Product Instruction Manual

By Water of Life

We would like to thank you for taking the first step to go Blue! By using our product and services you will be utilizing an ever-renewable resource to power your life. This Manual will give you all the information regarding each part, how they affect one another, how to put it together, how to maintain it, and finally how to contact us for any support you may need in your leap into the renewable energy family!

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CHAPTER 1 PRODUCT PARTS AND TOOLS

1.1 Turbine and Shaft

The Turbine is the main part used to turn kinetic energy from a flowing water source into electricity. As water moves through the fins of the turbine it will turn a shaft alongside it connecting to the generator. The Shaft is what connects the Turbine to the Generator to transfer energy.

1.2 Generator

The Generator takes the kinetic energy the Turbine creates and turns it into electricity as alternating current.

1.3 Transformer

The Transformer turns the alternating current produced by the Generator and changes it to high voltage current to be utilized in a designed power grid.

1.4 Battery (Sold Separately)

The Battery will store all power from the Transformer This will allow for power to be available even if the Turbine is not being utilized. (Battery Cable Included)

1.5 Housing

The Housing will hold both the turbine and generator and can used to lower and raise to allow users to decide when to generate power. This will also allow for easier maintenance.

1.6 Tools

Tools List: Allen Keys, 3 cans of Epoxy Adhesive, 3 bags of Allen Screws, Spare Cables, 2 turbine shaft brackets

CHAPTER 2 INSTALLATION AND ASSEMBLY

2.1 Assembly of the Housing

Step 1: From Box 1 take out the 4 steel legs, 8 steel bars pull out the Allen key, Allen screws, 1 braking fork, and the 4 cables.

Step 2: Place legs into a rectangular pattern using 4 bars on both the bottom and top of the legs in the preplaced screw holes. (During this step please ensure your turbine will reach your intended water source)

Step 3: Locate the Housing frame to allow one side to be next to accessible land while placing the rest within the water stream.

Step 4: On the top of each steel bar you will see preplaced screw holes with numbers etched onto them. You will need to match the numbers on the bars to the feet of the generator. During this step, you can place the braking fork on the generator side of the frame. In the placement hole etched with the letters BF.

Step 5: Connect the small motors on each leg to the generator. Once attached you can use the placed buttons on the generator to lower and raise the housing in and out of the water.

2.2 Assembly of the Turbine

Step 1: From Box 2 pull out the Allen screws, 2 cans of Epoxy Adhesive, barrel, fins, and fin stabilizers.

Step 2: Utilize Allen Key and screws to attach the fin stabilizers (silver in color) to the barrel.

Step 3: Take out 1 can of epoxy adhesive, fins, and remaining screws. On the flat surface at the bottom of the fan place a layer of epoxy and place in the fin stabilizers

while lining up screw holes. Once placed use the remaining Allen screws to connect the fan to the stabilizer.

Step 4: Once all items are connected use the second can of epoxy adhesive to seal any gaps between the barrel and fin stabilizer.

2.3 Connecting the Turbine to the Generator

Step 1: Grab the turbine shaft, bracket, screws, and the can of epoxy from box 3.

Step 2: Place the turbine shaft into the generator and use 1 bracket to connect to the generator.

Step 3: Place the turbine barrel onto the shaft utilizing the remaining bracket to connect them on the opposite side. (The orientation of the barrel in part with the generator does not matter as the shaft is able to spin in both directions.)

Step 4: Use your final can of epoxy adhesive to seal the gaps between the shaft and both the turbine barrel and generator.

2.4 Connecting the Generator to the Battery

Step 1: Take out the cable wheel from box 4.

Step 2: Plug in the Blue connector to the generator and plug in the Yellow Connector to your battery. (Note that in total you will only have 100ft if you require a longer cable please reach out to request a longer cable and we will send you one free of charge!)

CHAPTER 3 OPERATION AND REGULATION

3.1 Enabling Turbine to Generate Power

Step 1: Pull back the attached brake fork from the turbine letting the fans free. It will be spring loaded so you will twist it to keep it in place.

Step 2: Once free use the buttons on the generator to lower the housing to allow the turbine to enter the water stream. After the turbine begins to spin, it will begin to generate power through the generator.

3.2 Placing Turbine to Standby Mode

Step 1: Utilize the generator buttons to raise the housing to allow the turbine to hang out of the water.

Step 2: As the turbine comes to a stop you can use the button labeled by the spinning arrows to slowly rotate the turbine to be in place for the brake fork to hold any one of the fins. Standby mode allows you to not add additional wear or damage during windy weather, or flash floods, or to keep it out of the water when the flow is slow.

CHAPTER 4 MAINTENANCE

4.1 General Maintenance

To properly care for your HydroElctric Generator you should schedule periodic inspections and maintenance. Items to put on your checklist should be the following:

1. Check for general wear or rust on all parts.
2. Ensure all electrical connections are clean and there is no damage to any of the cables/wires.
3. Make sure that the turbine shaft spins properly and does not create clicking sounds while rotating.
4. On the side of your battery will be a health indicator, please ensure the light remains green, if red you may need a new battery as it isn't efficiently holding charge.
5. Ensure all epoxy seals are still in place and without any cracks.

4.2 Support Team Information

For any questions or concerns please contact our support team utilizing the following:

Email: WaterOfLife.Support@gmail.com

US Number (+1) 123-456-7890

International Number (+0) 098-765-43213

Your Instruction-Writing Process

1. My target audience would be those who have an interest in renewable energy. Staying economically friendly can open a path to those who have even a slight interest. It would be welcoming to those of any age as it's never too late to change the world though in our current climate it would more than likely range from those aged 21-45!
2. For font choice, I decided to stick with Arial as the general public is more attuned and familiar with the font, which allows our brains to read it more easily. For font size, I chose a larger size for titles to allow for an easier identification of what each page goes over. Overall I organized each sub-section by its steps associating it with numbers going by chapter and then step number. Headings remained the company name and spacing was not utilized as much but rather indentation to allow a smoother reading process and an easier flow of information for each specific chapter/step
3. A difficulty I had was trying to word instructions to have the customer envision what each step entails. As the product is fictional I found it difficult to find any images remotely close to the design I had in my head. I attempted to go as in-depth as I could and had a friend read over it to see how well they could understand my thought process without any help.
4. When it came to this I didn't plan anything out initially, rather I laid out what I believed was necessary in an instruction manual after reading a few others on hydroelectric generators. After having all of these put together I started to put them together in what I deemed a logical order. After each "section" was in order and I was satisfied with it I proceeded to fill each section with all the information and steps I believed necessary. I

have to say that this process can be a bit inefficient as I constantly had to go back to prior sections to change minor details, but in the end I believe it worked out!