http://www.hauntedillinois.com/fogtimer.php

Repeating ECT (Event Control Timer)

Have you ever wanted to activate an effect over and over without having to "trigger" the effect repeatedly somehow? If so, you will like this project. I originally built this timer to activate my fog machine for five seconds, every three minutes, for as long as the machine and timer are turned on. It's a great little control circuit and it's fairly easy to build.

Here is a list of the parts that you need:

- IC - LM555 Timer (Radio Shack 276-1723)
- Q1 - Generic NPN Switching Transistor
- RELAY - 5VDC Coil Relay
- LED1 - Standard Red LED
- D1 - 1N4001 or similar diode
- R1 - 100K Potentiometer
- R2 - 10K Potentiometer
- R3,R5,R6 - 1K 1/4 watt resistor
- R4 - 390 Ohm 1/4 watt resistor
- R7 - 330 Ohm 1/4 watt resistor
- C1 - 4,700 µF Electrolytic Capacitor
- C2 - 0.01 µF Ceramic Capacitor
- Project Box / Circuit Board
- Assorted Hardware / Wires

Below is a picture of the finished product. The knob on the left (R2) is used to control the amount of time the effect is activated (from 2 to 30 seconds) and the knob to the right (R1) controls how long between activation cycles (from 2 seconds to 4.5 minutes). The timing cycles can be made to last longer by replacing the appropriate potentiometer with a higher valued one, however, the values listed above in the parts list seemed to work the best for me. An indicator LED in the middle of the box displays when the power is on and the timer is running. Coming out of the right side of the box is a cord with a plug at the end. Since this plug is hooked directly to the contacts of the relay inside the project
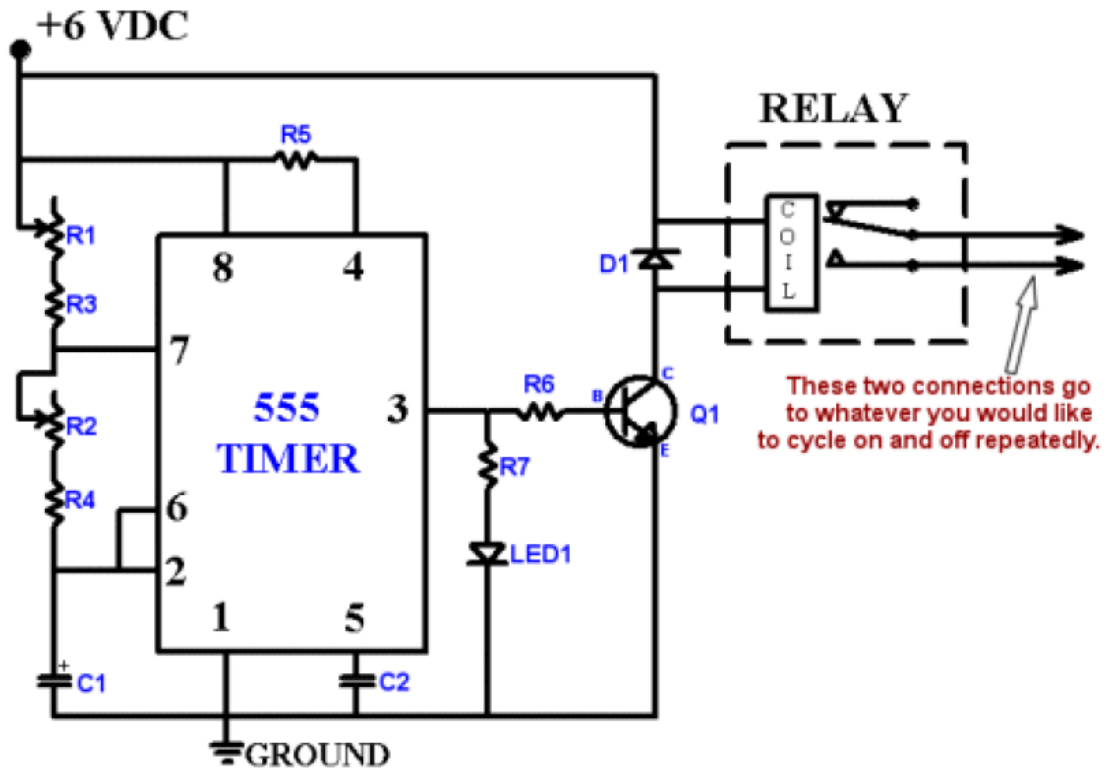
box, you can hook it up to whatever you want to activate, in the same way that you would hook the effect up to a toggle switch.

The relay used in this project had contacts that are capable of handling 2 amperes at 120VAC, which is more than enough to control the fog machine that I hooked it to. I took apart the remote switch box for activating the fog machine (see picture below). Inside, I hooked up a 1/4" mono jack, in parallel with the original fog machine activation switch. Hooking up the 1/4" jack in parallel with the switch allowed me to activate the fog machine manually, or I could let the timer do it.

In order to build this timer circuit, you must wire it up using the schematic below.

+6 VDC

R5

R1
R3
R2
R4

8   **4**

7

**555
TIMER**   **3**

6

2

1   **5**

C1   **C2**

GROUND

RELAY

COIL

D1

R6 B C **Q1**
E

R7

LED1

These two connections go
to whatever you would like
to cycle on and off repeatedly.