SeeMeCNC®
Customer Support

My Machine Homes in the Wrong Direction

If you home your delta printer and the effector goes down towards the bed, instead of up towards the limit switches it can be very frustrating. The good news is that the fix is simple. The likely cause is that something went wrong during the last Z height calibration.
To correct the issue follow these simple steps:

- Access the EEPROM via your host software
- Locate the Max Z Length variable (It is likely a negative value since the machine is homing in the wrong direction)
- Change this value to 150 (this is an arbitrary value and will get changed when we perform a Z height calibration)
- Save the EEPROM

Now that the EEPROM has been updated with a usable Max Z Length value, you will need to preform a Z Height Calibration.

For newer/upgraded machines equipped with the HE280 Probing Hotend

- Run the probing routine

For older machines not equipped with the HE280 Probing Hotend

- Bring your hot end and heated bed up to operating temperature.
- Set the hot end temp to 180C and the heated bed to 60C. We want the hot end and bed to expand to “normal print conditions” so we can get a fairly accurate measurement here.
- Once the hot end and bed have reached their target temperatures, push the knob in on the LCD controller. This will take you to the LCD menu.
- Turn the shaft counter-clockwise until you reach the “Advanced Settings” entry and then click the button to select that option.

- Rotate the shaft counter-clockwise until you reach the “Calibrate Z Height” option and click the button.
- Rotate the knob counter-clockwise again and choose the “Home Towers” menu option
- and click. This will send the Rostock MAX to the home position. This is the same as sending G28 to the printer or clicking the “Home All” icon in MatterControl.
- After the homing process finishes, select the “Z-Position” option and click. You control the height of the effector platform by turning the shaft on the LCD panel. Turning it counter-clockwise will lower the nozzle, and turning it clockwise will raise it. If you turn the shaft quickly, you'll get large changes and if you turn it slowly, one step at a time, the change will only be 0.01mm per click. Please be careful not to accidentally burn yourself on the heated bed or the nozzle!
- Turn the shaft counter-clockwise until you're about 1/2” from the bed surface. Place a sheet of paper on the bed, under the nozzle. Lower the nozzle slowly until moving the paper around causes it to drag a little bit on the nozzle tip. You want it close enough that you can push the paper under the nozzle, such that it almost prevents you from pushing the paper under the nozzle.
- When you've reached that point, press the knob to return to the LCD menu and then and select the “Set new Z=0.00” option. This will set the correct Z-Height for your Rostock MAX v2.