

## GENERAL INFORMATION

This Din Rail-Mount 24-Hour/7-Day Time Switch series is one of a wide range of din rail products. The time switch can be operated in 4 separate power supplies, ranges from 240Vac to 12Vdc, such as lighting control, HVACR, pumps, motors, fan controls, access controls, OEM applications, agricultural facilities, and general purpose electrical circuits. It has one volt-free changeover contact. **TM-615-series**



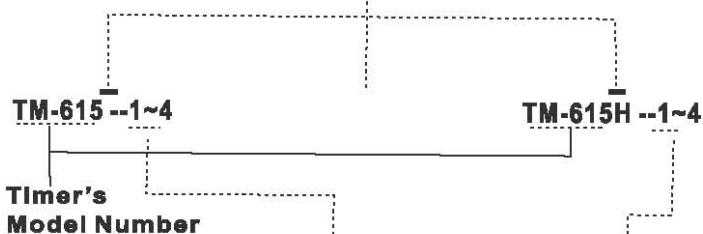
This Digital Timer is accurate to the minute, designed with **18 ON/OFF(event) per day**. Rechargeable battery is for retaining the current time and the program setting during Timer's operating power disconnected.

Also, it provides 15-combination of Daily-Programs which can leads great convenience to users upon choosing desired **DAYS of WEEK**

|     |    |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|----|
| 1.  | MO | TU | WE | TH | FR | SA | SU |
| 2.  | MO |    |    |    |    |    |    |
| 3.  | TU |    |    |    |    |    |    |
| 4.  |    | WE |    |    |    |    |    |
| 5.  |    |    | TH |    |    |    |    |
| 6.  |    |    |    | FR |    |    |    |
| 7.  |    |    |    |    | SA |    |    |
| 8.  |    |    |    |    |    | SU |    |
| 9.  | MO | TU | WE | TH | FR |    |    |
| 10. |    |    |    |    |    | SA | SU |
| 11. | MO | TU | WE | TH | FR | SA |    |
| 12. | MO | TU | WE |    |    |    |    |
| 13. |    |    |    | TH | FR | SA |    |
| 14. | MO |    | WE |    | FR |    |    |
| 15. |    | TU |    | TH |    | SA |    |

## DESCRIPTIONS TO MODEL CODE

: Volt-Free contact, 250Vac/16Amp Rating  
**H** : Volt-Free contact, 250Vac/30Amp Rating



Timer's Model Number

**1 ~ 4 Power supply for Timer**  
 1: 120V AC main supply  
 2: 240V AC main supply  
 3: 24V AC/DC  
 4: 12V AC/DC

## PROGRAMMING THE TIMER #1

### A. Functional description to buttons on panel

1. **Ⓟ**: Programs review & setting programs
2. **MANUAL**: To select "ON, AUTO or OFF"
3. **⊕**: To adjust current DAY and TIME
4. **D+**: To adjust day of week
5. **H+**: To adjust Hour
6. **M+**: To adjust minute
7. **RESET**: Reset Timer's setting
8. **LED**: To indicate ON/OFF status

Press **RESET** button to reset Timer before programming

### B. Adjusting CLOCK

Press and hold **⊕** and then press **D+** key, **H+** key, **M+** key respectively to adjust clock of Timer to accurate **DATE, HOUR, MINUTE**. LCD screen shall indicate 0:00~23:59

### C. Start to programming the TIMER

1. Press **Ⓟ** key. LCD screen shall show

**1** ON -- : -- : --

2. Press **D+** key to select any of 15-combination of Daily-Programs to your application demand. Continuing to press **D+** key, LCD shall alternating indicate among 15-combinations.

3. Press **H+**, **M+** respectively to set desired Hour and Minute for **1<sub>ON</sub>**

4. After finished setting of **1<sub>ON</sub>**, Press **Ⓟ** key again, **1** OFF -- : -- : -- shall appear on LCD screen.

5. Press **D+** key to select any of 15-combination of Daily-Programs to your application demand Continuing to press **D+** key, LCD shall alternating indicate among 15-combinations.

**Day-combination chosen in each of ON/OFF program-period must be consistent**

6. Repeat Programming procedure "3" to set desired Hour & Minute for **1<sub>OFF</sub>**

7. When finished setting **1<sub>ON</sub>** & **1<sub>OFF</sub>**, Press **Ⓟ**

**2** ON -- : -- : -- shall appear on LCD screen.

8. Repeat programming procedure above to complete rest of ON/OFF program-period(event)

**1** ON -- : -- : -- ⇒ **2** OFF -- : -- : -- ⇒ ●●●●●●●● **18** OFF -- : -- : --

or just to the desired number of ON/OFF(event) setting for demand of practicable application.

**1** ON -- : -- : -- ⇒ **1** OFF -- : -- : -- ⇒ **2** ON -- : -- : -- ●●●●●●●● **5** OFF -- : -- : --

9. When finished program-setting(event), press **⊕**, Timer shall start to execute programs.

### D. To review programs

Keep to press **Ⓟ**, display on LCD screen shall alternating display among each of 18 ON/OFF

## PROGRAMMING THE TIMER #1

E. How to use **OVERRIDE** functions  
 615-programming-mode Timer is designed with 2 Override function, so as to widen its usage upon practicable application. Override function is **effective only** when Timer is running under **AUTO mode**.

**Temporary-Override**---Follow procedure below:

**Condition-1** When Timer's output status is "ON"  
 Pressing **MANUAL** key, to move indicator from "AUTO" to "OFF", Timer output shall turn to "OFF" status, programs overridden.  
 Pressing **MANUAL** again to switch Timer status to "AUTO", Timer's output shall continue maintaining "OFF". Timer shall resume its automatic operation when next program(event) calls for "ON" (With next opposite set point).

**Condition-2** When Timer's output status is "OFF"  
 Pressing **MANUAL** key, to move indicator from "AUTO" to "ON", timer output shall turn to "ON" status, programs overridden.  
 Pressing **MANUAL** again to switch Timer status to "AUTO", Timer's output shall continue maintaining "ON". Timer shall resume its automatic operation when next program(event) calls for "OFF". (Until next opposite set point)

**How this works:** An example is the best way to demonstrate this. Imagine you are programming this timer for a business gate to open at 9am and close at 5pm (hour 17) for all weekdays. You are doing this programming on a Tuesday at 10am and you wish the gate to stay open starting immediately and close Tuesday night and continue on its normal schedule the rest of the week. When you are done with your programming you will press the **MANUAL** button to toggle to **ON** and then back to **AUTO**. This will turn the timer on immediately and leave it on (subsequently opening the gate) but setting the time to react to the next OFF programmed in and allow the gate to close at 5pm in the evening.

## TECHNICAL DATA

Voltage rating: see imprint on device  
 Hysteresis: 2 sec/day (25°C)  
 ON/OFF operation: 18 ON/OFF  
 Power consumption: 4.5VA(MAX)  
 Service life: Mechanical 10<sup>7</sup>, Electrical 10<sup>7</sup>  
 Display: LCD  
 Minimum interval: 1 minute  
 Weight: approx 150g  
 Switching contact: 1 changeover switch  
 Power reserve: 3 years (Lithium battery)  
 Ambient temperature: -10~+40°C  
 Ambient humidity: 35~85%RH

## CAUTIONS



Electric Shock Or Fire Hazard

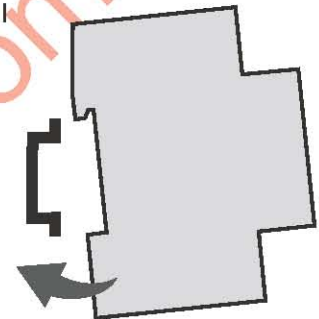
READ ALL WIRE SIZING, VOLTAGE REQUIREMENT AND SAFETY DATA AVOID PROPERTY DAMAGE AND PERSONAL INJURY.

Remark:

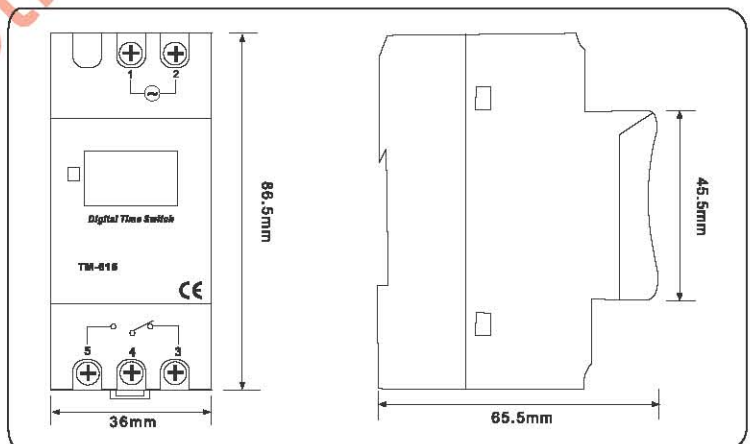
1. The connection and installation of electrical devices may only be carried out by a qualified electrician.
2. For voltage and electrical RATING information, please refer to the markings on the back of timer.
3. See the back of timer for proper wire connections.
4. Timer may need to be connected to power source in order to set the program.
5. Press RESET key before first use to clear memory.
6. Do not immerse timer in water or any other liquid.

## DIMENSIONS & WIRING DIAGRAM

Installation on DIN rail



Dimensions:



Wiring diagram:

