

# ***CNC airbrush Singular - Instructions for use***

## **1. Packaging**

Package contains:

- CNC Singular machine
- Airbrush head
- 110-230V Power Supply (If you have a different type of power supply in your country, you can use any 19 or 24V min.4.5A notebook universal power supply with 5.1x 2.5mm connector.)
- Other accessories specified in your order

## **2. Commissioning:**

It is advisable to carry out the assembly in two people.

You will need a Ph3 screwdriver.

- Carefully remove the device from the shipping container.
- Place machine on a flat surface so that you can access both sides. of the unit as far as possible during installation.
- Remove all polystyrene blocks.
- **Follow the video tutorial here: [https://youtu.be/\\_M1YIZbaBLk](https://youtu.be/_M1YIZbaBLk)**

Connection:

- Move the portal manually to the front of the machine
- Lift the back of the device up so that you have access to the two connectors at the bottom of the device.
- Plug in power and USB cable.

## **3. Software Installation:**

The first step is to install a usb driver to communicate with your computer.

- Download driver here. <http://work.czrobotics.cz/CH341SER.ZIP>
- The installation is performed in the normal way by running SETUP.EXE or DRVSETUP64.EXE
- Now download and install the control software:  
[https://github.com/Denvi/Candle/releases/download/v1.1/Candle\\_1.1.7.zip](https://github.com/Denvi/Candle/releases/download/v1.1/Candle_1.1.7.zip)
- Perform the Candle software installation normally.

The next step is setting up the Candle software.

- Launch the software and select Settings
- Select the port. And set the speed to *115200 Baud*
- Enter the text: "\$ H; G92X0Y520Z0A0B0; G0Y0" into User Command -> Button 1

Now the machine is ready for work.

- When switched on, the software is always in ALARM status.
- Press Unlock. The software goes into the IDLE state. Now the machine is ready.
- Now you can open the G code and click Send to send it to the machine.
- 

## 4. Creating an Airbrush Control Code:

Download the inkscape graphics editor: <https://inkscape.org/release/inkscape-0.92.4/>  
and plugin for CNC Airbrush system: [http://work.czrobotics.cz/Airbrush\\_Plugin.zip](http://work.czrobotics.cz/Airbrush_Plugin.zip)

- First, install the Inkscape software by default.
- Copy two files stored in the Airbrush\_Plugin.zip archive (airbrush.inx and airbrush.py) to the „C:\Program Files\Inkscape\share\extensions“
- Now the software is ready to create your first G code.

Tip: Draw lines and curves (Airbrush nozzle trajectory). Note: some objects, such as fonts, must be converted to path before export (menu Path -> Object to Path)

When you have lines and curves drawn, open the Extension menu -> CNC Airbrush G-code generator:

Describe:

*Nozzle Axis name:* A

*Open Air command:* B60 or - nothing -

*Open Close command:* B0 or - nothing -

*Travel speed:* 8000 - not used yet. Machine maximum speed is used for crossing.

*Drawing Speed:* 1200mm / min

*Nozzle:* - degree of nozzle opening -

*Start delay* - nothing -

*Z - axis:* value from 0 to -120 (nozzle distance from the surface 0 = Top > max. distance -120 = bottom )

*Final parking Code:* - nothing or eg G0 X200 Y0 Z0 -

*Directory:* - output folder (eg C:\Godes) -

*File name:* - filename of the generated g-cod -

*Append to a File:* if checked, then the created g-code appends to the end of an existing file (suitable for Tricolor head)