



DESKTOP LASER CUTTER QUICKSTART GUIDE

When you start up your Mr Beam II, remember that it has been assembled and packed by us with great care. We hope that you will take the time to unpack and set it up carefully.

SAFETY INSTRUCTIONS

You will find the latest update of this Quickstart Guides and some other informations about your Mr Beam II at the following QR Code.

At **mr-beam.org/faq** you will also find answers to many questions around the Mr Beam II.



Before using your Mr Beam II, read and understand the user manual and the safety instructions. You can find the latest manual and safety instructions in the menu of your Mr Beam II user interface and on **mr-beam.org**

Only process materials that Mr Beam Lasers has classified as harmless. A current list of materials can be found at **mr-beam.org**

Never process PVC, Vinyl, ABS, coated carbon fiber, fiberglass or other materials containing chlorine!

Processing these materials with your Mr Beam II will produce extremely toxic vapours, which can cause machine damage and health hazard.

Vor Beginn von Reinigungs- und Wartungsarbeiten das Gerät immer ausschalten und den Netzstecker ziehen.

Wartungs- und Inspektionstätigkeiten dürfen nur im ausgeschalteten Zustand von geschultem Personal durchgeführt werden.

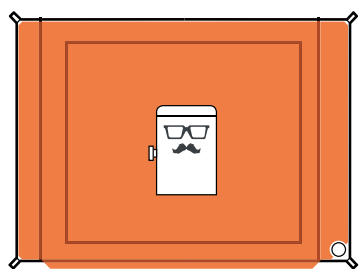
Vorsicht - sichtbares Laserlicht Klasse 4, wenn Abdeckung geöffnet und Sicherheitsverriegelung überbrückt
Bestrahlung von Auge und Haut durch direkte oder Streustrahlung vermeiden

Bei Abwesenheit Schlüssel des Schlüsselschalters abziehen

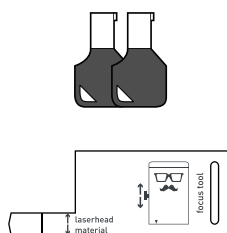


$P_0 = 5W \text{ cw}$
 $\lambda = 450nm$

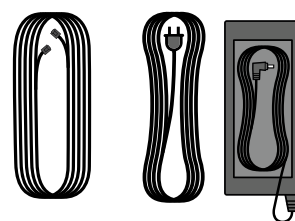
SCOPE OF DELIVERY - WITH AIR FILTER SYSTEM



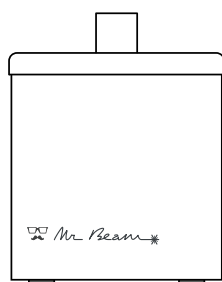
LASER HEAD
MR BEAM II



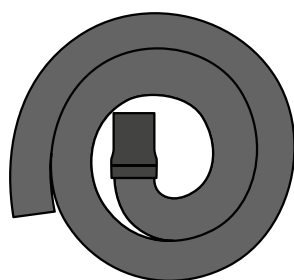
2 KEYS
FOCUS TOOL



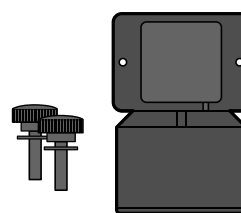
CABLE AIR FILTER
POWER CABLE
POWER SUPPLY UNIT



AIR FILTER SYSTEM



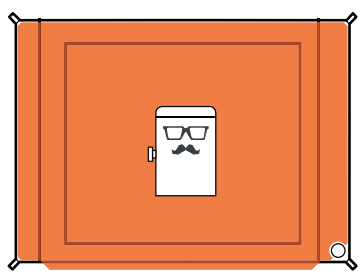
HOSE



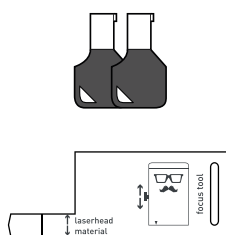
SUCTION SOCKET

SCREWS
WASHERS

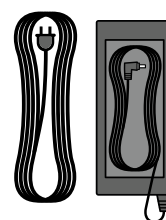
SCOPE OF DELIVERY - WITHOUT AIR FILTER SYSTEM



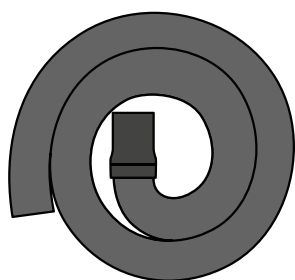
**LASER HEAD
MR BEAM II**



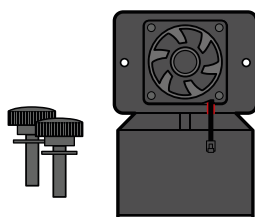
**2 KEYS
FOCUS TOOL**



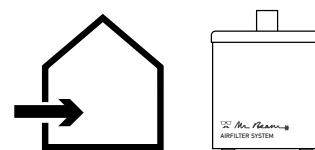
**POWER CABLE
POWER SUPPLY UNIT**



HOSE



**SUCTION SOCKET
FAN
SCREWS
WASHERS**

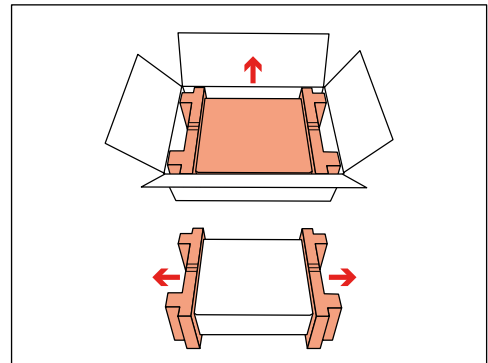
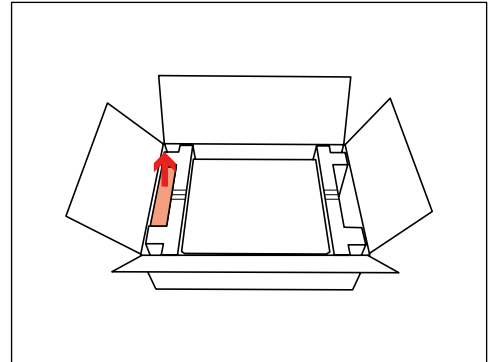


For indoor use we recommend a Mr Beam Air Filter System. If you don't have one yet, order it now from our shop at:

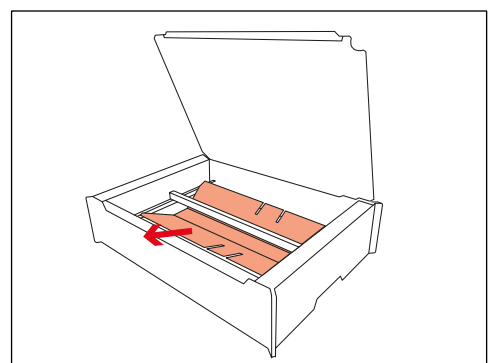
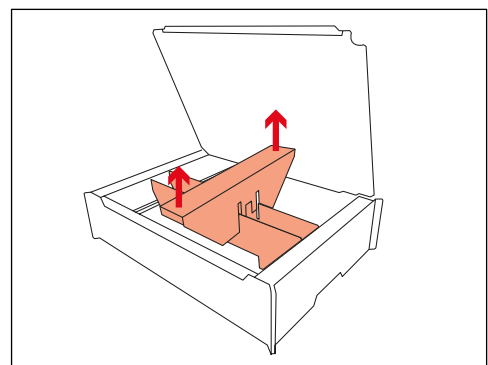
<http://shop.mr-beam.org/product/mr-beam-air-filter-7809404>

UNPACKING THE MR BEAM II

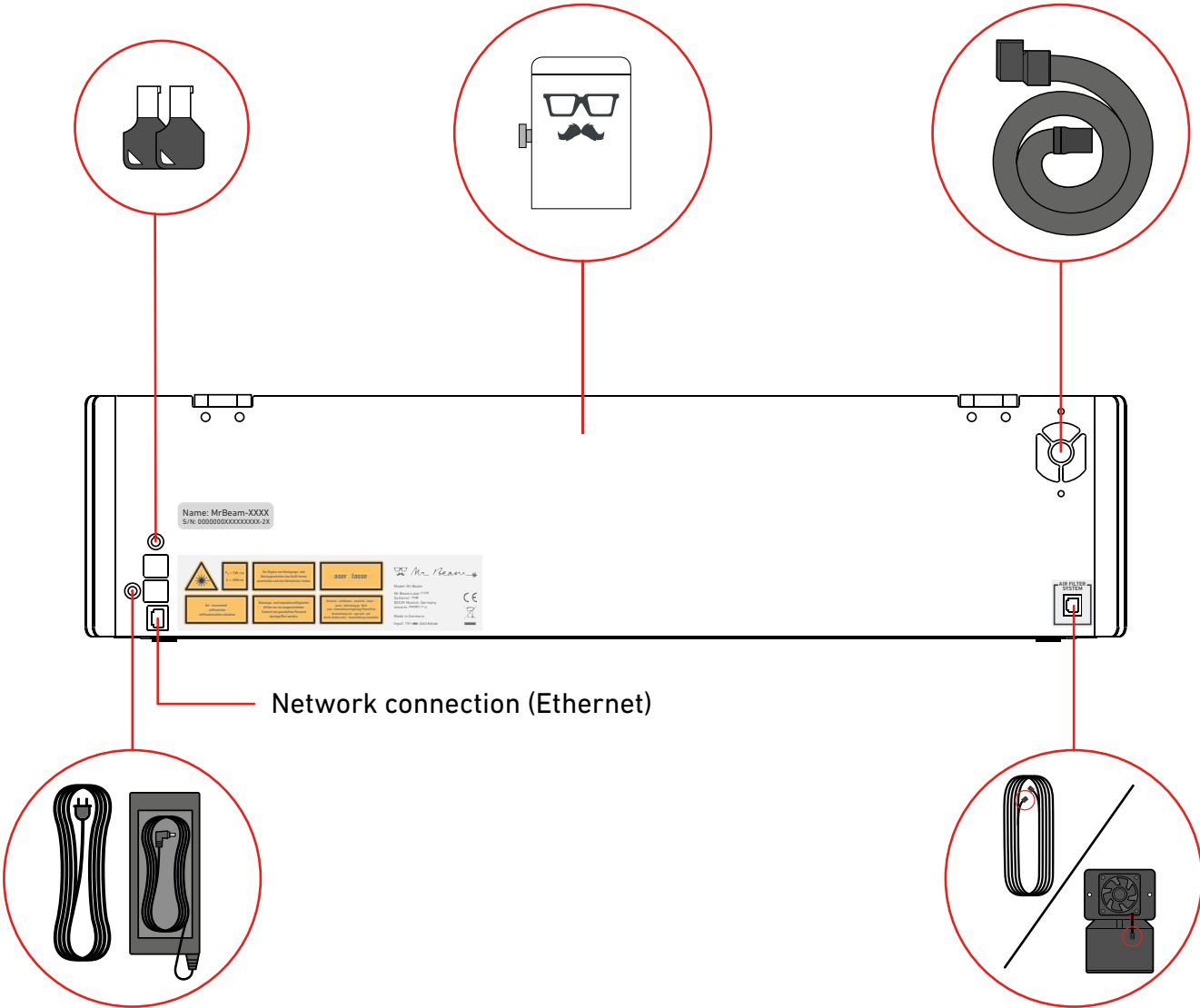
First remove the small box on the side. The laser head, the power adapter, the key and the Focus Tool are located in it.



Remove the transport safeguard inside the device carefully.



SETTING UP THE MR BEAM II

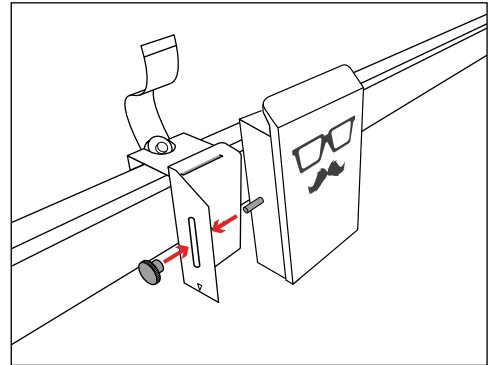


CONNECTION OF LASER HEAD TO X-AXIS

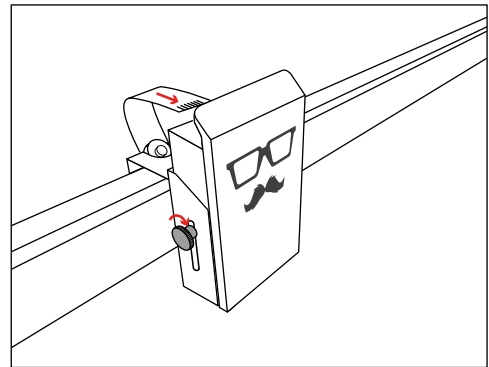


To connect and disconnect the laser head, Mr Beam II must be disconnected from the power supply system!

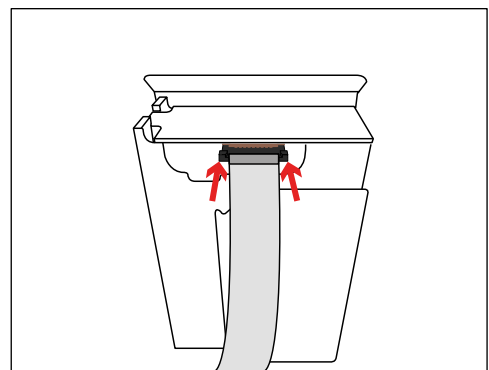
Mount the laser head to the base plate using the knurled screw.



Tighten the knurled screw moderately with two fingers.
Then connect the ribbon cable to the laser head.

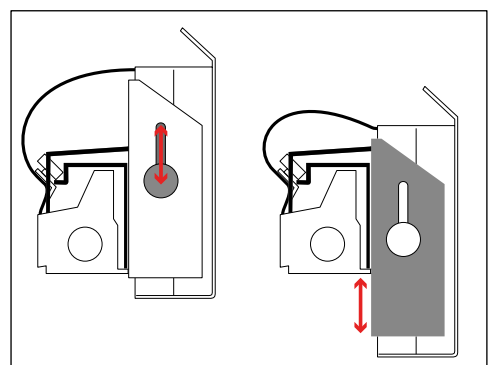


The black bracket fixes the ribbon cable in the socket.
To disconnect the cable and pull out the bracket **carefully**. For fastening, press in the bracket on both sides.



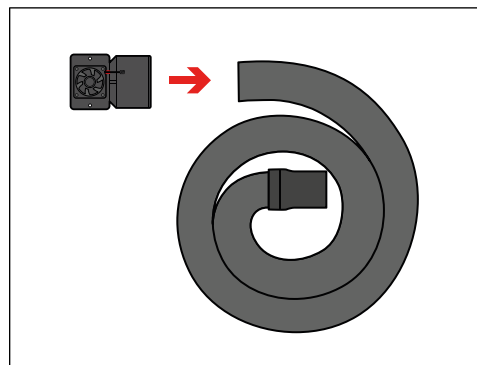
To adjust the laser focus to different material heights, the base plate can be mounted at different heights. Fine adjustment is made via the knurled screw and the slotted hole in the base plate.

See the chapter: Focusing Mr Beam II

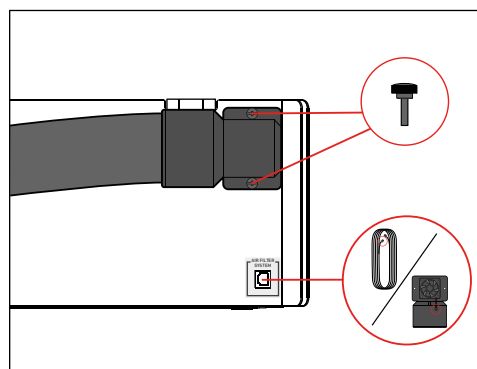


CONNECTION OF THE SUCTION / AIR FILTER SYSTEM

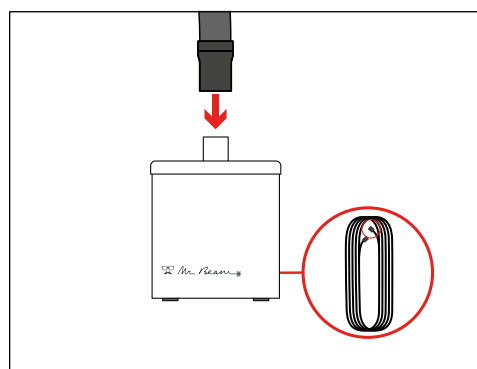
Screw the elbow to the end of the hose (left-hand thread).



Then screw the contra-angle incl. hose to the housing using the knurled screws.
Also connect the Mr Beam Air Filter System or the suction with the appropriate cable.



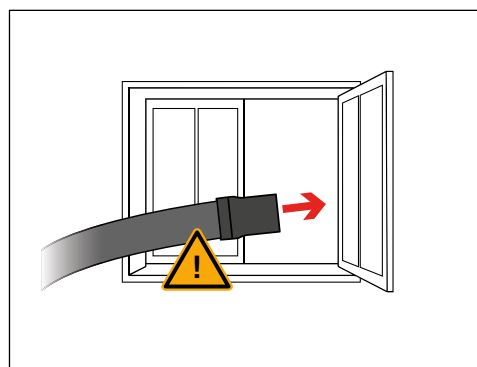
Connect the Mr Beam Air Filter System or suction fan to your Mr Beam II.



If you operate your Mr Beam II without the Mr Beam Air Filter System, you are obliged to ensure that the waste air is discharged properly. To do this, direct the waste air outdoors or connect the hose to an existing waste system.

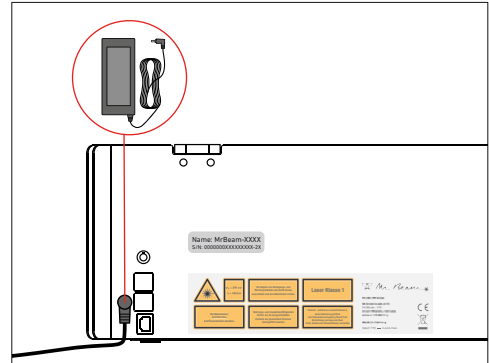


Fix the hose carefully and prevent the waste air from entering the room.

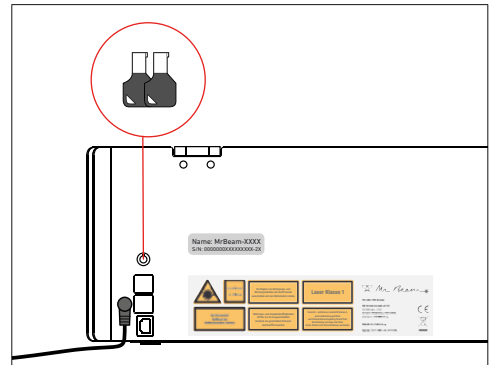


POWER SUPPLY / SWITCH ON/OFF

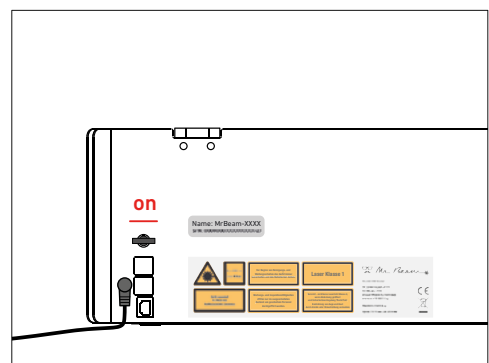
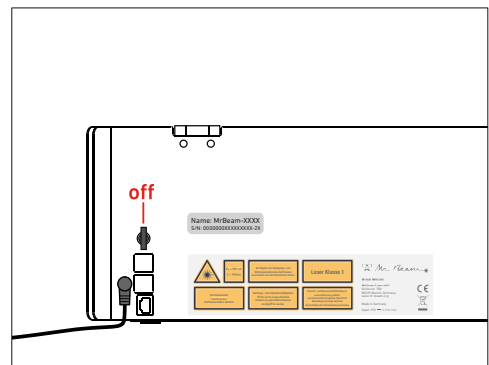
Connect the power adapter to your Mr Beam II.



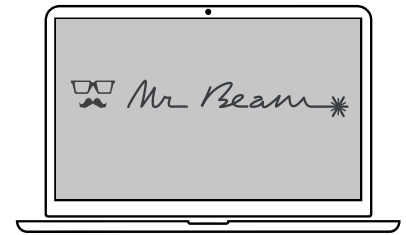
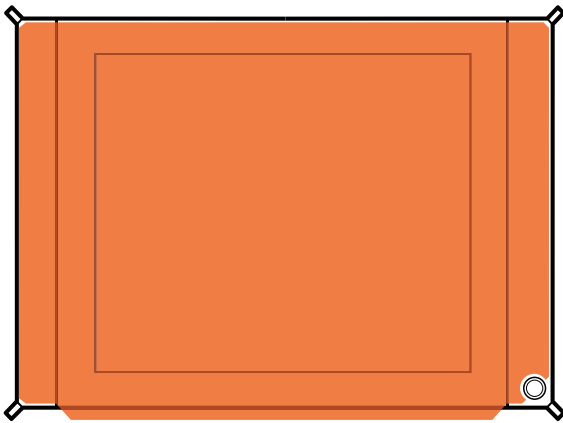
Use the key to turn on your Mr Beam II.



Remove the key when not in use and thus prevent unauthorized persons from using it.

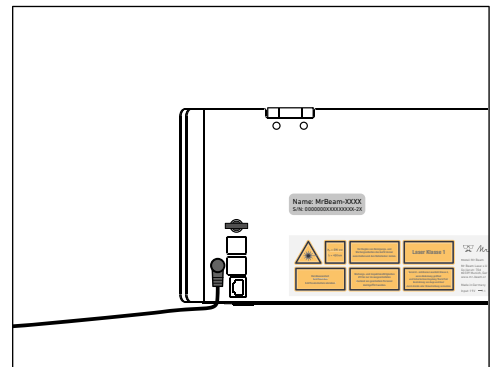
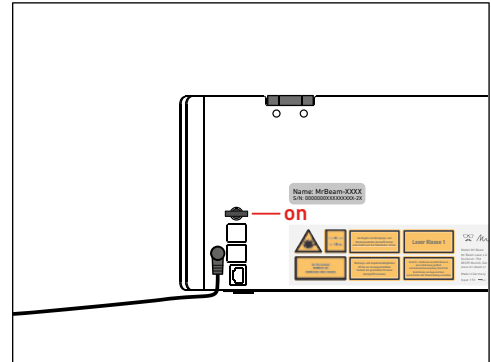


STARTING UP



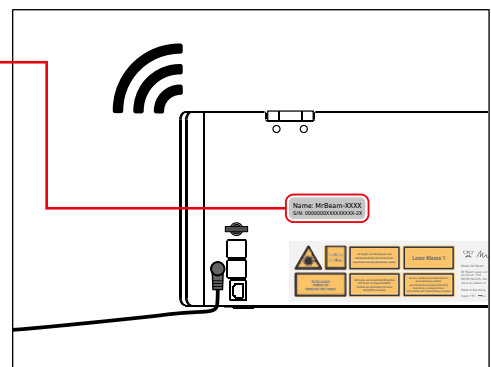
MR BEAM II SETUP - OPTION 1 WIRELESS

Turn on your Mr Beam II.



Name: MrBeam-XXXX
S/N: 0000000XXXXXXX-2X

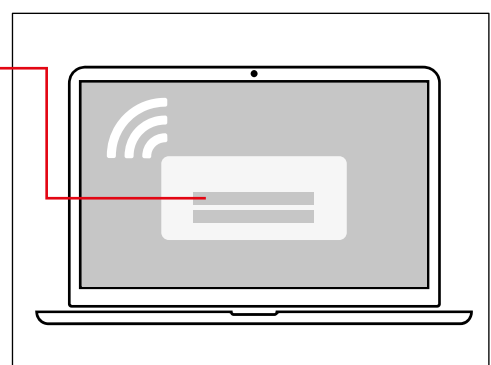
Your Mr Beam II now launches a WiFi Access Point named **Mr Beam-XXXX**. XXXX stands for your specific device name, that appears on the back of your Mr Beam II and will be used again and again in the following.



Name: MrBeam-XXXX
S/N: 0000000XXXXXXX-2X

password: mrbeamsetup

Connect your computer to your specific Mr Beam II WiFi. The password for the WiFi connection is: **mrbeamsetup**



MR BEAM II SETUP - OPTION 1 WIRELESS

10.250.250.1

Type the following IP address into your Google Chrome browser to connect to your Mr Beam II:
10.250.250.1



Your Mr Beam II uses the latest web technologies and is currently only supported by Google Chrome.

Your Mr Beam II will now show you around the Mr Beam *Welcome Dialog*. Please have the password and name of your personal WiFi ready for this purpose.



find.mr-beam.org

If you have connected your Mr Beam II to the local network in the *Welcome Dialog* and turned it on, it is now set to **find.mr-beam.org** in your browser and can be opened from there.¹



mrbeam-XXXX.local

Your Mr Beam II can also be called directly from the above address.² XXXX will be replaced by your specific device located on the back of your Mr Beam II.

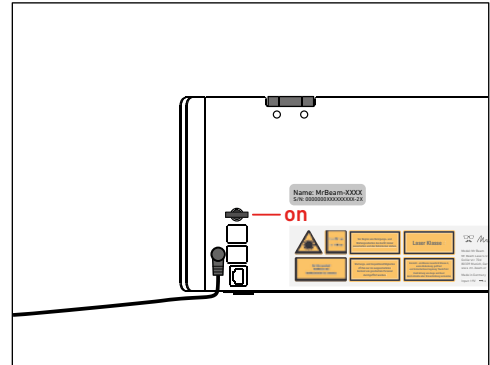


¹ If your local network is connected to the Internet and your Mr Beam II and your computer are on the same network.

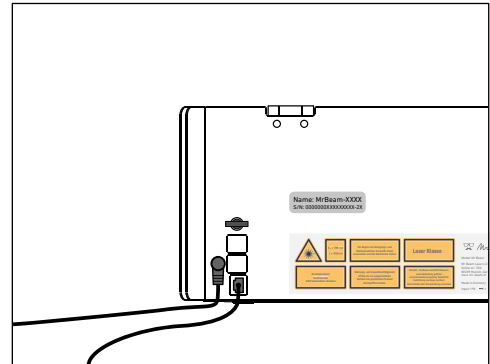
² Applies to common network configurations

MR BEAM II SETUP - OPTION 2 CABLE ROUTER

Turn on your Mr Beam II.

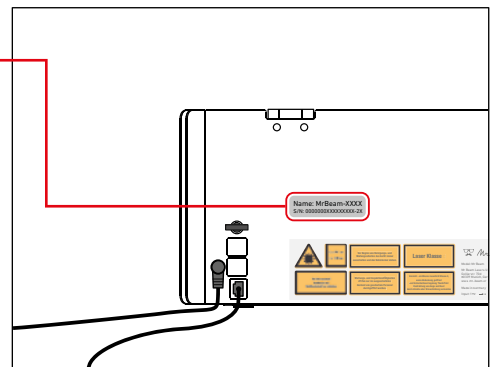


Connect your Mr Beam II to your router via the network cable (Ethernet). The network socket is located next to the power socket.

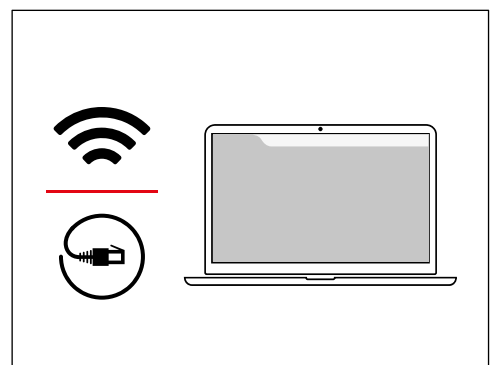


Name: **MrBeam-XXXX**
S/N: 0000000XXXXXXX-2X

On the back of your Mr Beam II is your specific device name **MrBeam-XXXX**, which will be used again and again in the following.



Make sure that your computer is also connected to the router via cable or WiFi.



MR BEAM II SETUP - OPTION 2 CABLE ROUTER

find.mr-beam.org

mrbeam-XXXX.local

Enter the address **find.mr-beam.org** or **mrbeam-XXXX.local** into your Google Chrome browser to log in with your Mr Beam II to connect. On a Windows PC, you can also access your Mr Beam II via the network environment.



Your Mr Beam II uses the latest web technologies and is currently only supported by Google Chrome.

In your browser, your Mr Beam II will guide you through the Welcome Dialog. Optionally, you can integrate your Mr Beam II into your WiFi. Please have the password of your personal WiFi ready for this.



find.mr-beam.org

If you have connected your Mr Beam II to the local network in the *Welcome Dialog* and turned it on, it is now set to **find.mr-beam.org** in your browser and can be opened from there.¹



mrbeam-XXXX.local

To use your Mr Beam II without Internet, it can also be accessed directly from the above address.² XXXX will be replaced by your specific device located on the back of your Mr Beam II.



¹ If your local network is connected to the Internet and your Mr Beam II and your computer are on the same network.

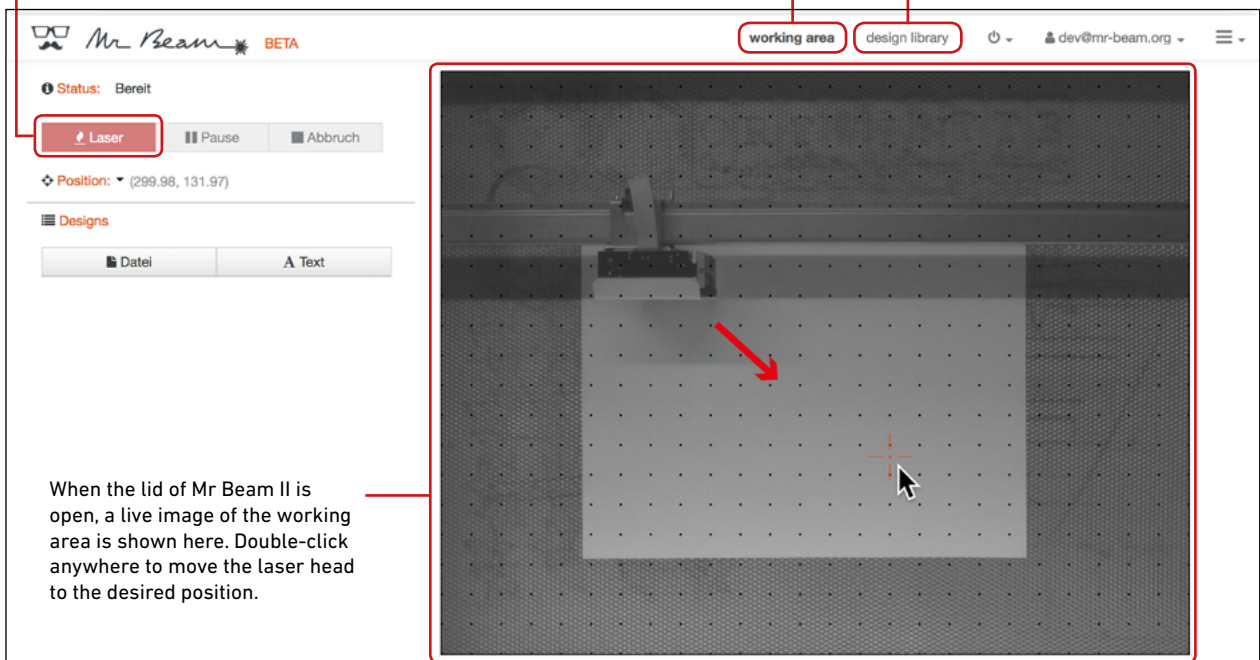
² Applies to common network configurations

MR BEAM II SOFTWARE

Continue to the material settings

working area

design library



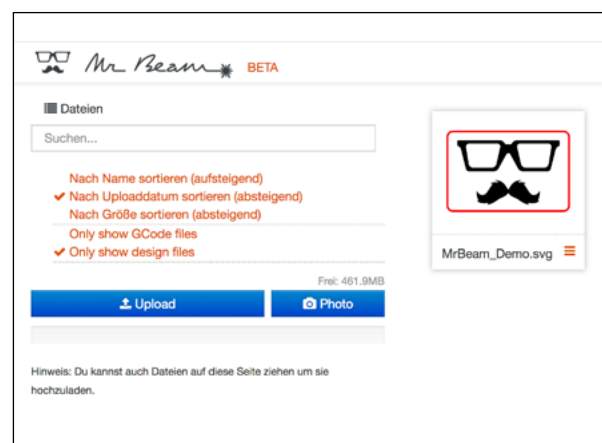
Creating SVG files

If you create a vector file for cutting and engraving, please observe the following details:

- filled areas always will be engraved
- lines can be cutted or engraved
- choose different colors while creating the file to later select different parameters in the Mr Beam Software

1. Upload file

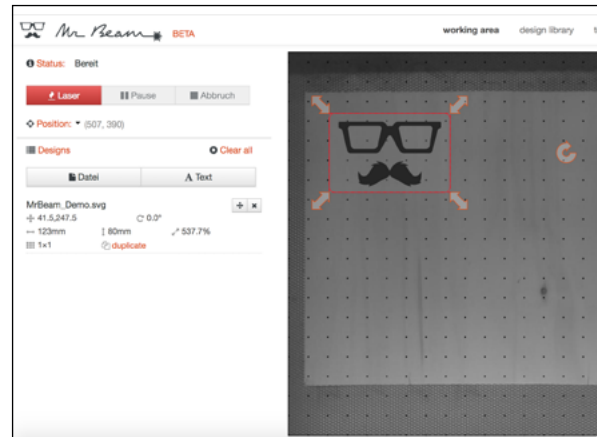
Switch to the „design library“ area. Under „Upload“ or drag and drop into the browser window, you can upload files with the following extensions: .dxf, .svg, .gcode, .gif, .jpeg, .jpg, .bmp, .pcx, .png, ... The file can then be selected in the overview



MR BEAM II SOFTWARE

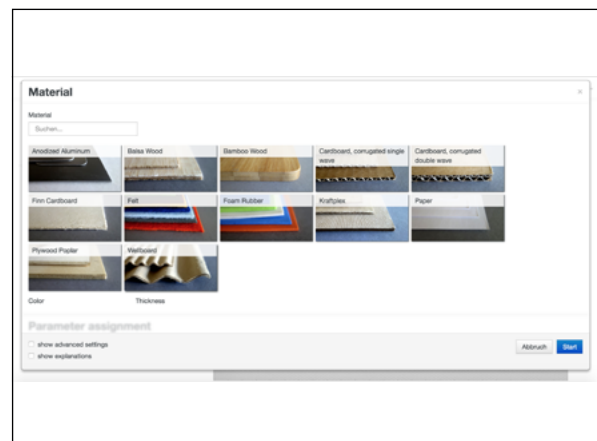
2. Placement

Once a file has been selected, it can be placed in the work area on the work piece. Use the arrows to scale and rotate the graphic. Click on „Laser“ in the upper left corner to access the laser settings.



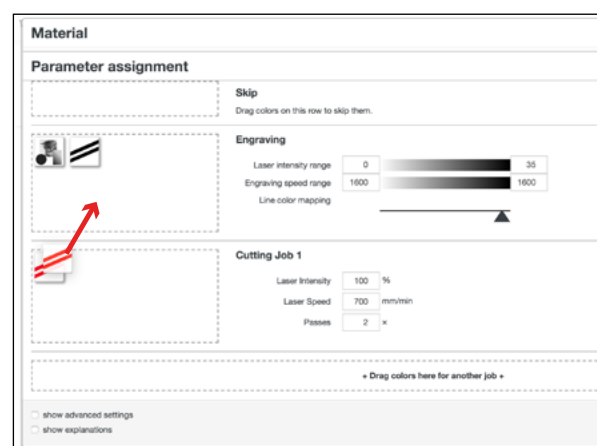
3. Material settings

Select the inserted material. Depending on the material, colour and material thickness can be selected.



4. Parameter assignment

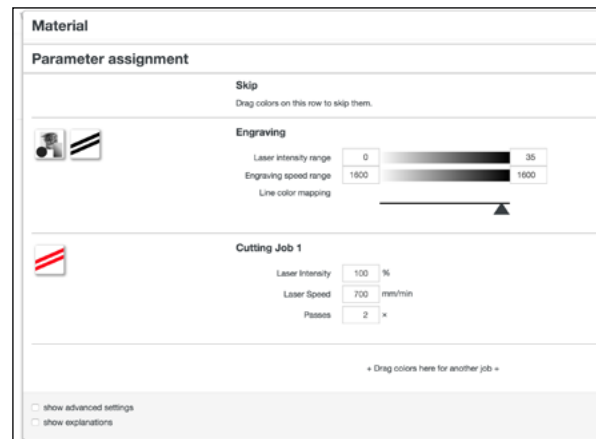
Depending on the material used, additional settings can be made. If different colours were used in the selected file, different parameters can be assigned to them. By dragging into the corresponding field, different tasks can be assigned to each colour. „Skip“ (skip), „engrave“ (engraving) or „cut“ (cutting job).



MR BEAM II SOFTWARE

5. Additional settings

The „Laser Intensity Range“ describes the range of the gray levels displayed in an engraving; „Engraving Speed Range“ describes the speed at which gray values are engraved. When cutting materials, „Laser Intensity“ displays the performance, „Laser Speed“ the speed as well as „passes“ how often the contour is cut. Further explanations can be found under the menu item „show explanations“.



6. Transmission of the order

By clicking on „Start“ the order will be transmitted to your Mr Beam II.



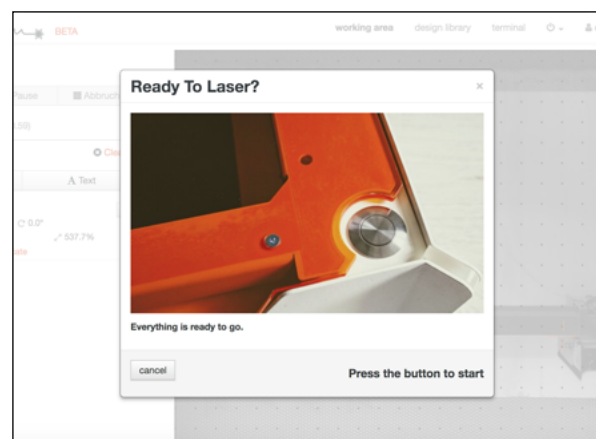
7. Start

After the lid of the laser is closed and the button pressed to confirm, the Mr Beam II starts to laser.

The computer can then be disconnected or turned off from your Mr Beam II, as the laser order is now on your Mr Beam II.



Never operate your Mr Beam II unsupervised!

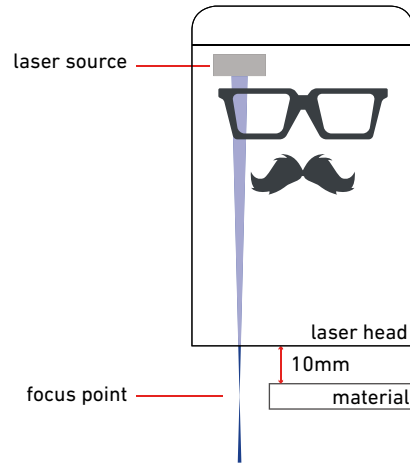


MR BEAM II FOCUSING

It is needed to focus the laserhead to achieve the best result with your Mr Beam II.

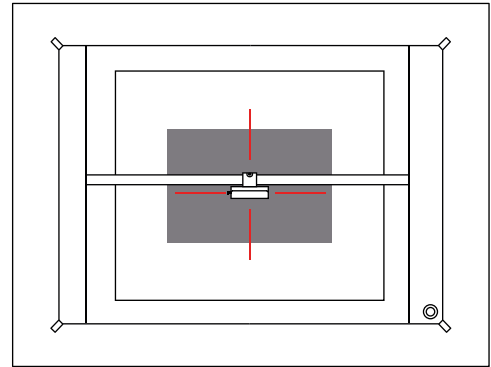
Because the laser light conically leaves the laser head, there is one point at which it is focused maximally, the focus point. At this point, your Mr Beam II has the maximum performance and highest precision. Therefore, the focus point should be positioned exactly on the material and must be manually adjusted to the material height.

For this adjustment, the distance between the bottom edge of the laser head and the top edge of the material must be 10mm. Use the Mr Beam Focus Tool for it.



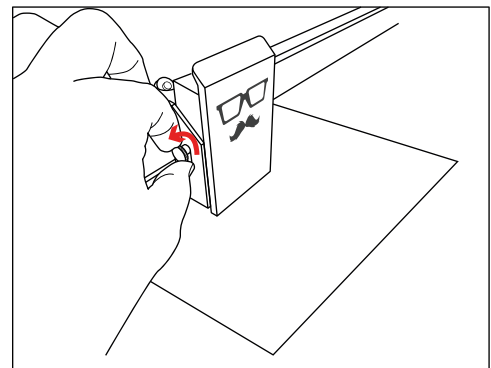
Step 1:

Move the laser head over the material by double-clicking on the working area on your computer.



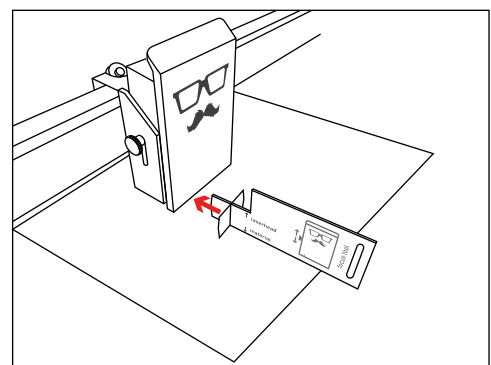
Step 2:

Open the screw on the left side of the laser head to move it up and down.



Step 3:

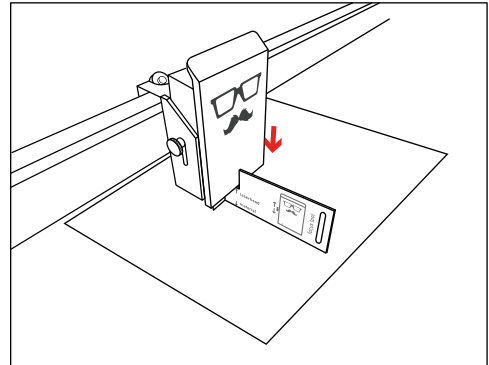
Place the focus tool on the material and the cross under the laser head.



MR BEAM II FOKUSING

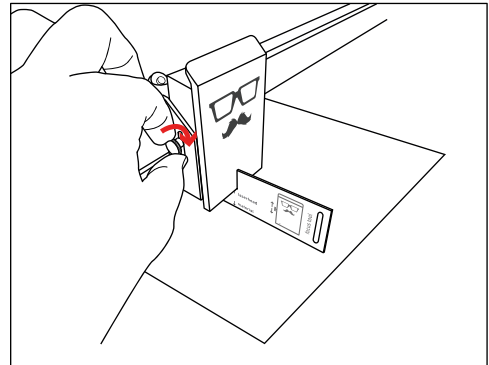
Step 4:

Move the laser head down until it touches the cross of the focus tool.



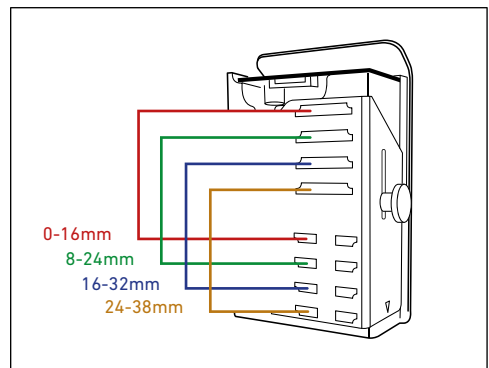
Step 5:

Tighten the screw again moderately and remove the focus tool.



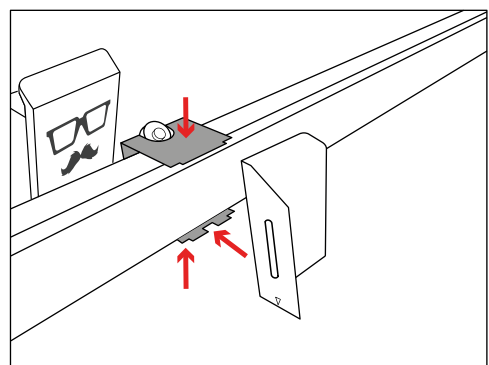
Coarse focusing

For coarse focusing, the laser head can be mounted at different positions.



To connect and disconnect the ribbon cable, Mr Beam II must be disconnected from the power supply!

First remove the laser head by using the knurled screw and put it carefully aside. It is not necessarily needed to disconnect the ribbon cable. To mount and unmount the base plate, slightly press the wagon together. First unhook the base plate above and then below. To reassemble in a different height, proceed in reverse order.





Happy?

Tell your friends and family! Share your results on Facebook, Twitter and Instagram

#madewithmrbeam



Not Happy?

Please visit our FAQ section:
mr-beam.org/faq

or contact our friendly customer service team:
support@mr-beam.org