

Re: 555 timer problem

Source: <http://sci.tech-archive.net/Archive/sci.electronics.basics/2006-09/msg01625.html>

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 - *Date:* 27 Sep 2006 17:00:34 -0700
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randomname wrote:

I'm working on the "time fountain" project and have run into probably the last of my problems. Here is the circuit (just strobing LEDs, and a motor):

```
+6V
+-----+ |
+6V>---+---[1N4001>]---+-----|Vcc | [LED]
||+ || |K
| [1000µF] | OUT|-----+
|||
GND>---|-----+-----|GND 5|---[.1uf]---|GND
| +-----+
|
|
+-----+-----+
||
| +-----+-----+
|||
| [1N4001] [MOTOR]
|||
| +-----+ +-----+-----+
+6V>---+---[1N4001>]---+-----|Vcc | |
|+ || C
[1000µF] | OUT|---[R]---B
||| E
GND>-----+-----|GND 5|---[.1uf]---|
+-----+ GND
```

The top timer just controls strobing LEDs, and appears to be working fine (though I have no real means to test it).

The bottom timer, however, gives me problems. I'm using a 1uf cap, 1K for uptime, and 1K for downtime. (The configuration is such that one resistor controls the cap charge, the other controls the discharge)

The motor is a tiny submersible 3vdc water pump. The problem is that

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the frequency of the 555 timer will alternate. I've hooked up a piezo in parallel to the motor, so I can hear the frequency of the timer. (I don't have an oscilloscope)

It will be high for a few seconds, then dip low for a few seconds, then go back high. When this happens, it changes the RPMs of the motor which changes the flow of water — I need a constant flow of water. I just need the motor to run steady at a certain rate, which it does, but only for short bursts of time.

I need the 555 to stay as constant as possible... but for some reason the 555 timer is giving me a hard time. Any suggestions? Thanks a lot!

Maybe if you could post the exact circuit of the timer that controls the motor, with all the parts and connections...

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John

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