

# ZK-J06 Trigger Cycle Timer Delay Controller

## 1. Description:

ZK-J06 is a multifunction delay controller module. Digital tube display. It can be widely used at Smart home, Industrial control, Automatic irrigation, Indoor ventilation. And protection equipment.

## 2. Features:

- 1>.Digital tube display
- 2>.Support high level trigger
- 3>.Emergency stop function
- 4>.Sleep mode, Wake up with any button
- 5>.Automatically save parameters
- 6>.Dual MOS control support more than 15A 400W
- 7>.Support reverse connection protection
- 8>.Continuously adjustable from 0.01 seconds to 9999 minutes
- 9>.Optocoupler isolation to enhance anti-interference ability

## 3. Parameters :

- 1>.Product Name:ZK-J06 Delay Controller Module
- 2>.Product Number:ZK-J06
- 3>.Working Voltage:DC 5V-36V
- 4>.Control Current:30A(Max and need heat sink!Normal temperature 15A 400W)
- 5>.Quiescent Current:15mA
- 6>.Working Current:50mA
- 7>.Trigger signal source: High level trigger (3.0V~24V)
- 8>.Reverse protection:Yes
- 9>.Size:60\*39\*14mm

## 4. Work Mode:

P1.1:Trigger Delay Mode. Input trigger signal and then output turn ON and keep time OP. Then turn OFF after delay time OP.Keep OFF at last; The input signal is invalid if get trigger signal again during delay time OP.(Time OP can not be set 0)

P1.2:Trigger Delay Mode. Input trigger signal and then output turn ON and keep time OP. Then turn OFF after delay time OP.Keep OFF at last; Output will restart delay if get trigger signal again during delay time OP.(Time OP can not be set 0)

P1.3:Trigger Delay Mode. Input trigger signal and then output turn ON and keep time OP. Then turn OFF after delay time OP.Keep OFF at last; Output will reset and

stop timing if get trigger signal again during delay time OP. (Time OP can not be set 0)

P2: Trigger Delay Mode. Input trigger signal and then output keep OFF for time OL. Then turn ON after delay time OL and then keep ON for time OP. Then turn OFF after delay time OP. Keep OFF at last. (Time OP and OL both can not be set 0)

P3.1: Trigger Delay Mode. Input trigger signal and then output turn ON and keep time OP. Then turn OFF after delay time OP and then keep OFF for time OL. Cycle the above two actions in turn. The number of cycles (LOP) can be set. Output will reset and stop timing and output OFF if get trigger signal again during loops. (Time OP and OL both can not be set 0)

P3.2: Power-ON Delay Mode. Input work power supply and then output turn ON and keep time OP. Then turn OFF after delay time OP and then keep OFF for time OL. Cycle the above two actions in turn. The number of cycles (LOP) can be set. (Time OP and OL both can not be set 0) Note: this mode no need input signal.

P4: Signal Keep Mode. Keep input signal and then output keep ON. Output turn OFF after delay time OP when the signal disappears. Reset delay time when get trigger signal again during timing. (Time OP can not be set 0)

## 5. Timing range:

1>. Continuously adjustable from 0.1 seconds to 999 minutes. (Time can not be set 0)

2>. Enter the settings interface when short press button 'STOP' in the OP / CL parameter modification interface (Flashing) to select timing range.

3>. Pay attention to the position where the decimal point moves when the button is pressed.

4>. Display 'XXX' No decimal point, the timing range is 1 second ~ 999 seconds.

5>. Display 'XX.X' The decimal point is the penultimate, timing range is 0.1 second to 99.9 seconds.

6>. Display 'X.X.X' The decimal point is fully lit, timing range is 1 minute to 999 minutes.

7>. For example, if you want to set the OP to 3.2 seconds, move the decimal point to the penultimate position, Screen will display '03.2'

8>. OP and CL parameters are the same in different work mode.

9>. It will display OP (CL, LOP) and corresponding delay time by short press button SET in main display interface (when display 000).

10>. It just display OP and corresponding delay time in P1 mode by short press button SET in main display interface.

## 6. Parameter Description:

1>. OP: Delay time for turn ON;

2>. CL: Delay time Turn OFF;

3>. LOP: Number of cycles. Range is 1-999 times. '---' means unlimited loop.

## 7.Set Parameter:

Long press:keep press button for more than 3second.

1>.Enter set parameter menu by long press button 'SET'.

2>.Work mode will flash at first when set the working mode.Short press the UP/DOWN button to select working mode P1~P4.

3>.Short press SET button to enter the system parameter settings interface.

4>.In the system parameter setting interface, short press the 'SET' button to switch the system parameters to be modified, short/long press the UP/DOWN button to modify value;

5>.Short press button 'STOP' to select timing range.

6>.Short press button SET to set next parameter.

7>.Save the parameter settings and exit the settings interface when long press 'SET' button after all the parameters are set.

8>.Main interface:Display 000 if no output.

9>.Set interface:Long press SET button enter into set interface.Long press SET button again into main interface after set parameter.

## 8.Additional Features:

1>.Auto sleep function: Long press button 'STOP' in the normal running interface to turn on or off auto sleep function.

1.1>C-P:Turn ON auto sleep function.Screen will automatically turns off if there is no operation within five minutes.It can be wake up by any buttons.

1.2>.O-d:Turn OFF auto sleep function.

2>.Enabled/Disabled output by short press button STOP:

2.1>.ON:Enabled output during delay time OP.

2.2>.OFF:Disabled output during delay time OP.Module can not output any signal at this mode.

3>.Common ground:User can connect GND of trigger signal to GND of module by short pads GND-T and GND.But it is not recommended, which will reduce the anti-interference ability of the module.

## 9.Application:

1>.Motor

2>.Robot

3>.Smart home

4>.Industrial control

5>.Automatic irrigation

6>.Indoor ventilation

7>.Illumination

8>.Alarm system

## 10.Note:

- 1>.Module can output voltage same to input voltage.
- 2>.GND and GND- can not connect together otherwise module can not work normally.
- 3>.Please read use manual and description before use.

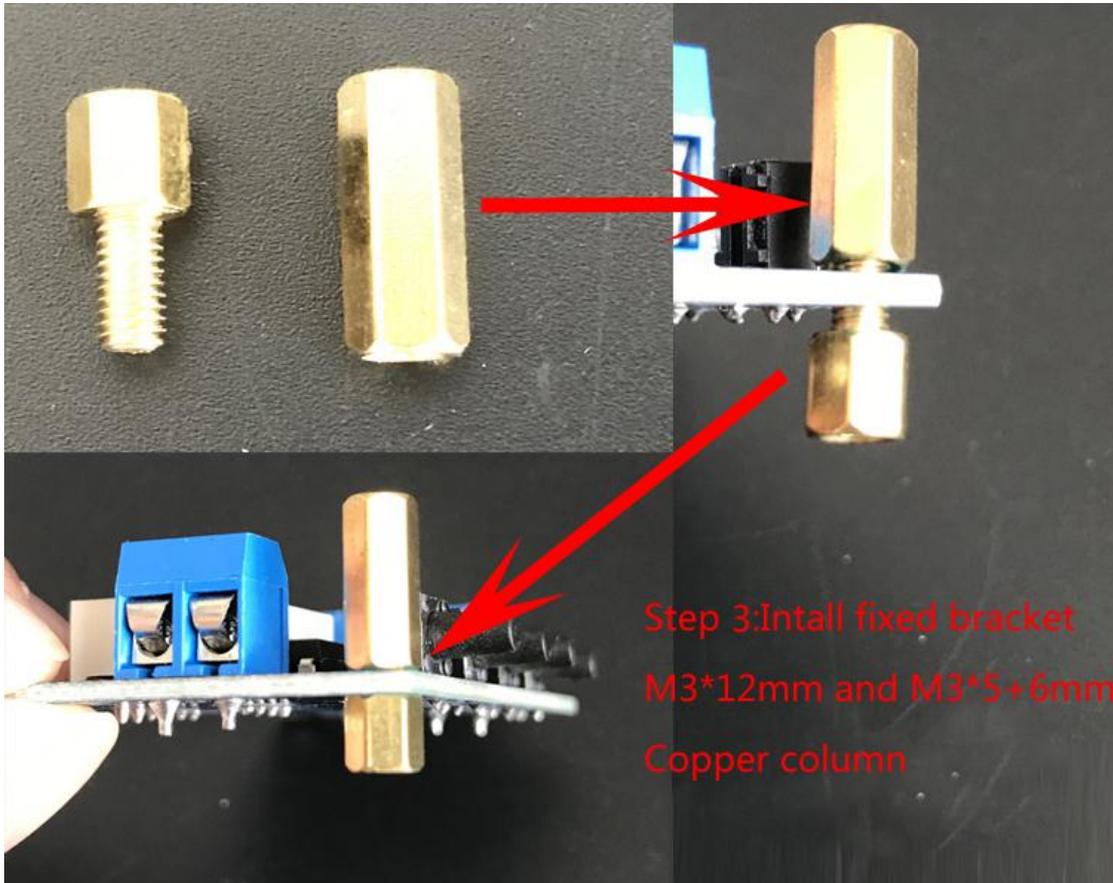
## 11.Package Listing:

- 1>.1pcs ZK-J06 Trigger Cycle Timer Delay Controller
- 2>.6pcs Acrylic shell
- 3>.4pcs M3\*12mm Copper column
- 4>.4pcs M3\*5+6mm Copper column
- 5>.8pcs M3\*6 screw

## 12.Installation Manual:



Step 2: Remove the protective film on the acrylic surface.



Step 4: Install others fixed bracket as following Step 3.



Step 5: Prepare the base plate and 4pcs M3\*6 screw. keep clean.



Step 6: Fixed acrylic floor by M3\*6 screw.



Step 7: Ready for surrounding acrylic



Step 8: Install acrylic on button side.



Step 9: Install acrylic. Note the corresponding point



## Step 10: Install Acrylic at load side



## Step 11: Install Acrylic at input side



Step 12: Prepare the acrylic at top side



Step 13: Fixed acrylic by M3\*6 screw



