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› [Walfront TM610C Intelligent DIN Rail Timing Switch User Manual](#)

## Walfront TM610C

# Walfront TM610C Intelligent DIN Rail Timing Switch User Manual

Model: TM610C

## 1. INTRODUCTION

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The Walfront TM610C Intelligent DIN Rail Timing Switch is a high-performance, programmable time relay designed for precise control of electrical circuits. This device allows you to automate the switching ON and OFF of various electrical appliances and systems, such as street lights, factory equipment, advertising signs, and more, based on a pre-set 24-hour schedule. Its robust design and easy DIN rail installation make it suitable for a wide range of industrial and domestic applications.

## 2. SAFETY INFORMATION

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Please read and understand all safety instructions before installing or operating this device. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Hazard:** Installation and wiring should only be performed by a qualified electrician.
- **Power Disconnection:** Always disconnect power at the main circuit breaker before performing any installation, wiring, or maintenance.
- **Voltage Compatibility:** Ensure the supply voltage matches the device's specifications (220V AC).
- **Load Capacity:** Do not exceed the maximum resistive load of 16 Amperes.
- **Proper Grounding:** Ensure the device is properly grounded according to local electrical codes.
- **Indoor Use Only:** This device is designed for indoor use in dry environments.

## 3. PRODUCT FEATURES

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- **High Performance:** Provides stable and reliable timing control.
- **Programmable:** 24-hour programmable cycle with a minimum setting interval of 15 minutes.
- **Manual Override:** Features a convenient ON-AUTOMATIC switch for manual control.
- **Easy Installation:** Designed for standard DIN rail mounting.
- **Power Backup:** Built-in battery provides up to 100 hours of power backup to maintain time settings during power outages.

- **Wide Application:** Suitable for various electrical equipment requiring scheduled operation.

## 4. PACKAGE CONTENTS

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- 1 x Walfront TM610C Intelligent DIN Rail Timing Switch
- 1 x User Manual (this document)

## 5. PRODUCT OVERVIEW AND COMPONENTS

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Familiarize yourself with the components of the TM610C timing switch.



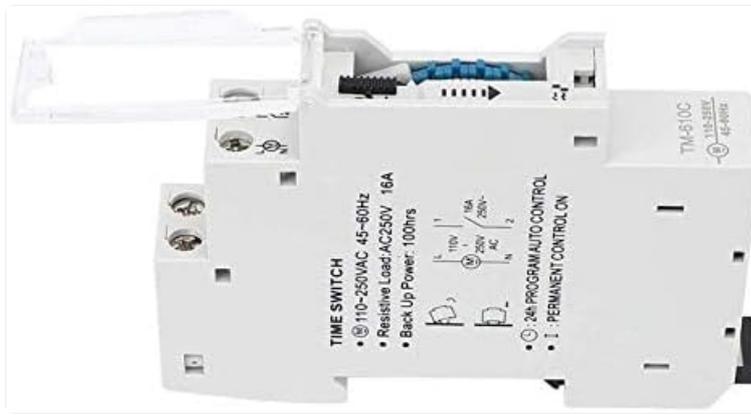
**Figure 5.1:** Front-side view of the Walfront TM610C timing switch, showing the transparent cover and terminal screws.



**Figure 5.2:** Top-down view of the TM610C with the protective cover open, revealing the 24-hour dial and the manual ON-AUTOMATIC switch.



**Figure 5.3:** Direct front view of the TM610C, highlighting the time dial and indicator arrow.



**Figure 5.4:** Back view of the TM610C, displaying the electrical specifications and wiring diagram for connection.

## 6. SPECIFICATIONS

Parameter	Value
Model Number	TM610C
Brand	Walfront
Coil Voltage	220V AC
Frequency	45-60Hz
Resistive Load	AC250V 16A
Contact Material	Copper
Contact Type	Normally Open
Operating Mode	Automatic
Mounting Type	DIN Rail Mounting
Minimum Setting Interval	15 minutes per day
Power Backup	100 hours
Connector Type	Screw
ASIN	B0873DHK41
GTIN	03512730907995

## 7. SETUP AND INSTALLATION

### 7.1 DIN Rail Mounting

The TM610C is designed for quick and easy installation on a standard 35mm DIN rail. Simply align the device with the DIN rail and press firmly until it clicks into place.



Figure 7.1: Side view illustrating the DIN rail mounting mechanism.

## 7.2 Wiring Instructions

**WARNING:** Ensure all power is disconnected before wiring. Incorrect wiring can cause damage to the device or connected equipment, and poses a risk of electric shock.

Refer to the wiring diagram on the back of the unit (Figure 5.4) and the instructions below:

1. **Power Input (L, N):** Connect the 220V AC live (L) and neutral (N) wires to the corresponding input terminals.
2. **Load Output (1, 2):** Connect the load (e.g., light fixture, motor) to the output terminals. Terminal '1' is typically the switched live output, and '2' is the common neutral or return path for the load.
3. Ensure all screw terminals are tightened securely to prevent loose connections.



Figure 7.2: Detailed wiring diagram on the back of the unit. L and N are input terminals for 110-250VAC. Terminals 1 and 2 are the output contacts for the load (AC250V 16A).

## 8. OPERATING INSTRUCTIONS

### 8.1 Setting the Current Time

Rotate the dial clockwise until the current time aligns with the arrow indicator on the front of the unit. The dial represents a 24-hour cycle.



Figure 8.1: Front view showing the 24-hour dial and the time indicator arrow.

## 8.2 Programming ON/OFF Cycles

The dial has segments, each representing 15 minutes. To program an ON period, push the corresponding segments outwards. To program an OFF period, leave the segments pushed inwards.

- Each segment corresponds to 15 minutes.
- Pushing a segment **outwards** will turn the connected device **ON** during that 15-minute interval.
- Leaving a segment **inwards** will keep the connected device **OFF** during that 15-minute interval.
- You can set multiple ON/OFF periods throughout the 24-hour cycle.



Figure 8.2: View of the programmable segments on the dial. Segments pushed outwards activate the timer.

### 8.3 Manual Override Switch

The TM610C features a manual override switch with two positions:

- **"ON" (I):** The connected device will remain continuously ON, overriding the programmed schedule.
- **"AUTOMATIC" (Clock Symbol):** The device will operate according to the programmed ON/OFF schedule.

Ensure the switch is set to the "AUTOMATIC" position for scheduled operation.



**Figure 8.3:** The manual override switch located near the time dial. Set to 'I' for permanent ON, or the clock symbol for automatic operation.

### 8.4 Power Backup Function

The TM610C includes an internal battery that provides up to 100 hours of power backup. This feature ensures that the internal clock continues to run and maintains your programmed settings even during power outages, preventing the need for reprogramming after a power interruption.

## 9. MAINTENANCE

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- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use liquid cleaners or solvents.
- **Connections:** Periodically check the wiring connections to ensure they remain secure.
- **Environment:** Ensure the device is kept in a dry, dust-free environment within its specified operating temperature range.

## 10. TROUBLESHOOTING

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Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Device not turning ON/OFF as programmed.	<ul style="list-style-type: none"> <li>◦ Manual override switch set to "ON" (I).</li> <li>◦ Incorrect programming of segments.</li> <li>◦ Time dial not set to current time.</li> <li>◦ No power supply to the unit.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Set manual override switch to "AUTOMATIC" (clock symbol).</li> <li>◦ Review and adjust the pushed-out segments for desired ON times.</li> <li>◦ Rotate the dial to align with the current time.</li> <li>◦ Check power connections and circuit breaker.</li> </ul>
Clock dial not moving.	<ul style="list-style-type: none"> <li>◦ No power supply.</li> <li>◦ Internal mechanism stuck (rare).</li> </ul>	<ul style="list-style-type: none"> <li>◦ Check power connections.</li> <li>◦ Gently shake the unit to dislodge any stuck gears. If the problem persists, contact customer support.</li> </ul>
Connected device not receiving power.	<ul style="list-style-type: none"> <li>◦ Loose wiring connections.</li> <li>◦ Overload, tripping a circuit breaker.</li> <li>◦ Faulty connected device.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Ensure all wiring terminals are securely tightened.</li> <li>◦ Check the load's current draw against the timer's 16A rating. Reset circuit breaker if tripped.</li> <li>◦ Test the connected device independently.</li> </ul>

## 11. WARRANTY AND SUPPORT

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### 11.1 Warranty Information

Walfront products are manufactured to high-quality standards. For specific warranty details, please refer to the warranty policy provided by your retailer or the official Walfront website. Keep your purchase receipt as proof of purchase for any warranty claims.

### 11.2 Customer Support

If you encounter any issues or have questions regarding your Walfront TM610C Intelligent DIN Rail Timing Switch that are not covered in this manual, please contact Walfront customer service or your local distributor for assistance. You can often find contact information on the Walfront brand store page or their official website.

For more information, visit the [Walfront Store on Amazon](#).

