TAXNELE THC15A

TAXNELE THC15A Digital LCD Electronic Relay Timer User Manual

Model: THC15A (12V DC AC)

1. INTRODUCTION

The TAXNELE THC15A is a digital electronic relay timer designed for general-purpose time control applications. This device allows for precise, programmable switching of various electrical appliances and devices based on daily and weekly schedules. It features a clear LCD display and user-friendly buttons for easy operation.

Key Features:

- 7-day digital programmable timer with daily and weekly programs.
- Time range from 1 minute to 168 hours.
- Up to 20 ON and 20 OFF settings for repeat programs.
- Automatic control for various powered devices.
- High-precision industrial-grade chip for accurate timing.
- Large screen and clear key buttons for easy and accurate operation.
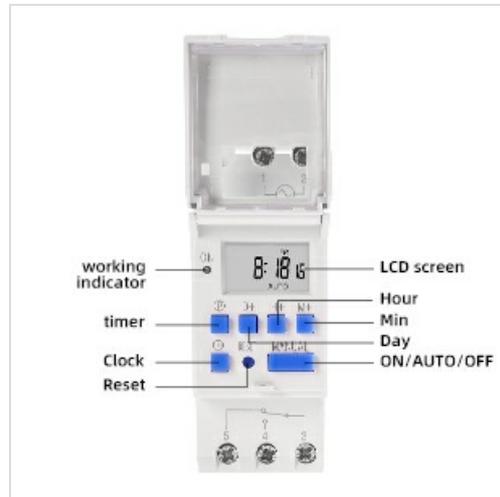
2. SAFETY INSTRUCTIONS

Please read these safety instructions carefully before installation and operation to prevent damage to the device or injury to yourself.

- **Electrical Hazard:** Installation and wiring should only be performed by qualified personnel. Ensure power is disconnected before any wiring work.
- **Voltage Compatibility:** Ensure the timer's voltage rating (12V DC AC) matches your power supply. Connecting to an incorrect voltage may damage the device.
- **Load Capacity:** Do not exceed the maximum load current specified for the timer's relay. Overloading can cause overheating and fire hazards.
- **Environment:** Do not install the timer in areas with high humidity, extreme temperatures, or corrosive gases.

- **Maintenance:** Do not attempt to disassemble or repair the timer yourself. Refer to qualified service personnel.

3. PRODUCT COMPONENTS AND DISPLAY

The THC15A timer features a clear LCD display and intuitive buttons for programming and control. Below is an overview of its main components and display elements.

This image shows the front panel of the THC15A timer, highlighting the LCD screen, working indicator, and control buttons labeled for Hour, Day, ON/AUTO/OFF, Timer, Clock, and Reset functions.
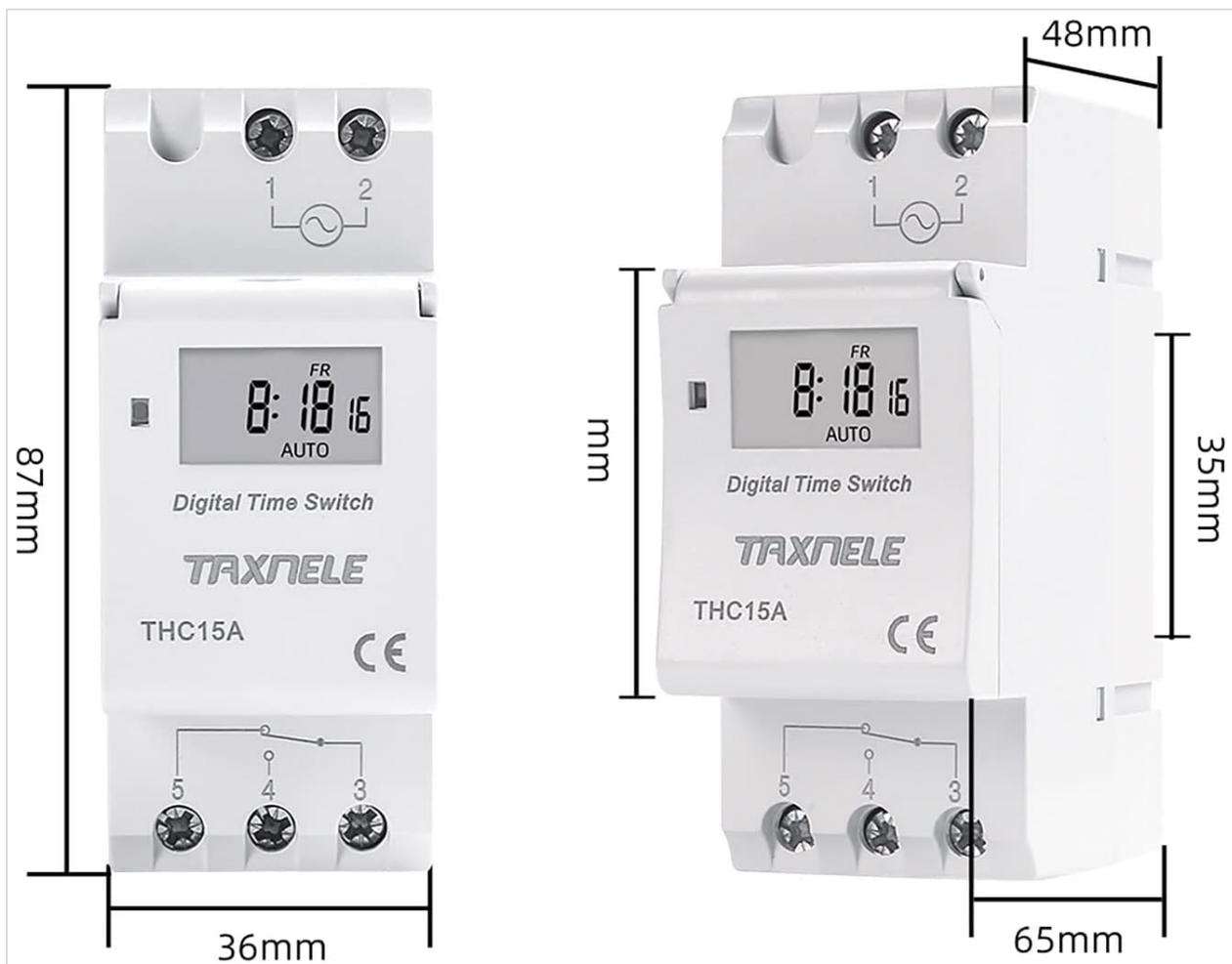
Front Panel Controls:

- **LCD Screen:** Displays current time, day, and programming status.
- **Working Indicator:** LED light indicating the timer's operational status.
- **D+ (Day):** Button for setting the day of the week.
- **H+ (Hour):** Button for setting the hour.
- **M+ (Minute):** Button for setting the minute.
- **Clock Button:** Used to exit programming mode and return to clock display, or to set the current time.
- **Timer Button:** Used to enter and navigate programming modes for ON/OFF settings.
- **Reset Button:** Resets all settings to factory defaults.
- **Manual Button (ON/AUTO/OFF):** Toggles between manual ON, automatic operation, and manual OFF modes.

OLD VERSION COMPLICATED

This image shows a 30A relay, which is integrated into the timer to handle significant electrical loads safely and stably.

4. TECHNICAL SPECIFICATIONS

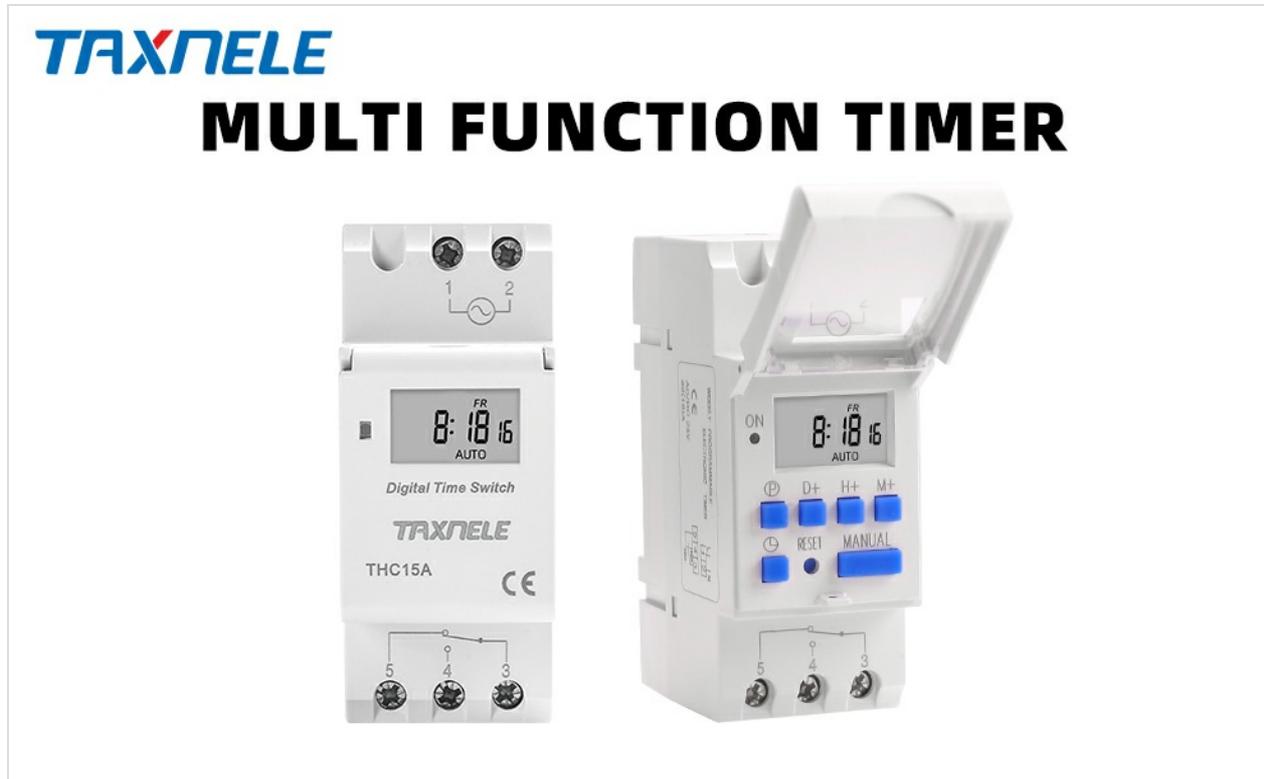| Brand	TAXNELE
Model	THC15A
Operating Voltage	12V DC AC
Material	Plastic
Product Dimensions (D x W x H)	1.42" x 3.39" x 2.56" (36mm x 87mm x 65mm)
Item Weight	4.9 ounces (140 Grams)
Timing Range	1 minute to 168 hours
Program Settings	20 ON / 20 OFF settings
Mounting Type	35mm DIN Rail Mounted

This image illustrates the physical dimensions of the THC15A timer, including its height (87mm), width (36mm), and depth (65mm), along with its DIN rail mounting compatibility.

5. INSTALLATION AND WIRING

The THC15A timer is designed for easy installation on a 35mm DIN rail. Follow these steps for proper mounting and wiring.

5.1 DIN Rail Mounting

The timer can be easily snapped onto a standard 35mm DIN rail, commonly found in electrical distribution boxes or control panels.

This image demonstrates the compact size of the THC15A timer when assembled on a 35mm DIN rail, ideal for household electrical panels.

5.2 Wiring Instructions

WARNING: Ensure all power is disconnected before attempting any wiring. Incorrect wiring can cause electric shock or damage to the device.
The timer has terminals for power input and load output. Refer to the diagram below for typical wiring connections.

OLD VERSION COMPLICATED

This diagram illustrates a basic wiring setup for the THC15A timer, connecting it to a power source (terminals 1 and 2) and a load (terminals 3, 4, 5 for the relay switch). The red lines indicate live/hot connections, and green lines indicate neutral/return connections.

- **Terminals 1 & 2:** Power input for the timer (12V DC AC).
- **Terminals 3, 4, 5:** Relay output contacts.

  - **Terminal 3:** Normally Open (NO) contact.
  - **Terminal 4:** Common (COM) contact.
  - **Terminal 5:** Normally Closed (NC) contact.

- Connect your load to the Common (4) and either Normally Open (3) or Normally Closed (5) contact, depending on whether you want the load to be ON or OFF when the timer is activated.

6. OPERATING INSTRUCTIONS

The THC15A timer offers precise timing and multiple programming options. Follow these steps to set up and operate your timer.

This image highlights the timer's capability for precise timing and automatic calibration, ensuring accurate operation.

6.1 Initial Setup: Setting Current Time and Day

1. **Power On:** Connect the timer to power. The LCD will light up.
2. **Reset:** Press the **R (Reset)** button with a pointed object (e.g., a pen tip) to clear all previous settings and reset the timer. The display will show 00:00.
3. **Set Day:** Press and hold the **Clock** button, then press the **D+** button repeatedly until the correct day of the week is displayed (e.g., MO for Monday, TU for Tuesday).
4. **Set Hour:** While still holding the **Clock** button, press the **H+** button repeatedly to set the correct hour.
5. **Set Minute:** While still holding the **Clock** button, press the **M+** button repeatedly to set the correct

minute.

6. Release the **Clock** button. The current time and day are now set.

6.2 Programming ON/OFF Cycles

The timer supports up to 20 ON and 20 OFF programs. Each program can be set for specific days or a combination of days.

This image highlights the multi-functional capabilities of the timer, including various programming options like 20 ON/OFF settings, countdown, cycle, and day/week cycles.

1. Press the **Timer** button once. The display will show "1 ON". This is your first ON program setting.
2. Press **D+** to select the day(s) for this ON program. Options include individual days, weekdays, weekends, or all 7 days.
3. Press **H+** to set the hour for the ON time.
4. Press **M+** to set the minute for the ON time.
5. Press the **Timer** button again. The display will show "1 OFF". This is your first OFF program setting.
6. Repeat steps 2-4 to set the day(s), hour, and minute for the OFF time.
7. Continue pressing the **Timer** button to cycle through "2 ON", "2 OFF", up to "20 ON", "20 OFF" to set additional programs.
8. After setting all desired programs, press the **Clock** button to exit programming mode and return to the current time display.

6.3 Manual Control (ON/AUTO/OFF)

The **Manual** button allows you to override the programmed settings temporarily or permanently.

- Press the **Manual** button repeatedly to cycle through the following modes:

  - **ON:** The load is continuously ON, ignoring all programs.
  - **AUTO:** The timer operates according to the programmed ON/OFF cycles.
  - **OFF:** The load is continuously OFF, ignoring all programs.

- For automatic operation, ensure the timer is set to **AUTO** mode.

7. MAINTENANCE

The THC15A timer requires minimal maintenance to ensure long-term reliable operation.

- **Cleaning:** Use a soft, dry cloth to wipe the timer's surface. Do not use abrasive cleaners or solvents, as they may damage the plastic casing or LCD.
- **Environment:** Ensure the installation environment remains free from excessive dust, moisture, and extreme temperatures.
- **Inspection:** Periodically check wiring connections to ensure they are secure and free from corrosion.

8. TROUBLESHOOTING

If you encounter issues with your THC15A timer, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Timer display is blank.	No power supply or incorrect voltage.	Check power connections and ensure the voltage matches the timer's rating (12V DC AC).
Load does not turn ON/OFF as programmed.	• Timer is not in AUTO mode. • Incorrect program settings. • Wiring issue. • Overloaded relay.	• Press **Manual** button until "AUTO" is displayed. • Review and correct program settings (ON/OFF times, days). • Check wiring connections to the load and ensure they are secure. • Verify the load current does not exceed the timer's maximum rating.
Time is inaccurate.	Initial time setting error.	Reset the timer and re-set the current time and day accurately.

9. WARRANTY AND SUPPORT

This TAXNELE THC15A Digital LCD Electronic Relay Timer is covered by a standard manufacturer's warranty against defects in materials and workmanship. Please refer to your purchase documentation for specific warranty terms and duration.

For technical support, troubleshooting assistance, or warranty claims, please contact your retailer or the manufacturer directly. Keep your purchase receipt as proof of purchase.