ZYT20 MICROCOMPUTER TIMER SWITCH

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- **DIN35mm standard rail mounting**
- **Can be controlled of industrial electrical, public places electrical appliances, household appliances and other equipment**
- **Can be set different time ON/OFF program for 20 times, many different time of auto ON/OFF control according to every day or some certain days per week.**
- **Can be set different working mode of AUTO,ON,OFF,ON AUTO,OFF AUTO.**
- **Can be set countdown(delay time ON and OFF)**
- **Fitted with a replaceable battery 3V CR2032, still show time from an external power supply and keep the settings more than a year.**

The main technical parameters

- **Power voltage: 24～265VAC(50/60Hz)/ 24～265VDC**
- **Power consumption: < 2VA**
- **Switching capacity: 10A(Resistive)**
- **Programmable number of groups:20**
- **Timing error: ≤±2s/day**
- **Contacts: 1 ON 1 OFF**
- **Dimension： 85×67×18mm**
- **Weight： 73g**
- **Installation: guide rail**
- **Work Ambient Temperature： -10～50℃**
- **Relative Humidity： <95%**
- **Implementation of standards: GB-14536.1/GB-14536.8**

Function Definitions

Work status: After the initial power-up or reset the status and procedures set by the user and the status of the work mode;

Work Mode:

AUTO: Prepared by the user ON and OFF the implementation of the model automatically;

ON: The switch is at ON status: the OFF contact 3 and 4 open while the ON contact 3 and 5 closed;

OFF: The switch is at OFF status: the OFF contact 3 and 4 closed whlile the ON contact 3 and 5 open;

ON AUTO: Immediately the switch turns on, then prepared by the user ON and OFF the implementation of the model automatically;

OFF AUTO: Immediately the switch turns off, then prepared by the user ON and OFF the implementation of the model automatically;

Week Mode: everyday cycle (MON.,TUE., WED.,THU. FRI. SAT. and SUN. everyday cycle), everyday different(Selected separately MON.,TUE., WED.,THU. FRI. SAT. and SUN.), MON., WED. and FRI.; TUE., THU. and SAT.; MON., TUE. and,WED.; THU. FRI. and SAT.; MON., TUE., WED., THU. and FRI.; MON., TUE., WED., THU. FRI. and SAT.; SAT and SUN.; Total 9 Modes

Countdown: countdown ON(delay time ON): The switch is at OFF status, the countdown time is calculated to 0,the switch turns on;countdown OFF(delay time OFF): The switch is at ON status, the countdown time is calculated to 0,the switch turns off

Note: the longest countdown time is 99 hours 59 minutes, the shortest is 1 minute;

Indicator: No external power supply, the light does not shine;

There is an external power supply: the switch turns off, the red light shines; the switch turns on, the green light is blinking.

Button Definition: SET: Click it the working status enters the main menu, the setting status is back to the previous menu, press it to the working status in the main menu interface. CONF: In SETTING status, make sure the selected item enters the next menu.

SFT: SETTING status is submenu or the selecting key of the items to be set, at the working status, it is an operation function key for COUNTDOWN ON

ADJ: The setting status adjusts to the parameter to be set, at the working status, it is an operation function key for COUNTDOWN OFF

RST: At any state, press it, the system resets, all the parameters must be reset.

Operation instructions

At the working status, click SETTING to enter the main menu, then press SFT to cycle selection, TL-PROG-MODE-C/D-CLR 5 submenu, the selected submenu is blinking:

1. Correction time Select CLOCK on the main menu, CLOCK is blinking press CONF to enter the clock interface, while press SFT to cycle selection ten-digit hours→hour digits→ten-digit minutes→minutes digits→week(display a particular item among MON.,TUE., WED.,THU. FRI. SAT. and SUN) 5 items, the selected one is blinking, press ADJ to adjust the blinking one. At last press SET back to the main menu, then select the other submenu to set, or again press SET back to the working status.

2. Establish ON/OFF Program: Select Program on the main menu, PROG is blinking, press CONF to enter the PROG menu, while click SFT to cycle selection 1 ON→1 OFF→2 ON→2 OFF ..... 20 ON→20 OFF total 40 items, when selecting the particular item, press CONF to enter the setting interface of its time and week, the way of TIME SETTING is the same as "1. Correction time"; when setting week mode, each time you press ADJ to select
MON.→TUE.→WED.→THU.→FRI.→SAT.→SUN→MON.WED.FRI.→,TUE.THU.
SAT.→MON.,TUE.,WED.→THU.FRI.SAT.→MON.,TUE.,WED.,THU.
FRI.→MON.,TUE.,WED.,THU.FRI.SAT.→SAT.SUN.→MON.,TUE., WED.,THU. FRI. SAT. SUN., users can select according to your need, if no choice, the default is MON.,TUE., WED.,THU. FRI. SAT. SUN.(everyday cycle), at last press SET back to the main PROG menu, then select the next item to set, or go on to press SET back to the main menu or the working status.

3. Work Mode Set: Select MODE on the main menu, MODE is blinking, click CONF to enter MODE setting interface(the default mode is AUTO), when setting, each time you press ADJ to select ON→OFF→ON AUTO→OFF AUTO→AUTO, press SET back to the working status after selecting, the switch runs according to the selected working mode.

4. C/D Time Setting: 2 items C/D ON and C/D OFF. Select C/D on the main menu, C/D is blinking, press CONF to enter C/D menu, then press SFT to select □ON(C/D ON)while you press CONF to enter the time setting interface of C/D ON, the way of TIME SETTING is the same as "1. Correction time"; At last, press SET back to C/D menu, then press SFT to select □OFF(C/D OFF), press CONF to enter the time setting interface of C/D OFF, the way of TIME SETTING is the same as "1. Correction time". At last, press SET back to the working status.

5. CLR: Select CLR on the main menu, CLR is blinking, press CONF to enter CLR menu, while press SFT to select □ON→□OFF→1 ON→1 OFF→2 ON→2 OFF…20 ON→20 OFF, when you seclect the particular item, press ADJ to clear its time,it displays "--:--" after clearing, if you want to resume, again press ADJ once.At last, press SET back to the working status.

★Example 1: A certain electrical equipment work time is:

A. It needs to switch on at19:00 every day, and switch off at 06:00 next day.

B. It needs to switch on at12:00 from MON to FRI, and switch off at 13:00; The way of "2. Establish ON/OFF Program" as the following:

A: Select 1ON to set the time for 19:00, week for MON、TUE、 WED、THU、FRI. SAT.、SUN.(everyday cycle); Select 1OFF to set the time for 6:00, week for MON.,TUE., WED.,THU. FRI.SAT. SUN.(everyday cycle); (see Fig 2)

B. Select 2 ON to set the time for 12:00, week for MONTUE、WED、THU、FRI 、Select 2 OFF to set the time for 13:00, week for MON.,TUE., WED.,THU. FRI.; (see Fig 3)

After finishing setting A,B above, then according to the way of "3. Work Mode Set" to set the working mode for AUTO.

USING METHODS

- **After setting, connect to the external power and controlled equipment, the switch runs according to the setting program and working mode by the users,**

◎C/D function Start: press SFT/ADJ for more than 3s at the working status, start C/D ON/ C/D OFF(delay time ON/OFF) function, while the switch is off / on, the system starts to reduce time according to Section IV C/D Time Setting, when time to 00:00, the switch turns on/off.

Exit: press SFT/ADJ for more than 3s at C/D working status, exit C/D ON/ C/D OFF working status.

Pause: press SFT/ADJ (Normal key, time is less than 3s) at C/D working status, pause and resume running C/D ON/ C/D OFF.

Example2: A. A certain electrical equipment needs to switch on immediately, and switch off after 8 hours, do as the following:

A1. According to Section IV C/D Time Setting □ OFF (C/D OFF), set the time for 08:00, then back to the working status.

A2. Press ADJ for more than 3s at the working status, till the green light is blinking that is entering C/D status, the switch turns on, it will turn off automatically after 8 hours.(see Fig 5)

B. A certain electrical equipment needs to switch on after delaying 6 hours, do as the following:

B1. According to Section IV C/D Time Setting □ON(C/D ON), set the time for 06:00, then back to the working status.

B2. Press SFT for more than 3s at the working status, till the red light is blinking that is entering C/D status, the switch turns off, it will turn on automatically after 6 hours.(see Fig 6)

Dimensions and Connection Method

Tips: The contact capacity of the product is 10A (Resistive), when wiring, please consider the size of the load and its features, and multiplied by the amount of derating factor as in the following table. If it is less than the contact capacity of the product, it may wire directly (as shown), if it is more than that, please add the installation of expansion relay(AC relay or solid state relay) to prevent the product burning and impact the normal operation of your equipment

Load current derating factor table:

Load type	Resistance	Electric heating	Light	Solenoid	Transformer	Motor
derating factor	1	0.8	0.5	0.5	0.5	0.2

Notes!

- **▲Do not self-repair, decomposition or reconstruction the products. Please commit the repair, inspection work to the agency or the construction enterprises.**
- **▲Make it work under the environment where is isolated from moisture, corrosion and high content of metal gas. Do not make it contaminate with oil or water.**
- **▲The product displays fuzzy or does not show, please replace the battery (Type for CR2032 is battery Li),**

  when replacement, first disconnect the external power supply and turn the left battery cover to OPEN, then take out the battery and electrical cover, open the battery inner cover to replace the battery, and then cover the inner cover, put the battery and cover into the battery compartment, turn right to LOCK.