

Install GRBL1.1 Firmware

CNC Controller: AC-CNC2019-N-GRBL (REV2.x)

Setting the output "SpRel" of the control card.

We'll start right away.

- Download and install Arduino IDE.

Link : [Arduino IDE 1.x](#)

Download the Arduino IDE



ARDUINO 1.8.8

The open-source Arduino Software (IDE) makes it easy to write code and upload it to the board. It runs on Windows, Mac OS X, and Linux. The environment is written in Java and based on Processing and other open-source software.

This software can be used with any Arduino board. Refer to the [Getting Started](#) page for installation instructions.

Windows Installer, for Windows XP and up
Windows ZIP file for non admin install

Windows app Requires Win 8.1 or 10
[Get](#)

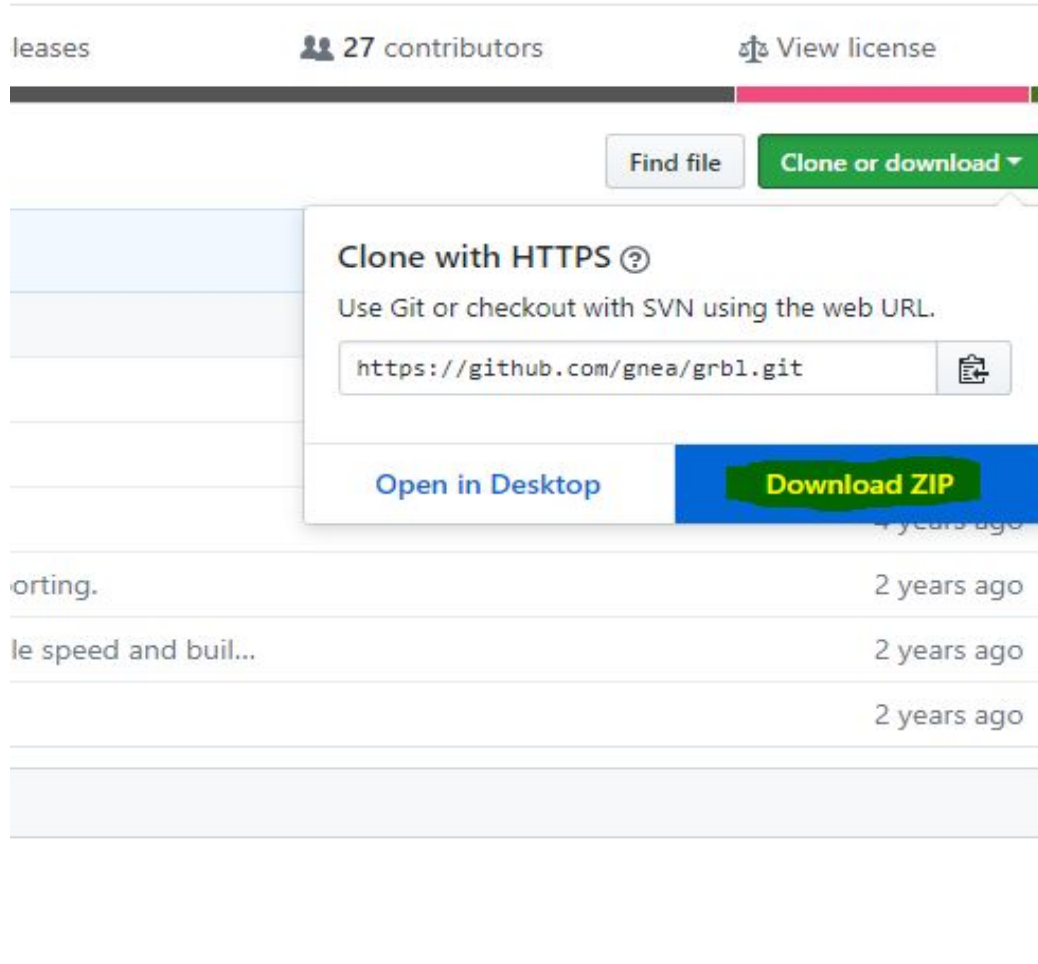
Mac OS X 10.8 Mountain Lion or newer

Linux 32 bits
Linux 64 bits
Linux ARM

[Release Notes](#)
[Source Code](#)
[Checksums \(sha512\)](#)

- Download GRBL1.x firmware.

Link : [GRBL1.x Code von GitHub](#)



leases **27** contributors [View license](#)

[Find file](#) [Clone or download](#)

Clone with HTTPS ⓘ
Use Git or checkout with SVN using the web URL.

[Copy](#)

[Open in Desktop](#) [Download ZIP](#)

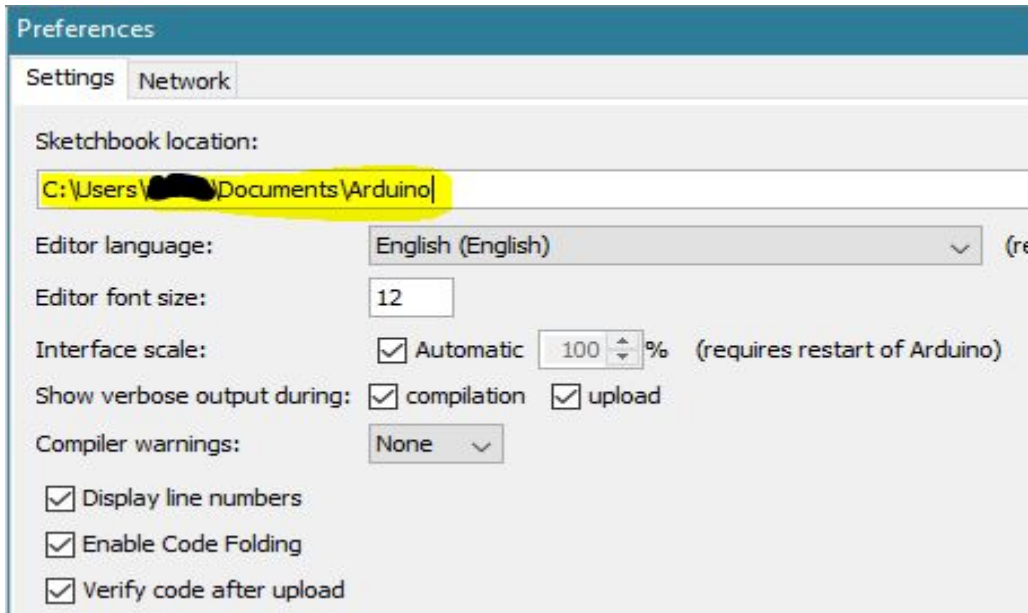
4 years ago

orting. 2 years ago

le speed and buil... 2 years ago

2 years ago

- Please install and run Arduino IDE.
- Open the preferences from the "File->Preferences" menu and make a note of the path specified under Sketchbook Location.



- Please open the noted path via the Explorer.
- In the folder you will find a directory called "libraries".
- Now open the ZIP file downloaded by GitHub in which the GRBL firmware is located.
- In the ZIP file you will find a folder "grbl", please copy it into the "libraries" folder of the Arduino IDE.
- Now open the file "/libraries/grbl/config.h" with an editor.
- In the opened "config.h" search for :

```
// #define USE_SPINDLE_DIR_AS_ENABLE_PIN
```
- Uncomment the line:

```
#define USE_SPINDLE_DIR_AS_ENABLE_PIN
```
- Save the "config.h" and quit the editor.
- Now restart the Arduino IDE.
- Open the file : "grblUpload" by selecting in the menu :
"Datei->Examples->grbl-grblUpload", do not make any changes to it!
- Connect the nano of the control card to the UBS port of the computer.
- Select in the Arduino IDE under "Tools->Board", Arduino Nano and under "Tools->Port" the port of the Nano.
- Load the firmware onto the Nano using the menu item "Sketch->Upload".

Now open the monitor via the menu item "Tools - Serial Monitor".
Your controller should report "Grbl 1.1g ['\$' for help]".

The setting we just made in config.h ensures that the output SpRel of the control card is switched when an M3 command is given.

Depending on what you use or if you use limit switches there are further settings in the config.h to make.
You can find out exactly how to make the settings under : [GRBL Wiki](#)

Here you can (after having read the Wiki) make further settings.

If you enter e.g. \$\$ in the upper text field of the serial monitor, the current configuration is listed.

For example :

```
$0=10  
$1=25  
$2=0  
$3=0  
$4=0  
$5=0  
$6=0  
$10=1  
$11=0.010  
$12=0.002  
$13=0  
$20=0  
..... etc.
```

To change a value, enter e.g. : "\$10=0" in the upper text field.

This would change the value \$10 to 0 and store it permanently in the controller.

For beginners, this all looks complicated at first, but it's not. Read the Wiki. Google it.

End.