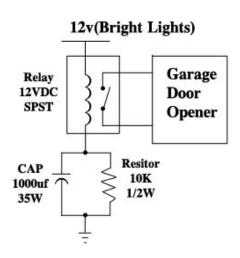
## How to Connect a Garage Door Opener Remote to the bright headlight switch. By Lance Tracy

This is a pretty simple set up. Most of what I could find online wants to use the momentary flash to pass switch but the 650 does not have that. The momentary action of the flash to pass switch allows the remote to transmit while the momentary switch is being pressed. What I came up with is a way to connect the remote to the bright lights that only transmits for a short period of time (approx 1 sec.) right after you switch the bright beams on and then right after you switch them off. Without the circuit below when you switch on the brights the remote would transmit the whole time the brights are on, running your remote battery down in no time. Here is the circuit:



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Relay – Type: Reed SPST 12VDC Capacitor – 1000 micro ferret 35w Resistor –  $10K\Omega$  1/2W Shrink Wrap (assorted sizes) (All of these parts came from Radio Shack except for the largest piece of shrink wrap.)

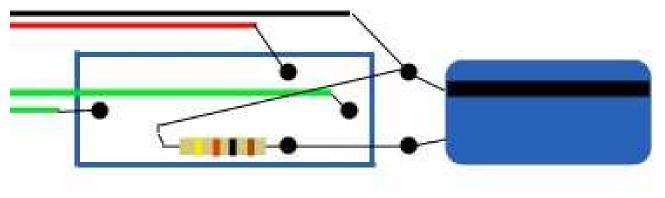
Here is an explanation of the circuit for those who want it:

When the bright light is switched on, the capacitor charges momentarily energizing the relay. When the capacitor if fully charged the relay will switch off also. The resistor is large enough to not allow the relay to complete the circuit thru it to ground, but serves the purpose of providing a path to ground allowing the capacitor to discharge when the bright switch is turned off.

Here is the physical layout for the components. I used shrink wrap of different sizes to help control and stabilize the wires and to cover the resistor lead that runs back between the coil connections

The green wires connect to the remote (described later), the Red and black wires will connect to the bike inside the dome (also described later):

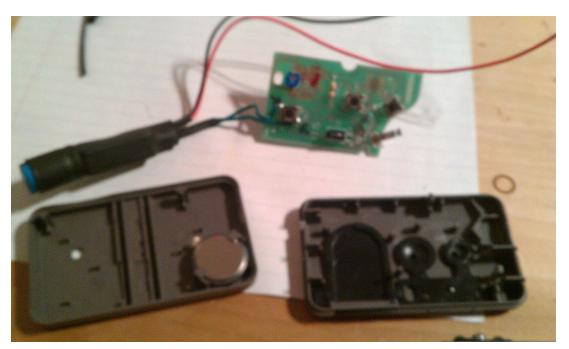


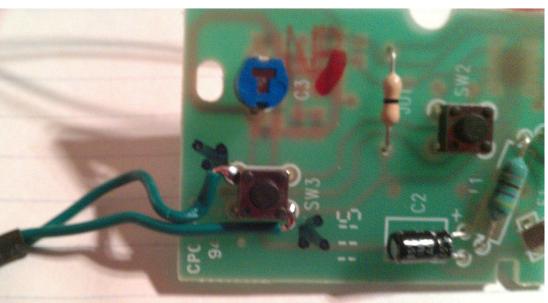


I placed a large piece of shrink wrap over the whole circuit to protect it. Radio Shack does not sell shrink wrap this large but you can get it at an electronic supply store or you could use electrical tape.

Next I had to connect it to the remote. The first step is to find which two contacts on the appropriate switch are connected when you push the button. Every remote is different so I cannot tell you which is the correct for yours. I opened my remote and found the switch the main push button pressed. It had four connections soldered to the board. I took a piece of wire and touched it to two different connections to see if the garage door went up. Between the four connections you have a possible six combinations but I think most switches will use the connections opposite of each other so start with them. Once I had the right to connections I soldered one of the green wires to each connection. I then cut a notch in the remote housing to run the wires out of. Then I closed the remote housing.

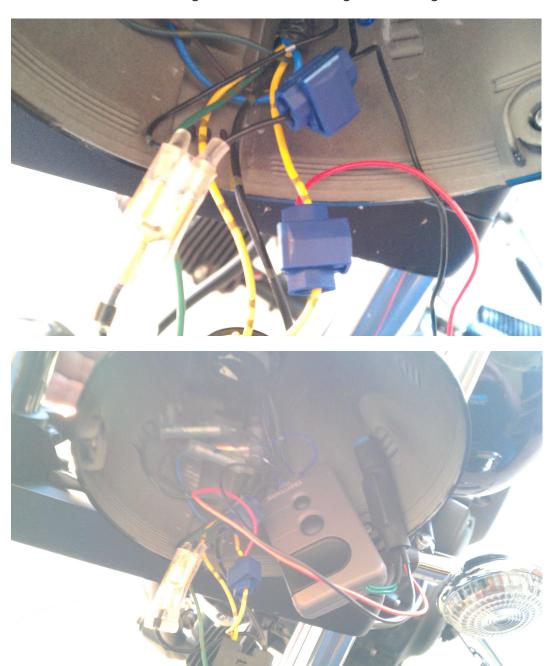
(note you might want to find the smallest available remote for your brand of garage door opener as you will be putting it in the head light dome.)







I then removed the front off of the head light dome and unplugged the headlight giving me a little more room to work. I used two crimp-on splicers to connect the remote to the head light. There are two Yellow wires running parallel to each other that power the bright beam. I connected the Red wire to one of them. I then connected the black wire to one of the black ground wires also running to the headlight connector.



I then pushed everything back up inside of the dome and reconnected the head light and closed it up. Job done. Not having to hide wires or mount switches. Nice clean installation.

## After thought:

I think I might go back and modify the remote so the button cannot be physically pushed. I would hate for the vibrations of the road or the occasional bump to start causing the remote to transmit. It's easy to get to the remote to change the battery but I don't want to do it all of the time.