



Sphere-Egg Bot

by 3DMAXPRINTER.COM



User Guide

Part 1: *Checking out your Sphere Bot*



Part 2: *Overview*

In brief, here are the steps to getting started with the Sphere Bot:

1. Attach the pen holder to the rest of the Eggbot



2. Install the **Arduino Drivers** and download **Software** on product page on our website www.3dmaxprinter.com.
3. Plug in power and USB, and check the pen / down.
4. Moving the pen holder into center of the object that you will decorate.
5. Set the pen motor in vertical position: Pull up for spheres, halfway down for eggs, etc.
6. Insert a pen, and check that it rides just above the object's surface when the pen is up.
7. Open or create the artwork that you would like to print, and begin drawing from the Inkscape interface.

Part 3: Software

1. Download

You will need download *Software_(inkscape+extension).zip* to your computer to operate the Sphere Bot.

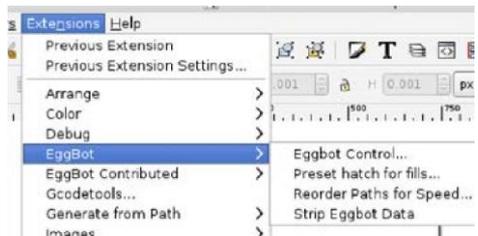
Please begin at the main documentation page: <http://www.3dmaxprinter.com/shop/do-it-yourself/egg-bot-sphere-bot-mechanics-kit/>

From there, click on “download software” and follow the directions specific to your operating system.

The File RAR that you will download includes Inkscape, the drawing program, and a set of extensions that operate the Sphere-Egg Bot from within Inkscape.

2. Inkscape and the extensions

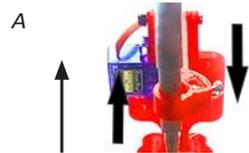
Once installed **inkscape.exe**, the Eggbot software may be found in the Extensions > Eggbot submenu of Inkscape. All machine control is performed from within the “Eggbot Control” panel.



3. Setting the “pen up / down”

Rotate the pen arm to its upright position. Loosen the pen height thumbscrew, raise it to the top of the slot and tighten it in place (A).

Connect the Eggbot to power and to your computer with the USB cable.

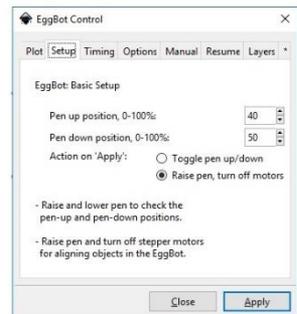


Setting the pen heights, continued:

Open **Eggbot Control**, and click through to the **Setup** There, enter the factory calibration values for the Sphere Bot, which are good starting points:

30/40 for the pen up position, and
50 for the pen down position.

Select the “Toggle pen up/down” action, and click the “Apply” button. If everything works correctly, the pen lift motor will alternately move to the up or down position each time that you press Apply.



Use the control panel to fine-tune the positions. The “Up” position should be several degrees above horizontal, and the “Down” position several below. You may find it helpful to insert a pen to weight down the arm.

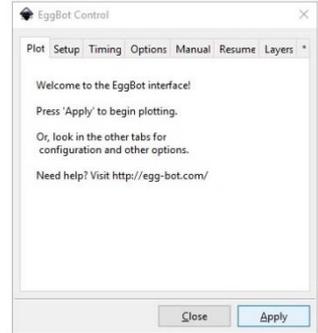
Part 4: Using the Sphere Bot

1 Making your first plot



To make a plot, you’ll need some artwork.

Raise the pen arm upright at the middle of the object. From the **Plot** tab of **Eggbot Control**, press “**Apply**” and the Sphere Bot should print the entire drawing.



2 Preparing artwork for the Sphere Bot

Within **Inkscape**, it is convenient to start with a document that is 800 pixels tall by 3200 pixels wide. The width corresponds to one full turn of the egg motor, and 800 pixels tall is the approximate travel of the pen motor.