Bxmgr T104

Bxmgr T104 Mechanical Timer Switch Instruction Manual

Model: T104 | Brand: Bxmgr

1. Introduction

The Bxmgr T104 Mechanical Timer Switch is a robust and reliable solution for automating electrical loads such as pool pumps, lighting, and HVAC systems. Designed for both indoor and outdoor use, this heavy-duty timer provides precise 24-hour scheduling with up to 12 ON/OFF cycles daily. Its durable construction ensures long-lasting performance in various environmental conditions.

2. Safety Information

WARNING: Risk of Electric Shock. More than one disconnect switch may be required to de-energize the device before servicing. For supply connections, use copper wire AWG8-14 suitable for 90°C (194°F). Always close the door after use.

- Always disconnect power at the main circuit breaker before installing or servicing the timer.
- Installation should be performed by a qualified electrician in accordance with all local and national electrical codes.
- Ensure all connections are secure and properly insulated.
- Do not immerse the timer in water. The heavy-duty metal case is waterproof and moisture-proof, but direct immersion is not intended.

3. Product Overview

The Bxmgr T104 Mechanical Timer Switch features a durable design with user-friendly controls. Key components include a 24-hour mechanical dial, adjustable ON/OFF trippers, and a manual override switch, all housed within a protective metal casing.

Image: Detailed view of the T104 Mechanical Time Switch, highlighting the time pointer, line and load terminals, manual switch, and the 208V-277V 60Hz pool time motor. The timer is shown with its heavy-duty metal waterproof casing.

Key Features:

- **Heavy-Duty Metal Casing:** Provides robust protection for internal components, making it suitable for outdoor installation.
- **24-Hour Mechanical Dial:** Features clear 24-hour scales with 15-minute interval markings for precise scheduling.
- **Adjustable ON/OFF Trippers:** Includes 4 adjustable trippers, allowing for up to 12 ON/OFF cycles per day.
- **Manual Switch:** Easily set the timer to ON, OFF, or AUTO mode.
- **DPST Switch:** Double Pole Single Throw switch for dual-circuit control.
- **Durable Motor:** Equipped with a motor using high-quality copper wire for long-lasting durability.

Image: A close-up view of the T104 Mechanical Time Switch mechanism, showing the yellow dial, the time pointer, and the terminals for wiring connections.

4. Setup and Installation

The T104 timer is designed for straightforward installation. Follow these steps carefully, ensuring all safety precautions are observed.

Wiring Instructions:

1. **Power Disconnection:** Before beginning any installation, ensure that power to the circuit is completely disconnected at the main breaker.
2. **Mounting:** Securely mount the metal case to a flat, stable surface using appropriate hardware. The case is designed for outdoor use.
3. **Wire Connections:** The terminal interface (line, load, neutral, ground) has clear instructions. Refer to the wiring diagram provided on the inside of the timer's door and below. Ensure all wires are copper and suitable for 90°C (194°F).

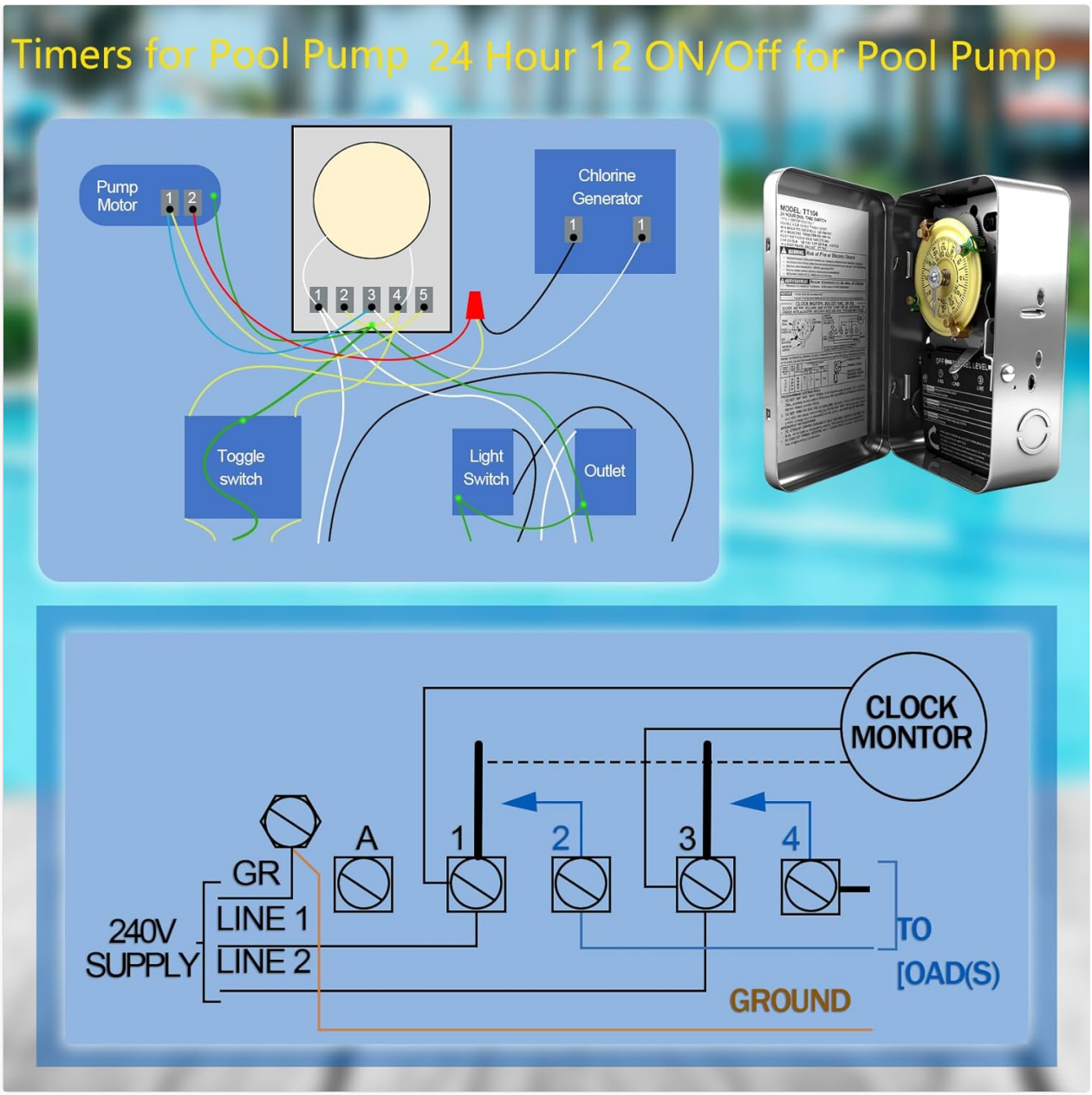

Image: A detailed wiring diagram illustrating connections for a pool pump timer, showing line, load, neutral, and ground terminals.

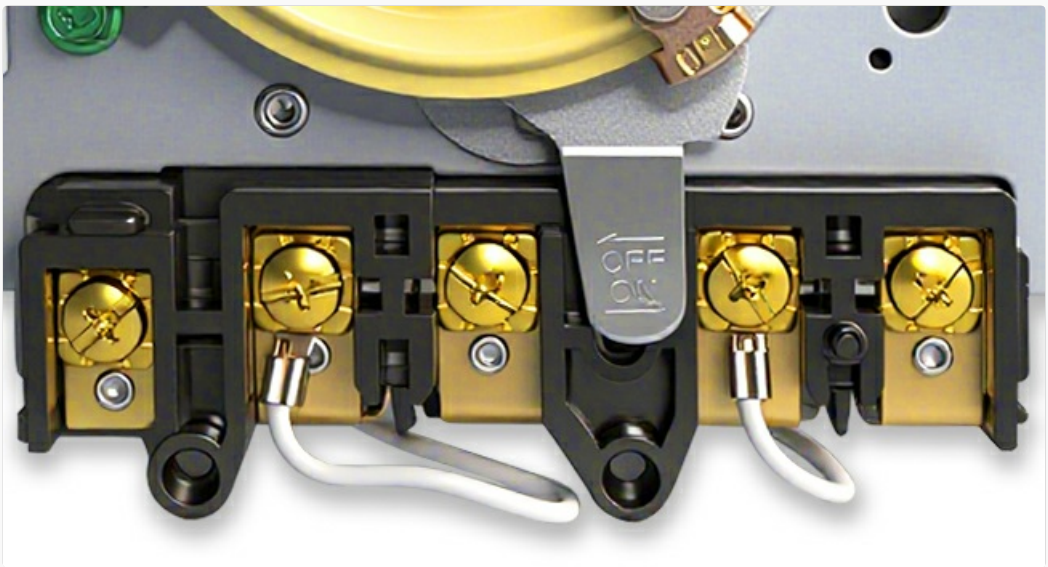

Image: A magnified view of the wiring diagram found inside the T104 timer box, detailing connections for Line 1, Line 2, Load L1, and Load L2, along with grounding instructions.

4. **Secure Wires:** Tighten all terminal screws firmly to ensure good electrical contact.
5. **Close Door:** Once wiring is complete, close the timer door securely to maintain its waterproof and moisture-proof integrity.

Installation Video:

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Video: This video demonstrates the installation process for a T104M Mechanical Time Switch, showing how to open the casing, connect wires to the terminals, and secure the unit. It provides a visual guide for wiring and mounting.

5. Operating Instructions

Setting the Bxmgr T104 timer is simple and allows for precise control over your connected devices.

Setting the Time:

1. **Set Current Time:** Rotate the entire 24-hour dial clockwise until the current time aligns with the 'TIME POINTER' arrow located at the top of the dial.
2. **Set ON/OFF Cycles:** The timer comes with 4 adjustable trippers (2 ON, 2 OFF). To set an ON time, slide an 'ON' tripper (green) to the desired time on the dial. To set an OFF time, slide an 'OFF' tripper (red) to the desired time. Additional trippers can be purchased if more cycles are needed.
3. **Minimum Run Time:** Each ON/OFF cycle can be set for a minimum duration of 1 hour.

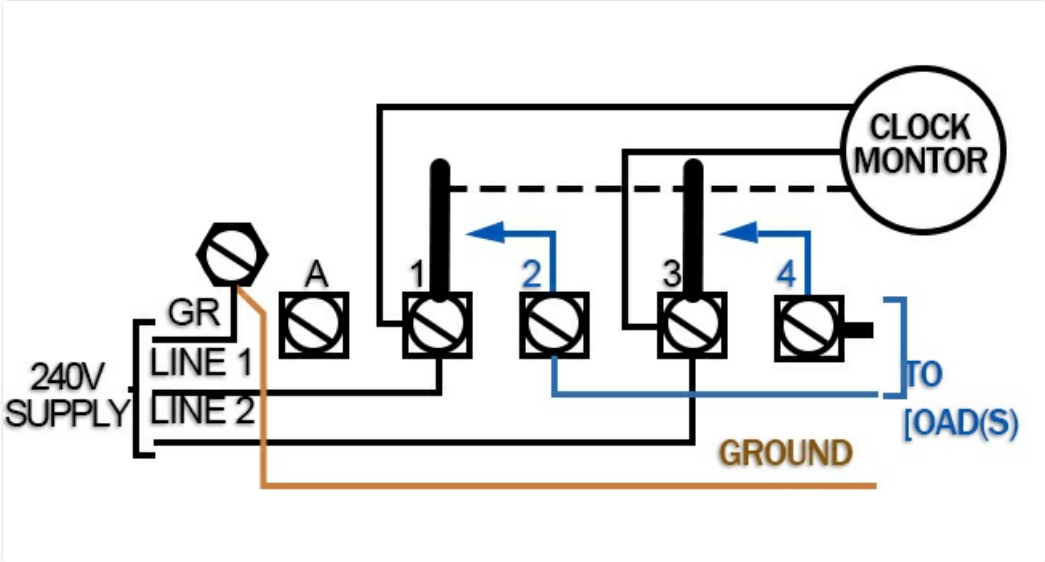

Image: A close-up of the T104 timer's yellow dial, showing the 24-hour markings, the time pointer, and the adjustable ON/OFF trippers. Instructions for setting the time are visible.

Manual Override:

The timer includes a manual switch that allows you to temporarily override the programmed schedule. Move the lever to 'ON' for continuous operation, 'OFF' to turn off the connected device, or 'AUTO' to resume the programmed schedule.

Operation Video:

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Video: This video provides a brief overview of the T104 Electromechanical Timer Switch, showcasing its design and the mechanical dial for setting schedules. It highlights the simplicity of its operation.

6. Maintenance

The Bxmgr T104 Mechanical Timer Switch requires minimal maintenance to ensure optimal performance and longevity.

- **Keep Clean:** Periodically wipe the exterior of the timer with a damp cloth to remove dust and debris. Avoid using harsh chemicals.
- **Inspect Connections:** Annually, with power disconnected, inspect all wiring connections for tightness and signs of wear or corrosion.
- **Ensure Door Closure:** Always ensure the timer's door is securely latched to protect internal components from moisture and foreign objects.

7. Troubleshooting

If you encounter issues with your Bxmgr T104 Mechanical Timer Switch, consider the following common problems and solutions.

Common Issues:

- **Timer Not Operating:** Check the power supply at the circuit breaker. Ensure all wiring connections are secure. Verify the manual switch is in 'AUTO' mode.
- **Incorrect Timing:** Ensure the current time is correctly set on the dial. Verify that the ON/OFF trippers are positioned accurately for the desired schedule.
- **Motor Not Working** / **Pointer Aging:** These are common signs of an old or failing timer mechanism. The Bxmgr T104 is designed to replace such units, offering improved quality and reliability.

Image: A visual comparison showing a new, functional T104 timer mechanism alongside an old, non-working timer, illustrating common failure points like a stuck pointer or corroded circuits.

8. Specifications

Feature	Specification
Model	T104
Input Voltage	208-277 VAC
Frequency	60 Hz
Max Load Current	40 Amp
Horsepower Rating	Highest rated HP (5HP 240VAC)
Switch Type	DPST (Double Pole Single Throw)
Cycles per Day	Up to 12 ON/OFF cycles

Minimum ON/OFF Time	1 hour
Operating Temperature	-60°F to 180°F (-51°C to 82°C)
Material	Metal
Product Dimensions	7.87 x 5.1 x 2.95 inches
Item Weight	2.7 pounds

Image: The Bxmgr T104 Mechanical Timer Switch shown with its dimensions: 7.87 inches in height, 5.15 inches in width, and 3.0 inches in depth, highlighting its compact size.

9. Applications

The Bxmgr T104 Mechanical Timer Switch is versatile and suitable for a wide range of applications, including:

- Swimming Pool Pumps
- Water Heaters
- Outdoor Lighting
- HVAC Systems
- Commercial Applications
- Irrigation Timing Equipment

Image: A collage showing different applications for the T104 timer, including swimming pool pumps, water heaters, outdoor lighting, and irrigation timing equipment.

10. Warranty and Support

The Bxmgr T104 Mechanical Timer Switch comes with a**5-year warranty**. We are committed to providing excellent customer service.

- **Warranty Coverage:** If you are not satisfied with your timer, we support replacing it with a new one. This service extends beyond standard return periods.

- **Customer Support:** For any questions or assistance, please email us through your historical orders. We guarantee a reply within 24 hours to help you resolve any issues.

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