OWNER'S MANUAL

Power Inverter PI-140

Converts DC Battery Power to AC Household Power

CAUTION:
Read all Safety Rules and Operating Instructions, and follow them with each use of this product.

Schumacher Electric Corporation
Mount Prospect, IL 60056 U.S.A.

Send Warranty Product Repairs to:
Customer Service Returns
P.O. Box 280, 1025 E. Thompson
Hoopeston, IL 60942-0280
Questions? Call Customer Service: 1-800-621-5485

00-99-000666/0606

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

Before using your PI-140, read and understand this Owner's Manual.

- Keep the inverter well ventilated in order to properly disperse heat generated while it is in use. Make sure there are several inches of clearance around the top and sides and do not block the slots of the inverter.
- Make sure the inverter is not close to any potential source of inflammable fumes, gases or clothing.
- Keep the inverter dry.
- DO NOT allow it to come into contact with rain or moisture.
- DO NOT operate the inverter if you, the inverter, the device being operated or any other surfaces that may come in contact with any power source are wet. Water and many other liquids can conduct electricity, which may lead to serious injury.
- Do not place the inverter on or near heating vents, radiators or other sources of heat.
- Do not place the inverter in direct sunlight. The ideal air temperature for operation is between 50° and 80°F.
- Do not use near open engine compartment.
- Only connect the power inverter to a 12-volt battery accessory outlet. Make sure the AC plug connection is tight.
- Do not modify the AC receptacle in any way.
- Use only 15-amp fuses.

BEFORE USING PI-140 POWER INVERTER

It is important to know the continuous wattage of the device you plan to use with the inverter. The PI-140 must be used with devices drawing 140 watts or less. If the wattage is not marked on the device, an estimate can be made by multiplying the AC input current (Amps) by the AC voltage (110V).

Devices like TVs, fans or electric motors require additional power to start (commonly known as the “starting or peak power”). The PI-140 can supply a momentary surge in wattage; however even devices rated less than the maximum 140 watts can exceed the inverters surge capability and cause an automatic overload shutdown.

Make sure the device you are using is compatible with a modified sine wave inverter.

OPERATING INSTRUCTIONS

1. Push the PI-140 firmly into the 12V accessory outlet. The LED indicator light should glow GREEN verifying the inverter is receiving power. (If connecting in a vehicle, remove the cigarette lighter from its outlet.)
2. Make sure that the device to be operated is turned OFF.
3. Plug the device into the PI-140 AC outlet.
4. Turn the device on. If the LED Indicator briefly blinks

when you first plug the inverter in, it is a sign that there is a short circuit within the power supply. Remove the 12-volt plug from the 12-volt accessory outlet. Firmly reinsert the plug. If this does not remedy the problem, try using a different 12-volt accessory power outlet.

NOTE: A ''buzzing'' sound emitted from inexpensive sound systems is the result of ineffective filters in the sound system. This can be resolved by purchasing a sound system with a higher quality power supply or higher quality filter.

POWER SOURCE

Your average automobile or marine battery at full charge will provide an ample power supply to the inverter for approximately 3 hours when the engine is off. The actual length of time the inverter will function depends on the age and condition of the battery and the power demand being placed by the device being operated with the inverter.

Turn OFF the device plugged into the inverter before starting the engine. To maintain battery power, run the engine every 2 to 3 hours for approximately 10 minutes to recharge the battery. While the PI-140 draws very low amperage when not in use, it should be unplugged to avoid battery drain.

USAGE EXAMPLES

Device Type	Estimate Wattage
Cell Phones, MP 3 Players	10 watts
Portable CD	50 watts
Laptop Computers	90 watts
Video Games	100 watts

LED INDICATOR AND OVERLOAD PROTECTION

The LED glows GREEN automatically when plugged into a 12V DC source and will not glow under the following conditions:

1. When the power input from the vehicle's battery drops to approximately 10 volts, low battery shutdown occurs and inverter shuts off.
2. When the power input the vehicle's battery exceeds 15 volts, high voltage overload protections occurs.
3. The continuous load demand from the equipment or device being operated exceeds 140 watts.
4. The case temperature becomes hot (exceeds 145°F).

Reset:
To reset after shutdown occurs, check the source of the problem and correct. Reinsert the inverter into the 12V accessory outlet.

TROUBLESHOOTING

PROBLEM: Low or No Output Voltage
Reason*/Solution*

1. **Poor contact at terminals.**
   Unplug and reinsert PI-140.
2. **Equipment being operated is drawing too much power.**
   Use a higher capacity inverter or do not use the device.
3. **Inverter is too hot (thermal shut down).**
   Allow inverter to cool. Check for adequate ventilation. Reduced the load on the inverter to rated continuous power output.
4. **Fuse blows.**
   A blown fuse is usually caused by reverse polarity or a short circuit within the device being operated. To replace:
   - Disconnect the device immediately.
   - Find the source of the problem, and repair it.
   - Install a new 15-amp fuse. Do not tighten the fuse cap too far; finger tight is sufficient.
     NOTE: Installing a fuse higher than 15-amps may cause damage to the inverter.
5. **Inverter may be defective.**
   See warranty and call Customer Service 800-621-5485 (Hours: 7 a.m. – 4:30 p.m. CST).

SPECIFICATIONS

Maximum Continuous Power	140 Watts
Surge Capacity (Peak Power)	280 Watts
No Load Current Draw	<0.2 Amps
Wave Form	Modified Sine Wave
Input Voltage Range	10.5 – 15.5V DC
Low Battery Alarm	N/A
Output Voltage	110 – 125V AC
Low Battery Shutdown	9.9V – 10.8V DC
High Battery Shutdown	15.0V – 16.0V DC
Optimum Efficiency	>85%
AC Receptacles	One, NEMA 5-15 (USA)
Dimensions	5”H x 2.5”W x 1.5”D
Product Weight	Approximately .45 lbs.
AC Outlets	110V AC 3-Prong
Fuse	15 Amp (250V)

REPLACEMENT PARTS

Fuse - 15 Amp (250V)
Can be purchased at most electronic component retailers.

LIMITED WARRANTY

Schumacher Electric Corporation warrants your inverter to be free from defects in material and workmanship, excepting abuse or misuse, for a period of two years from the date of sale to the original user or consumer purchaser. If your inverter malfunctions or fails within the 24-month warranty period because of a defect in material or workmanship, we will repair it without charge or replace it.

This warranty is in lieu of all other express warranties. The duration of any implied warranty, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose made in respect to your unit, is limited to the period of the express warranty set forth above.

For warranty service, **return your inverter as well as proof of purchase** to the factory or a designated agent:

Schumacher Electric Corporation,
Warranty Service Department
1025 E. Thompson, P.O. Box 280,
Hoopeston, IL 60942-0280
Phone: 800-621-5485 (Hours: 7 a.m. - 4:30 p.m. CST)

You will be responsible for all insurance and freight or other transportation charges to the factory or point of repair. We will return your inverter freight prepaid if repair is covered under warranty. Your inverter should be properly packed to avoid damage in transit since we will not be responsible for any such damage.

In no event shall Schumacher Electric Corporation be liable for consequential damages. Some states do not allow limitations on the length of the implied warranty or the exclusion or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.