

Fog Machine

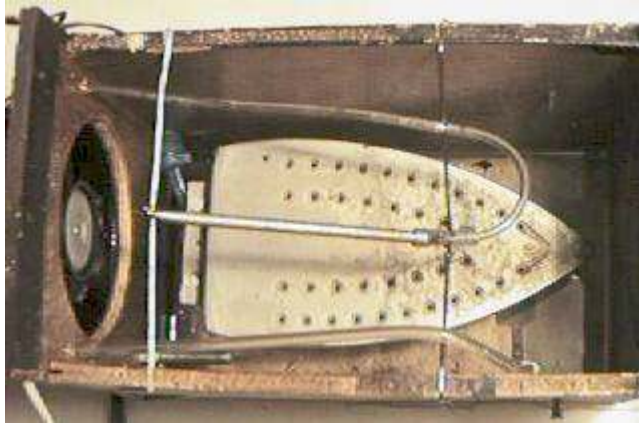
This is our home-made fog machine. It uses the same regular fog juice used in store-bought fog machines. You can buy the juice from Terror by Design, Spencers, or



party/theatrical supply stores (check your yellow pages). You can also make your own juice. It's less expensive, but there may be legal issues if the general public is going to breathe your fog. According to the Halloween-L archives: "For fog juice, mix 15% to 35% glycerin to distilled water. Experiment, the

less glycerin you use the cheaper and cleaner your fog will be but it will also be lighter and not last as long." You don't have to use distilled water with my fog machine design because there's no heat exchanger to get clogged. You can get small amounts of glycerin at a drug store, or larger amounts from restaurant supply companies.

A piston air pump (bought at the local surplus store for \$5) squirts the juice onto an inverted, disassembled iron (bought at a garage sale for \$1). The iron is on all the time.

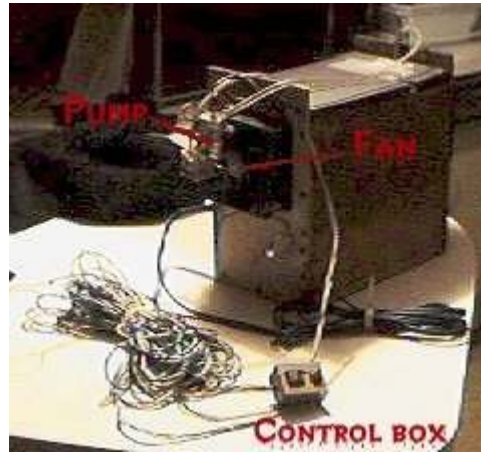


It's held above the juice by long bolts from the bottom of the box. The wooden box is sealed and waterproofed inside with a kind of paint called C.R.A.E. (Corrosion-Resistant Acrylic Enamel.) Any thick, waterproof paint will work. If you build something like this, be certain to keep enough space between the wood and the iron, you don't want to start a fire! Any device like this should be thoroughly tested before being used unattended. Heat it up

without juice in it to be sure it won't burst into flames when it runs out of juice.

The juice is pumped into a metal tube 4 inches above the iron with several pin-holes in it to distribute the juice over the hot surface. The heat vaporizes the juice into fog. Fans (salvaged from an old computer) on both ends of the box blow the fog out the front of the machine. Unvaporized juice runs back down into the reservoir. The intake for the pump is a metal tube glued to the side of the box with water-proof epoxy. It's bent 90 degrees at the bottom and the end is covered with a screen to keep little bits of junk out of the pump.

The pump is mounted on the back of the box so it will be cooled by the flow of air. The fan and pump run on 12v, and the iron plugs in of course. A 15 foot control wire allows the operator to turn the fans on and off and the squirt the juice.



We built this machine back when the cheapest fog machines were \$300. Today, small machines can be bought for as little as \$30. Unless you've already got all the parts in your junk box, or can get them second hand, it might not be worth it to build this machine.

This type of fog will not hang close to the ground unless you cool it below the ambient air temperature. There are plans and discussion of fog chillers on this site.