

# Mr Bean \*

# dreamcut <sup>[s]</sup> dreamcut <sup>[x]</sup> DESKTOP LASERCUTTER QUICK START GUIDE

When you start up your **Mr Beam**, 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.

Munich, February 2023 | Rev. 1.56

## SAFETY INSTRUCTIONS

You can find the latest version of this Quick Start Guide, as well as that of previous modells, and some other information about your Mr Beam at the following QR Code.

At **www.mr-beam.org/support**, you will also find answers to many questions regarding Mr Beam.





#### **User Manual**

Before using your Mr Beam, please 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 user interface and on **mr-beam.org/downloads**.

Only process materials that Mr Beam Lasers has classified as harmless. You can find an up-to-date list of materials at **mr-beam.org/ materialien** 

**Warning:** Never process PVC, vinyl, glass fiber, carbon fiber or materials containing chlorine! The processing of these materials produces toxic fumes that can damage your health and machinery.cause machine damage and health hazard.



### UNPACKING AND SETTING UP YOUR MR BEAM



First, remove the small box on the side. The laser head, the power adapter, the key and the

Focus Tool are inside it.

Remove the transport safeguard inside the device carefully.



## SCOPE OF DELIVERY - WITH AIR FILTER SYSTEM





2 KEYS FOCUS TOOL





# SCOPE OF DELIVERY - WITHOUT AIR FILTER SYSTEM





2 KEYS FOCUS TOOL



POWER CABLE POWER SUPPLY UNIT





# CONNECTING THE LASER HEAD TO THE X-AXIS

**Attention:** In order to connect and disconnect the laser head, the Mr Beam must be disconnected from the power supply!

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Remove the sticker from the back side of the laser head.

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



Tighten the knurled screw moderately with two fingers.

Then connect both the hose, as well as the ribbon cable to the laser head.



**Attention:** The silver contacts of the ribbon cable must be on the top.



The black bracket fixes the ribbon cable to the socket.

**Attention:** To disconnect the cable, pull out the bracket about 2 mm 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. You can make fine adjustments using the knurled screw and the slotted hole in the base plate.

See the chapter: Mr Beam Focusing



### CONNECTION OF THE SUCTION / AIR FILTER SYSTEM



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

Screw the contra-angle incl. hose to the housing using the knurled screws. Place the washers between the screw and the rubber.

Also connect the Mr Beam Air Filter System or suction fan with the appropriate cable.

![](_page_6_Figure_5.jpeg)

![](_page_6_Figure_6.jpeg)

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

![](_page_6_Picture_8.jpeg)

**Caution:** If you operate your Mr Beam without 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.

![](_page_6_Picture_11.jpeg)

# POWER SUPPLY / ON-OFF SWITCH

Connect the **power adapter** to your Mr Beam before you connect it to the socket.

Turn on your Mr Beam using the **key**. It serves as access control for authorized users.

Press the button to **turn on** your Mr Beam. The light of the laser head is switched on immediately and after 10 seconds the Status Lights are also switched on.

To **shut down** your Mr Beam, press the button 5 seconds until the Status Lights turn permanently red. After 15 seconds the whole system shuts down.

When all the lights in the Mr Beam are off, turn the key to **turn it off** completely.

![](_page_7_Figure_8.jpeg)

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![](_page_7_Picture_9.jpeg)

![](_page_7_Picture_10.jpeg)

### STARTING UP

#### Connection options with Mr Beam

There are three options to connect Mr Beam to your computer or tablet. Choosing the most appropriate option depends on your personal usage preference and the network available at the location Mr Beam is set up in. In all cases you need the Google Chrome Browser. Other Browsers are not supported.

Please choose one of the following connection options and proceed with the installation in the section "**Status Lights**" on the next page.

#### **Option A: Connection via Wi-Fi**

Connect your computer directly to the Wi-Fi of your Mr Beam. This is the easiest connection option. No internet access or network infrastructure is required. You may not be able to use the internet on your computer while you are connected to Mr Beam. See page 11.

![](_page_8_Picture_6.jpeg)

#### Option B: Connection via network cable (Ethernet) and router

Connect Mr Beam to the network router using a cable. Then, use the find.mr-beam service to create a connection to your Mr Beam.

This option is particularly stable due to the cable connection. An internet connection is necessary for the use of the find.mr-beam service. See page 12.

![](_page_8_Picture_10.jpeg)

#### Option C: Connection via Wi-Fi and router:

Connect your Mr Beam to your network via Wi-Fi. To do this, connect Mr Beam to your Wi-Fi using the Wi-Fi-name and password. For initial setup, you need to connect via Option A or B first. The initial setup may be a little complicated, but in the long term, this is the most comfortable option that many users prefer. See page 13.

![](_page_8_Figure_13.jpeg)

### CONNECTION WITH MR BEAM

#### Status Lights

Whether you are setting up for the first time or have connected to your Mr Beam many times before, the **Mr Beam Status Lights** will show you how to connect to your Mr Beam right now. For this purpose, the Status Lights pulsate (blink slowly) in different colors.

#### Green pulsation:

![](_page_9_Picture_4.jpeg)

Your Mr Beam **pulses green** if a Wi-Fi direct connection is possible.

The direct connection via the Wi-Fi of the Mr Beam is used during the initial setup and if you want to operate the Mr Beam without an active internet connection. (e.g. at fairs or in the basement).

For more details of the Wi-Fi direct connection, please refer to page 30.

#### Orange pulsation:

![](_page_9_Picture_9.jpeg)

Your Mr Beam **pulses orange** if it has an active internet connection.

In this case, you can access your Mr Beam via **find. mr-beam.org** in the Google Chrome browser.

More details about the active internet connection (via router or network cable) can be found on page 31 and 32.

#### White pulsation:

![](_page_9_Picture_14.jpeg)

Your Mr Beam **pulses white** if it is connected to your local network but has no active internet connection. Visit our online **Knowledge Base** to find possible solutions.

When **pulsing green and** white at the same time, a Wi-Fi direct connection is possible and it is connected to your network router, but still cannot be found on find. mr-beam.org.

![](_page_9_Picture_17.jpeg)

In all cases, you can find more information in our **online knowledge base** at **www. mr-beam.org/docs/lights.** 

## OPTION A: DIRECT CONNECTION VIA MR BEAM WI-FI

![](_page_10_Figure_1.jpeg)

### OPTION B: CABLE AND ROUTER

![](_page_11_Figure_1.jpeg)

Connect your Mr Beam to your router with a network cable (Ethernet). The network socket is located on the back under the USB ports.

**Note:** Do not confuse the socket with the Air Filter System connection on the other side.

![](_page_11_Figure_4.jpeg)

![](_page_11_Figure_5.jpeg)

Make sure your computer is also connected to the router via cable or Wi-Fi.

After a few seconds (maximum 60 s), your Mr Beam will pulsate with orange lights. The next steps can be found on page 29.

**Note:** During the initial setup, your Mr Beam will guide you through the Mr Beam **Welcome Dialog**. If you wish to do so, you can set up a Wi-Fi connection with the router there.

![](_page_11_Picture_9.jpeg)

### OPTION C: WI-FI AND ROUTER

![](_page_12_Figure_1.jpeg)

For initial setup, you need to first connect through either option A or B to get to the Welcome Dialog, where you can set up your Wi-Fi connection.

If you select **Option A**, connect your computer directly to the Wi-Fi of your Mr Beam. Afterwards enter the IP address 10.250.250.1 in your Google Chrome browser. This process is described in detail on page 30.

![](_page_12_Figure_4.jpeg)

If you have a cable, select **Option B** to connect Mr Beam to your router with the cable. Now use the find.mr-beam service to connect to your Mr Beam for the first time. This process is described in detail on page 31.

![](_page_12_Figure_6.jpeg)

Independently of the chosen option, Mr Beam will greet you with the **Welcome Dialog**. During the Welcome Dialog, you have the option of connecting your Mr Beam to your Wi-Fi. Click the Connect button that appears next to your Wi-Fi network name and then enter your Wi-Fi password.

**Note:** A similar process is performed when registering a new smartphone in your Wi-Fi.

![](_page_12_Picture_9.jpeg)

### **OPTION C: WI-FI AND ROUTER**

If you have selected the **Option A** for initial setup and are connected to the Mr Beam via Wi-Fi, Mr Beam will interrupt the Wi-Fi connection to your computer to connect to your wireless router. If successful, your Mr Beam will soon pulsate with orange lights and you can connect to the find.mrbeam service.

**Caution:** If this fails, e.g. because you entered an incorrect password, you will not receive an error message because you are no longer connected to your Mr Beam. In this case, you have to repeat the connection process of the **Option A** from the beginning.

If you have selected the **Option B** using a cable for initial setup, Mr Beam will tell you if the connection to your router was successful or not. If successful, you can now disconnect the network cable, use the Wi-Fi connection and use the find.mr-beam service.

If you notice a slow connection while operating your Mr Beam, e.g. If the pictures of the camera do not load or load slowly, this is probably due to a poor Wi-Fi connection. In this case, try option B (network cable and router).

### MR BEAM FOCUSING

You need to focus the laserhead to achieve the best result with your Mr Beam.

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 has the maximum performance and highest precision. Therefore, the Focus point should be positioned exactly on the material and needs to 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 has to be 10mm. Use the **Mr Beam Focus Tool** for this.

![](_page_14_Figure_3.jpeg)

![](_page_14_Figure_4.jpeg)

#### Step 1:

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

![](_page_14_Figure_7.jpeg)

![](_page_14_Figure_8.jpeg)

#### Step 2:

Loosen 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 FOCUSING

cross of the focus tool.

![](_page_15_Figure_2.jpeg)

### Step 5:

**Coarse focusing** 

Step 4:

Moderately tighten the screw again and remove the focus tool.

Move the laser head down until it touches the

![](_page_15_Figure_5.jpeg)

![](_page_15_Figure_6.jpeg)

For coarse focusing, the laser head can be

mounted at different positions.

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

![](_page_15_Figure_8.jpeg)

### MR BEAM SOFTWARE

![](_page_16_Figure_1.jpeg)

#### Legend:

- 1. Laser: Go to laser job parameters proceed
- 2. Working area: If the lid of the Mr Beam is fully open, an image is taken every five seconds an image is taken and displayed on the working area. Double click on any position so that the laser head moves to the desired position.
- **3.** Design library: Upload designs here and select uploaded designs.
- **4.** Design store: Choose from a large selection of ready-made designs.
- 5. Support and settings

#### **Creating SVG files**

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

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

For more detailed information about the Mr Beam software, please read the article on our website:

![](_page_16_Picture_14.jpeg)

www.mr-beam.org/pages/das-beamos

### MR BEAM MAINTENANCE AND CARE

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**Attention:** Regular maintenance and care are necessary. Before cleaning and maintenance, always switch off the Mr Beam and disconnect the power plug.

#### Laser head

The laser head should be cleaned regularly. As a guide value the cleaning requirement can be viewed in the software under Settings -> Maintenance. If you work with materials which generate a lot of dust, such as wood, cleaning of the laser head may be necessary before 100% is reached.

![](_page_17_Figure_5.jpeg)

#### Mechanics

The guide rails of the mechanical system must be regularly cleaned of dust and dirt. We recommend using a mild, grease-dissolving cleaner and a damp cloth for this purpose.

![](_page_17_Figure_8.jpeg)

![](_page_17_Figure_9.jpeg)

#### Working Area

To protect the Mr Beam from unnecessary workload and possible ignition of small parts, always keep the interior clean.

### MR BEAM AIR FILTER SYSTEM

To ensure that the exhaust air is cleaned by the Air Filter System, the filters must be changed regularly.

The voucher code QUICKSTARTGUIDE gives you a 10€ discount on your first filter order in our Mr Beam online shop. www.mr-beam.org

![](_page_18_Picture_3.jpeg)

#### **Before starting**

Check the prefilter and main filter for correct seating. The prefilter must lie flat and cover the entire surface. The soft, fluffy side of the prefilter must

point upwards.

![](_page_18_Picture_7.jpeg)

![](_page_18_Picture_8.jpeg)

### Filter change

The filters should be checked regularly. As a guide value, the wear of both filters can be viewed in the software under Settings -> Maintenance. If you work with materials which generate a lot of dust, such as wood, it is may be necessary to change the filters before they reach 100%.

Detailed tutorials on maintenance and filters can be found in our Knowledge Base: www.mr-beam.org/maintenance

![](_page_19_Picture_0.jpeg)

### Happy & Excited

Tell your friends and family! Share your results with the Mr Beam community and the rest of the world.

### #madewithmrbeam

![](_page_19_Picture_4.jpeg)

### **Questions & Problems**

Check out our knowledge base: mr-beam.org/support

Create a **Support Ticket** to contact our friendly customer service team: **mr-beam.org/ticket** 

### Get Inspired

![](_page_19_Picture_9.jpeg)

youtube.com/mrbeamlasers

![](_page_19_Picture_11.jpeg)

instagram.com/mrbeamlasers

![](_page_19_Picture_13.jpeg)

facebook.com/groups/officialmrbeamusers