

Re: 555 monostable circuit design

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- *From:* ehsjr <ehsjr@xxxxxxxxxxxxxxxxxxxx>
 - *Date:* Fri, 07 Apr 2006 05:56:03 GMT
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John Fields wrote:

On Thu, 06 Apr 2006 13:08:25 -0500, John Fields
<jfields@xxxxxxxxxxxxxxxxxxxxxxxx> wrote:

On 6 Apr 2006 07:46:27 -0700, jeff@xxxxxxxxxxxxx wrote:

I have a GPS unit which I'm mounting in the trunk of my car powered by the 12v lighter plug in the trunk. The socket has power only when the key is on and the GPS unit requires its power button to be held down for 1 second to activate it. If I were to use the 555 monostable circuit I found (link below) to trigger a relay that would act as a remote switch, would I be able to omit the circuit's pushbutton and just use the lighter plug's power to start the countdown? Also, it seems as though there is a 6 second delay built in to the circuit, what component values would I need to change to get the 1 second delay I need?

That circuit won't work for you because it needs a trigger to start it after power has been applied. What you need is a circuit that turns a relay on as soon as you turn the key on, then releases the relay 1 second later.

However, that would be equivalent to applying power to the GPS at

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the same time that its POWER button was held down, and it might not like that.

If it didn't mind, though, here's the simplest way I can think of solving your problem, plus you get a little delay between the application of power to the GPS and connecting the PWR terminals together (pressing the POWER) switch because of the switching time of the relay. View in Courier.

```
VBAT>-----+
|
O--> |
IGN |
O | +-----+
+----->>--|+12v |
|+ ||
[CAP] COM ||
| O---->>--|PWR |
[COIL]- - -|||
| O--> |||
| |NO ||
| +----->>--|PWR |
|||
GND>-----+-----|GND |
+-----+
```