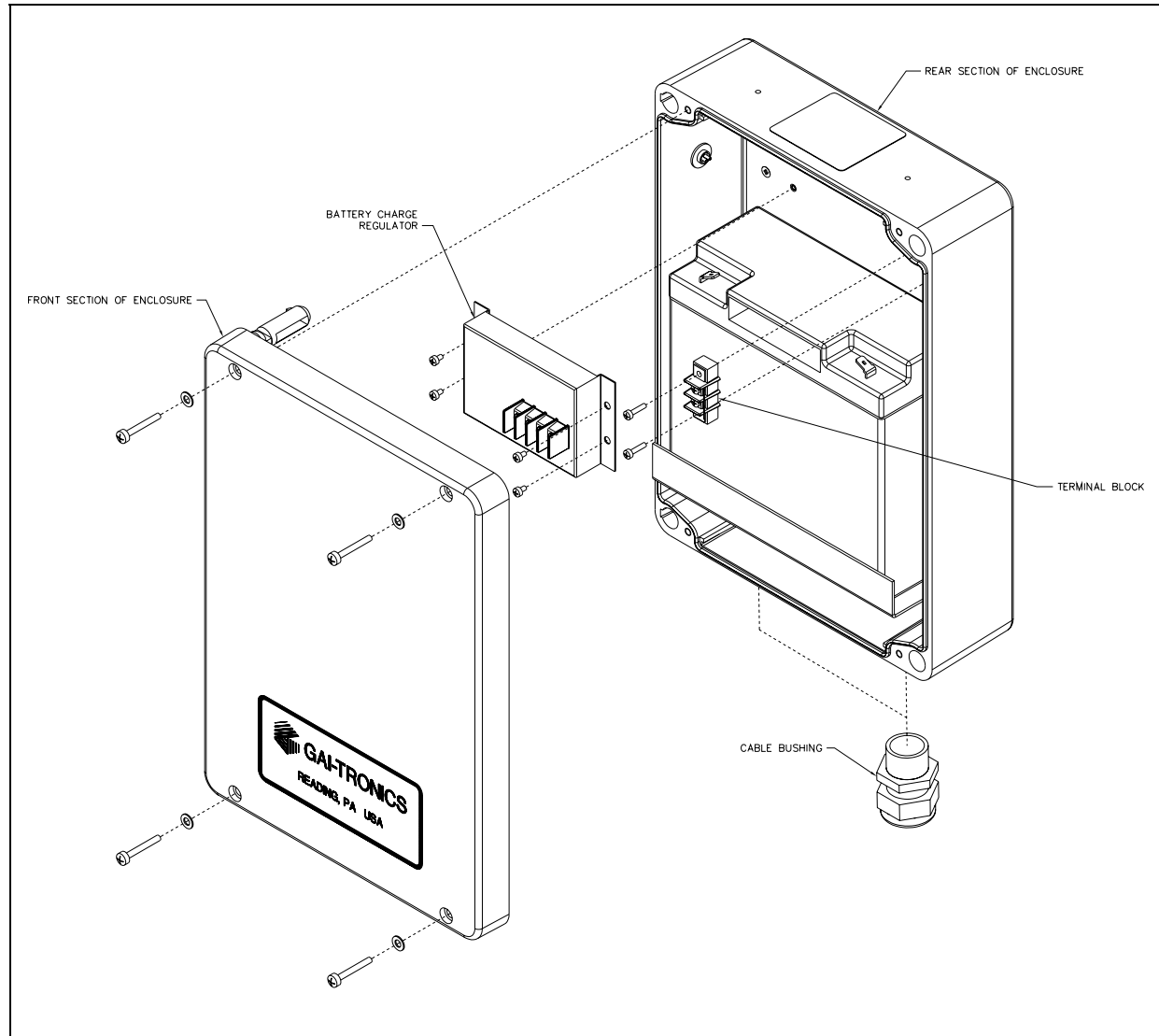


Figure 1. Exploded view of the External Battery Enclosure with Charge Regulator Module

2. To prepare for the solar panel cable entry, drill a 0.492-inch hole into the bottom of the enclosure at one of the two drill spots (dimple provided). Install the provided bushing into the hole.
3. Install the 2-point terminal block using the #6-32 \times .187 inch (3/16-inch) screws provided.
4. Install the charge regulator module using the #6-32 \times .500 inch (1/2-inch) screws provided.
5. Install the harness assembly provided, carefully adhering to the color-coding depicted in Figure 2, the interconnection diagram.

6. Connect the ¼-inch quick-connect fastons from the weatherproof receptacle harness to the terminal strip.
7. Attach the charge regulator's temperature sensor wire to the side of the fully charged battery using the self-adhesive foam provided with the regulator.
8. After mounting the rear section of the enclosure, the solar panel cable can be installed. Refer to Pub. 43003-037 provided with the Model XB001 Kit for further information. Insert the solar panel cable through the cable bushing, allowing enough slack to route the cable through the enclosure and removing any excess cable. Attach to the charge regulator module. (The use of spade lugs is recommended.) Tighten the bushing to insure retention of the rain-tight rating.
9. Return the door to the rear section by inserting the hinge pins and pushing into place, closing the door. Re-install the four screws using 16 to 20 inch-pounds of torque.
10. Connect plug end of the wiring harness provided with the Model XB001 Kit to the weatherproof receptacle and connect the lugged end to the terminal strip inside the Addressable Amplified Speaker. If this solar power arrangement is used for GAI-Tronics' RF Call Boxes, cut the lugs off the wires, strip the insulation, and insert into the power connector on the Call Box PCBA.

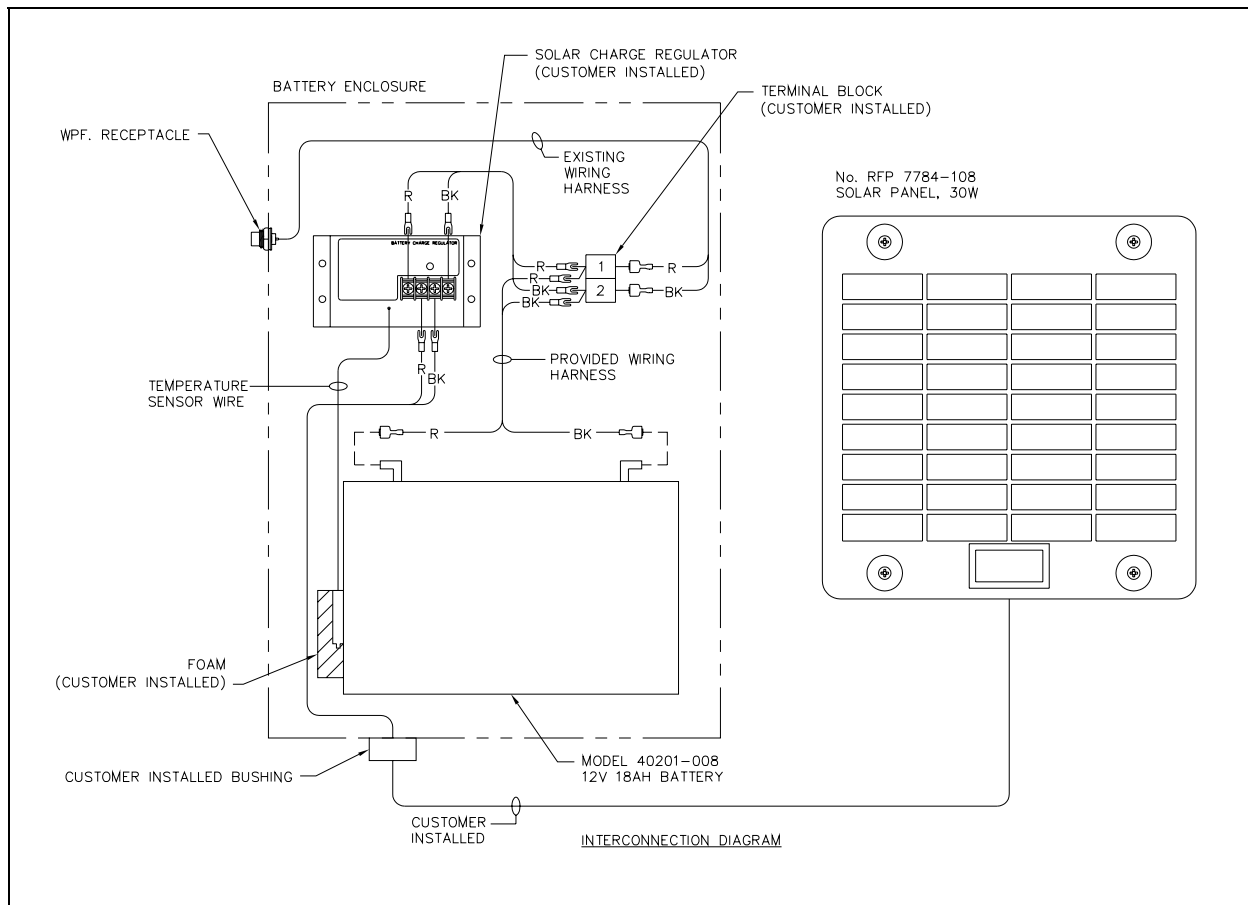


Figure 2. Interconnection Diagram