



POWER INVERTER OWNER'S MANUAL



WARNING:

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item# 43829

1. INTRODUCTION

Thank you for purchasing the Ironton Inverter. With our state of the art, easy to use design, this product will offer you reliable service for providing AC power for your home, cabin, RV or Trailer. The Ironton Inverter can run many AC-powered appliances when you need AC power anywhere. This manual will explain how to use this unit safely and effectively. Please read and follow these instructions and precautions carefully.


IMPORTANT SAFETY INFORMATION

This section contains important safety information for the Ironton Inverter. Each time, before using the Ironton Inverter, READ ALL instructions and cautionary markings on or provided with the inverter, and all appropriate sections of this guide.

The Ironton Inverter contains no user-serviceable parts. See Warranty section for how to handle product issues.

 **WARNING:** Fire and/or chemical burn hazard


- Do not cover or obstruct any air vent openings and/or install in a zero-clearance compartment.

 **WARNING:** Failure to follow these instructions can result in death or injury

- When working with electrical equipment or lead acid batteries, have someone nearby in case of an emergency.
- Study and follow all the battery manufacturer's specific precautions when installing, using and servicing the battery connected to the inverter.
- Wear eye protection and gloves.
- Avoid touching your eyes while using this unit.
- Keep fresh water and soap on hand in the event battery acid comes in contact with eyes. If this occurs, cleanse right away with soap and water for a minimum of 15 minutes and seek medical attention.
- Batteries produce explosive gases. **DO NOT** smoke or have an open spark or fire near the system.
- Keep unit away from moist or damp areas.
- Avoid dropping any metal tool or object on the battery. Doing so could create a spark or short circuit which goes through the battery or another electrical tool that may create an explosion.

 **WARNING:** Shock Hazard. Keep away from children!

- Avoid moisture. Never expose unit to snow, water etc.
- Unit provides 120 VAC; treat AC output sockets the same as regular wall AC sockets at home.

 **WARNING:** Explosion hazard!

- DO NOT use the Ironton Inverter in the vicinity of flammable fumes or gases (such as propane tanks or large engines).
- AVOID covering the ventilation openings. Always operate unit in an open area.

LIMITATIONS ON USE


Do not use in connection with life support systems or other medical equipment or devices.

2. PRODUCT DESCRIPTION

The Ironton Inverter package includes the items list below.

- Power Inverter base unit
- Owner's manual
- DC Input cable


3. INSTALLATION

 **WARNING:** The AC output socket of the inverter is only intended for power supply, and cannot be in parallel connection to the mains. Ironton recommends that all wiring be done by a certified technician or electrician to ensure adherence to the applicable electrical safety wiring regulations and installation codes. Failure to follow these instructions can damage the unit and could also result in personal injury or loss of life.

CAUTION: Before beginning your power inverter Installation, please consider the following:

- The Ironton Inverter base unit should be used or stored in an indoor area away from direct sunlight, heat, moisture or conductive contaminants.
- When placing the unit, allow a minimum of three inches of space around the unit for optimal ventilation.

Installing the Power Inverter System

 **WARNING:** Electrical Shock Hazard

The unit 'On/Off' switch does not disconnect the DC power from the battery. Use a DC Disconnect Switch or disconnect the DC input cables connection to disconnect the DC power from the battery before working on any circuits connected to the unit. Failure to follow these instructions can result in death or serious injury.

CAUTION: Reverse of the DC Input terminal will damage the unit and cannot be repaired. Damage caused by reverse polarity connection is not covered by the warranty.

- Insert the 12V lighter plug into 12V socket.
- Unit is ready for use.

Testing the Power Inverter:

- Turn unit on by using the On/Off button on the unit. The 'Power' light turns on indicating the Ironton Inverter is ON. AC output is now available.
- Plug in a small AC load like a 25W table lamp or small appliance to the AC socket to verify AC is available.
- The unit is successfully installed and functioning properly.

4. UNIT OPERATION

 **WARNING:** RISK OF EQUIPMENT DAMAGE

- Do not plug surge-protected power bars into the unit's 120 VAC outlets. The surge protected components on the surge-protected power bar may not like the modified sine wave output generate by the inverter.

- Do not connect an AC power source like utility power or generator to the unit 120 VAC outlets.

Turn ON and OFF the unit

- Toggle the On/Off switch to 'ON' position to turn unit ON.
- 'Power' indicator will turn green.
- 120 VAC Output is available at the AC output socket.
- Toggle the On/Off switch to 'Off' position to turn unit off. 'Power' indicator will turn off.

Estimate Run time on Load

Following run time is an estimate based on using a 12V-120AH battery bank for reference. Actual run time may vary.

Load	Consumption	Estimate Run time
Cordless Phone	5W	150 hrs
Clock/Radio	8W	100 hrs
Table Lamp	40W/60W	27 hrs/ 18 hrs
Freezer (8.8 cu. ft.)	80W	15 hrs
20" LCD TV	100W	11.5 hrs

5. TROUBLESHOOTING

Problems	Reasons & Solutions
Inverter fails to work	1. Check if the plug is in place or whether it's loose; 2. Check if the inverter is switched on; 3. Check if there is voltage output in the cigarette lighter socket (see if external leads are correctly connected with the red to "+" and black to "-" and if the battery is exhausted)
The output voltage of inverter is inadequate and can be only used for small- appliances	1. see if the capacity of battery is too limited (replacing or reducing appliances in use) 2. the voltage of battery is too low (recharging or replacing) 3. In case of an external battery, the lead has to be replaced with a thicker and shorter one.
The inverter does not work, while the green indicator flashes and is accompanied with intermittent beeps	the power of electrical appliance in use succeeds the nominal power, which leads to automatic protection (reducing the power of used electrical power)
The inverter gives out intermittent beeps	1. the voltage of battery is too low (to be re- charged or replaced) 2. reducing the number of electrical appliances in use
The shell of inverter is too hot	Normally below 65°C internally protected from too high temperatures

For technical questions please call **1-800-222-5381**.

PARTS LIST

Part#	Description	Qty.
1	Power Inverter	1
2	DC Cord	1

For replacement parts and technical questions, please call **1-800-222-5381**.

6. WARRANTY

One Year Limited Warranty



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