

Build your own *Fog Machine Controller*

by Chuck Rice



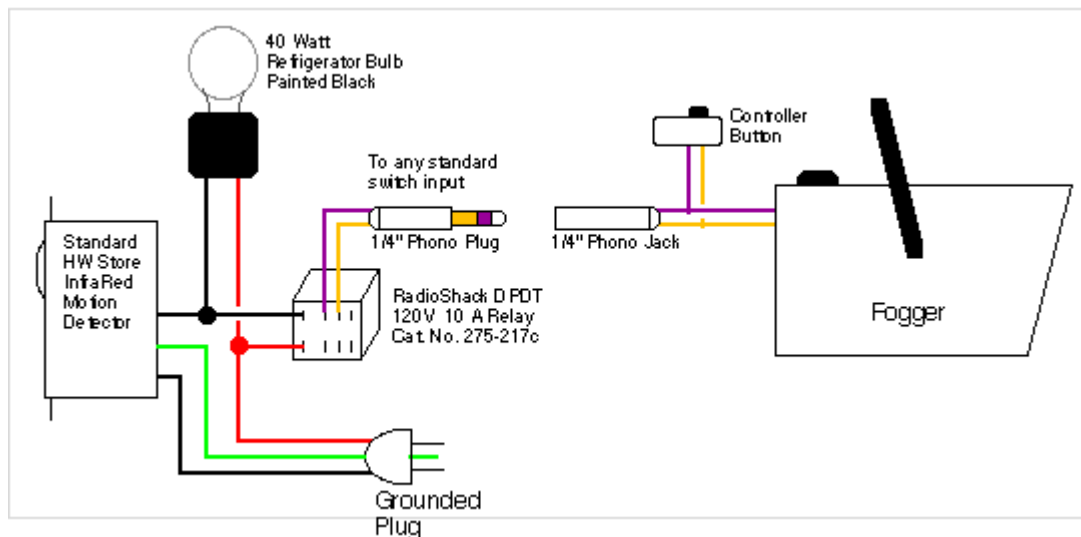
I purchased two F-70 fog machines this year. They have a wired remote control with a single button that you press when you want fog. But I did not want to stand around waiting to press the button till the TOTs arrived, so I built this automatic button presser. It is simple to build and it ended up looking pretty neat to boot. I found a small circuit breaker box (2 breakers) at the hardware store (the cheapest metal box I could find) to contain the wiring. I found that the IR device required at least a 30 watt load to operate, so I used a 40 watt refrigerator lightbulb to provide the load. It got too hot to keep inside the box, so I poked it out the top and painted it black. The black paint makes the bulb look old and dirty when turned on and gives it an un-cared-for look.

Wiring

The wiring is simple enough for anyone to do. The IR motion detector has three wires, a ground, and two black wires (the black wires are interchangeable). My fogger uses 1/4" phono plugs, but I understand that other foggers use different connectors, so you are on your own there.



Since the relay shown handles 10A at 120 volts, you can use it to control almost any type of switched device, but be sure to check the tag on the device you are trying to control. Half of the relay is unused, so it can be used as a second switch if needed. The IR detector has a 120 degree range of detection, but if you want to make it more directional, you can cover parts of the sensor with black tape. Make sure you cover all connections so that they cannot short out. Heat shrink tub is available at most hardware stores and is easy to use. Just remember to place it over the wire before soldering. After completing the connection, slide the shrink tube over the connection and heat it with a match or the soldering iron. You should be sure to run the ground wire to the metal breaker box (not shown) as well as to the PIR for added protection.



Please note:

I can make no warranties on the methods and procedures presented here. I have built this device, but your tools and skills are unknown to me. Proceed at your own risk.

I also do not endorse any of the products here except the [FerretTronics](#) chip. They are just the products I chose to use for this project. You may find that they work better or worse for you. Experiment for yourself. That is half the fun!

On the other hand, if there is a step or procedure here that you do not understand, let me know using the [Comments](#) button and I will see what I can do to explain it better. -Chuck-