TM-6331H--1~4   TM-6331--1~4   TM-6331AB--1~2
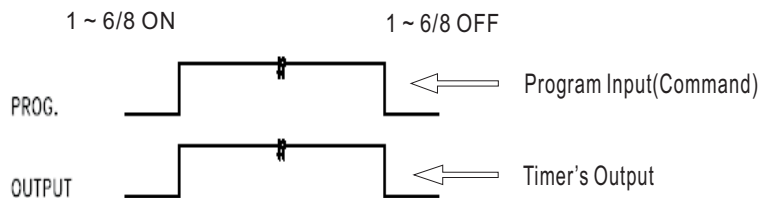**TM-619--1~4   TM-619H--1~4 TM-619L--1~4**

TM-619

TM-6331

Control Logic (Lithium CR 2032 memory backup, replaceable)

This electronic 7-day timer is accurate to the minute, designed with Control-Logic by **6 or 8 ON/OFF(event) per day**
Graphic description, as below:

1 ~ 6/8 ON   1 ~ 6/8 OFF

PROG. → Program Input(Command)

OUTPUT → Timer's Output

Also ,it provides 15-combination of Daily-Programs leads great convenience to users, in use of Timer on programming it to their demands to desired DAYS of WEEK.

	MO	TU	WE	TH	FR	SA	SU
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	

Start to use Timer – Press ® key to reset Timer
before using

A. RUBBER KEY's functional description
1. **TIMER** : Programs review & setting programs
2. **MANUAL** : To select "**ON**,**AUTO** or **OFF**"
3. **CLOCK** : To adjust current DAY and TIME
4. **Day** : To adjust day of week
5. **HOUR** : To adjust Hour
6. **MIN** : To adjust minute
7. ® : Reset Timer's setting
8. **LED** : To indicate ON/OFF status

B. To set CLOCK –

Press and hold **CLOCK** key and then press **DAY** key, **HOUR** key, **MIN** key respectively to adjust clock of Timer
to current DATE, HOUR, 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. Starts to set programs into TIMER
1. Press **TIMER** key. LCD screen shall show
1^{ON} _ - : - - - -
2. Press **DAY** key to select any of 15-combination of Daily-Programs to your application demand. Continuing to press **DAY** key, LCD shall alternating indicate among 15-combinations.
3. Press **HOUR** key ,**MIN** key respectively to set desired HOUR and MINUTE for 1^{ON}
4. Press **TIMER** key again, after finished setting of 1^{ON}, 1^{OFF} _ - : - - - - shall appear on LCD screen.
5. Press **DAY** key to select any of 15-combination of Daily-Programs to your application demand. Continuing to press **DAY** key, LCD shall alternating indicate among 15-combinations.
6. Press **HOUR** key, **MIN** key to set desired HOUR and MINUTE for 1^{OFF}
7. When finished setting 1^{OFF}, Press **TIMER** key, 2^{ON} _ - : - - - - shall appear on LCD screen.
8. Repeat procedure stated on **1 ~ 6** to complete rest of ON/OFF program-period(event)
1^{ON} _ - : - - - - ⟹ 1^{OFF} - : - - - - ⟹ 2^{OFF} - : - - - - ○○○○ ○ 8^{OFF} - : - - - -

or just to the desired number of ON/OFF(event) setting for demand of practicable application.
1^{ON} _ - : - - - - ⟹ 2^{OFF} - : - - - - ⟹ ○○○○ ○ 6^{OFF} - : - - - -

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

D. To review programs
Keep to press **TIMER** key, display on LCD screen shall alternating display among each of
6 or 8 ON/OFF

E. How to use OVERRIDE functions
619-programming-modeTimer is designed **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 overrided.
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 overrided.
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 " OF ". (With next opposite set point)

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.

Guide to Wiring, Mounting and Battery replacement

Important :
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. To clear memory press RESET key before first use.
4. Timer may need to be connected to power source in order to set the program.

619-Programming-mode Timer by its **Output-Formats** & **Contact-Rating**, Each model is able to provide multiple choices in usage, to users.

Follow graphic description & models descriptions below to connect /install Timer.

3 Types of **output-format**,
TYPE-1 SPDT Dry-Contact
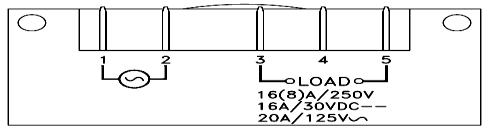**TYPE-2** Standard Rating, Line-Voltage output and
TYPE-3 High Rating, Line-Voltage output.
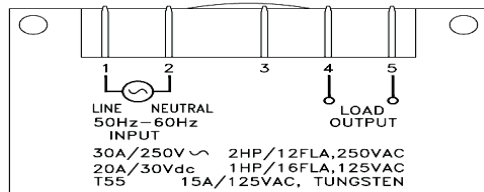Connect/Install Timer to equipments/Devices in accordance with "Terminal Numbers"
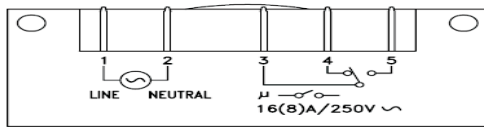
TYPE-1
SPDT, Dry-Contact output,Standard-Rating

1 2 LINE NEUTRAL 3 4 5
16(8)A/250V

TYPE-2 L
Line-Voltage output, standard-Rating

1 2 3 4 5
LOAD
16(8)A/250V
16A/30VDC
20A/125V

TYPE-3 H
Line-Voltage output, High-Rating

1 2 LINE NEUTRAL 3 4 5
50Hz~60Hz INPUT
LOAD OUTPUT
30A/250V   2HP/12FLA,250VAC
20A/30Vdc   1HP/16FLA,125VAC
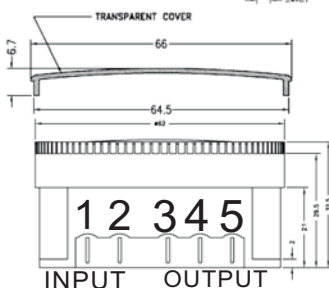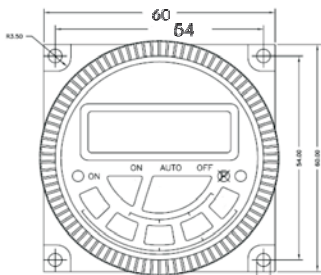T55   15A/125VAC, TUNGSTEN

By Timer's **Input-formats**, the operating Power of Timer, There are **4 types** available for user's option. Choosing required voltage-system upon ordering.
-1 120VAC **-2** 230VAC **-3** 24VAC   **-4** 12V

A. TM-619 Round-Shape,
  TM-619(H/L)-1 120VAC, TM-619(H/L)-2 230VAC,
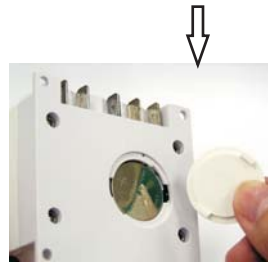 **TM-619(H/L)-3 24VAC, TM-619(H/L)-4 12V**
  Mounting-Hole 54~60 mm,
  TYPE-1/2/3 Output-Format are all available.

UL/CUL CE/LVD Certified

1 2 3 4 5
INPUT OUTPUT

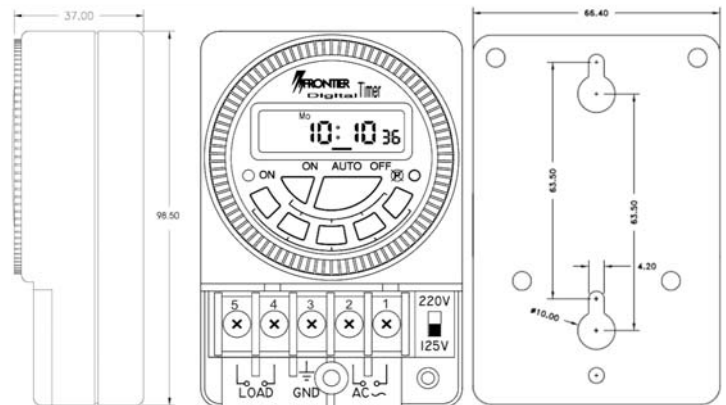
⟸ To replace Battery

B. TM-6331(H)-1~2 Switching-Power **120~230VAC**
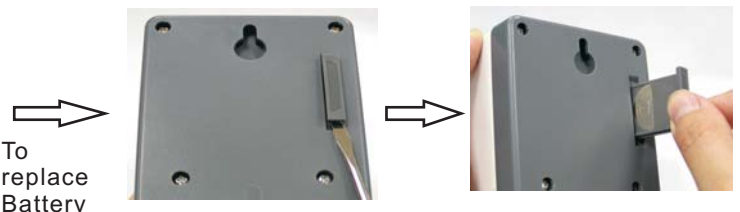 **TM-6331(H)-3 24 VAC, TM-6331(H)-4 12V**
  Voltage-output models. **TYPE-2/3 a**vailable only
  TM-6331AB-1~2 Switching-Power **120~ 230 VAC**
  (SPDT, Dry-Contact output). **TYPE-1** Output-format available only.
  Mounting-Hole 60~82 mm.

5 4 3 2 1
LOAD GND AC
OUTPUT   INPUT

UL/CUL CE/LVD Certified

To replace Battery