

Trouble Shooting: How to solve problems with the camera?

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This article is dedicated to the most common camera problems and discusses respective solutions.

Let's have a look at the following issues:

- The camera preview image is not accurate.
- The camera does not update the images.
- The camera preview image is blurred / out of focus / has a bad resolution
- The camera preview does not show any images
- I am getting a camera preview error

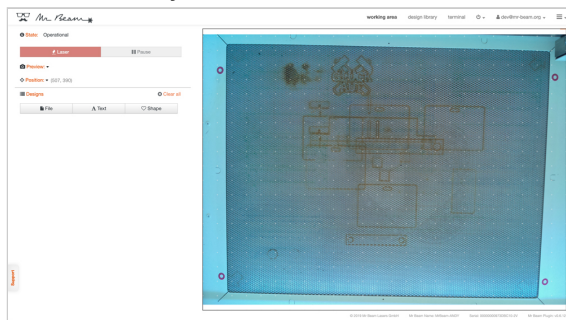
The camera preview image is not accurate.

The precision of the camera image is **+/- 5 mm**. In case you require a higher precision for specific applications, we recommend using manual positioning (<https://support.mr-beam.org/en/support/solutions/articles/43000065874-manual-positioning>).

If the deviation is considerably bigger, please go through the following check-list:

1. **Is the preview image in the software colored, and is what you see not just the working area, but also the white boarder and the pink round markers inside your Mr Beam? (only when using the stable software channel)**

In this case the preview image could not be adjusted - a correct positioning with this image is not possible. Here is what you can do to fix it:



- Check if all **four pink round circles** are visible in the working area. If your material or the x-axis are covering one of these markers for the camera, the image cannot be processed correctly. Please find more details on this issue in the following article (<https://support.mr-beam.org/en/support/solutions/articles/43000577720-message-preview-not-accurate-and-pink-circles-flashing-on-working-area>).
- Open and close **the lid** of your Mr Beam. This way a new camera shooting session is going to be started. In many cases this will solve your problem.
- **Bad lightning:** a very strong light (e.g. direct sun light, in case your Mr Beam is standing close to a window) or very dark environments can lead to distortions of the system. This is why we always urge to surround your Mr Beam with evenly distributed lightning.
- **Colorful materials:** materials in very bright colors (e.g. pink felt) can irritate the system. Try removing the material, close the lid and open it again. Then try placing the same material in the

working area once again.

2. **There are blinking pink circles in the corners of the working area, and there is a warning message in the left menu panel in the "Preview" pane. (Beta software channel only)**

The camera system could not identify all **four pink round markers** inside Mr Beam. Depending on how many markers could not be identified, the preview image might not be updated anymore. In this case we recommend to have a look **at the following article** (<https://support.mr-beam.org/en/support/solutions/articles/43000577720-message-preview-not-accurate-and-pink-circles-flashing-on-working-area>), where you will find more details.

3. **You are using a very high or thick material.**

For high or thick materials (more than 1cm) the deviation in perspective can be particularly high towards the edges of the working area. This means the preview image might be not very precise towards the edges (this is only relevant if the deviation is bigger than +/-5 mm). In this case we recommend using **manual positioning** (<https://support.mr-beam.org/en/support/solutions/articles/43000065874-manual-positioning>). In our current *beta software channel* you can add the height of your object as thickness of your material - on left in the preview of the working area. (Please note that this function is currently in a testing phase)

4. **The camera needs a calibration.**

In this article you will find out everything you need to know about **camera calibration** (<https://support.mr-beam.org/en/support/solutions/articles/43000065908-camera-calibration>), and if a new calibration is required in the first place.

The camera does not update the image.

If your working area preview in the software is not updating the image, please follow this check-list:

- **There are blinking pink circles in the corners of the working area, and there is a warning message in the left menu panel in the "Preview" pane. (Beta software channel only)**

The camera system could not identify all **four pink round markers** inside Mr Beam. To prevent you from positioning your design based on a very imprecise preview, Mr Beam stops showing new preview images all together. In this case we recommend to have a look **at the following article** (<https://support.mr-beam.org/en/support/solutions/articles/43000577720-message-preview-not-accurate-and-pink-circles-flashing-on-working-area>), where you will find more details on how to fix this problem.

- Mr Beam will only show a new image once it has done a **homing cycle**, when your **computer is properly connected** to your Mr Beam, and when there is **no laser job currently in progress**. (e.g. also in the "pause" mode the camera remains inactive.)
- The **lid** of the Mr Beam should be **completely open**.
- If there is a **slow connection** between your computer / tablet and your Mr Beam (which has generally nothing to do with the speed of the internet connection), it can take longer to process and display a preview image. In this case there could be a "queue" of images which are being uploaded simultaneously. This case is very rare, as the local connection is mostly quite speedy. In this case we recommend to restart the Mr Beam software (simply by refreshing your browser tab). The only thing which will help to solve this problem long-term, is to improve the connection, e.g. by reducing the distance between your Mr Beam and your computer, or your router. (Depending on the way your Mr Beam is connected, more details on connectivity **in this article** (<https://support.mr-beam.org/en/support/solutions/articles/43000548328-how-to-connect-your-mr-beam>).)

The camera preview image is blurred / out of focus / has a bad resolution

- There are **blinking pink circles** in the corners of the working area of the Mr Beam software. An older software version will blur the camera preview image on purpose, when the design cannot be positioned precisely enough. In this case we recommend updating Mr Beam software (*Setting > Software updates > scroll down > press blue button "Check for updates now"*)

- You are probably getting a preview with low resolution because the connection too slow. If the preview images are shown with low resolution, this is not an error or malfunction. Instead, your Mr Beam is trying to **compensate for a slow connection** while still displaying a preview image. In many cases the blurry image is enough for positioning your design on the material.

While a preview image in high resolution is loading, Mr Beam software is displaying that same preview in low resolution. In the meantime you will see an according note in the preview pane (on the left close to the working area). Just a few seconds later the system should be showing a picture in high resolution. If the connection between your Mr Beam and your computer is slow, it can happen that Mr Beam will be switching to the high resolution mode only later.

The camera preview does not show any images

If the camera of your Mr Beam seems to have stopped working or is not showing any preview images, there might be a variety of reasons. Usually, the camera takes a **new picture every 5-10 seconds**, in cases **following points** are true:

- The lid is completely open. When the camera button is activated through opening the lid, you will hear a silent clicking sound in the right back part of your Mr Beam.
- You have an **active connection** between your computer and your Mr Beam. As soon as you loose connection, the camera will stop taking new pictures. In this case Mr Beam status lights will turn to a slow pulsating in orange, green or white. The easiest way to solve this problem is to restart the software (by refreshing the browser tab).
- Your Mr Beam has made a homing cycle. If your Mr Beam is in "State:Locked" and you can see a big button **"Homing cycle"** on the working area preview, you need to click on it to make a homing cycle, before the camera can start to take pictures.

- Your Mr Beam is **not currently running a laser job**.

If your camera is **not showing a preview picture** even though **all** of the above check-points are fulfilled, please check the following points:

- Is there a **camera error warning** in the working area preview? In this case we recommend to close the lid of Mr Beam for a few seconds and then open it again, to restart the camera. If this does not help, please restart the whole device.
- Can you see a **red light** on the camera casing (on the inner side of the lid, in the front). Is this the case, then your camera is taking pictures but there are not being processed by the software. Please check if the connection between Mr Beam and your computer is reliable and fast enough to regularly transmit new images.
- Do you see **blinking pink circles** in the working area of the software? If your material or the x-axis are covering up any of these markers from the camera, the preview images cannot be processed correctly. Please find more information on how to solve this problem **in the following article** (<https://support.mr-beam.org/en/support/solutions/articles/43000577720-message-preview-not-accurate-and-pink-circles-flashing-on-working-area>).
- Can you hear a silent **clicking sound** in the right back part of the Mr Beam device when the lid is completely open? If not, or if any other unknown problem occurs, which is not listed above, please contact our **support team** (<https://mr-beam.freshdesk.com/en/support/tickets/new>).

I am getting a camera preview error

- If you are getting an error message "Camera error" in the working area of the software, you need to **switch your Mr Beam device off and restart it**.