Neoteck MTHM231de

Neoteck DC 12V 16A Digital Electronic LCD Time Relay Switch User Manual

Model: MTHM231de

1. PRODUCT OVERVIEW

The Neoteck DC 12V 16A Digital Electronic LCD Time Relay Switch is a programmable timer designed for various applications requiring precise time control. It features a digital LCD display, 16 ON/OFF program settings, and a built-in lithium battery for power reserve during outages.

Key Features:

- Energy saving functionality
- Manual mode operation
- DC switching current capability
- Up to 16 ON/OFF program settings
- Lithium battery power reserve for settings retention
- Includes waterproof cover and wire connectors for easy installation
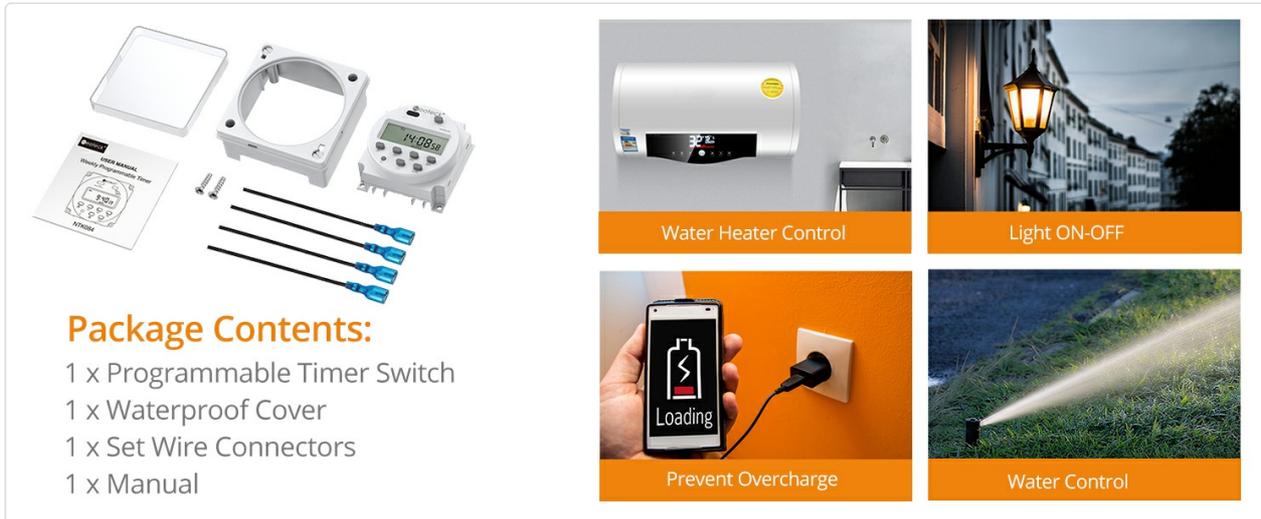- Automatic timer error correction (± 60 seconds weekly)

This image displays the Neoteck DC 12V 16A Electronic LCD Timer Switch, highlighting its main features such as energy saving, manual mode, DC switching current, 16 ON/OFF program settings, and lithium battery power reserve. The image also

shows icons representing easy setting, rechargeable battery, intelligent operation, and precise timing.

2. PACKAGE CONTENTS

- 1 x Programmable Timer Switch
- 1 x Waterproof Cover
- 1 x Set Wire Connectors
- 1 x User Manual

Package Contents:
1 x Programmable Timer Switch
1 x Waterproof Cover
1 x Set Wire Connectors
1 x Manual

Water Heater Control

Light ON-OFF

Prevent Overcharge

Water Control

This image illustrates the package contents of the Neoteck Timer Switch, which include one programmable timer switch, one waterproof cover, a set of wire connectors, and one manual. Additionally, it shows various application examples for the timer switch, such as controlling water heaters, turning lights ON/OFF, preventing overcharge for devices, and managing water systems.

3. SETUP AND WIRING

3.1 Physical Dimensions

The timer switch has a compact design for easy integration. The approximate dimensions are 60mm (width) x 54mm (height) x 33mm (depth).

3.2 Wiring Diagram

Connect the timer switch according to the diagram below. Ensure all connections are secure and follow local electrical codes. The input is 12V DC, and the output is rated for 16A.

This image provides technical details for the Neoteck Timer Switch. It includes a diagram showing the physical dimensions of the timer (60mm width, 54mm height), a wiring diagram for 12V 16A switch connections (fire line, neutral line, electrical appliances), and a table explaining the display symbols and their functions. An illustration of the LCD display with day, time, and AUTO/ON/OFF indicators is also present.

3.3 Unboxing and Basic Wiring Demonstration

Your browser does not support the video tag.

This video demonstrates the unboxing of the Neoteck DC 12V Timer Switch, showing the components included in the package. It also provides a visual guide on how to connect the timer switch for basic operation, including wiring to a power source and an electrical appliance.

4. OPERATING INSTRUCTIONS

4.1 Display Symbols Explanation

Familiarize yourself with the display symbols for easier programming:

- **P:** Program (used for setting ON/OFF times)
- **D+:** Day (used for setting day of the week)
- **H+:** Hour (used for setting hour)
- **M+:** Minute (used for setting minute)
- **Clock Symbol:** Clock (used for setting local time)
- **C:** Reset (clears all settings)
- **MANUAL:** Manual (switches between ON, OFF, AUTO modes)
- **C/R:** Cancel/Recovery (used in programming)

4.2 Setting Local Time

1. Press the 'C' button to reset the timer.
2. Press and hold the 'Clock' key.
3. While holding 'Clock', press 'D+' to set the current day.
4. While holding 'Clock', press 'H+' to set the current hour.
5. While holding 'Clock', press 'M+' to set the current minute.

4.3 Programming ON/OFF Settings (Up to 16 Programs)

1. Press the 'P' button to enter programming mode. The display will show '1 ON'.
2. Press 'H+' and 'M+' to set the desired ON time for the first program.
3. Press 'D+' to select the day(s) for this program (e.g., MO, TU, WE, TH, FR, SA, SU, or specific combinations).
4. Press 'P' again. The display will show '1 OFF'.
5. Press 'H+' and 'M+' to set the desired OFF time for the first program.
6. If you want the same day(s) for the OFF time as the ON time, you do not need to press 'D+'.
7. Repeat steps 2-6 for additional ON/OFF programs (up to 16).
8. Press the 'Clock' button to exit programming mode and save settings.

4.4 Manual Mode and Auto Timing Setting Demonstration

Operating Instruction

1. Local Time Setting:
Press " c " to Reset at first. Keep pressing " ⏱ " key, then press "D+"key to set day, press"H+" key to set hour, press "M+" key to set minute.

2. Enter into programming as belows:

Step	Key	Programming
1	Press P	Setting 1^{ON} time (display 1^{ON})
2	Press H+/M+	Setting hours and minutes
3	Press D+	To select same every day, or different time each day
4	Press P	Setting 1$_{OFF}$ time(display 1$_{OFF}$)
5	Press H+/M+	Setting hours and minutes turn off time
6	Press D+	If you want the same every day,you need not press this key
7	Repeatstep 2-6	Set 2-16 on/off time
8	Press ⏱	End

72mm

72mm   33mm

This image details the operating instructions for the Neoteck Timer Switch. It shows the timer unit and provides step-by-step guidance for setting the local time using the 'clock', 'D+', 'H+', and 'M+' buttons. It also includes a table for programming ON/OFF times, outlining steps to set 1st ON time, hours and minutes, select days, set 1st OFF time, and repeat for up to 16 ON/OFF settings.

Your browser does not support the video tag.

This video tutorial guides users through setting the local time on the Neoteck DC 12V Timer Switch. It also illustrates how to switch between Manual ON, Manual OFF, and Auto modes, and demonstrates the process of setting up automatic timing programs for both ON and OFF events.

5. MAINTENANCE

To ensure optimal performance and longevity of your Neoteck DC 12V Timer Switch, follow these general maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the timer switch. Avoid using abrasive cleaners or solvents.
- **Waterproof Cover:** Ensure the waterproof cover is properly installed and sealed if the unit is exposed to moisture or dust. Regularly check for any damage to the cover.
- **Connections:** Periodically inspect wiring connections to ensure they remain tight and free from corrosion.
- **Battery:** The internal battery is designed to retain settings during power interruptions. If the display is blank or settings are lost frequently, the internal battery may need recharging or replacement. Connect the unit to a 12V DC power source for several hours to recharge the internal battery.

6. TROUBLESHOOTING

- **Difficulty Programming:** The programming sequence can be intricate. Refer to Section 4.3 and the provided video tutorial for detailed, step-by-step instructions. Practice the steps without a load connected until you are comfortable.
- **Timer Not Turning ON/OFF as Expected:**
  - Verify that the current time and day are set correctly (Section 4.2).
  - Check that the timer is in 'AUTO' mode. If it shows 'ON' or 'OFF', press the 'MANUAL' button until 'AUTO' is displayed.
  - Ensure your ON/OFF programs are set for the correct days of the week.
  - If programs span midnight (e.g., 8 PM to 6 AM), it is recommended to set two separate programs: one from 8 PM to 11:59 PM, and another from 12:00 AM to 6 AM.

- **Unit Appears Dead (DOA) or Loses Settings:**
    - Ensure the 12V DC power supply is correctly connected and providing power.
    - The unit has an internal rechargeable battery. If the unit has been stored for a long time without power, the battery may be fully drained. Connect the timer to a 12V DC power source for several hours to allow the internal battery to recharge.
    - If the unit still does not power on or retain settings after recharging, contact customer support.

- **Output Not Switching 16 Amps:** While rated for 16A, it is generally advisable not to operate any switch at its absolute maximum rated current continuously. If experiencing issues with heavy loads, consider using an external relay or contact customer support for advice on load management.

7. SPECIFICATIONS

Specification	Value
Brand	Neoteck
Model Number	MTHM231de
Color	White
Material	Acrylic
Product Dimensions	1.3"D x 2.83"W x 2.83"H (approx. 33mm D x 72mm W x 72mm H)
Number of Settings	16 ON/OFF programs
Screen Size	2.83 Inches
Item Weight	2.11 ounces
Batteries	1 Product Specific battery required (included, rechargeable)
Input Voltage	DC 12V
Max Load Current	16A
Timing Error Correction	± 60 seconds weekly

8. WARRANTY AND SUPPORT

8.1 Warranty Information

Please refer to the product packaging or contact customer support for detailed warranty information regarding your Neoteck DC 12V 16A Digital Electronic LCD Time Relay Switch.

8.2 Customer Support

For technical assistance, troubleshooting, or any product-related inquiries, please contact Neoteck customer support:

- **Email:** neoteckservices@gmail.com