



the **Human Power Generator System** is small, portable, and dependable - perfect for emergencies, power failures, remote locations, and off-grid applications. It can be pedaled or cranked by hand to charge 12 volt batteries and run small appliances. Incorporate it into your existing 12 or 24 volt system or simply plug your 120 volt appliance into the Human Power Generator System outlet and start pedaling. It's as easy to operate as an ordinary bicycle.

The Human Power Generator System comes equipped with the Human Power Generator (pictured at left) and a stand-alone Portable Power System which includes: storage battery, 200 watt inverter (with 300 watt peak power), LED battery voltage readout, connection cables, and a 120 volt outlet to

turn your calories into useful power. All you need to do is plug into the Portable Power System outlet with your standard AC or DC lights or appliances. To keep your system charged, you just hook up the Generator to the Portable Power System, and pedal...it's the same way you would recharge an ordinary battery, except you provide all the power! The typical average continuous power that can be generated by pedaling the Human Power Generator is up to about 75 watts. The maximum amount of power that an average human can generate *sustainably* is about 125 watts. Up to 1,500 watts can be generated in short spurts. The maximum power obtainable through hand cranking typically is about 50 watts. The pedals and optional hand-cranks are interchangeable.

Though even the *Tour de France* winner could not run an entire household's electrical appliances with it, the Human Power Generator System can give you a boost when and where you need it most (charge your car or boat battery, recharge portable electric tool batteries, run emergency back-up lighting, run your PC at your remote cabin). You can maximize the use of your Human Power Generator System by retrofitting your home with compact fluorescent lighting and energy efficient appliances.

Easy to use and great exercise, the Human Power Generator System will give you a first hand idea of exactly how much energy it takes to run household lights and small appliances.

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Stock No. 454211, Stand-Alone Human Power Generator \$497 [Order Now](#)

Stock No. 454216, Human Power Generator System (with Portable Power System) \$850 [Order Now](#)

technical information**human power generator system**

The Human Power Generator System can be used for **charging batteries** or for running **lights and appliances**. To operate standard 120 volt ac lights and appliances plug directly into the outlet on the Portable Power System. If you choose to use the Human Power Generator without the Portable Power System, 12 volt dc lights and appliances can be connected directly to a small battery (for stabilization) in a circuit with the stand-alone Human Power Generator.

measurement of human power

The typical average continuous power that can be generated by pedaling is about 75-125 watts, or one-sixth horsepower, more or less, depending on the weight, strength, and endurance of the person pedaling. Higher power, up to as much as 1,500 watts, can be generated in short spurts. The maximum power obtainable through hand cranking is more a function of strength than of weight, and is typically about 50 watts.

The power in watts is equal to the generator output voltage multiplied by the output current in amperes. Pedal or hand cranking power can be measured by connecting a voltmeter and ammeter into the generator circuit, and by multiplying the readings together. For instance, if the voltmeter reads 12.5 and the ammeter reads 10 amperes, the power being generated is 125 watts. To convert watts into horsepower, divide the number of watts by 746. In this example, 125 watts would be equal to $125/746=0.17$ horsepower.










When the Human Power Generator is used to charge a battery, the approximate power can be read directly from the ammeter alone, by assuming the voltage to be that of the battery. In the case of a 12 volt battery, whose terminal voltage is typically 12.6, a 0-10 ammeter scale can be overlaid with a 0-125 watt scale, or even a horsepower scale.
more power to you!

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