User’s Manual

We are constantly improving our products so specifications are subject to change without notice. Visit our website for the latest product information.
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Thank you for purchasing the Power Dome® 400 by Wagan Tech®. With normal care and proper treatment it will provide years of reliable service.

IMPORTANT INFORMATION

- Please read and understand all warnings, cautions, and notes included in this manual before using the Power Dome® 400. Follow instructions provided by your vehicle manufacturer and other devices intended to be used with this unit. Keep these instructions for future reference.
- Make sure the Power Dome is fully charged before first use. We recommend 48 hours for initial charge.

GENERAL WARNINGS

WARNING: The inverter output can be lethal. Improper use may result in property damage, personal injury, or loss of life.

- This appliance is NOT intended for use by persons with reduced physical, sensory, or mental capabilities.
- Children or persons lacking in experience and knowledge also should NOT operate this appliance unless he/she has been given supervision or instruction concerning the proper usage and warnings of the appliance by a person responsible for their safety.
- For proper and safe operation of any accessory outlet, do not place anything in it except the plug of the accessory to be used.
- Use only the chargers, cables, and clamps provided. Unauthorized parts may damage the unit.
- This product has no consumer serviceable parts other than the external fuse. Do not attempt to open the unit’s enclosure, doing so will void the warranty.

STORAGE

This unit may be stored in any position. Make sure the clamps and air hose are securely tucked away in their original positions. Store in a cool, dry area. If the unit is not used for a prolonged period of time, recharge every 3 months.

PROPER DISPOSAL

- Appliance, accessories, and packaging should be recycled in an environmentally friendly manner. Plastic parts are coded for purposes of separation when recycling.
- Battery-powered electrical appliances contain materials which are harmful to the environment. Do not dispose of batteries and/or electric/electronic appliances in normal household refuse. When the battery has reached the end of its lifetime, please take the entire unit to a battery recycling facility.
PRODUCT FEATURES

- Powerful jumpstarter with heavy-duty cables and clamps.
- Jumpstart cable polarity indicator for safety protection.
- Voltmeter for checking battery status.
- High pressure air flow compressor for inflating tires and sports equipment with easy-read analog pressure gauge.
- Built-in power inverter providing two 115-volt AC outlets.
- Additional DC accessory socket for powering DC appliances.
- One USB power port for charging mobile devices.
- Bright, long-lasting LED area light.
- AC/DC recharging adapter & DC recharging cable (fused) included.

SPECIFICATIONS

| Battery | AGM Sealed lead acid, 12V, 18Ah |
| Peak Amps | 900A |
| Jumper Cables | 6 AWG, 24-inch |
| Air Compressor | 260 PSI, analog gauge |
| Inverter Continuous Output Power | 400W (modified sine wave) |
| Inverter Peak Surge | 800W (for a max of 0.3 seconds) |
| Inverter Low Voltage Alarm | 10.5V ±0.5V |
| Low Voltage Shut-off | 10.0V ±0.5V |
| Fuse | 40A |
| AC Outlets (x2) | 115V, 60 Hz |
| DC Sockets | (2x) 12V, 11A max, 132W |
| USB Power Port | 5V, 500 mA |
| Work Light | 5-LED |
| Charging Time (AC) | 34 hours |
| Charging Time (DC—with engine running) | 12 hours |
| Dimensions WxLxH (inches) | 10.5 x 8.5 x 11.5 |
| Weight (lb) | 18.0 |
| AC Charging Adapter Output | 12V, 500mA DC |
FRONT VIEW

1. Reverse Polarity Indicator
2. Air Compressor Switch
3. Pressure Gauge
4. Charging Jack
5. DC Sockets
6. Jumper Cables (sides)
7. Worklight Switch
8. Voltmeter
9. Charging Indicator
10. Battery Status Button
11. LED Worklight
12. Inverter/USB Switch
13. Fuse
14. Inverter Power Indicator
15. Air Compressor Hose
16. AC Outlet
17. Jumper Safety Switch
18. USB Power Port
19. Air Vent
BATTERY STATUS

The voltmeter provides the current state of charge on the internal battery. It is the user’s responsibility to periodically monitor the battery’s status and recharge every 3 months in addition to recharging after each use.

1. Disconnect any input or output power cords and turn off all switches.
2. Press and hold the Battery Status button.
3. Read the voltmeter to determine battery status.
   - < 12V: Battery is discharged, charge immediately
   - ~12V: Battery should be charged before jumpstarting a vehicle
   - > 12.5V: Battery is fully charged

CHARGING THE POWER DOME

**ELECTRICAL SHOCK!** Exposure to water may cause electrical shock. Exposure to water and excessive moisture will also damage the unit and void the warranty.

Charge your Power Dome in an upright position for a full 48 hours before initial use. The Power Dome can be charged continuously via AC adapter without damaging the internal battery. In order to prolong the life of the Power Dome (as with all lead-acid batteries), be sure to fully recharge the unit every 3 months even if the Power Dome has not been used.

**AC Charging**

Only use the AC charging adapter supplied with this unit. Make sure the supplied AC/DC charging adapter is powered by the correct voltage (110V AC or 220V AC depending on your country/region).

1. Make sure all Power Dome switches are off.
2. Open the dust cover on the charging jack.
3. Plug the DC end of the AC/DC charging adapter into the Power Dome's charging jack.
4. Connect the AC end of the AC/DC charging adapter to the wall outlet.
5. The charging indicator will light up during the charging process.
6. When charge is complete, disconnect the adapter from the AC outlet first, then from the charging jack.
7. Replace the dust cover on the charging jack.

**DC Charging in Your Vehicle or Boat**

Only use the DC charging adapter supplied with this unit. Your vehicle engine must be running while charging the Power Dome. Do NOT exceed 12 hours of continuous charging time.

1. Make sure all Power Dome switches are off.
2. Open the dust cover on the charging jack.
3. Plug the small end of the DC power cord into the Power Dome’s charging jack.
4. Plug the large end of the DC power cord into an accessory (cigarette lighter) socket.
User’s Manual—Read before using this equipment

5. The charging indicator will light up during the charging process. Do NOT charge for more than 12 hours at one time.
6. When charge is complete, disconnect the power cord from the accessory socket first, then from the unit’s charging jack.
7. Replace the dust cover on the charging jack.

**JUMPSTARTER**

**Warnings**

- Lead-acid batteries can release explosive gases. Failure to follow instructions may cause property damage, explosion hazard, and/or personal injury.
- Do not smoke while jumpstarting.
- Jumpstart a vehicle or boat in a well ventilated area.
- Do not attempt to jumpstart a frozen battery.
- This product is not intended for use in the rain or temperatures above 130°F.
- Do not let the jumper cables or other attached appliances get wet.
- Do not wear vinyl clothing when jumpstarting—friction can cause static electricity sparks.
- Remove all metal jewelry to avoid short circuits.
- Always use safety glasses when jumpstarting battery. Keep battery terminals clean and be careful to keep corrosion from coming in contact with eyes—acid can cause blindness and/or severe burns.
- Never allow red and black clamps to touch or connect to the same piece of metal—this can cause short-circuits, power arcing, and/or explosion.
- Make sure someone is available to give assistance if needed.
- Keep out of reach of children.
- This unit is for use with 12 volt systems only.

**Operation**

**CAUTION:** If the engine fails to start after three attempts, discontinue jumpstart procedure. Excessive engine cranking can damage the vehicle’s starter motor. Look for other problems that may need to be corrected or call for professional service.

1. Review the Jumpstarter warnings.
2. Put the vehicle’s gear is in “park” position and make sure the brake is set.
3. Turn off the vehicle ignition and accessories (e.g. radios, lights, air conditioners), and disconnect all devices such as GPS and mobile phones or tablets.
4. Turn off all Power Dome switches and disconnect all accessories.
5. Determine the polarity of the vehicle’s battery terminals. The positive (POS, P, +) battery terminal is usually larger in diameter than the negative (NEG, N, –) terminal. If you are unsure, you should refer to the vehicle owner’s manual.
6. Determine the ground system of your vehicle.
   • If vehicle to be started has the positive battery terminal connected to chassis (this is rare and usually found in older car models from the 1950s or earlier):
     a. Connect the black (−) clamp first to vehicle battery’s negative (black) terminal.
     b. Connect red (+) clamp to vehicle chassis or a solid, non-moving, metal vehicle component or body part. DO NOT clamp directly to positive battery terminal or a moving part.
   • If vehicle to be started has a negative ground system:
     a. Connect the red (+) cable clamp first to the vehicle’s positive (red) battery terminal.
     b. Next, connect the black (−) clamp to the vehicle chassis or non-moving, metal vehicle component.

7. Observe the color of the Reverse Polarity Protection Indicator.
   • If the light is RED, DO NOT TURN ON THE JUMPER SAFETY SWITCH!
     a. Cable clamps need to be reversed.
     b. Disconnect the black clamp first then the red clamp.
     c. Reconnect and observe the indicator again.
   • If the light is GREEN, turn on the Jumper Safety Switch.
     a. Inside the vehicle, turn on the ignition switch and attempt to start the engine.
     b. Crank a maximum of 3 seconds. If the engine does not start, wait 3 minutes before the next attempt.
     c. After the engine starts, turn off the Jumper Safety Switch.
     d. Disconnect the clamps in the reverse order of connection prior to jumpstarting.

8. Be sure that the cables and clamps are securely stored.

9. Recharge the Power Dome as soon as convenient.

AIR COMPRESSOR
This Power Dome is equipped with an air compressor that can provide up to 260 PSI (pounds per square inch) of pressure for a variety of uses such as vehicle tires and sports equipment.

CAUTION: Be careful not to over inflate, monitor the compressor gauge while inflating. Never connect or disconnect the nozzle with the compressor operating. To avoid overheating, do not operate the air compressor for more than 10 minutes at a time. After 10 minutes, allow the compressor to cool for 15 minutes before using again.

Operation
In the event that the vehicle tire is completely flat, raise the vehicle using a recommended jack before inflating the tire.

1. Before any tire inflation, look for manufacturer’s recommended inflation pressure.
2. Open the compartment door at the rear of the Power Dome and extend the air hose.
3. Position the Power Dome so that you can see the pressure gauge.
4. Make sure the chuck lever is positioned up (away from the chuck opening).
5. Determine if you will need an air hose adapter for your object.
   • To inflate a vehicle tire:
     a. Remove the valve cap from the valve stem of the tire.
     b. Attach the chuck of the air hose to the tire’s valve stem.
     c. Push the chuck lever down to secure the chuck to the valve stem.
   • To inflate a sports equipment, air mattress, rafts, or other plastic inflatables:
     a. Insert the proper valve stem adapter into stem connector as far as possible.
     b. Push the chuck lever down to secure the adapter.
     c. Remove the valve cap from your inflatable object if there is one.
     d. Insert the other end of the valve stem adapter into inflatable’s air valve opening as far as possible.
6. Set the Air Compressor Switch on to the “I” position to start inflation.
7. Monitor the pressure gauge while inflating the tire.
8. When recommended tire pressure has been reached, turn off the air compressor.
9. Disconnect the hose and replace valve cap.
10. Return the hose back to its compartment for storage.
11. Recharge the Power Dome as soon as it is convenient.

POWER INVERTER

The Power Dome® 400 can run most AC appliances or a combination of appliances up to 400 watts. Operating time is dependant on the AC load (required wattage) and the current charge/condition of the Power Dome’s internal battery. Reduced AC loads and/or having a full charge on the internal battery will result in longer operating time. Ordinary overloads will cause the inverter to automatically shut down. Reduce the load and restart the inverter.

There is a user-replaceable automotive-type fuse protecting the inverter from an unlikely excessive power draw or short circuit. REPLACE ONLY WITH THE SAME TYPE AND RATING FUSE. To replace the fuse, simply pull it out with a pair of needle nose pliers and insert the new fuse.

Caution

Some rechargeable devices are equipped with a separate AC charger. These devices are likely to operate properly with the inverter in this unit. Rechargeable devices that have built-in chargers (see your device’s user manual) may not operate properly with this unit because the inverter is modified sine wave.

Some motorized devices may operate at excessively elevated temperature when used with this inverter. During first use with this inverter, check for excessive motor temperature. Abnormally elevated temperature of the device is an indication that they should not be used together.
Operation

1. Check the required current draw of the appliance/device to be powered and make sure it does not exceed the Power Dome's maximum wattage.

2. Prior to plugging in your device, turn your power tool or appliance off. Mobile devices are fine to keep on, but operating them during the charging process will prolong charging time.

3. Open the AC outlet dust cover.

4. Connect the electrical plug of your device/appliance to either of the two AC outlets.

5. Set the Inverter/USB Switch to the “||” position.

6. Observe the Inverter Power Indicator. If the LED remains green, proceed to plugging in and turning on the second device/appliance.
   - If the power indicator remains green, then both devices/appliances are operating properly.
   - If the power indicator is no longer lit, reduce the AC load. If the inverter still does not operate after load is reduced, refer to the Troubleshooting section in the manual.

7. After use, remove the device/appliance plug(s), close the dust cover(s), and turn the Inverter/USB Switch off.

8. Recharge the Power Dome as soon as it is convenient.

DC OUTPUT SOCKET

The DC accessory socket can power a DC load up to Amps. Overloading the socket will result in tripping the self-resetting circuit breaker. Removing the overload automatically restores power to the DC socket. For proper and safe operation of the 12 Volt DC power accessory sockets, do not place anything in them except the 12V DC plug of the accessory to be used.

1. Check the required current draw of the appliance/device to be powered and make sure it does not exceed the Power Dome's maximum wattage.

2. Remove the dust cover from the DC socket.

3. Insert the 12V DC plug of your device/appliance(s) into either of the Power Dome’s DC socket(s).

4. Operate your device/appliance as usual.

5. After use, remove the device/appliance’s plug(s) and close the dust cover(s).

6. Recharge the Power Dome as soon as convenient.

USB POWER PORT

1. Connect a user-supplied USB cable to the USB power port on the Power Dome.

2. Set the Inverter/USB Switch to “I” position.

3. Operate your mobile device as usual.

4. After use, disconnect the USB cable and turn the Inverter/USB Switch off.

5. Recharge the Power Dome as soon as convenient.
WORK LIGHT

1. Set the Light Switch to the “|” position.
2. The light will illuminate.
3. Turn off the light when it is not in use.

TROUBLESHOOTING

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<th>Cause</th>
<th>Solution</th>
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<td>Air compressor shut-off.</td>
<td>High temperature protection.</td>
<td>Allow the Power Dome cool for about 10 minutes.</td>
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<tr>
<td>Lack of power output.</td>
<td>Power Dome battery voltage is below 10 volts.</td>
<td>Recharge the Power Dome immediately.</td>
</tr>
<tr>
<td></td>
<td>Excessive current drawn by appliance being operated.</td>
<td>Reduce load to maximum wattage.</td>
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<td></td>
<td>Inverter fuse blown.</td>
<td>Check and replace if necessary. Be sure replacement fuse is the same type and rating.</td>
</tr>
<tr>
<td>Loud buzzing sound.</td>
<td>Battery charge level is too low.</td>
<td>1. Disconnect all appliances.</td>
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<td></td>
<td></td>
<td>2. Turn inverter off.</td>
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<tr>
<td></td>
<td></td>
<td>3. Charge Power Dome fully. (See charging section for more details.)</td>
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<tr>
<td>Inverter Power Indicator is not lit.</td>
<td>Excessive voltage drop.</td>
<td>Check internal battery status and recharge if voltage drops below 10 volts.</td>
</tr>
<tr>
<td>Inverter automatically shuts down.</td>
<td>AC overload.</td>
<td>Unplug and power off to restart then reduce AC load to maximum wattage.</td>
</tr>
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<td>Television/power tool will not start.</td>
<td>Required wattage exceeds Power Dome peak surge for start-up.</td>
<td>Toggle the Inverter Switch on and off in quick succession for 5 times. If the device does not start, the device is not compatible with this type of inverter.</td>
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<td>Television Interference.</td>
<td>Picture breaking up (static).</td>
<td>Place the Power Dome as far as possible from the TV, antenna, and coaxial cable.</td>
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<td>Static/noise interference in audio system.</td>
<td>Sound system has weak alternating current shielding.</td>
<td>Replace audio system with high quality noise filtering.</td>
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The WAGAN Corporation warranty is limited to products sold only in the United States.

**Warranty Duration:**
Product is warranted to the original purchaser for a period of one (1) year from the original purchase date, to be free of defects in material and workmanship. WAGAN Corporation disclaims any liability for consequential damages. In no event will WAGAN Corporation be responsible for any amount of damages beyond the amount paid for the product at retail.

**Warranty Performance:**
During the warranty period, a product with a defect will be replaced with a comparable model when the product is returned to WAGAN Corporation with an original store receipt. WAGAN Corporation will, at its discretion, replace or repair the defective part. The replacement product will be warranted for the balance of the original warranty period. This warranty does not extend to any units which have been used in violation of written instructions furnished.

**Warranty Disclaimers:**
This warranty is in lieu of all warranties expressed or implied and no representative or person is authorized to assume any other liability in connection with the sale of our products. There shall be no claims for defects or failure of performance or product failure under any theory of tort, contract or commercial law including, but not limited to negligence, gross negligence, strict liability, breach of warranty, and breach of contract.

**Returns:**
WAGAN Corporation is not responsible for any item(s) returned without an official Return Authorization number (RA#). Please contact our customer service team by phone or email to obtain an RA#. You can also visit our website and chat with our team during our normal business hours. For more details and instructions on how to process a warranty claim, please read the “Returns” section under the “Contact” page on our website. WAGAN Corporation is not responsible for any shipping charges incurred in returning the item(s) back to the company for repair or replacement.

Register your product online at http://tinyurl.com/wagan-registration to be added to our email list. You will receive previews on our upcoming products, promotions, and events.

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