

Lewmar 589813

Lewmar Power Switch Gen2 24/48 Mx User Manual

Model: 589813 | Brand: Lewmar

1. INTRODUCTION AND PRODUCT OVERVIEW

This manual provides essential information for the safe and effective installation, operation, and maintenance of your Lewmar Power Switch Gen2, model 589813. This device is engineered to facilitate the safe use of thrusters by converting voltage, specifically enabling a 24V thruster to operate on a 12V boat system, or a 48V thruster on a 24V boat system. It incorporates positive and negative switching capabilities and is constructed to meet stringent industry standards.

2. SAFETY INFORMATION

Always prioritize safety during installation and operation. Incorrect installation or use can lead to equipment damage, personal injury, or fire. It is recommended that installation be performed by a qualified marine electrician.

- Disconnect all power sources before attempting any installation or maintenance.
- Ensure all wiring connections are secure and properly insulated to prevent short circuits.
- Verify that the voltage and current ratings of all components, including batteries and wiring, are compatible with the thruster and switch box.
- Do not operate the switch box if it appears damaged or has been exposed to excessive moisture.
- Refer to local and national electrical codes for proper installation practices.

3. PRODUCT FEATURES

The Lewmar Power Switch Gen2 24/48 Mx offers the following key features:

- Enables safe usage of a 24V thruster on a 12V boat electrical system.
- Enables safe usage of a 48V thruster on a 24V boat electrical system.
- Provides positive and negative switching functionality.
- Designed and built in compliance with strict industry standards for marine applications.
- Requires additional batteries for proper operation (not included).

4. SPECIFICATIONS

Specification	Detail
Model Number	589813
Brand	Lewmar
Material	Plastic
Colour	Factory
Number of Items	1
Parcel Dimensions	22.86 x 14.61 x 0.95 cm
Weight	453.59 g

5. SETUP AND INSTALLATION

The Lewmar Power Switch Gen2 is designed for integration into a boat's electrical system to manage power for a thruster. Proper wiring is critical for functionality and safety. The switch box facilitates the use of a thruster requiring a higher voltage (e.g., 24V or 48V) than the boat's primary battery system (e.g., 12V or 24V) by utilizing additional batteries.



Figure 1: Lewmar P/S Switch Box 589813. The image displays the Lewmar P/S Switch Box, model 589813, a grey,

rectangular enclosure with multiple cable entry points and a small red power indicator switch on the side. A clear wiring diagram is printed on its lid, illustrating connections for 'MAIN BATT', 'AUX BATT', and 'THRUSTER' for both 12V and 24V systems. The diagram shows how the switch box manages power distribution and voltage conversion for thruster operation, indicating connections for 'AUX BATT', 'MAIN BATT', and 'THRUSTER' on both sides, along with a 'THRUSTER CONTACTOR' point. The model number '589029' is visible on the diagram.

Wiring Instructions:

1. **Mounting:** Securely mount the switch box in a dry, accessible location, away from direct exposure to water or excessive heat.
2. **Battery Connections:** Connect the boat's main battery bank to the 'MAIN BATT' terminals as indicated on the diagram. Connect the additional batteries (required for voltage conversion) to the 'AUX BATT' terminals. Ensure correct polarity for all connections.
3. **Thruster Connections:** Connect the thruster's power cables to the 'THRUSTER' terminals on the switch box. Pay close attention to the positive and negative connections.
4. **Contactor Connection:** Connect the thruster contactor as shown in the diagram. This typically involves control wiring that activates the thruster.
5. **Verification:** Double-check all connections for tightness and correct polarity before applying power.

Note: Additional batteries are required to achieve the necessary voltage for the thruster. Consult your thruster's manual for specific voltage and current requirements.

6. OPERATING INSTRUCTIONS

Once the Lewmar Power Switch Gen2 is correctly installed and wired, operation is straightforward:

- **Power On:** Locate the small red power switch on the side of the switch box. Flip the switch to the 'ON' position. A red indicator light (if present) should illuminate, signifying that the unit is powered.
- **Thruster Activation:** Operate your thruster using its dedicated control panel. The switch box will manage the power delivery from the battery banks to the thruster, ensuring the correct voltage is supplied.
- **Power Off:** When the thruster is not in use, it is recommended to switch the power switch on the box to the 'OFF' position to conserve battery power and for safety.

7. MAINTENANCE

Regular maintenance helps ensure the longevity and reliable performance of your Lewmar Power Switch Gen2:

- **Periodic Inspection:** Annually inspect the switch box and all associated wiring for any signs of corrosion, wear, or damage.
- **Cleanliness:** Keep the exterior of the switch box clean and free from dirt, salt, and moisture. Use a damp cloth for cleaning; avoid abrasive cleaners or solvents.
- **Connection Check:** Periodically check all electrical connections to ensure they remain tight and secure. Loose connections can lead to overheating and poor performance.
- **Battery Health:** Ensure that all connected batteries (main and auxiliary) are well-maintained and charged according to their manufacturer's recommendations.

8. TROUBLESHOOTING

If you encounter issues with your Lewmar Power Switch Gen2, consider the following troubleshooting steps:

- **No Power to Thruster:**

- Check if the power switch on the box is in the 'ON' position.
- Verify that all battery banks (main and auxiliary) are adequately charged.
- Inspect all wiring connections for looseness or corrosion.
- Check any inline fuses or circuit breakers in the thruster or switch box circuit.

- **Thruster Operates Intermittently:**

- This could indicate low battery voltage or poor connections. Check battery charge and all terminals.
- Ensure the thruster contactor is functioning correctly.

- **Overheating:**

- Immediately disconnect power. Overheating can be caused by loose connections, undersized wiring, or an overloaded system. Consult a professional.

If problems persist after performing these checks, contact a qualified marine electrician or Lewmar customer support for assistance.

9. WARRANTY AND SUPPORT

For information regarding the product warranty, please refer to the documentation provided with your purchase or visit the official Lewmar website. For technical support, spare parts, or service inquiries, please contact Lewmar customer service directly. Ensure you have your product model number (589813) and purchase details available when contacting support.