

# User Manual

## METAL AIR FUEL POWER PACK



Please read through this manual carefully in order to use this product both correctly and safely.

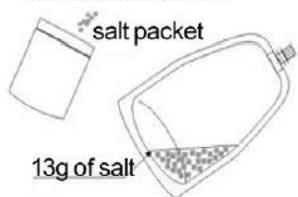
### Introduction

The metal air power pack is comprised of a magnesium alloy anode, a gas diffusion cathode and neutral electrolyte or salt electrolyte system. Which is high with energy density, light weight, portable and vastly abundant, thus it is available for various applications such as charging a mobile phone, laptop and tablets, cameras and lighting. it is a kind of new-type green energy.

TT POWER has 2 cells serially connected, each cell has a single side air cathode and magnesium plate positioned inside the device. Just add a salt solution into the pack through the water inlet on the top side and then electricity can be generated as the metal is consumed. When the metallic plates are used up, you can easily replace them with new ones and replenish either the saltwater or seawater acting as the electrolyte so that the TT POWER can continue to generate electricity.

### Initial Instruction

1. Pour 13g of salt into soft water bottle



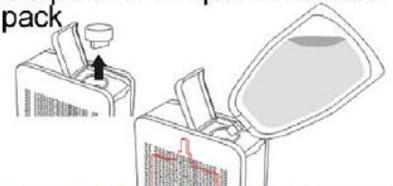
2. 150ml of water



3. Dissolve salt completely via shaking to make electrolyte



4. Open the top cover and pour salt water into the pack



Note: After replace the first time used electrolyte. The second use shall see the user add 150ml of electrolyte first and then add water just before it reaches the metallic plate as shown in the above picture.

**Important:** This power pack should be used within four hours whatever its state is after each electrolyte addition.

**Caution:** If you don't want to use the item immediately, please do not add salt water into the pack to avoid the unnecessary corrosion of the metal plate. And after use, please pour out the electrolyte in time and rinse the pack.

Take the body of the power pack out of the box. Secondly open the cover and fill it with prepared electrolyte (i.e. saltwater made under the instructions shown above), then the power pack will become activated and will begin to generate electricity, connect your device to the USB port for charging.

### Maintenance Instruction

1. Rotate bottom plug by 90° counterclockwise



2. Pull out bottom plug and let electrolyte out



3. Put bottom plug back and turn 90 degrees to the right



4. Add half clean water into the pack and shake



After 4 hours of usage, please clean the power pack by following the steps above. Firstly, please turn off electric power to which the appliance is connected and take the connector off it. Rotate the bottom plug 90° counter-clockwise and follow the ways described above to wash the battery cartridge appropriately. Please rinse it cleanly with water, dry it, tighten the bottom plug up (90° clockwise rotation), put the rubber plug back in place, close the top cover and keep it in a dry place for future use.

### Recharging Instruction

1. Electrode plate



2. Open two covers in both sides



3. Dig out the seal cap



4. Open the seal cap



5. Disconnect the plug connector



6. Unscrew



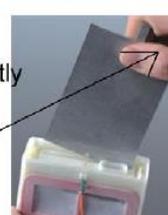
7. Take off the seal cap and sealing gasket



8. Pull out used electrode plate



9. Insert new electrode plate correctly (note: the longer end is near the water inlet)



10. Assemble all parts by doing above steps in reverse order (from step 7 to step 2)



Approximately after using the product 7 times (lasting 4 hours each time) the electrolyte may need replacing as the magnesium plates begin to erode and the electric output may drop as a result. At this time, please ensure to replace the electrode plate step by step according to the above procedures, then simply add electrolyte (made as shown in the “Initial Instruction” section) and the power pack can continue to supply electricity. The cleaning will lead to a better initial performance. Therefore for electrodes already been used, it is better to brush or scratch dust off the surfaces of the electrodes before you set them in the power pack.

### Use With Caution

1. Please check whether the output voltage and power are compatible with the electric appliance before use. When an electric or electronic appliance that operates at a lower voltage is applied, it may result in damage to the appliance or lead to reduction in its battery life.
2. Please make sure TT POWER is placed upright on a flat surface while using it keeping it in a horizontal state. For long distances of travel, the electrolyte should be removed in case of leakage.
3. While running the power pack, please do not turn it upside down to avoid leakage of the electrolyte, which would cause poor performance from the pack.
4. Please do not electrically recharge this product it may seriously degrade air cathodes.

Model	TT Power
<b>Dimensions</b>	93*45*133mm
<b>Weight</b>	293g
<b>Metallic anode</b>	Magnesium alloy
<b>Capacity</b>	14000mAh
<b>Output</b>	USB: DC5V 0.5A
<b>Lifetime</b>	>/= 500 times
<b>Application</b>	Emergency, small outdoor electronic devices, PDA, lighting, etc.