



# ATOMSTACK R3 Rotary Roller User Manual

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# ATOMSTACK R3 Rotary Roller User Manual



## 1.Security statement

Before operating our R3 Rotary Roller please read our instruction carefully it will show all the special situation including some warning of the unsafe behavior which may cause some property losing even harmful for your personal safety.

## 1.Security statement

AtomStack R3 Rotary Roller part with Laser engraver is Level 4 Laser product. The power of laser head is high, it may cause injury of the eye and skin burning.

1. Please wear on the eye protection when you are operating the laser engraver and R3 Rotary Roller
2. Refrain to expose the skin on Level 4 laser beam, especially close
3. It must be supervised by p arents or other adult person when the teenager operating our device
4. DO NOT touch the laser module when it is

## 2. Security of Fire Fighting

1. When Laser engraver operating with R3 Rotary Roller to cutting or engraving will burned up the basic material, the high intensity laser will create extreme high temperature and massive
2. Some material will be burned during the cutting or engraving, and will cause some gas or
3. The lighting spot will create some flame when the laser beam shot at the material. The flame will move with the laser and will not keep flaming when the laser moving. The operation must be supervised during cutting or engraving. Please clear the sundry, scrap and flammable material after the cutting or engraving. Ensure there is fire extinguisher at the workplace of the There is some smog, steam or particulate which could be poisonous ( plastic or some flammable material ) caused by material when the laser engraver operating, this smog, steam or particulate may be harmful for your healthy.

## 3. Security of Material

1. DO NOT cutting or engraving any unknown
2. Recommended material: wood, bamboo, leather, plastic, fabric, paper, non-transparent acrylic, glass Not recommended

#### 4. Security of Operation

1. R3 Rotary Roller only operating on the horizontal flat, and make sure the Rotary Roller must be fixed firmly, preclude fire when dropping or moving during the
2. It is forbidden to aim at people, animal or any flammable material, no matter under operation or

#### 1.Disclaimer and warning

Atomstack product is not toy, not suitable for the people who is younger than 15.

Make sure DO NOT allow the children to touch any Atomstack product, be careful of children when you operate our product accompany with children. Be careful when adjusting the product gear, Atomstack will not take the responsibility due to the any harm cause by any incompatible our instruction behavior.

R3 Rotary Roller is a multi-function Rotary Roller, it will provide you engraving and cutting viewing experience under the normal condition. Visit our website: <http://www.atomstack3d.com/laserengrave> to get the experience and user manual. Shenzhen AtomStack Technologies Co., Ltd Atomstack will own the right to update the Disclaimer and the user manual.

Before using our product, please be sure to read this document carefully to understand your legal rights, responsibilities and safety instructions; otherwise it may cause property damage, safety accidents and personal safety hazards. Once you use this product, you should be deemed to have understood, accepted and accepted all the terms and contents of this document. The user is responsible for his or her actions and all consequences arising therefrom. The user agrees to use the product only for lawful purposes, and agrees to all the terms and contents of this document and any related policies or guidelines that AtomStack may establish. You understand and agree, unless you provide the original engraving or cutting files, the configuration parameters of the engraving software used, operating system information, videos of the engraving or cutting process, and the operating steps before problems or failures occur.

Atomstack will not take the responsibility to any lost which caused by the failure using of our product. AtomStack has the final right to interpret the documents and comply with legal regulations. Atomstack reserves the right to update, modify or terminate the terms without notice.

#### 3. AtomStack R3 Rotary Roller brief introduction

**AtomStack R3** collocates with laser engraver to process the engraving and cutting.

**AtomStack R3** rotary roller adopts the base of aluminum profile, which is firm and stable.

The height of the roller protrudes from the height of the base, which can engrave longer objects, expands the engraving area, and has no restriction on the shape of the engraved object; the rotary roller is adjustable wide and narrow, for objects of different sizes, engraving can be achieved by adjusting the width of the roller, which makes the engraving machine more widely used.

**AtomStack R3** rotary roller adjustment is very convenient, you just need to adjust four plum blossom handle from both side to match different size object to make the engraving and cutting. Rotary roller is the concentric circles designing, Synchronous belt will keep the same status no matter how to adjust, and it is an advanced design that some others similar product dose not have. There are positioning holes on the side cover for setting to make sure the rollers will keep the same horizontal level under the adjustment. The motor of our R3 rotary roller is build-in, will not scald people even the motor is getting hot after some processing. Integrated rubber roller, the hardness is 70A. The process will be more stable with the strong friction.

**AtomStack R3** with the speed which adapts 95% brands of the engraves that we know, including Atomstack Neje and Ortur etc, just plug and play

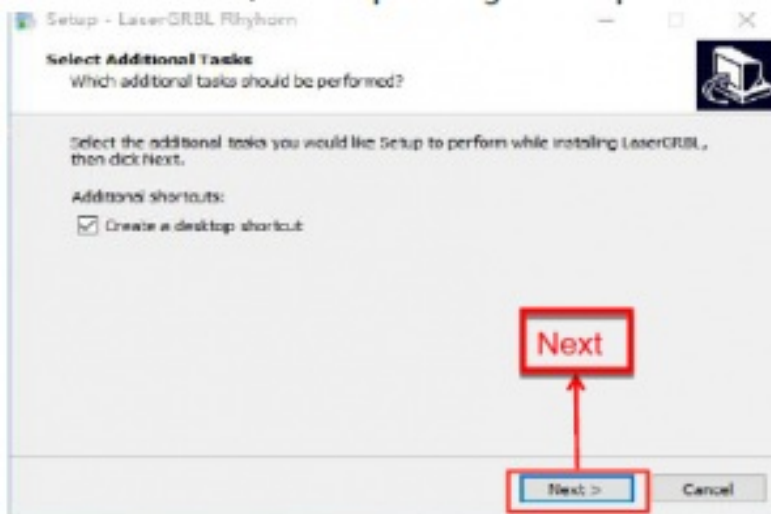
### 3. AtomStack R3 Rotary roller installation and using

AtomStack R3 roller coordinate with either X axis or Y axis of the engraver to make the processing, and compatible with engraver of Neje, Atomstack and Ortur. No need to adjust the pulse, directly process after link. If coordinate with other brands, may need to adjust the pulse. The main supplied OS is LaserGRBL and LightBurn. Below there are software installation manual and the procedure of the pulse adjustment.

#### 4.1 LaserGRBL installation and procedure of the pulse adjutment

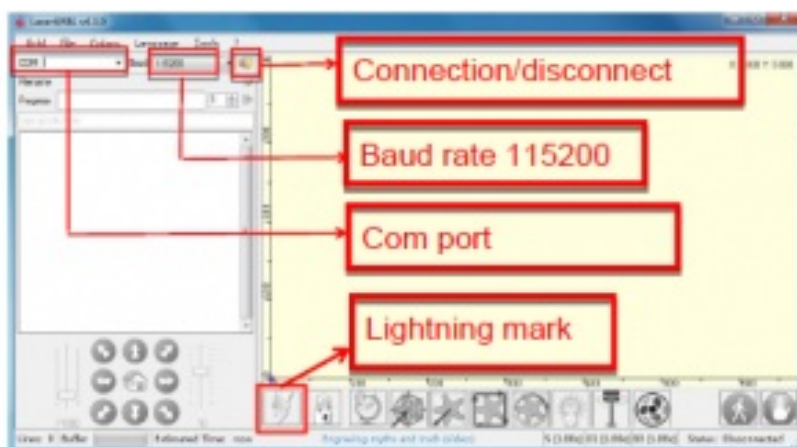
1. Download the software LaserGRBL is one of the popular software for engraving, we could visit and download from <http://lasergrbl.com/download>.
2. Install LaerGRBL

Click to start the installation file, and keep clicking next step until the installation is finished.



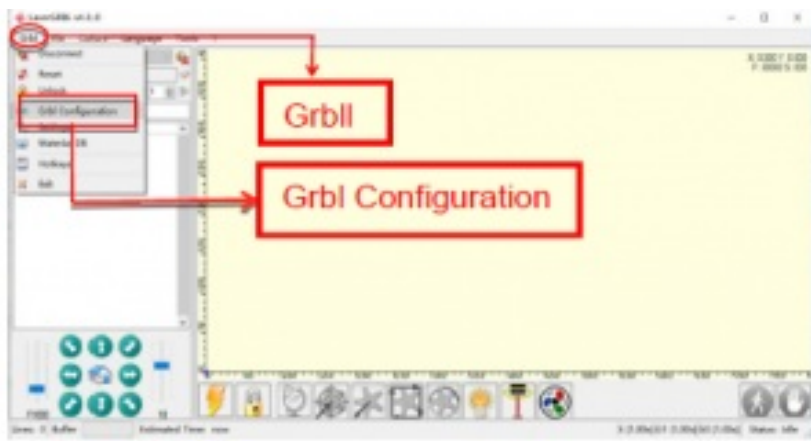
### 3. LaserGRBL procedure of the pulse adjustment

\*A. Start up LaserGRBL connect the engraver and the computer which already installs the LaserGRBL. Click the lightning mark, the connection is successful when the lightning mark turns into red X.



#### 4.2 LaserGRBL connecting with the laser engraver

\*B. Click the Grbl, and select the Grbl Configuration



### 4.3 Grbl Configuration

\*C. Find the \$100(X-axis travel resolution), \$101(Y-axis travel resolution) and set the Value according to your device you can first engrave a small square with 30\*30mm to confirm the pulse value. The processing is to check if error is within 1mm after testing engraving is finished. If confirmed, that is the suitable pulse value click write and close to



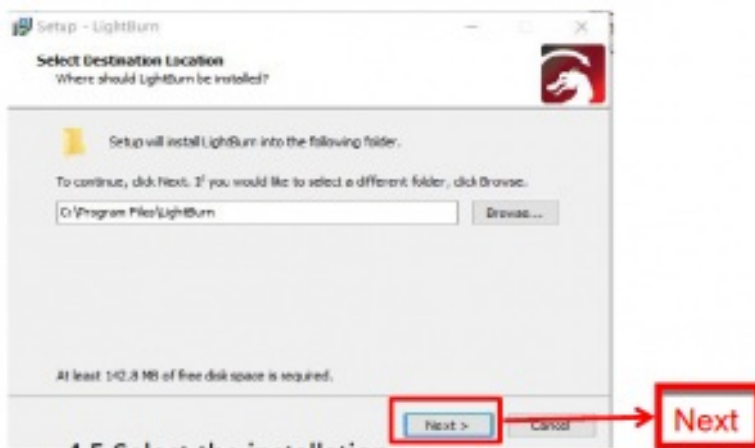
## 4.2 LightBurn installation and procedure of the pulse adjustment

### 1 Download

You could visit and download the software from the link: <https://lightburnsoftware.com/pages/trial-version-try-before-you-buy>

### 2 Install LightBurn

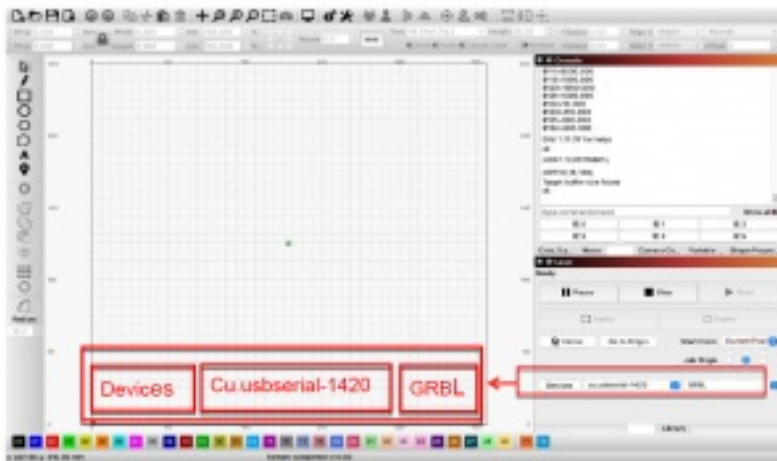
Click to install the software ( LightBurn need to charge, you may pay for the genuine to get the better experience, here we will show by the trial for installation ), and click the next for next step.



### 4.5 Select the installation

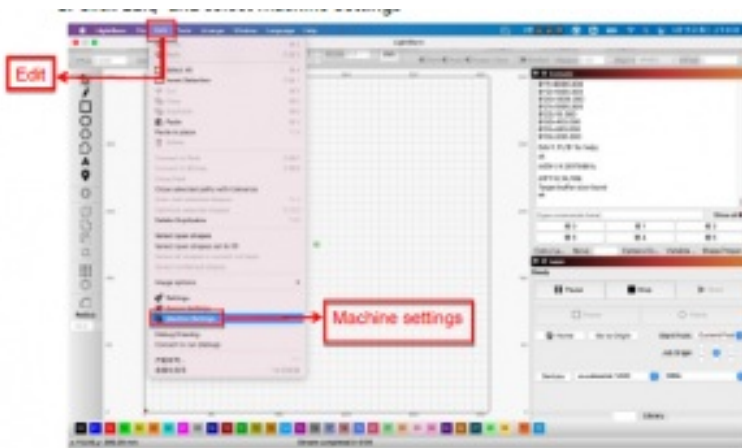
## 3. LightBurn procedure of the pulse adjustment

\*A. Start up LightBurn connect the engraver and the computer which already installs the LightBurn. When there is portal information show up from the devices means connection is successful.



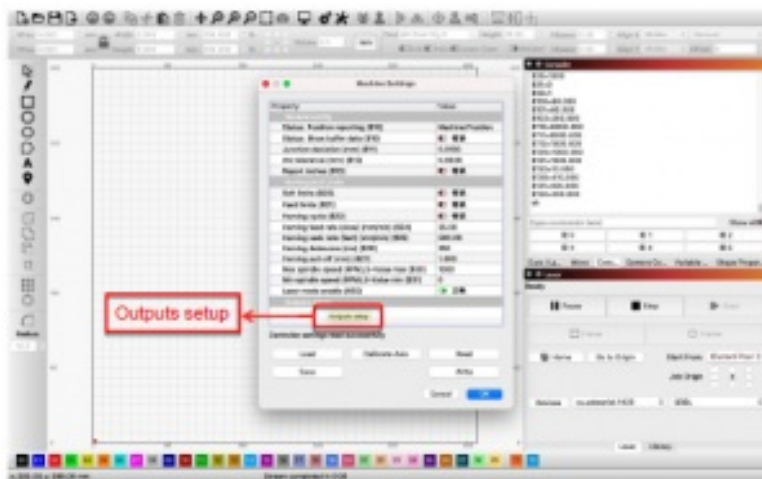
#### 4.6 LightBurn connectivity with engraver

\*B. Click Edit, and select Machine Settings



#### 4.7 Machine setting position

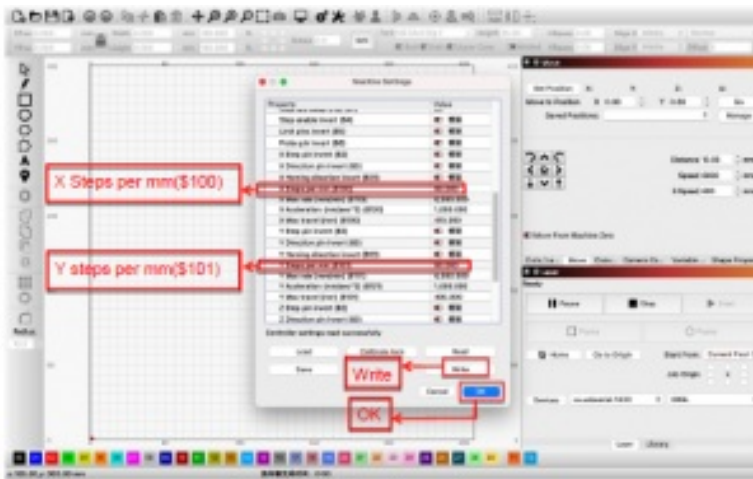
\*C. Click to Outputs Setup to find the hidden parameter



#### 4.8 Outputs Setup parameter

\*D. Find the \$100(X-axis travel resolution), \$101(Y-axis travel resolution) and set the Value according to your device you can first engrave a small square with 30\*30mm to confirm the pulse value. The processing is to check if error is within 1mm after testing engraving is finished. If confirmed, that is the suitable pulse value click write and close to finish the configuration.





#### 4.9 X and Y Axis pulse setting

### 5. R3 Rotary Installation

1. When you want to engrave or cutting wide surface object or coordinate with the rotary roller to engrave on cylinder, you need the set the heighten accessory. The supported bracket of laser engraver is thin-shaping, could be fasten by the Plum blossom handle of the heighten accessory so that heighten the laser engraver to engrave or cutting higher object.



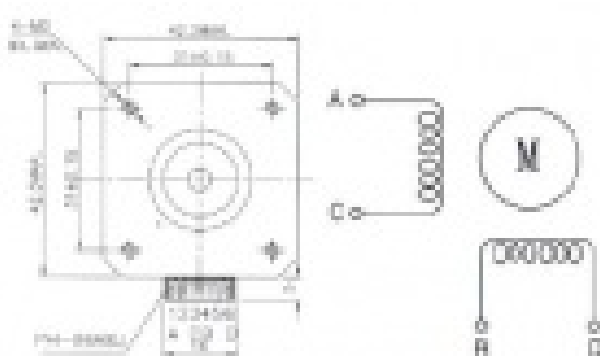
#### 4.10 R3 Rotary Roller and Heighten Accessory 4.12 Heighten Accessory

2. Atomstack set up two connection wire for the R3 rotary roller and engraver( black plug and white plug ), pay attention that the wire order of them is different need to be careful for the connectivity.

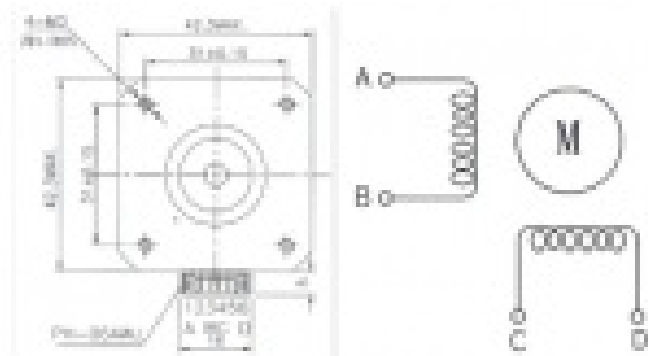
2.1 The 4PIN white plug wire is for the connection with Atomstack, AtomStack engraver.

2.2 The 4PIN black plug wire is for the connection with Neje, Ortur engraver.

2.3 These 4PIN wire (white and black plug) is the our main connection wire for the other brand engraver, you may try one of them to connect. If it fails to connect, please change the order of wire, and the change processing is in chart 4.16-4.17



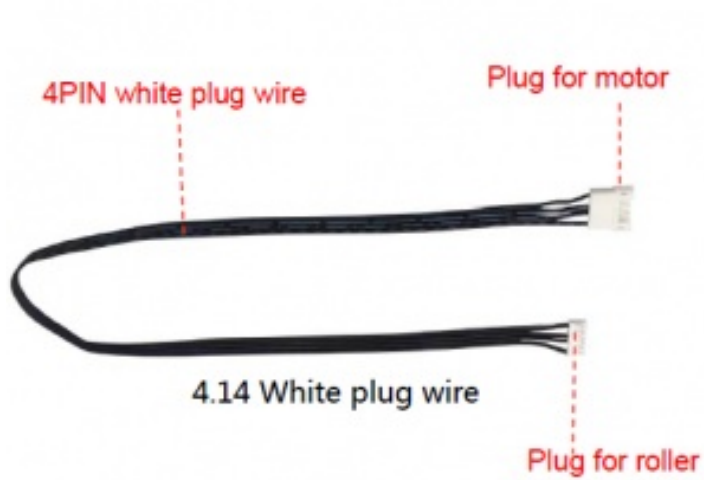
4.16 Connection order of white plug wire



4.17 Connection order of black plug wire



#### 4.13 Connection plug on rotary roller



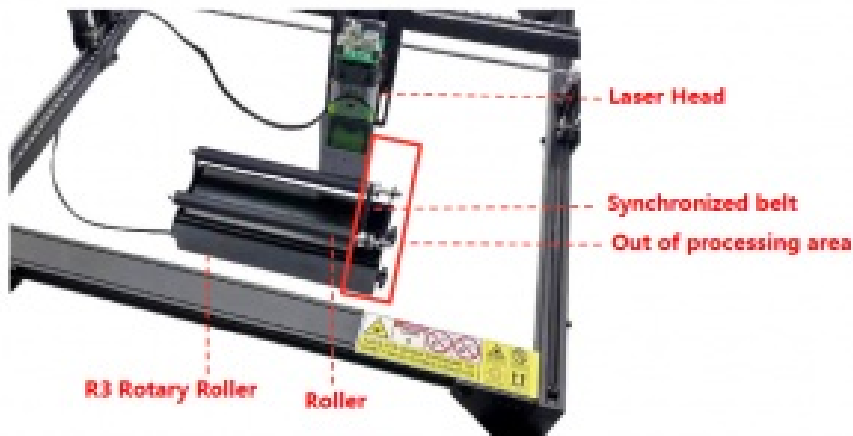
#### 4.14 White plug wire



#### 4.15 black plug wire

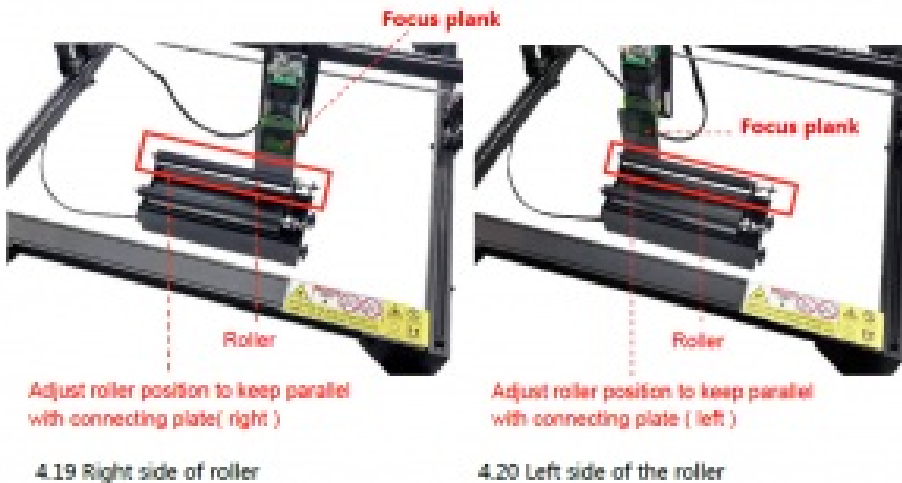
3. The synchronized belt must be set out of the processing area, make sure will not be destroyed by the laser during the operation.





#### 4.18 Rotary roller and synchronized belt

4. The roller of R3 Rotary need to keep parallel with the X axis of engraver and the rotary roller must be at the same horizontal surface with the desk, can not have any object under the roller.



#### 4.21 Make sure no object under the roller

5. There is 8 Steps for our R3 Rotary Roller, it can adjust to match different size object for engraving via different gear.



#### 4.22 Steps setting of roller



#### 4.23 Steps for adjustable



#### 4.24 plum blossom handle

## 6. Precautions

1. R3 Rotary Roller must be keep away from the high temperature environment such as fire. The high temperature environment may cause heat distortion to destroy the
2. Non-technical people cannot disassemble your product to prevent the
3. The roller should not be stride intensely, R3 Rotary Roller is the full-metal device but the motor may be damage when the device is stride over the secured level. Meanwhile, it may also distroy the
4. Our R3 should keep away from the chemicals, must be cleaned in time if contact with any
5. It is not allowed for splash water get into the roller, otherwise will damage the motor to cause failure.
6. R3 rotary roller is electromagnetic, should keep away from the strong magnetic field. It may cause the failure of motor or the roller is not rolling



## Customer Service

- For detailed warranty policy,please visit our official website at: [atomstack3d.com](http://atomstack3d.com)
- For Laser Engraver technical support and service,
- please email: [support@atomstack3d.com](mailto:support@atomstack3d.com)




Manufacturer: Shenzhen AtomStack Technologies Co., Ltd.  
Address: AB301,New Chabridge Industrial Park,No.3,Baolong 6th Rd.,Longgang Dist,Shenzhen,Guangdong,CHINA 518116

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 <p>ATOMSTACK R3 Rotary Roller User Manual</p> <p>CE RoHS FCC MADE IN CHINA</p>	<p><a href="#">ATOMSTACK R3 Rotary Roller</a> [pdf] User Manual R3 Rotary Roller, R3 Roller, Rotary Roller, Roller</p>

## References

-  [Download – LaserGRBL](#)
-  [Atomstack3D](#)
-  [Download & Trial - Try before you buy – LightBurn Software](#)

