Warning!

- Be cautious around electricity electrical components and batteries. Shocks burns, injury and even death can occur if an installer comes in contact with electricity.
- Install according to national and local building codes
- Keep ezPowerPlant out of puddling water and direct sun
- Inspect unit after shipping for damage prior to installation
- Batteries generate explosive gases during normal operation, ensure lid is not sealed to allow venting
- Use only deep cycle 12V lead acid batteries
- Do not connect cables backwards or to other sources of power such as the grid or power outlet, this could destroy the ezPowerPlant and cause harm

ezPowerPlant Setup

The ezPowerPlant is designed to be preassembled as much as is possible, but shipping limitations require some minor final assembly steps. A flat bladed screw driver and an adjustable wrench or pliers will be needed.



UNPACKING - Remove the ezPowerPlant unit from the shipping box.



Remove the solar panel(s) from the shipping box(s).



INSTALLING AXLE -



Install the axle and wheels. Slide the axle through the two holes on the back of the box. Next slide a white PVC spacer on each end of the axle. Next slide a wheel on each end of the axle. Then slide on a large washer on each end of the axle.



Last install a hatch pin clip into the hole at the end of the axle. Do the same with the other hatch clip pin on the other end of the axle.

INSTALLING BATTERIES –



Typically ezPowerPlants are ordered and shipped without batteries to save the buyer shipping costs (125lbs). Models EP25xx and greater require two 12 volt deep cycle lead acid batteries, model size 27DC or 29DC recommended – available from Costco, Wal-Mart, Sears, etc.. Remove any loose items from inside the ezPowerPlant box such as bolts. Place the two batteries into the ezPowerPlant box. There are four aluminum L brackets on the inside bottom of the box to keep the batteries from slipping around after they are installed. Connect the battery cables provided to the appropriate battery terminals. Be sure that the PLUS(+) cables connect to the PLUS battery terminals, and the MINUS (-) cables connect to the MINUS battery terminals, usually this is done with nuts included with the battery. **Ensure not to connect backwards or inverter and charge controller could be permanently destroyed.**

After the batteries are connected the charge controller and inverter should work and can be tested.

SOLAR PANEL MOUNTING – Install the rubber foot to the bottom of the solar panel by putting the threaded portion through the hole at the center of the bottom of the solar panel, then turn the nut and lock-washer to secure it in place.



Using the bolts and wing nuts, attach the solar panel to one side of the ezPowerPlant mounting arm. A bolt and wing nut is used for each side of the solar panel.



Feed the two wires from the solar panel through the 90-degree connector on the side of the box. This will require removing the two screws then removing the connector cover. Once the wires are through the hole. Reinstall the connector cover with the two screws.



Connect a YELLOW solar panel wire to a YELLOW wire from the ezPowerPlant. Be sure to push these two YELLOW connectors together until YELLOW touches YELLOW. Do the same with the BLACK wires. The first solar panel is now connected. If your model of the ezPowerPlant includes two solar panels, you will repeat these steps to connect the other solar panel. READY TO GO - The last step is to put the box lid back on to make the unit weather resistant.

SOLAR PANEL ORIENTATION – Remember to position the ezPowerPlant so the solar panel(s) takes the best advantage of the sun. If you have two panels, you may wish to orient one panel towards the morning sun and the other to the afternoon sun.



110 VOLT USE – All ezPowerPlants come with 110 volt output. To turn on the INVERTER lift up the door and flip on the power switch to the INVERTER. You can now plug in 110 volt cords into the inverter. Your ezPowerPlant is now operational.

220 VOLT USE – If your model of the ezPowerPlant came equipped for outputting 220 volts, it includes a TRANFORMER which is mounted in the ezPowerPlant box above the INVERTER. When you are using your 220 volt-capable ezPowerPlant for 110 volt only, be sure to turn off the power switch on the TRANSFORMER to save idle power. To access the transformer switch, remove the ezPowerPlant box lid. The TRANSFORMER is the upper of the two black electronic boxes inside the ezPowerPlant box. To turn on or off, locate the power switch on the end of the TRANSFORMER.

BACKUP FOR ON-GRID ITEMS – Wire the output to a transfer switch that connects power to the grid or the generator. A couple examples are shown below.





Reliance Controls Transfer Switch (left), Schneider Electric Generator Transfer Switch (right), both for 120V and 240V.



Example: Schematic for connecting to a 220V Well Pump or 240V Air Conditioner. The double pole double throw switch with break before make (transfer switch) is not included.