

## Configure Contador laser

Guide:  [Programas para CNC Láser, Conexiones y Primer tallado. GRBL, LaserGRBL #6 \(youtube.com\)](#)

Step 1 : Download files...

Software for print:

[Download – LaserGRBL](#)

Lib for upload in Arduino Uno:

[gnea/grbl: An open source, embedded, high performance g-code-parser and CNC milling controller written in optimized C that will run on a straight Arduino \(github.com\)](#)

Download lib and copy this lib (grbl) in lib internal of the Arduino

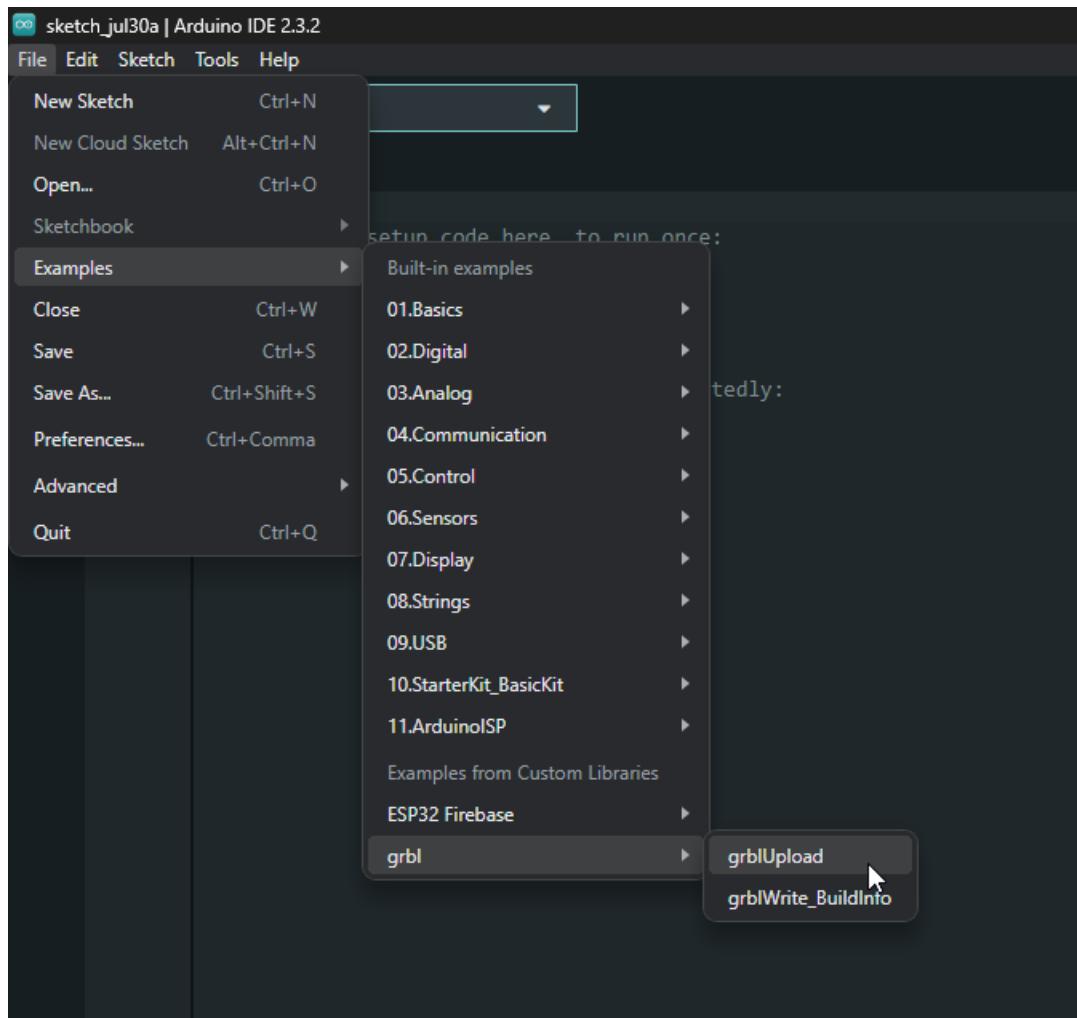
Dir download file:

Name	Date modified	Type	Size
build	7/30/2024 10:39 AM	File folder	
doc	7/30/2024 10:39 AM	File folder	
<b>grbl</b>	<b>7/30/2024 10:39 AM</b>	<b>File folder</b>	
.gitignore	7/30/2024 10:39 AM	Git Ignore Source File	1 KB
COPYING	7/30/2024 10:39 AM	File	35 KB
Makefile	7/30/2024 10:39 AM	File	4 KB
README	7/30/2024 10:39 AM	Markdown Source File	8 KB

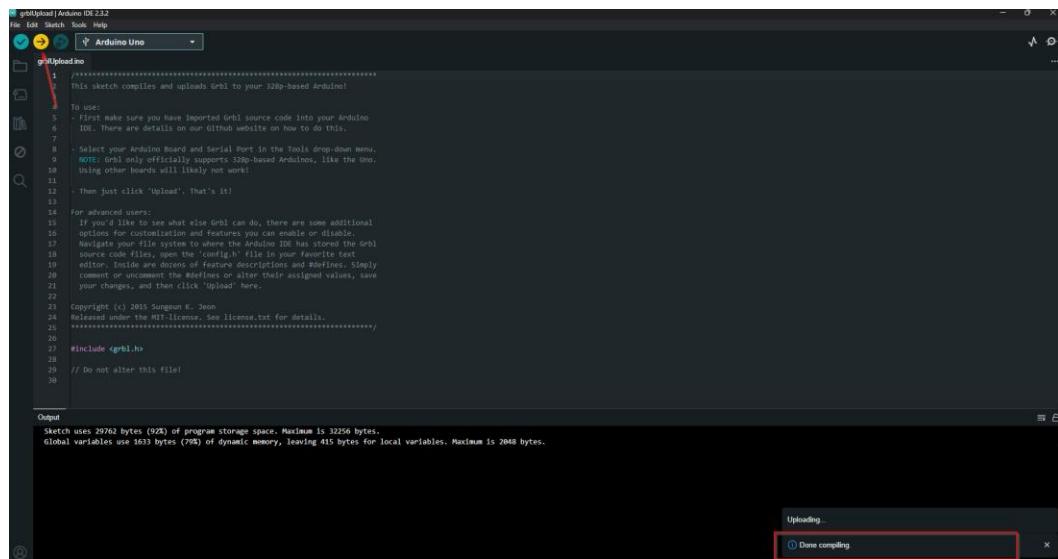
Dir Arduino lib:

Name	Date modified	Type	Size
ESP32_Firebase	7/30/2024 10:59 AM	File folder	
<b>grbl</b>	<b>7/30/2024 11:01 AM</b>	<b>File folder</b>	

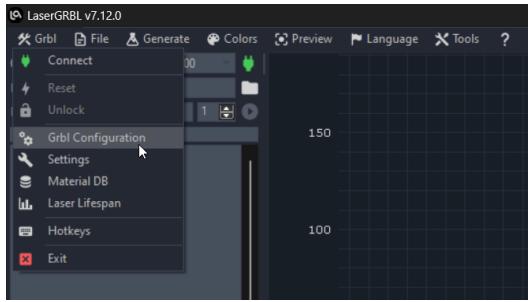
## Step 2: Load rgbl lib in Arduino



## Step 3 : Upload lib in Arduino Uno



## Step 4: Configure in Software RGBL



**Grbl configuration**

#	Parameter	Value	Unit	Description
\$4	Invert step enable pin	0	boolean	Inverts the stepper driver enable pin signal.
\$5	Invert limit pins	0	boolean	Inverts the all of the limit input pins.
\$6	Invert probe pin	0	boolean	Inverts the probe input pin signal.
\$10	Status report options	1	mask	Alters data included in status reports.
\$11	Junction deviation	0.010	millimeters	Sets how fast Grbl travels through consecutive junctions.
\$12	Arc tolerance	0.002	millimeters	Sets the G2 and G3 arc tracing accuracy between segments.
\$13	Report in inches	0	boolean	Enables inch units when returning any position.
\$20	Soft limits enable	0	boolean	Enables soft limits checks within machine boundaries.
\$21	Hard limits enable	0	boolean	Enables hard limits. Immediately halts motion if limits are triggered.
\$22	Homing cycle enable	0	boolean	Enables homing cycle. Requires limit switch calibration.
\$23	Homing direction invert	0	mask	Homing searches for a switch in the positive direction.
\$24	Homing locate feed rate	25.000	mm/min	Feed rate to slowly engage limit switch triggers.
\$25	Homing search seek rate	500.000	mm/min	Seek rate to quickly find the limit switch.
\$26	Homing switch debounce delay	250	milliseconds	Sets a short delay between phases of homing cycle.
\$27	Homing switch pull-off distance	1.000	millimeters	Retract distance after triggering switch.
\$30	Maximum spindle speed	1000	RPM	Maximum spindle speed. Sets PWM to 100% duty cycle.
\$31	Minimum spindle speed	0	RPM	Minimum spindle speed. Sets PWM to 0.4% duty cycle.
\$32	Laser-mode enable	0	boolean	Enables laser mode. Consecutive G1/2/3 commands are ignored.
\$100	X-axis travel resolution	400.000	step/mm	X-axis travel resolution in steps per millimeter.
\$101	Y-axis travel resolution	400.000	step/mm	Y-axis travel resolution in steps per millimeter.
\$102	Z-axis travel resolution	400.000	step/mm	Z-axis travel resolution in steps per millimeter.
\$110	X-axis maximum rate	1000.000	mm/min	X-axis maximum rate. Used as G0 rapid rate.
\$111	Y-axis maximum rate	1000.000	mm/min	Y-axis maximum rate. Used as G0 rapid rate.
\$112	Z-axis maximum rate	1000.000	mm/min	Z-axis maximum rate. Used as G0 rapid rate.
\$120	X-axis acceleration	100.000	mm/sec^2	X-axis acceleration. Used for motion planning.
\$121	Y-axis acceleration	100.000	mm/sec^2	Y-axis acceleration. Used for motion planning.
\$122	Z-axis acceleration	100.000	mm/sec^2	Z-axis acceleration. Used for motion planning.
\$130	X-axis maximum travel	200.000	millimeters	Maximum X-axis travel distance from homing point.
\$131	Y-axis maximum travel	200.000	millimeters	Maximum Y-axis travel distance from homing point.
\$132	Z-axis maximum travel	200.000	millimeters	Maximum Z-axis travel distance from homing point.

Buttons at the bottom: Refresh, Write, Export, Import. A note says "Read and Write enabled only when connected and idle". Close button.