

UCTRONICS DC 12V Time Delay Relay Module

Model: U6031

1. Introduction

The DC 12V time delay relay module is designed for different control systems. It can set on delay or off delay modes with the adjustable time range from 0.1s to 1h. The delay mode and delay time can be set by shorting or opening the jumper pins and rotating the potentiometer. It can be widely used for smart home, automobile control, Arduino robotics, and other electronic projects.

2. Functions

S6	S7	Function	Description	Timing Chart
Open	Close	On Delay	The time delay starts when applying the power supply and the output switches to the operate condition after the setting time has elapsed.	
Close	Open	Off Delay	The output immediately switches to the operate condition and the time delay starts when applying the power supply, and the output switches to the release condition after the setting time has elapsed.	

Adjustable Range of Time T with potentiometer

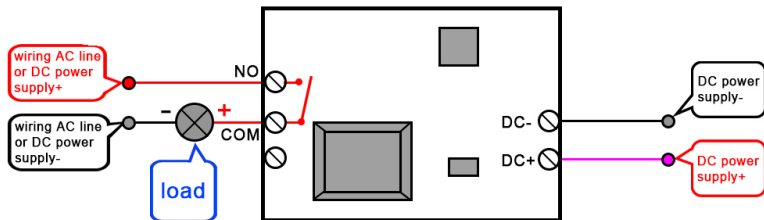
Mode	S1	S2	Diagram	S4	T
1	0	1	$\begin{matrix} 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S1} \\ 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S2} \end{matrix}$	open	0.13-1.3s
2	1	0	$\begin{matrix} 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S1} \\ 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S2} \end{matrix}$	open	0.5-5.2s
3	0	1	$\begin{matrix} 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S1} \\ 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S2} \end{matrix}$	close	1.5-14.5s
4	0	0	$\begin{matrix} 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S1} \\ 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S2} \end{matrix}$	open	4.4-42s
5	1	0	$\begin{matrix} 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S1} \\ 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S2} \end{matrix}$	close	6-58s
6	1	1	$\begin{matrix} 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S1} \\ 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S2} \end{matrix}$	open	38-340s
7	0	0	$\begin{matrix} 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S1} \\ 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S2} \end{matrix}$	close	48-463s
8	1	1	$\begin{matrix} 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S1} \\ 1 & \boxed{\text{---} \text{---} \text{---}} & 0 & \text{S2} \end{matrix}$	close	389-3700s

3. Specification

Module Size	57*30*18.5mm
Operating Voltage	12V
Quiescent Current	5.5mA
Max. Operating Current	42mA
Delay Type	Electricity delay
Max. Load Voltage	NC: DC 30V or AC 250V /NO: DC 28V or AC 125V
Max. Load Current:	10A
Relay Max. Frequency:	5KHz

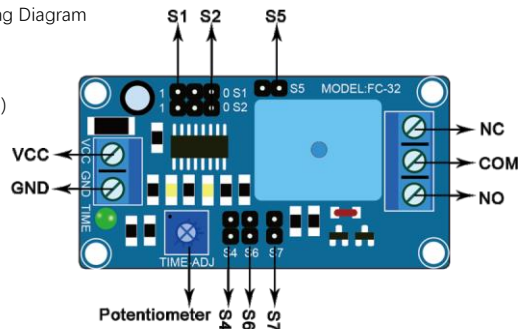
4. Quick Start Guide

Turn on a light after delaying 10s.



Wiring Diagram

1. Open cap S6, close cap S7 (On delay mode)
2. Jump S1 to 1 and S2 to 0
3. Close S4
4. Adjust the delay time by potentiometer



5. Trouble Shooting

Please remove the jumper cap of S5 when controlling AC current or DC current voltages other than 12V, otherwise the module will be burned or will not work properly.

6. Contact us

If need any further support, please feel free to contact us.

Website: <http://www.uctronics.com>

Email: support@uctronics.com