

## Bug Catcher

This summer there seemed to be an influx of tiny gnats and fruit flies in our house. These are incredibly annoying because they seem attracted to human warmth and tend to fly into your nose and eyes while you are sitting down at the computer or watching TV.

I looked at many options and finally decided on the Katchy Indoor Insect Trap. This is a solid, well built design that kills these bugs without chemicals or zapping them. Well to be honest it doesn't really kill them, it sucks them in and then they end up stuck to the "fly paper" at the bottom and die over time.

The unit uses UV light to attract the bugs so it most effective at night or in a dark room.

You can purchase the unit on Amazon here: [Amazon.com : Katchy Indoor Insect Trap](https://www.amazon.com/Katchy-Indoor-Insect-Trap/dp/B08L5K3K3K)



If you want to operate it manually, you just press one of the buttons on the top to turn it on/off.

If you want to put it on a timer (or home control system) it requires a minor modification due to the fact that the unit always defaults to "off" when the power is applied. The rest of this document describes how to modify the unit so that it will default to "on" when the power is applied.

I have to admit that there may possibly be another similar unit that does not require modification but I did not spend the time looking for it because: (a) I had already bought this one and liked it, and (b) it was an interesting technical challenge for me.

## Bug Catcher

Here is a picture of the bugs caught after a week or so in our kitchen area.



## Steps to modify unit to power on automatically

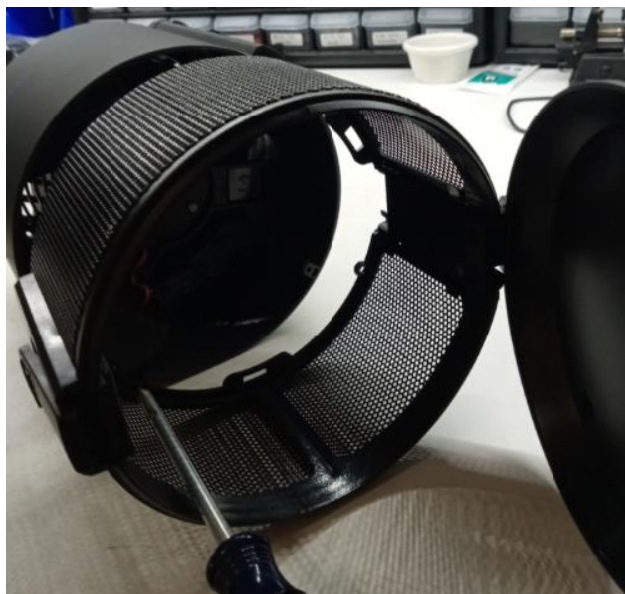
### Step 1 - Remove lower plastic funnel

Open the bottom door (by pressing on the release button on the side) and remove the one screw holding the plastic funnel in place. You can then twist the funnel about a ¼" and it will come right out.



### Step 2 - Remove the lower base

Remove the three screws holding the lower base to the upper base. You can then remove the lower base and put it aside.



### Step 3 – Remove the upper light bar screws

Remove the two screws holding the upper light bar to the upper base. These are located where the upper light bar's two "feet" make contact with the upper base. One of these screws is easy to get to.



The other screw is more difficult and can only be accessed by a screwdriver at an angle.



#### Step 4 – Remove the upper grill screws

Remove the three screws holding the upper grill to the upper base. These are easy to remove.



#### Step 5 – Remove the upper grill and upper funnel

Gently pull the upper light bar “feet” out of the upper base – one of the “feet” has wires going through it and you don’t want to break the wires. You should now be able to slide the upper grill and upper funnel out of the unit and set them aside.



### Step 6 – Remove upper light bar cover

Gently lay the unit down in such a way that you can work on the upper light bar without damaging the wires still connecting it to the upper base. Remove the two screws holding the white part of the upper light bar to the black part.



Now, with a small flat head screwdriver, pry both of the ends of the white part from underneath the locking tabs on the black part.



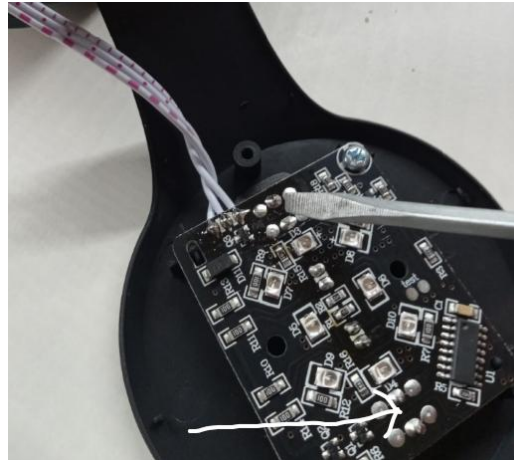
You should then be able to remove the white part and gain access to the circuit board as shown below.





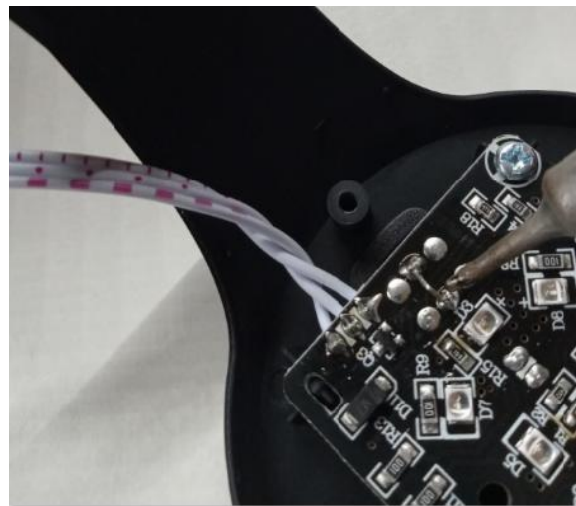
### Step 7 – Locate the underside of the button to force on

There are two buttons that can be shorted: “standard” and “low” setting buttons. I chose the “standard” button because I wanted the unit to run at full speed. However, if you prefer you can choose the “low” button if you want the unit to run slower and more quietly. The screwdriver in the photo below is pointing to the contacts for the “standard” button. The “slow” button contacts are at the opposite end of the board – as indicated by the white arrow in the photo below.



### Step 8 – Solder a wire across the button contacts

Solder (or otherwise electrically connect) the two button contacts together as shown in the photo below.



### Step 9 - Test the unit

Before putting the unit back together you should test to make sure the modification is working. Simply plug the unit in and you should immediately see the LEDs light up and the fan start running – without having to press either button on the upper light bar. If the unit does not turn on, you will need to fix the connection in Step 8 until it works.



### Step 10 – Putting it back together

This is probably the most difficult step as it is quite tedious to get all of the little screws back in their holes while trying to hold the different pieces together, but it can be done with a little patience. I highly recommend using a small “magnetic” Phillips screw driver. The unit goes back together in the opposite sequence used to take it apart – so you can just follow the instruction above in the opposite order and replace “remove” screw with “insert” screw throughout.

Now you can connect the unit to a timer or home control system and it will automatically start running as soon as power is applied!