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| **TM-610** | Digital time switch for DIN rail |

1.Introduce

-Industry first utility function:
- Built-in calendar, 10 holiday times can be set in a year
- EXT port(extended length can reach 100 meters)
- 16 groups procedure controls(ON/OFF)
- 32 pulse controls(can be used for bell or on trigger-start equipment)
- Countdown function

-Can be programmed, or manually controlled for easy use
-Imported digital chip, intelligent and stable system
-LCD display, LED work instruction
-Built-in lithium battery, when a power failure, data will not be lost and timer will travel time as usual and be in auto-sleep
-Key parts adopt imported components
-Standard width: 17.5mm
-Standard installation with Din 35mm
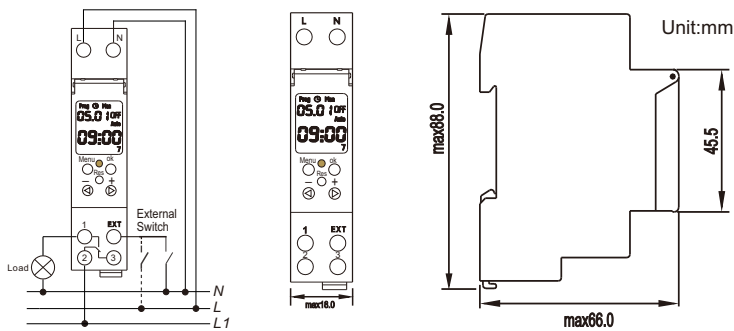-Widely used in industry, house, building, corollary equipment, etc.

2. Technical data

Rated voltage:	220-240VAC	load capacity:	AC250V 16A COSφ=1
Mains frequency:	50Hz	Load Inductive :	AC250V 10A COSφ=0.6
Procedure setting:	16 on/off program	EXT switch:	cable length≤100m
Pulse program:	32 channels duration:1-99sec	Contact point:	1group
Holiday program:	10	Contact resistance between contacts:	≤100mΩ
Countdown:	duration: 1-99min 59sec	Insulation resistance between contacts:	≥100MΩ
Electrical life:	10^5 times	Working temperature:	$-10 \sim +50\ ^{o}C$
Mechanical life:	10^7 times	Ambient humidity:	35-85% RH
Power reserve:	3Years	Storage temperature:	$-10 \sim +60^{o}C$
Power:	≤ 3VA	Weight:	≤ 90g

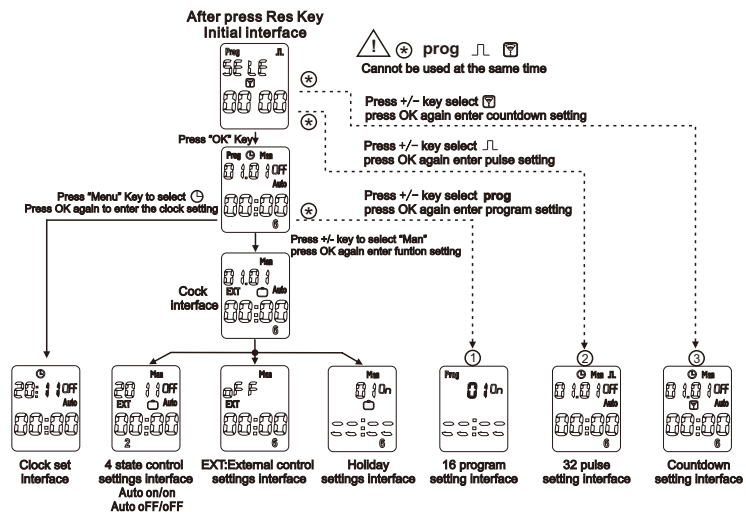## 3.Wiring diagrams

Unit:mm

4.Setting and operating

Notes:

1. Press "Menu" and "-" for 3 seconds, procedures will be closed but all former setting will be lost; press "Res", all procedures will be cleared.

2. In any setting screen but no any operation within 30 seconds, procedure will back to clock screen automatically, and will not save setting data.

3. Duing to built-in lithium battery, you can install timer in distribution box or control circuit after setting procedures.

Program setting interface chart

Date and time setting built-in calendar, set Year, Mouth, Hour and Minute respectively.

1. Press "Menu" until " ⏰ " flashes, then press "**OK**" into clock setting interface, Mark Year will flash.

2. Press"**+/-**" to required year ,then press "**OK**" to confirm .About setting mouth, day ,hour and minute ,same operation as setting year.

3. After finishing setting date and time, press "Menu" to exit and complete this setting.

Note: After the date is set, week will be self-synchronizing

1. Program/ pulse/ countdown function setting

Notes: After press **"Res"** key,the following three kinds of programs can only select one of them and cannot be used at the same time

1.Program setting(user can set program switch number as required at most 16 groups)

A: Press **"Menu"** in clock screen , when **"prog"** flashes, press **"OK"** to confirm and enter into one setting screen, **01 on** flashes.

B: Press **"OK"** into time setting, marker hour and minute flashes icon

C: Press **"Menu"**, then marker hour flashes icon.

D: Press **"+/-"** setting hour and press **"OK"** after completing then same setting for flashing minute and press **"OK"** after completing.

E: When program enters into week setting screen , marker 1(Monday) flashes .If need to open 1 (Monday),press **"+"** to open and copy to marker 2 (Tuesday),or press **"-"** to delete 1(Monday) , again to press **"+"** to 2(Tuesday),You can set week in turn after finishing press **"OK"** to confirm and program will enter into setting screen of close time.

Attention:

- After finishing week setting, open-needed week days will be shown in the screen.
- If all week days need to be open ,press **"OK"** and enter into setting screen of close time when marker Monday flashes.

F:Repeat step b to e ,and finish setting close time and week .Press **"OK"** into 2nd setting or press Menu to confirm and exit.

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2. pulses control program setting (user can set number of pulse control as requires, at most 32 channels)

A: Press "Menu" in clock display screen. When marker ⊓ flashes, press **OK** into group 1 setting screen icon.

B: Press "**Menu**" then marker hour flashes icon.

C: Press "**+/-**" to set hour and press "**OK**" after finishing . set minute and press "**OK**" to confirm .

D: Program enters into week setting screen, and setting ways please follow program setting.

E: Press "**+/-**" to set pulse control time ,and the duration range is from 1-99 sec ,after finishing, press "**OK**" into 2nd setting or press Menu to confirm and exit.

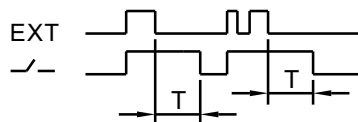### 3.Countdown setting (user can set countdown time, at longest time is 99 minutes and 59 seconds)

A: After press "**Rst**" Key, press "**+/-**" key , when marker 🕐 flashers, press **OK** into countdown.

B: Press "**+/-**" to set minutes and press "**OK**" after seconds flashes .

C: Press "**+/-**" to set seconds and press "**Prog**" completing and exit.

D: Press "**+**" and "**-**" Key, to select **Auto OFF** state.

E: Press "**OK**" and "**+**" Key, can to start and close countdown.

Man function setting (4 state control ways /EXT setting /holiday setting)

Press "Menu" until remark **Man** flashes, press **OK** into **Man** function setting screen, press "**+/-**"to choose required functions ,then press **OK** into subprogram setting screen.

1.Control ways setting (Auto ON/ON/Auto OFF/OFF)

A) Press "**+/-**" to choose remark **Auto**, then press "**OK**" to confirm

B) Remark **OFF Auto** flashes press "**+/-**" to choose one of control ways (Auto ON/ON/Auto OFF/OFF) ,and press "**Menu**" to exit after finishing setting.

OR: press "**+**" and "**-**", can cycle setting Auto **ON**/**ON**/**Auto OFF**/**OFF** at 4 state.

2.EXT setting .(if need this function ,external control switch is required ,and wiring method id shown in the diagram.

A) Press "**+/-**" to choose remark **EXT**, then press "**OK**" to confirm
B) Press "**+/-**" , there will be 2 selections :OFF EXT /ON EXT. press "Menu" after finishing choosing.
Notes:
A) There will be remark **EXT** after you set to EXT ON .But it is valid for EXT control switch in the state of Auto on or Auto OFF.
B) In the state of on or off ,the equipment will be forced to ON or OFF . If not followed by setted procedures ,it will be not valid .Only running timer in the state of Auto on or off , EXT switch is valid.
C) When setting EXT off ,EXT input port is not valid ,timer will run by setted procedure or pulse .When setting EXT on , EXT input port is valid.There is no execution of setting procedures or pulse when EXT switch closes setting procedures or pulse execute when EXT switch opens.

3.Holiday setting (can set 10holiday times within 1 year and every group of ON/OFF setting is required respectively)

A: Press "**+/-**" choosing " 🗓 ",then press ok to confirm.

B: Press "**+/-**" choosing ON/OFF

C: Press "**Menu**" into year setting screen (set the start time of holiday first and the end time second)

D: Press "**+/-**" choosing choosing required year ,then press OK into date screen.

E: Press "**+/-**" choosing choosing required date ,then press OK into setting screen of holidays (dates off) automatically.

F: Repeat step b-e ,and the system will enter into next holiday setting after setting , or press "Menu" to exit to time screen.

Notes:

- **Do not use this product in the places with dustiness, etchant gas, direct sunlight or rain.**
- **Please store and use in the places with rated voltage, specific temperature and humidity**
- **If design and specification of product are subject to change, will not further notice.**