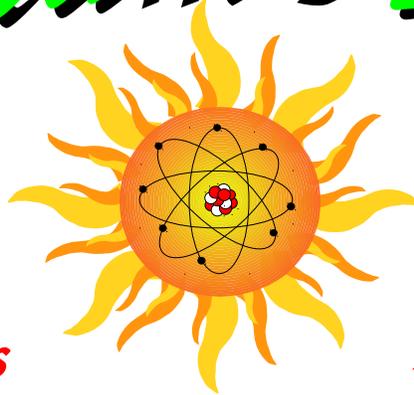


# Quantum Harvest

*Faraday  
Enclosures*



*Portable Solar  
Power Stations*

## Owner's Manual

For Quantum Harvest Model 175



[www.quantumharvest.net](http://www.quantumharvest.net)



## Introduction

Congratulations on your purchase of a Quantum Harvest portable solar power station! These units have been carefully designed and hand-crafted to provide many years of trouble-free operation. In the unlikely event of malfunction, we offer a 1 year warranty on the batteries (if provided by us.); 3 years on the inverter and charge controller; 5 years on everything else. For warranty details, see page 34.

To obtain maximum performance and long life from your new power station, it is important to gain a basic understanding of how such units operate and their limitations. The heart of the unit, and it's main component, is the battery. This is where the energy from the solar panels is stored for later use. The particular battery we have selected is a deep-cycle Absorbed Glass Mat (AGM) medical-grade battery. This battery is maintenance free and can be stored and used in any position. Since it does not give off gases as it charges, there is no danger of fire and it never needs to have water added.

To obtain maximum life from this, or any other battery, it is important to try to avoid deep cycling, that is, drawing it down flat before allowing it to recharge. Sometimes this cannot be avoided, but if at all possible, strive to avoid doing so.

Another important component is the inverter. This is the device that converts the low voltage DC current from the batteries into the high voltage AC current that we are familiar with. (All Quantum Harvest power stations also have 12 volt DC receptacles and USB charging sockets for the appropriate devices, in addition to standard 120 volt AC house current.) The inverter is protected internally from overheating and low battery voltage, and externally from over-current draw by a 30 ampere resettable circuit breaker. The 175 watt model will sustain a continuous 175 watts of current, and will briefly provide up to 300 surge watts.

The other important part is the solar panels. We offer a choice of an additional 30 watt solar panel to complement the 30 watt panel that is included with the Model 175, bringing it's total solar power rating to 60 watts for quicker recharge times.

## Usage Instructions

To use the Model 175, place the solar panel(s) in a location, (preferably South-facing) where it/they can gather the maximum amount of light. Place the base unit in a dry, convenient location where the cord(s) from the solar panel may be plugged into the jacks on the back of the unit. (See below)



Once plugged in, the solar panel will automatically keep the batteries charged as long as the main switch in the “on” position with no further user intervention.

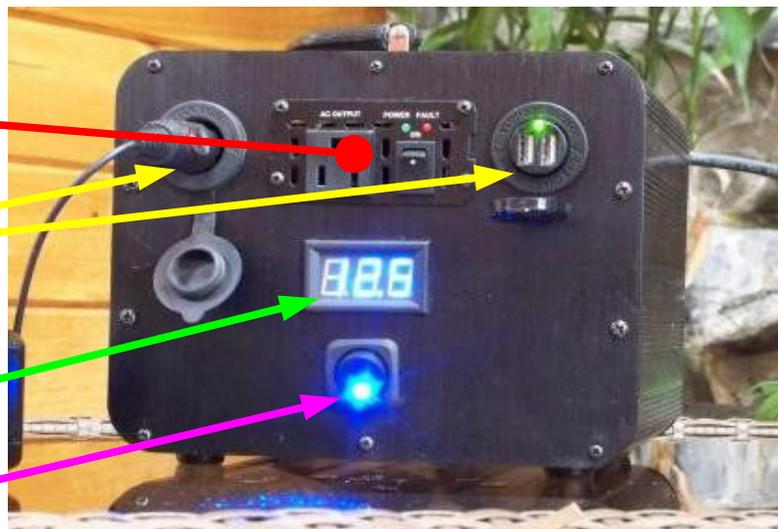
Note that the main switch must be on to charge the battery and to use the 12 volt DC/cigarette lighters and the USB ports (if so equipped), but it is NOT necessary for the main switch to be on when using the inverter, as it is on a separate circuit.

*Inverter*

*USB Ports, 12VDC  
Outlets/Cigarette lighter  
receptacle(s)*

*Battery voltage meter*

*Main switch*



## Using the Optional AC Charger



To recharge the unit when there is no sun, an optional AC charger is available. To use, plug the AC charger into a wall socket, and plug the cigarette-style plug into the DC receptacle as shown. The main switch must be on. The charger unit will display a red LED when charging, and when fully charged, the LED will turn green. The AC charger is fully automatic, so may be left plugged in with no harm even if the solar panel is also receiving sunlight.

# Contact Information

Quantum Harvest, LLC

89 Chapman Ridge Rd., Athens, ME 04912

Email: [support@quantumharvest.net](mailto:support@quantumharvest.net)

# Warranty Information

All Quantum Harvest power station base units and mobile solar panel units are warranted to be free of defects in materials and workmanship for:

**Batteries, if provided by us.....1 year**  
**Inverters, AC chargers and solar charger/controllers.....3 years**  
**Everything else, including solar panels.....5 years**

To obtain warranty service, contact us at: [support@quantumharvest.net](mailto:support@quantumharvest.net) for instructions. We will assist in diagnosing the affected component(s), and furnish an RMA. Shipping both ways is on us. You won't pay a cent for warranty service.

**In addition to the above warranty, we are so confident of our products, we will never, as long as you own it, charge you labor for repairs. Even after the warranty period, if a component fails or gets damaged, just contact us at the above email address, and we will assist in diagnosing the problem and either arrange to send you the part at cost, or have you ship us the affected module, where we will diagnose the problem and contact you with the cost of the replacement part(s). You will pay what we pay, no more.**

## What is NOT COVERED under the warranty:

Physical damage to the solar panels, including, but not limited to; broken glass or broken or bent parts. If this unit falls out of a truck at 65 mph and goes bouncing down the road, one can hardly expect the manufacturer to fix it for free!

Physical damage to the power station itself. If it gets dropped off a tailgate or table, it is going to be damaged.

Water damage to the internal components of the power station.