

Blue Sea Systems 2146A

Blue Sea Systems ML-Series 2146 Remote Control Contura Switch User Manual

Model: 2146 | Brand: Blue Sea Systems

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the Blue Sea Systems ML-Series 2146 Remote Control Contura Switch. This switch is designed to provide manual control for Blue Sea Systems ML-Series Remote Battery Switches or Automatic Charging Relays (ACRs), offering ON, AUTO, and OFF functionality. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. SAFETY INFORMATION

WARNING: Always disconnect power before installing or servicing electrical components. Improper installation can result in equipment damage, serious injury, or death. Consult a qualified marine electrician if you are unsure about any part of the installation process.

- Ensure all wiring meets applicable marine standards and regulations.
- Do not operate the switch if it appears damaged.
- This product is designed for 12V or 24V DC marine electrical systems.

3. PRODUCT OVERVIEW

The Blue Sea Systems ML-Series 2146 Remote Control Contura Switch is a Single Pole Double Throw (SPDT) switch designed for panel mounting. It provides three positions: ON, AUTO, and OFF, allowing for comprehensive control of connected ML-Series devices. Its robust construction ensures resistance to vibration, shock, thermoshock, moisture, and salt spray, making it suitable for harsh marine environments.



Figure 1: Front view of the Blue Sea Systems ML-Series 2146 Remote Control Contura Switch. The switch face clearly indicates the 'ON', 'AUTO', and 'OFF' positions, along with graphical representations of battery configurations for each state. The 'ON' position shows two batteries connected, 'AUTO' is between ON and OFF, and 'OFF' shows two batteries disconnected with an 'X' symbol.

4. INSTALLATION

4.1 Mounting

The 2146 Contura Switch is designed for standard panel mounting. It typically snaps into a rectangular cutout. Ensure sufficient space behind the panel for wiring connections.

- Create a rectangular cutout in your panel according to the switch's dimensions (approximately 0.83" x 1.45" or

21mm x 36.8mm for standard Contura switches).

- Push the switch firmly into the cutout until it snaps into place.

4.2 Wiring

The 2146 switch is a Single Pole Double Throw (SPDT) type, meaning it has one common terminal and two switched terminals. It is typically used to send control signals to an ML-Series Remote Battery Switch or ACR. Refer to the specific wiring diagram provided with your ML-Series device for exact connections. A common wiring configuration involves:

- **Common Terminal:** Connect to a fused positive (12V or 24V DC) power source.
- **"ON" Terminal:** Connect to the "ON" or "Combine" input of the ML-Series device.
- **"OFF" Terminal:** Connect to the "OFF" or "Isolate" input of the ML-Series device.
- **"AUTO" Position:** This position typically leaves the ML-Series device in its automatic mode, often by disconnecting both "ON" and "OFF" control signals, allowing the device's internal logic to operate.

Ensure all connections are secure and properly insulated to prevent short circuits and corrosion.

5. OPERATION

The 2146 Contura Switch provides three distinct operating positions:

- **ON (Up Position):** In this position, the switch sends a signal to the connected ML-Series device to engage its "ON" or "Combine" function. For a remote battery switch, this would typically connect the battery banks. For an ACR, it would force the batteries to combine.
- **AUTO (Middle Position):** This is the default or automatic operating mode. The switch does not send a continuous "ON" or "OFF" signal, allowing the connected ML-Series device (e.g., an ACR) to operate based on its internal voltage sensing and logic. This is the recommended position for normal operation of an ACR.
- **OFF (Down Position):** In this position, the switch sends a signal to the connected ML-Series device to engage its "OFF" or "Isolate" function. For a remote battery switch, this would disconnect the battery banks. For an ACR, it would force the batteries to isolate.

To change the switch position, firmly press the rocker switch to the desired setting. The tactile feedback indicates a secure position.

6. MAINTENANCE

The Blue Sea Systems 2146 Contura Switch is designed for durability and requires minimal maintenance.

- Periodically inspect the switch and its wiring for any signs of damage, corrosion, or loose connections.
- Clean the switch surface with a damp cloth. Avoid using harsh chemicals or abrasive cleaners.
- Ensure the area around the switch remains dry and free from excessive moisture.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Switch does not respond / ML-Series device not controlled.	No power to the switch's common terminal. Loose or corroded wiring connections. Faulty ML-Series device. Incorrect wiring to the ML-Series device.	Check fuse and power supply to the switch. Inspect and secure all wiring connections. Refer to the ML-Series device's manual for troubleshooting. Verify wiring against the ML-Series device's diagram.
Switch feels loose or does not stay in position.	Improperly mounted in panel. Internal mechanical failure.	Ensure switch is fully snapped into the panel cutout. If damaged, replace the switch.

8. SPECIFICATIONS

Feature	Detail
Model Number	2146
Brand	Blue Sea Systems
Switch Type	SPDT (Single Pole Double Throw)
Operation Mode	ON-OFF-ON
Control Method	Manual (for remote control of ML-Series devices)
Dimensions (L x W x H)	1 x 1 x 1 inches (approximate panel face dimensions)
Weight	1.6 ounces
International Protection Rating	IP54 (Protection against dust and splashing water)
Resistance	Vibration, shock, thermoshock, moisture, and salt spray resistant

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Blue Sea Systems website or contact their customer service directly. Keep your purchase receipt for warranty claims.

Blue Sea Systems is committed to providing high-quality marine electrical products and support.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question