

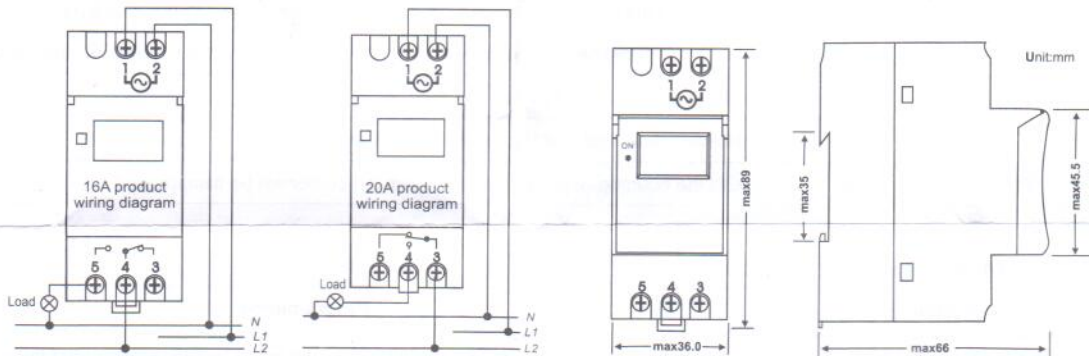
# Multi-functional Digital Programmable Timer

- Can set 20 groups on-off program, cycle weekly or daily, and control on-off manually
- Can set 20 times pulsation program, cycle weekly or daily, and control on-off manually
- With countdown function, time range setting within 1 s ~ 99min 59sec
- Can set Daylight Saving Time (1Hours) manually
- Built-in lithium battery, and travel time as usual if power failure
- Automatic time correction(-3 sec  $\leq \Delta t \leq 3$  sec) every day
- DIN35mm standard rails suitable for construction and industrial installation
- Products can be selected(16A, 20A)

## Technical data

Rated voltage:	AC220V 50Hz	Power failure memory:	3year
Voltage range:	190~240V	Contact Form:	1 group conversion
Number of on/off program setting:	20 groups, minimum 1 min	consumed power:	$\leq 5VA(16A) 7.5VA(20A)$
Number of pulsation setting:	20 times, 1 sec~59 min 59 sec	Electrical life:	$10^5$ times
Contact load capacity:	Resistance load: 16A/ 250V AC COS $\varphi=1$ Inductive load: 10A/ 250V AC COS $\varphi=0.6$	Mechanical life:	$10^7$ times
Countdown time:	1 sec- 99min59sec	Work temperature:	-10 ~ +50 °C (non-icing)
Contact resistance between contacts:	$\leq 100m\Omega$	Ambient humidity:	35~85% RH
Insulation resistance between contacts:	$\geq 100M\Omega$	Storage temperature:	-10 ~ +60 °C
Timing error:	$\leq \pm 2$ sec/day(25°C)	Weight:	About 125g(16A) 135g(20A)

## Wiring drawing and External dimension



## Setting method

\* If there is no display for the first time, press "RESET".(press both "D+" and "H+" for 3 seconds, then the product will be turned off and all setting will be lost. But day correction parameters, accumulated operating times and action times are reserved.)

### 1. Setting display time(present time):

Step	Button	programming
1	Hold $\odot$ and then press <b>H+</b>	HOUR increases on the screen, press <b>H+</b> continuously, the hours increase
2	Hold $\odot$ and then press <b>M+</b>	MINUTE increases on the screen, continuously press <b>M+</b> , the minutes increase
3	Hold $\odot$ and then press <b>D+</b>	Mark of WEEK moves on the screen, press <b>D+</b> continuously to choose the week

\* The timer is 24 hour system when turned on, hold " $\odot$ " for 5 sec to convert to 12 hours system with "AM" showed on the upper left corner. Hold " $\odot$ " for 5 sec again to convert to 24 hours system and the "AM" on the upper left corner will be disappeared.

### 2. Timing settings (2.1,2.2 and 2.3 three functions can not be used at the same time)

#### 2.1 20 groups setting of on/off function:

Step	Button	Programming
1	Press $\odot$	Enter into timing ON setting (display 1 ON)
2	Press <b>H+</b> and <b>M+</b>	Set ON time, press <b>H+</b> to set the hour, press <b>M+</b> to set the minute
3	Press <b>D+</b>	Same setting every day, MO-FR, MO-SA, SA-SU, MO-WE, TH-SA, MO WE FR, TU TH SA (if it is same every day, do not press <b>D+</b> and skip this step)
4	Press $\odot$	Enter into timing OFF setting (displays 1 OFF)
5	Press <b>H+,M+</b>	Set OFF time, press <b>H+</b> to set the hour, press <b>M+</b> to set the minute
6	Press <b>D+</b>	Same setting every day, MO-FR, MO-SA, SA-SU, MO-WE, TH-SA, MO WE FR, TU TH SA (if it is same every day, do not press <b>D+</b> and skip this step)
7	Repeat step 1-6	Set the ON/OFF time of 2nd to 20th groups(or press $\odot$ to exit)

- a. The ON/OFF program group can not setting overlap but should according to the time sequence.(If setting same ON/OFF time after contact 15 seconds, will have ring bell function ect.)
- b. When setting is finished, press  $\text{P}$  to view the set number of ON/OFF and the time, it be modified follow the appropriate setup steps.
- c. Press  $\text{P}$  enter to the interface ON or OFF program, press "MANUAL" to clear the ON or OFF time of current group and then display "-- : --".

### 2.2 20 pulsation function setting ("P" flashes on screen when opening)

Step	Button	Programming
1	Hold both <b>H+</b> and <b>M+</b> for 3 sec	Enter into the pulse width setting, display as 0:00 and <b>P</b>
2	Press <b>H+</b> , <b>M+</b> and $\text{⌚}$ at the same time	Set the pulse width: min / s (max 59 min 59 sec)
3	Press both $\text{⌚}$ and <b>Manual</b>	The pulse width setting is completed, the <b>P</b> on the screen flashes
4	Press $\text{P}$	Enter into timing pulsation ON(Display 1 ON)(Press again for the second pulse time)
5	Press <b>H+/M+</b>	Set ON time
6	Press <b>D+</b>	Same setting every day, MO-FR, MO-SA, SA-SU, MO-WE, TH-SA, MO-WE FR, TU-TH-SA (if it is same every day, do not press <b>D+</b> and skip this step)
7	Repeat step 4-6	Set the pulsation time of 2nd to 20th groups(or press $\text{⌚}$ to exit)
	Press both <b>H+</b> and <b>M+</b>	Exit the pulsation function, the display <b>P</b> will be disappeared

- a. When setting is finished, press  $\text{P}$  to view the set number of pulsation and the time, it be modified follow the appropriate setup steps.
- b. Press  $\text{P}$  enter to the interface pulsation program, press "MANUAL" to clear the pulsation time of current group and then display "-- : --".

### 2.3 Countdown function setting ("d" displayed at bottom left corner of screen)

Step	Button	Programming
1	Hold both $\text{P}$ and $\text{⌚}$ for 3 sec	Enter into the countdown setting, "d" displayed at bottom left corner, displayed as 0:00
2	press $\text{⌚}$ and <b>H+/M+</b> at the same time	Set the min and sec of countdown respectively (duration range: 1sec~99min59sec)
3	Press <b>MANUAL</b>	Start the countdown function
4	Press $\text{P}$	Halfway reset and wait to start the countdown again
5	Hold both $\text{P}$ and $\text{⌚}$ for 3 sec	Exit the countdown setting, "d" at bottom left corner will be disappeared

### 3. Manual daylight saving time (DST) display time setting:

Step	Button	Programming
setting	Hold both <b>D+</b> and <b>M+</b> for 3 sec	The present time will increase 1hour("1h" displayed at the bottom left corner of the screen)
cancel	Hold both <b>D+</b> and <b>M+</b> for 3 sec again	DST will be canceled and back to the present time

**Note:** This setting only set present time displayed. The ON/OFF time of program or pulsation has been set is not changed. If the ON/OFF program needs to run according to DST, set it in the setting program.

### 4. Automatic correction of time error daily("1d" display at bottom left corner of screen)

Step	Button	Programming
1	Press both <b>MANUAL</b> and $\text{P}$	Enter into time correction, screen display: 1d-00 (setting range -3~3sec)
2	Press <b>D+</b>	Set the number of seconds to compensate each day, The program is incremented or decremented by 1 second(For example, displayed as 05 refer to increase 0.5 seconds; -20 refer to reduce 2 seconds)
3	Press $\text{⌚}$	The setting is confirmed and exit

### 5. Control ON or OFF manually (press "MANUAL")

Screen Display	Work state
<b>ON</b> <b>AUTO</b>	Automatic control and in the ON state
<b>AUTO</b> <b>OFF</b>	Automatic control and in the OFF state
<b>ON</b>	Permanent ON and not controlled by the timer
<b>OFF</b>	Permanent OFF and not controlled by the timer

#### Attention

- Please don't use in the place with dust, corrosive gas, direct sunlight or rain.
- Please store and use in the conditions of rated voltage with the specified temperature and humidity.
- Product design and specifications maybe be changed without notice.