
USER MANUAL – 12V Battery Box – 02/2018



INTRODUCTION: Thank you for your purchase. This battery box is designed to store wind or solar energy in a way that is portable and easy to use. Please follow this manual thoroughly to get the most life from your battery box.

This battery box is **not waterproof**. It is designed to be used indoors, or outdoors temporarily without rain or water ingress.

SAFETY INFORMATION:

1. This product is not a toy. Keep it away from children.
2. Use as intended only.
3. Inspect before every use; do not use if parts are loose or damaged.
4. Do not plug small appliances into the inverter to directly recharge their nickel cadmium batteries. Always use the recharger provided with the appliance.
5. Keep away from any direct heat source or combustible material.
6. Do not use electrically powered products in the presence of flammable gases or liquids.
7. This battery box is **not waterproof**. Do not use this item in rain, on a boat, or any other wet area.
8. This is a delicate device, handle with care. Do not drop or strike this item.
9. Do not open housing. This product contains no user-serviceable parts. Internal parts may be electrified, even with unit off and power disconnected.
10. Do not overload this device. The inverter is designed for loads up to 80 Watts at 120 Volts AC only. Check the wattage of any device before using this item to power it. Some rechargeable appliances may damage the Power Inverter or the appliance. When first using a rechargeable device, check its temperature for the first 10 minutes. If it becomes abnormally hot, do not use this device with the Inverter.
11. Allow adequate ventilation. Do not cover this unit while it is plugged in. This unit generates heat; without proper ventilation it may overheat, potentially causing a fire hazard.
12. Leave the main power switch "off" whenever the box is not in use to help prevent draining and perhaps damaging the battery.
13. Switch any device to be powered off before plugging into this device.
14. Stay alert. Do not use while tired or under the influence of drugs, alcohol, or medication.
15. Store idle equipment. When not in use, this product must be stored in a dry location to inhibit rust.

16. WARNING: This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, et seq.)
17. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
18. Do not use the inverter to power sensitive devices such as medical devices or computers. Do not use in ignition protected areas.
19. Fuse must be replaced with fuse of the same type and rating only.
20. The warnings, precautions, and instructions discussed in this instruction sheet cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator. **While Cutting Edge Power is proud to be an American company dedicated to producing a high quality product, we are not responsible for any property or personal damage to you or your device(s) due to use/misuse of this product. Always use good judgement and never try to modify or disassemble this product.**

HOW IT WORKS:



Read the entire Important Safety Information section at the beginning of this document including all text under subheadings therein before set up or use of this product.

The list below details the input and outputs of your battery box:

- Voltage meter: Shows the voltage of your battery. The voltage meter is only powered when the momentary switch is held down. Please refer to the chart below for typical 12 volt lead acid battery voltages.



VOLTAGE	STATE OF CHARGE	STATUS
12.60	100%	GOOD
12.50	90%	
12.42	80%	
12.32	70%	
12.20	60%	
12.06	50%	
11.90	40%	DISCHARGED – CHARGE AS SOON AS POSSIBLE
11.75	30%	
11.58	20%	BAD – CHARGE IMMEDIATELY. PERMANENT BATTERY DAMAGE MAY OCCUR
11.31	10%	
10.5	0%	

You may charge the battery with a Cutting Edge Power Mini Wind Turbine, or any solar panel designed to be used with a 12 volt battery. Charging details are described later in this manual.

If your battery approaches 13.5V, we recommend disconnecting the wind turbine to avoid permanent damage to your battery. If your battery approaches 11.75V, we recommend using an additional charging method to charge your battery to avoid permanent damage.

- On-Off power switch: Turns the battery box on or off. All power is routed first through a 10A fuse and then through this switch.



- Momentary switch: When held down, the only thing this switch will power is the voltage meter. The reason this is not a constant on or off switch is to avoid draining the battery.



- 12V Cigarette lighter socket(s): This socket can be used as an input or output. Cutting Edge Power Mini Wind Turbines can be ordered with 12V plugs that use this socket to charge your battery. You may also plug a solar panel into this socket. Try to avoid plugging in any devices that can drain the battery too quickly. Any device that uses more than about 80W continuous could damage the battery and/or blow the main fuse.



- USB output(s): These USB output connections are 5V only. They have their own circuitry and fuse. They can be used to charge a phone, tablet or similar device.



- Inverter: Your battery box may be equipped with an 80 Watt 12VDC to 120V/1PH/60HZ AC inverter. Models with the inverter will power up and charge electronics, appliances, camcorders, TVs, DVD players, video game consoles, smartphones, tablets and laptop computers using the battery's power.



- Inverter vent: This vent hole is designed to remove heat from the inverter. If you are using the inverter, make sure to not block this vent.



Please note: Opening the battery box in any way will immediately void the manufacturer's warranty. Any adjustments or changes are at your own risk.

As always, if you have any questions please don't hesitate to contact us through our website at <http://www.cuttingedgepower.com/about-us>. We typically answer all questions within 24 hours.