

Dometic DSP 412

Dometic DSP 412 Sine Power Inverter 350W 12V User Manual

Model: DSP 412 (9600002541)

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your Dometic DSP 412 Sine Power Inverter. The DSP 412 converts 12V DC battery power into 230V AC pure sinusoidal output, making it suitable for sensitive electronic devices. Please read these instructions carefully before installation and use, and keep them for future reference.

2. SAFETY INSTRUCTIONS

Failure to observe these warnings could result in serious injury or damage to the product. Always prioritize safety.

- **Electrical Hazard:** Do not open the inverter casing. There are no user-serviceable parts inside. Refer all servicing to qualified personnel.
- **Ventilation:** Ensure adequate ventilation around the inverter. Do not block ventilation openings. Overheating can cause damage or fire.
- **Moisture:** Do not expose the inverter to rain, moisture, or excessive humidity.
- **Flammable Materials:** Do not install or operate the inverter near flammable materials or in environments with explosive gases.
- **Correct Wiring:** Connect the inverter only to a 12V DC power source. Observe correct polarity (+ to + and - to -) to prevent damage. Use appropriate cable gauges for the power connections.
- **Load Capacity:** Do not exceed the inverter's maximum output wattage of 350W. Overloading can trigger automatic shutdown or damage the unit.

3. PRODUCT OVERVIEW

The Dometic DSP 412 Sine Power Inverter is designed to provide reliable AC power on the go. It features a compact design and robust construction.



Figure 1: Front view of the Dometic DSP 412 Sine Power Inverter, showing the main unit with attached red and black power cables. The front panel includes an ON/OFF switch, a STATUS indicator light, and USB ports.



Figure 2: Rear view of the Dometic DSP 412 Sine Power Inverter, highlighting the cooling fan for heat dissipation and the connection point for the power cables.



Figure 3: The Dometic DSP 412 Sine Power Inverter shown alongside its metal mounting plate and screws, illustrating the easy mounting system for secure installation.

4. SETUP AND INSTALLATION

Proper installation is crucial for the inverter's performance and safety.

1. **Mounting:** Utilize the provided mounting plate and screws to secure the inverter in a stable, well-ventilated location. Ensure the mounting surface can support the inverter's weight and that there is sufficient space for airflow around the unit.
2. **Power Source:** Connect the inverter's red cable to the positive (+) terminal of a 12V DC battery and the black cable to the negative (-) terminal. Ensure connections are tight and secure. The wide DC input voltage range makes it ideal for Euro 6 compliant vehicles.
3. **Grounding:** For safety, ensure the inverter is properly grounded according to local electrical codes.
4. **Initial Check:** Before connecting any devices, double-check all connections for correct polarity and tightness.

5. OPERATING INSTRUCTIONS

Follow these steps to operate your Dometic DSP 412 Inverter:

1. **Power On:** Flip the ON/OFF switch to the 'ON' position. The STATUS indicator light will illuminate, indicating

the inverter is active.

- 2. **Connect Devices:** Plug your 230V AC devices into the inverter's output socket. Ensure the total wattage of connected devices does not exceed 350W.
- 3. **Energy-Saving Mode:** The inverter features an energy-saving mode with an automatic 'wake-up' function. If no load or a very low load is detected, the inverter may enter a low-power state to conserve battery. It will automatically 'wake up' when a sufficient load is connected.
- 4. **Power Off:** When finished, disconnect all devices and flip the ON/OFF switch to the 'OFF' position.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your inverter.

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Do not use liquid cleaners or solvents.
- **Ventilation:** Ensure the ventilation openings are free from dust and debris. Use compressed air to clear any blockages if necessary.
- **Connections:** Regularly check all electrical connections (battery terminals, output sockets) to ensure they are tight and free from corrosion.
- **Storage:** If storing the inverter for an extended period, disconnect it from the battery and store it in a cool, dry place.

7. TROUBLESHOOTING

This section addresses common issues you might encounter.

- **No Power Output:**
 - Check if the inverter is switched 'ON'.
 - Verify battery connections are secure and correct.
 - Ensure the 12V battery has sufficient charge.
- **Inverter Shuts Down:**
 - The inverter features automatic restart after overload, over-voltage, or under-voltage conditions.
 - **Overload:** Disconnect some devices to reduce the load below 350W.
 - **Over/Under Voltage:** Check the battery voltage. Ensure it is within the inverter's operating range.
 - **Overheating:** Ensure adequate ventilation. Allow the inverter to cool down.
- **STATUS Indicator Light Flashing:** Refer to the specific error codes in the full product manual (if available) or contact support. Generally, flashing indicates a fault condition.

If problems persist after following these steps, contact Dometic customer support.

8. SPECIFICATIONS

| Feature | Specification |
|---------|---------------|
| Brand | Dometic |

| Feature | Specification |
|---------------------------|-----------------------------------|
| Model Number | 9600002541 |
| Output Power (Continuous) | 350 Watts |
| Input Voltage | 12 Volts DC |
| Output Voltage | 230 Volts AC (Pure Sine Wave) |
| Product Dimensions | 21 x 12.7 x 5.2 cm |
| Item Weight | 1.2 kg |
| Total Power Outlets | 1 |
| Included Components | Power inverter, Mounting hardware |

9. WARRANTY AND SUPPORT


For warranty information, technical support, or service inquiries, please contact Dometic customer service. Keep your purchase receipt as proof of purchase.




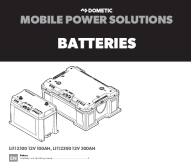
You can find contact details on the official Dometic website or through your local dealer.



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Related Documents - DSP 412

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|  | <p>Dometic SinePower DSP Series Installation and Operating Manual</p> <p>Comprehensive guide for Dometic SinePower DSP inverters (DSP 212, DSP 224, DSP 412, DSP 424). Learn about installation, operation, safety, and technical specifications for reliable DC to AC power conversion.</p> |
|  | <p>Guía de Compra Dometic: Energía y Control para Vida Móvil</p> <p>Descubra las soluciones Dometic de energía y control para la vida móvil, incluyendo inversores, cargadores de baterías y generadores. Aprenda a elegir los productos adecuados para su autocaravana o barco.</p> |

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|  | <p>Dometic SinePower DPSI Series Inverter Installation and Operating Manual</p> <p>Comprehensive installation and operating manual for Dometic SinePower DPSI series inverters, covering safety precautions, installation procedures, network configuration, operation, and troubleshooting. Includes technical specifications for models DPSI1512 TS, DPSI1524 TS, DPSI2012 TS, DPSI2024 TS, DPSI3012 TS, and DPSI3024 TS.</p> |
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|  | <p>Dometic DC-Kit PP12, DSP-T12, DSP-T24 Installation and Operating Manual</p> <p>Comprehensive installation and operating manual for Dometic DC-Kit PP12, DSP-T12, and DSP-T24, enabling DC power operation for Dometic air conditioning units. Covers safety, technical details, installation, and usage.</p> |
|  | <p>Dometic LI112100/LI112300 LiFePO4 Battery Installation and Operation Manual</p> <p>Comprehensive installation and operation manual for Dometic LI112100 (12V 100AH) and LI112300 (12V 300AH) LiFePO4 batteries, covering safety, installation, operation, maintenance, and technical specifications for marine applications.</p> |