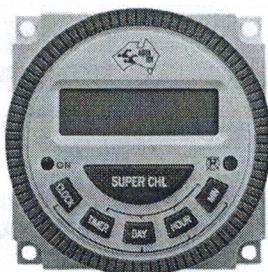


GENERAL INFORMATION

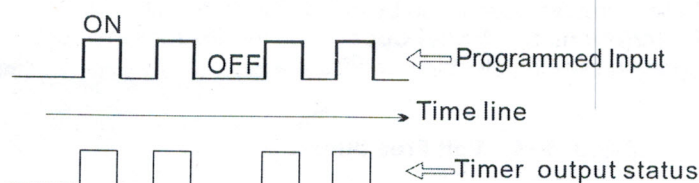
This Panel-Mount Digital Timer series can be operated in 4 separate power supplies, ranges from 240 Vac to 12 Vdc. Output format can be produced to be Volt-free or voltaic-output.

Batteries of Lithium CR2032 or rechargeable ML2032 or V80H available for option which is for retaining the programing during Timer's operating power disconnected.



TM-619-series

This Digital Timer is accurate to the minute, designed with either 4 ON/OFF(event) per day Graphic description, as below:



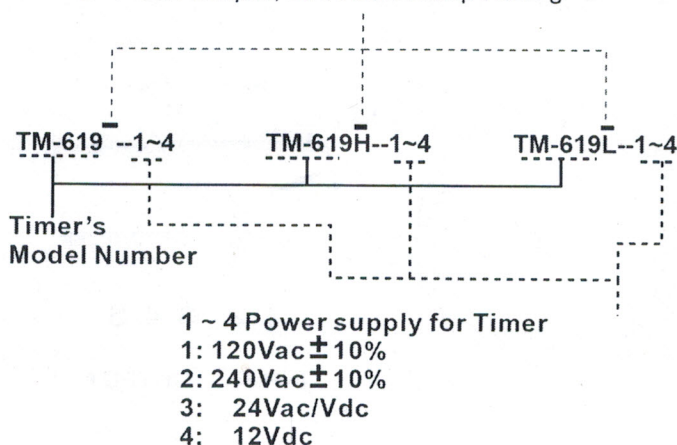
Also, it provides 15-combination of Daily-Programs which can lead great convenience to users upon choosing the required days in a week for operating the timer.

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

1. 12H or 24H clock format
2. 4 on/off per day
3. Lithium CR2032 or rechargeable V80H or ML2032 batteries above 3 items are prefixed at production.

: Volt-Free contact, 250Vac/16Amp Rating
 H : Volt Output, 250Vac/20Amp Rating
 L : Volt Output, 250Vac/16Amp Rating



PROGRAMMING THE TIMER #1

A. Functional description to buttons on panel

1. **TIMER** : Programs review & setting programs
2. **SUPER CHL** : To run continuously for 8 hours
3. **CLOCK** : To adjust current DAY and TIME
4. **Day** : To adjust day of week
5. **HOURL** : To adjust Hour
6. **MIN** : To adjust minute
7. **Ⓟ** : Reset Timer's setting
8. **LED** : To indicate ON/OFF status

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

B. Adjusting CLOCK

Press and hold **CLOCK** and then press **DAY** key, **HOURL** key, **MIN** key respectively to adjust clock of Timer to accurate DATE, **HOURL**, **MINUTE**. In 12-Hour-Format, **PM** & **AM** shall appear on LCD screen. In 24-Hour-Format LCD screen shall indicate 0:00 ~23:59

C. Start to programming the TIMER

1. Press **TIMER** key. LCD screen shall show **1^{ON}--:--:--**
2. Press the **DAY**, **HOURL** and **MIN** keys to set the program day and time.
3. Press the **TIMER** button for 3 seconds can switch the current setting to be valid or invalid.
4. After finished setting of **1^{ON}**, Press **TIMER** key again, **1^{OFF}--:--:--** shall appear on LCD screen.
5. Repeat Programming procedure "2" to set desired Hour & Minute for **1^{OFF}**
6. When finished setting **1^{ON}** & **1^{OFF}**, Press **TIMER**, **2^{ON}--:--:--** shall appear on LCD screen.
7. Repeat programming procedure above to complete rest of ON/OFF program-period(event)

1^{ON}--:--:-- ⇒ **2^{OFF}--:--:--** ⇒ ●●●●● **4^{OFF}--:--:--**

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

1^{ON}--:--:-- ⇒ **1^{OFF}--:--:--** ⇒ **2^{ON}--:--:--** ●●●●● **4^{OFF}--:--:--**
8. When finished program-setting(event), press **CLOCK**, Timer shall start to execute programs.

D. To review programs

Keep to press **TIMER**, display on LCD screen shall alternating display among each of 4 **ON/OFF**

PROGRAMMING THE TIMER #2

E. Super Chlorinate

Pressing the SUPER CHL key will cause the timer to remain "ON" for the next 8 hours without any further changes.

Once the 24-hour period has passed, the timer will return to its normal program functionality.

Press the SUPER CHL key again can cancel the Boost function.

Random-Start-Up Override – Press and hold **DAY** key and then press **MIN** key. There shall be a symbol  shows on left corner of LCD screen, to indicate this Override in executing.

When this Override is being executed, the original programs will be stopped, and once every 10 to 120 minutes Timers shall automatically turn its output to "ON" status.

In practicable application which is applied to home-use, this Override function also called Anti-Burglar Override.

Once again to press and hold **DAY** key, and then press **MIN** key shall terminate this Override.

Key Lock function:

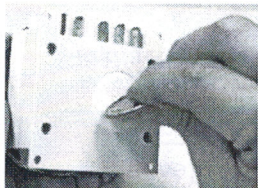
1. Enter Auto mode and press both "DAY" + "HOUR" keys for 6 seconds, Key Lock function will be enabled, you will see the icon  flashing on the screen.

2. Except RESET key, every key function will be locked in Key Lock mode.

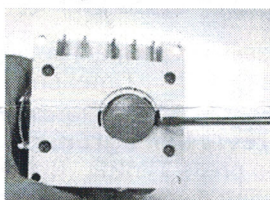
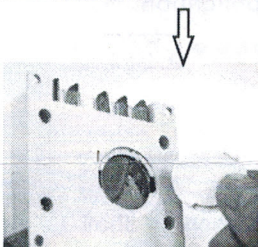
3. Pressing both "DAY" + "HOUR" keys for 6 seconds again will cancel the Key Lock function, icon  will disappear from the screen.

HOW TO REPLACE BATTERIES

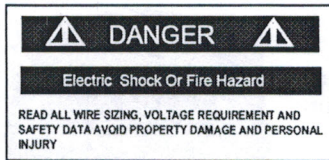
For Model with Lithium Cr2032



← To replace Battery



PROPOSED APPLICATION



Output terminal of Timer is produced with Flat-head Jack-Type socket to provide convenient electrical wiring upon mounting Timer on equipments.

Subject to output formats and formats of Contact Rating, there are 3 different styles in TM-619-series.

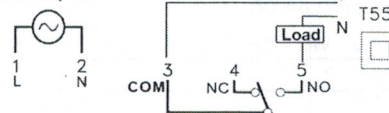
Remark:

1. For voltage and electrical RATING information, please refer to the markings on the back of timer.
2. See the back of timer for proper wire connections.
3. Timer may need to be connected to power source in order to set the program.

Follow graphic description below & Refer to section of **Descriptions to Model Code** on this instruction-sheet upon proceeding electrical wiring.

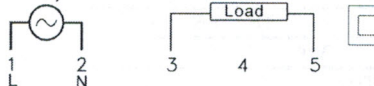
1.TM-619 -1~4 Volt Free output

Input voltage
 1. 100V~130Vac
 2. 200V~250Vac
 3. 24Vac/dc
 4. 12Vac/dc



2.TM-619L -1~4 Volt output

Input voltage
 1. 100V~130Vac
 2. 200V~250Vac
 3. 24Vac/dc
 4. 12Vac/dc



3.TM-619H -1~4 Volt output

Input voltage
 1. 100V~130Vac
 2. 200V~250Vac
 3. 24Vac/dc
 4. 12Vac/dc

