

# Drunken drawing robot !

by **skullbee** on December 7, 2009

## Table of Contents

Drunken drawing robot ! .....	1
Intro: Drunken drawing robot ! .....	2
Step 1: Materials and mesurements .....	3
Step 2: Design your plate .....	4
Step 3: Put it together .....	4
Step 4: Let it draw! .....	5
Related Instructables .....	6
Comments .....	6

## Intro: Drunken drawing robot !

Inspired by the [pocket drunken robot](#) , I wanted to give the robot a job to do. I decided to let the drunken robot make some drawings. To make your own you'll need the following:

materials:

3 felt-tipped markers

a button cell battery

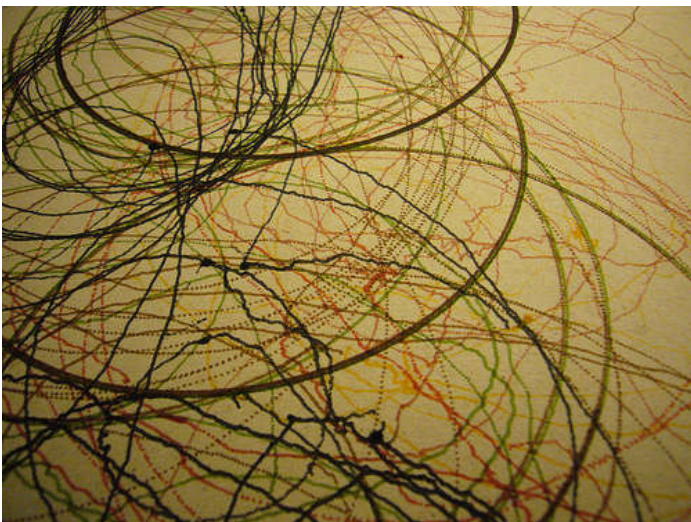
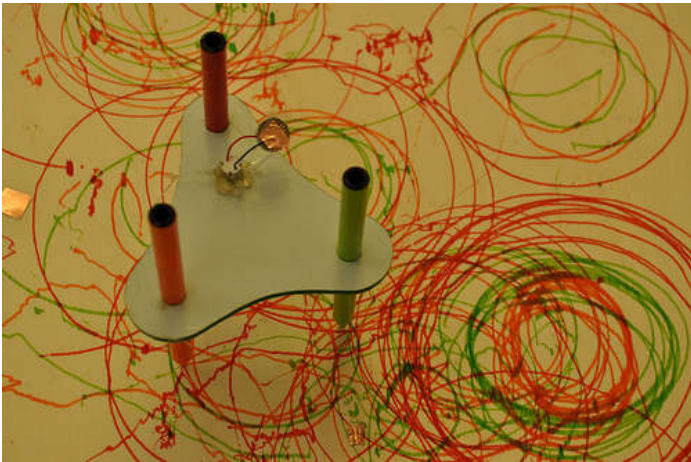
some adhesive copper foil

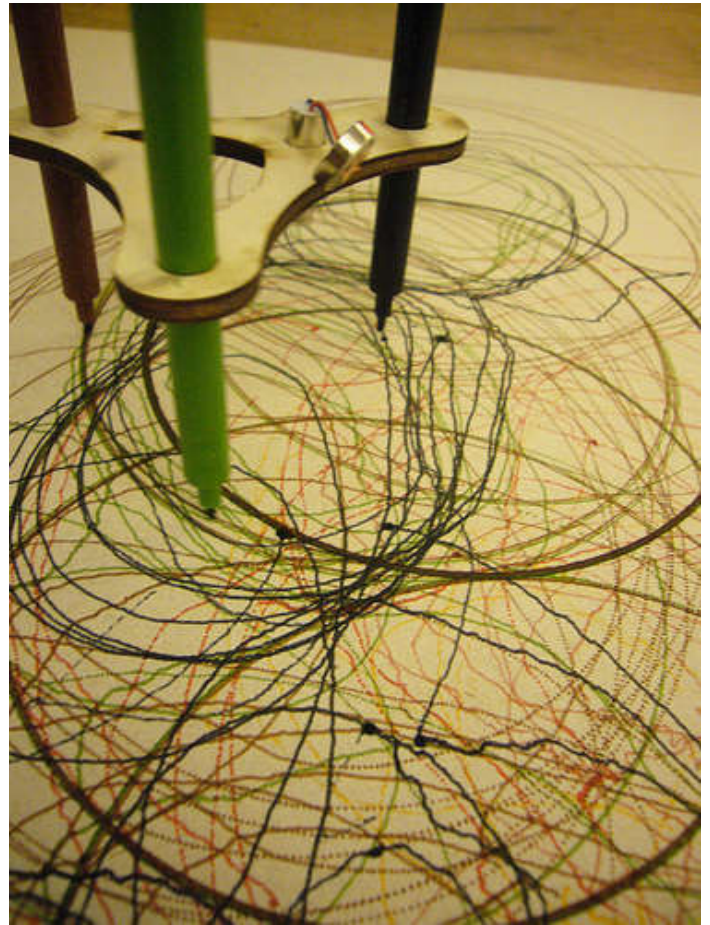
a vibrating motor from a cellphone or pager

a laser cutter ( run to your local [fablab](#) , or order from [ponoko](#) ! )

some plexiglass or wood for laser cutting (light wood seems to work best)

Here's some in action:





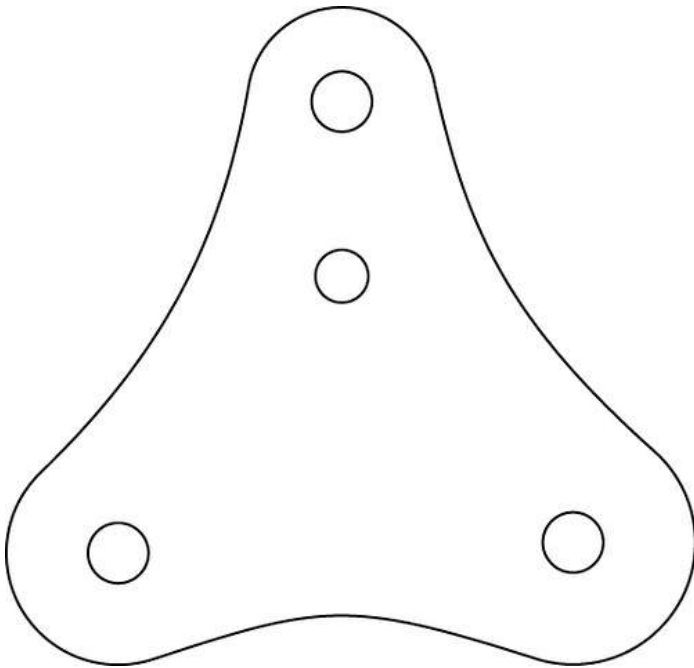
### Step 1: Materials and measurements

Once you have your materials ready you'll need to make a couple quick measurements. We're going to be making a special plate to hold everything, so you'll need to find out the diameter of your pens and your vibrating motor. We'll use these measurements to cut out holes in the plate to hold the pens and the motor.



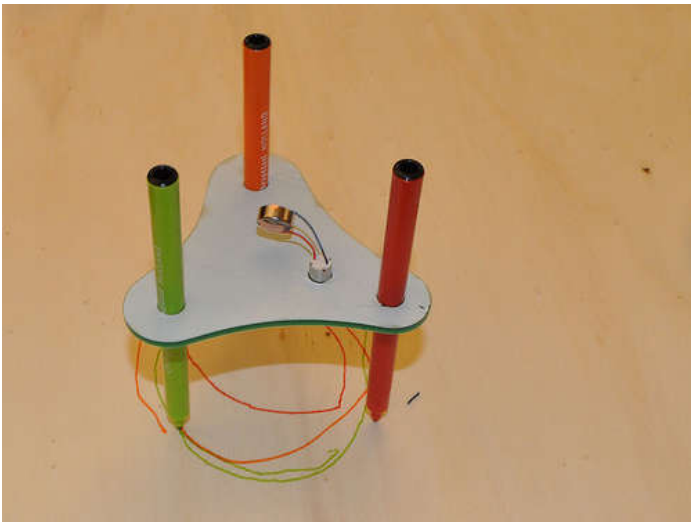
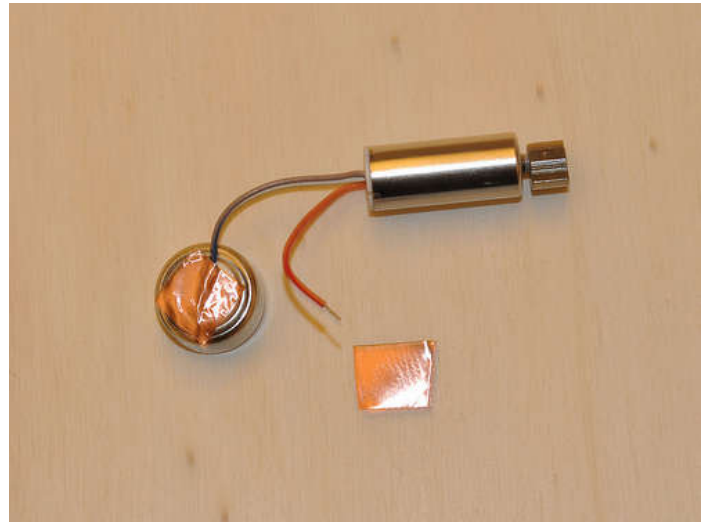
### Step 2: Design your plate

Fire up your favorite vector graphics program and design your plate. I used a triangular shape which is nice and stable, the middle hole is for the motor. I made the hole for the motor a little off-centre so the robot's movements are more eccentric. Then you'll fire up the laser and cut out your plate.



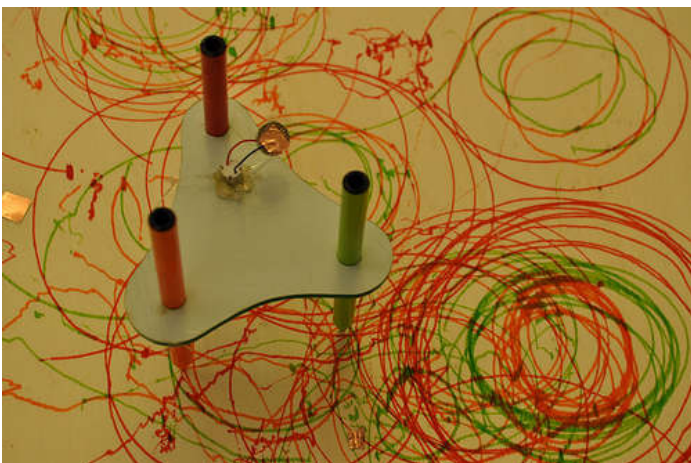
### Step 3: Put it together

Slide your pens into the holes in the plate. You can slide the motor in to its hole as well, insert it with the leads sticking up so you can easily attach the battery without flipping the robot over. Attach the leads of the motor to the sides of the battery with the adhesive foil. If the motor doesn't fit in its hole you can always use some hot glue to secure it in place. Your robot should start buzzing now!



**Step 4: Let it draw!**

let your drunken robot go nuts! make some friends for him to bump into and make even cooler drawings.



## Related Instructables



**Pocket Drunken Robot** by Grathio



**Mini Robot Smackdown (video)** by Schooniedude



**Easy Laser Light Show** by thecaden



**wall following virobot** by FastLearner



**Gillette mini vibrating motor** by sixtyfootsteve



**DIY Tooth Brush Robot** by Captain Molo

## Comments

[21 comments](#) [Add Comment](#)



**bryandhis pup** says:

I dont have nor have access to a lazer cutter, is there a good way, or you can suggest an alternative?

Oct 22, 2010. 9:59 PM [REPLY](#)



**BRUL** says:

i'd say use scissors? :P

Nov 21, 2010. 4:18 AM [REPLY](#)



**sashadistan** says:

With a couple of adjustments this would make a great introduction to electronics project for my KS3 year seven group. Thanks very much.

Sep 19, 2010. 11:31 AM [REPLY](#)



**sci5** says:

This is a great project! Getting them to turn on and off was kind of a problem, so we took two of them and used computer wires and connected them to a 9V battery and an on/off switch off to the side. Though the switch worked great the robots did sometimes get wrapped up in the wires. We also used two different size vibrating pieces of a Play Station 2 controller instead of one from a cellphone so that the two together would make different size circles.

May 26, 2010. 11:47 AM [REPLY](#)



**illdoyourdrugs** says:

What kind of alcohol did the robot drink?

Dec 8, 2009. 3:19 PM [REPLY](#)



**Evilthingamabober** says:

WAY too much ink. It keeps throwing it up all over the paper.

Dec 29, 2009. 9:13 PM [REPLY](#)



**bowmaster** says:

Cool. Make a thousand.

Dec 9, 2009. 5:14 AM [REPLY](#)



**Zaphod Beeblebrox** says:

and unleash your army of a thousand of them in a paper factory!!

Dec 21, 2009. 9:32 AM [REPLY](#)



**bowmaster** says:

Viva la revelution!!!!

Dec 21, 2009. 9:46 PM [REPLY](#)



**thepelton** says:

I may just make this. I have an Epilog laser, and I found that I can get real good results from eighth inch birch plywood available from Woodcraft.com, and I can find vibrating motors at sciplus.com.

Dec 11, 2009. 1:28 PM [REPLY](#)



**Zaphod Beeblebrox** says:

genius!!!!

Dec 7, 2009. 5:25 PM [REPLY](#)



**Mehehehful** says:

Agreed. =S

Dec 8, 2009. 5:20 PM [REPLY](#)



**boxen** says:  
NERDS (just kidding)

Dec 8, 2009. 9:58 AM [REPLY](#)



**boxen** says:  
Im not a physco nerd but it still pretty cool

Dec 8, 2009. 9:57 AM [REPLY](#)



**Grathio** says:  
Fantastic! Glad to see someone has found a good job for those luses!

Dec 7, 2009. 11:30 PM [REPLY](#)



**Jayefuu** says:  
I wonder if altering the angle of one of the pens would shift the balance and make it do shapes other than circles.....

Dec 7, 2009. 10:51 AM [REPLY](#)



**skullbee** says:  
Yeah changing the angle doesn't do much, it still will travel in circular paths. I've made a lighter version with super-light plywood and that helps it to travel in a more random fashion.

Dec 7, 2009. 12:35 PM [REPLY](#)



**lemonie** says:  
It's naturally inclined to do circles, adding another motor running at a different speed (or not) would be nice to try.

Dec 7, 2009. 11:59 AM [REPLY](#)

L



**skullbee** says:  
that's a nice idea, adding a microcontroller that pulses the motor on and off randomly might make some good results.

Dec 7, 2009. 2:10 PM [REPLY](#)



**lemonie** says:  
Oh yes, are you thinking of doing it? Another idea would be to add something (on springs) to relieve a bit of the weight from the pen-tips.

Dec 7, 2009. 2:13 PM [REPLY](#)

L



**skullbee** says:  
li'm gonna have to find some springs, that would be perfect! I'd love to do the microcontroller idea as well, just have to find the time to implement it.

Dec 7, 2009. 2:20 PM [REPLY](#)