

Camera Calibration

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Your Mr Beam's camera is factory calibrated by default, so there is normally no need to calibrate the camera.

Usually, Mr Beam II displays a black and white image of the working area. This image is suitable for camera based positioning of the designs, but a slight offset of up to +/- 5mm should be tolerated. (See article about [Manual Positioning](https://mr-beam.freshdesk.com/support/solutions/articles/43000065874-manual-positioning) (<https://mr-beam.freshdesk.com/support/solutions/articles/43000065874-manual-positioning>))

However, if Mr Beam II can not calibrate the image, it will output a color image showing not just the work area but the entire interior of the laser cutter. In this case positioning based on the image is not possible or very inaccurate. Most likely, the camera can not find or recognize the pink marks in the device, e.g. in case of unfavorable lighting or if one or more of the markings are covered.

What you can do in this case:

- Check if all four **pink marker circles** are visible at the edge of the working area. If your work material or the axis of the Mr Beam obscure these markers for the camera, the image can not be adjusted correctly. If one or more of the circles is damaged or missing, please contact our **support team** (<https://mr-beam.freshdesk.com/de/support/tickets/new>).
- **Close the lid of Mr Beam and open again.** This will start a new camera session (recording); Often that can help.
- **Unfavorable lighting:** Particularly strong light (eg direct sunshine) or particularly dark environments often disturb our system. Try to provide "even lighting". (Then close the lid and open again.)
- **Colored materials:** Materials in bright colors (such as pink felt) can also mess up the recognition system. Remove the material from the device, close the lid and open again. Try using the same material again.

If you did not get the desired result despite these tips, then take a look at our article on **Manual Positioning**. (<https://mr-beam.freshdesk.com/en/support/solutions/articles/43000065874-manual-positioning>)

A new calibration of the camera is only necessary if:

- One of the pink markings has been changed. (For example, if the mark was peeled off and glued in again.)

- You notice a larger deviation between the screen position on the adjusted (black-and-white image) and the laser result.

In this case go to Settings, klick on Camera Calibration and follow the instructions there.

If you have questions or problems with the calibration please contact our [support team](https://mr-beam.freshdesk.com/de/support/tickets/new) (<https://mr-beam.freshdesk.com/de/support/tickets/new>).

The screenshot shows the Mr Beam software interface. On the left, a sidebar lists various settings: Über diesen Mr Beam, Software Update, Zugangsbeschränkung, Wartung, Netzwerkverbindung, find.mr-beam, Dateiimport Einstellungen, **Kamerakalibrierung** (highlighted), Analytics, Erinnerungen, Logs, Debug, and DEV Machine Profiles. The main content area features a diagram of a laser beam hitting a rectangular object, with a red arrow indicating the beam's path. Below the diagram, the text reads: "Bitte lege ein Material wie Karton in Deinen Mr Beam II, damit er den gesamten Arbeitsbereich abdeckt." On the right, a menu is open, showing options: Einstellungen, Lasersicherheit, Vollbild, mr-beam.org, Find my Mr Beam, Quickstart Guide, Betriebsanleitung, Tour starten, and Support Portal.

(<http://www.mr-beam.org/ticket>)