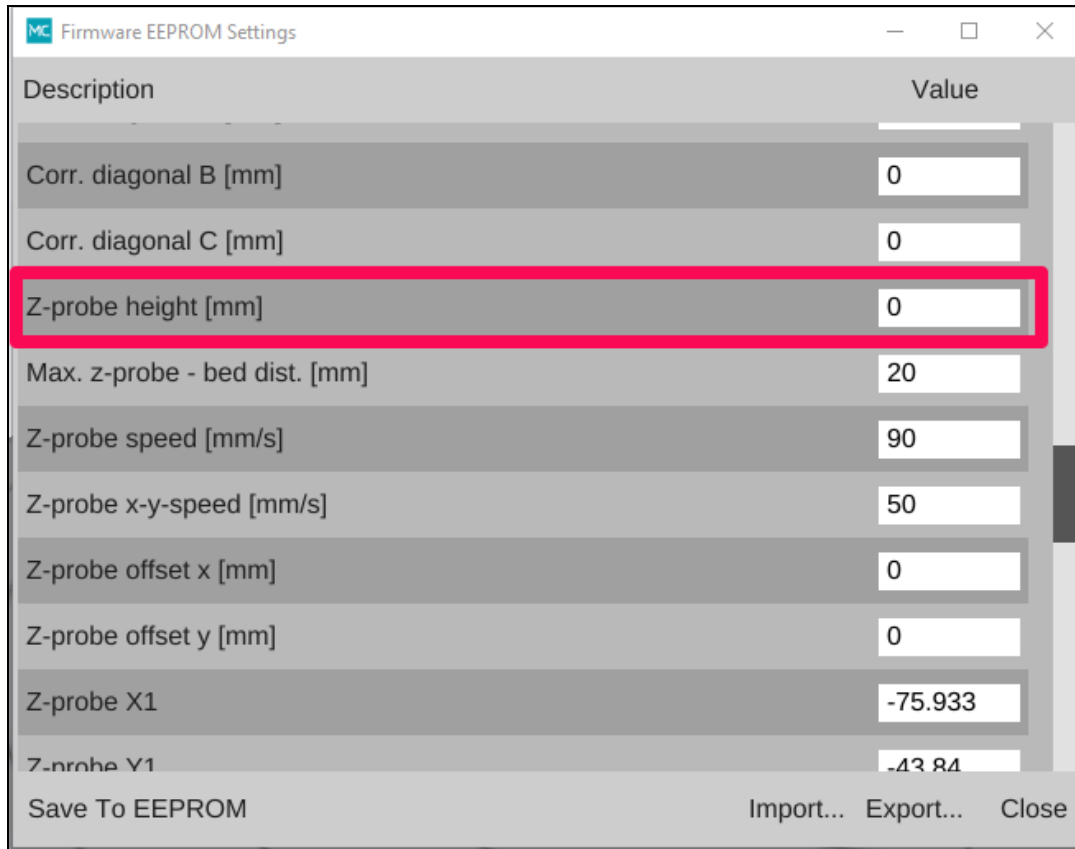# HE280 First Layer Issues

Problem: After running calibration, The first layer is too close / far away from the bed.

Solution #1: Ensure that your bed and nozzle are clear of any filament / glue / etc debris that will alter the result of the probing routine. After cleaning the nozzle and bed, send the G29 command again to re-calibrate the machine.

Solution #2: Apply a probe offset value in EERPOM. The accelerometer board are AWESOME! but they do have a certain board to board tolerance which can result with the nozzle either being too close / too far away from the bed. The compensation is an EEPROM value that is pretty easy to set. The steps are below:
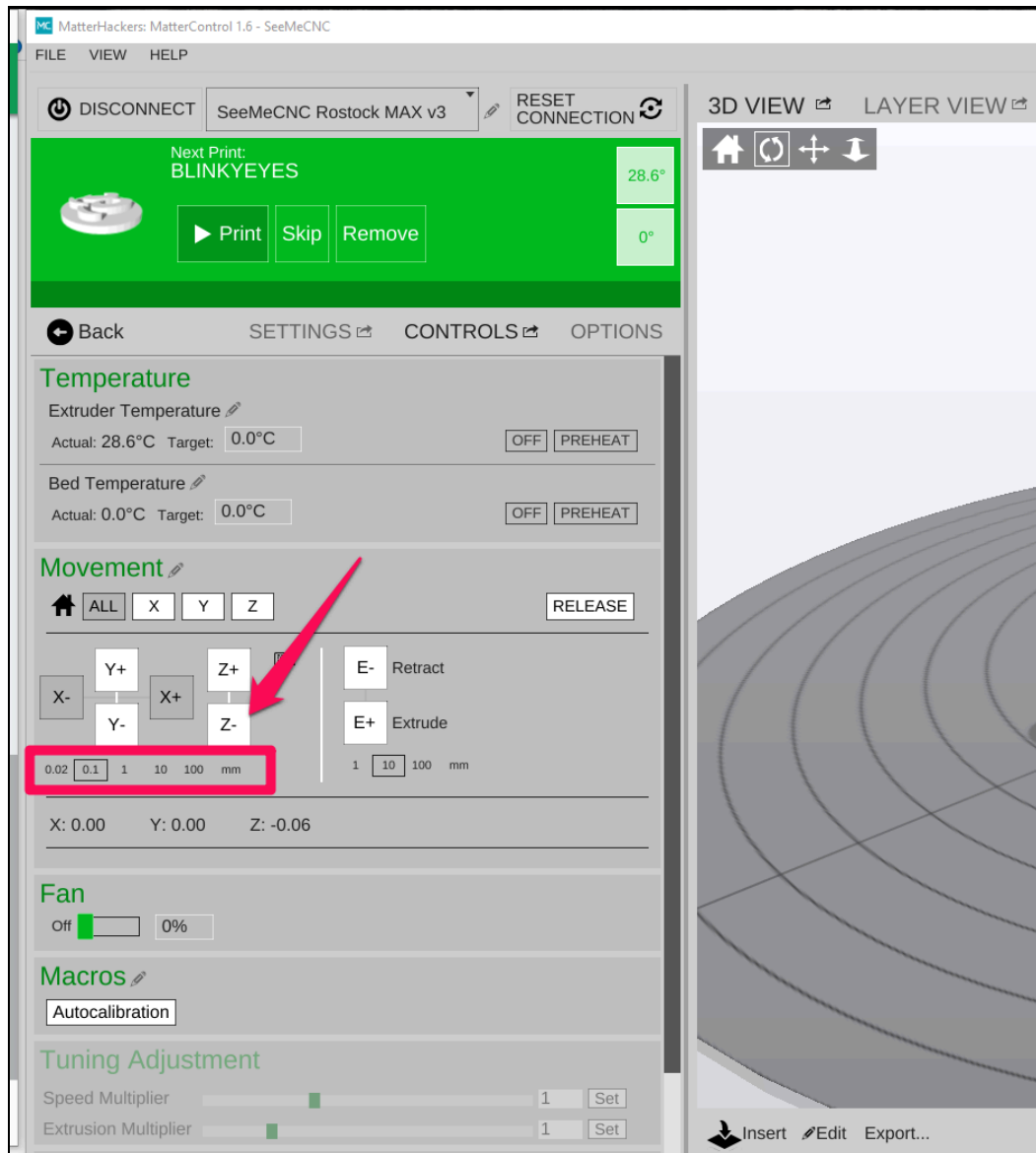
- Complete the steps above for solution #1 (including running G29 to calibrate)
- Home the printer (G28)
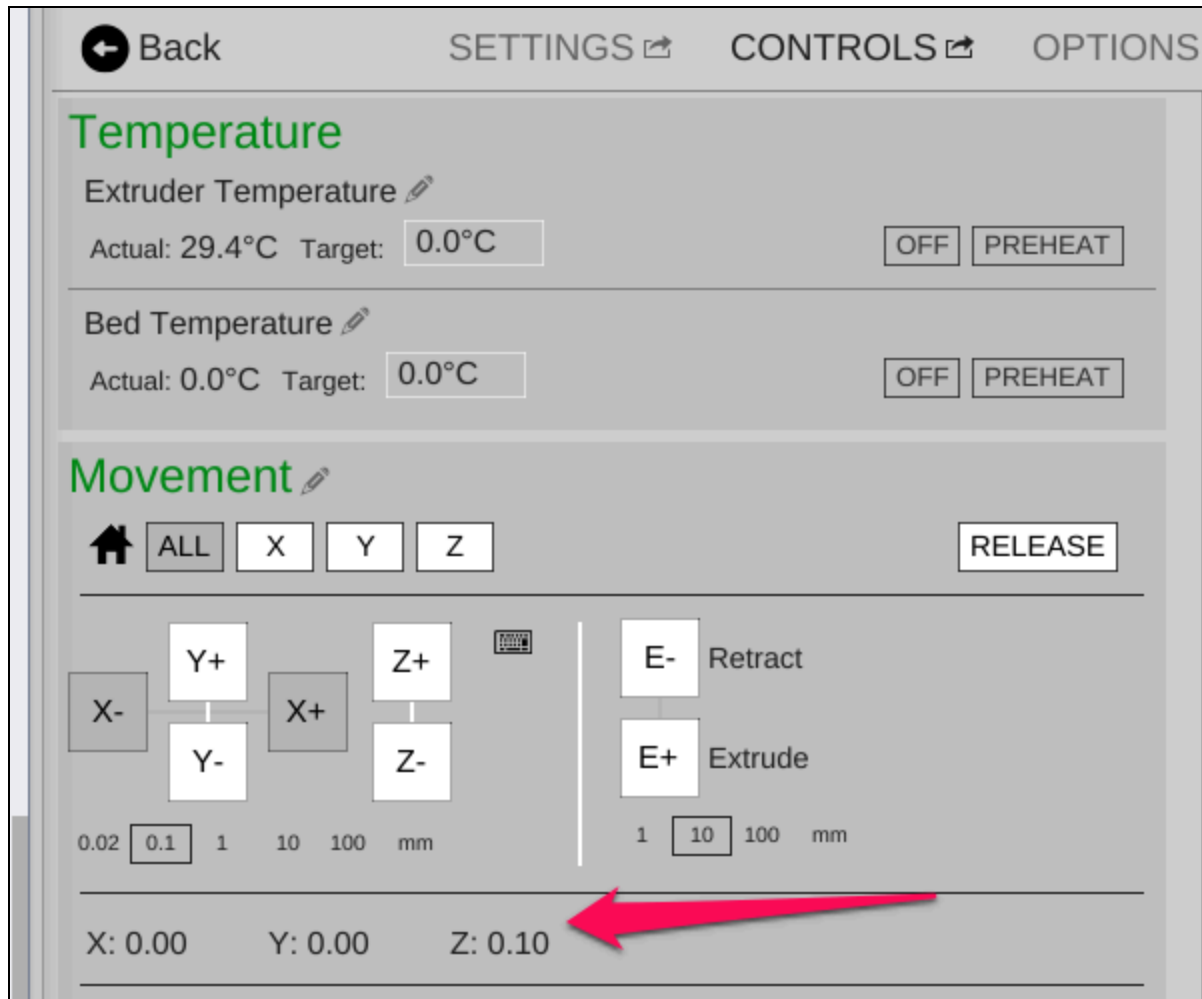- Access the EEPROM and set the Z-probe height [mm] to 0

Firmware EEPROM Settings

| Description	Value
Corr. diagonal B [mm]	0
Corr. diagonal C [mm]	0
Z-probe height [mm]	0
Max. z-probe - bed dist. [mm]	20
Z-probe speed [mm/s]	90
Z-probe x-y-speed [mm/s]	50
Z-probe offset x [mm]	0
Z-probe offset y [mm]	0
Z-probe X1	-75.933
Z-probe Y1	-43.84

Save To EEPROM   Import... Export... Close

- Save to EEPROM
- Run the probe routine again - G29
- When completed, use the manual controls in MatterControl to bring the nozzle down until it just makes contact with the glass plate. Be sure to change the precision levels of the manual controls as you get closer to the bed.

- When the nozzle is "just in contact" with the plate, not the Z value in MatterControl

Temperature

Extruder Temperature 🖉

Actual: 29.4°C   Target: 0.0°C   OFF   PREHEAT

Bed Temperature 🖉

Actual: 0.0°C   Target: 0.0°C   OFF   PREHEAT

Movement 🖉

🏠 ALL   X   Y   Z   RELEASE

Y+   Z+   ⌨   E-   Retract

X-   X+

Y-   Z-   E+   Extrude

0.02 0.1   1   10   100   mm   1   10   100   mm

X: 0.00   Y: 0.00   Z: 0.10

- If your value is positive, you will be applying a negative value (of that amount) in EEPROM. If the value is negative, you will be applying a positive value in EEPROM. So for the example given, the final applied value should be -.1
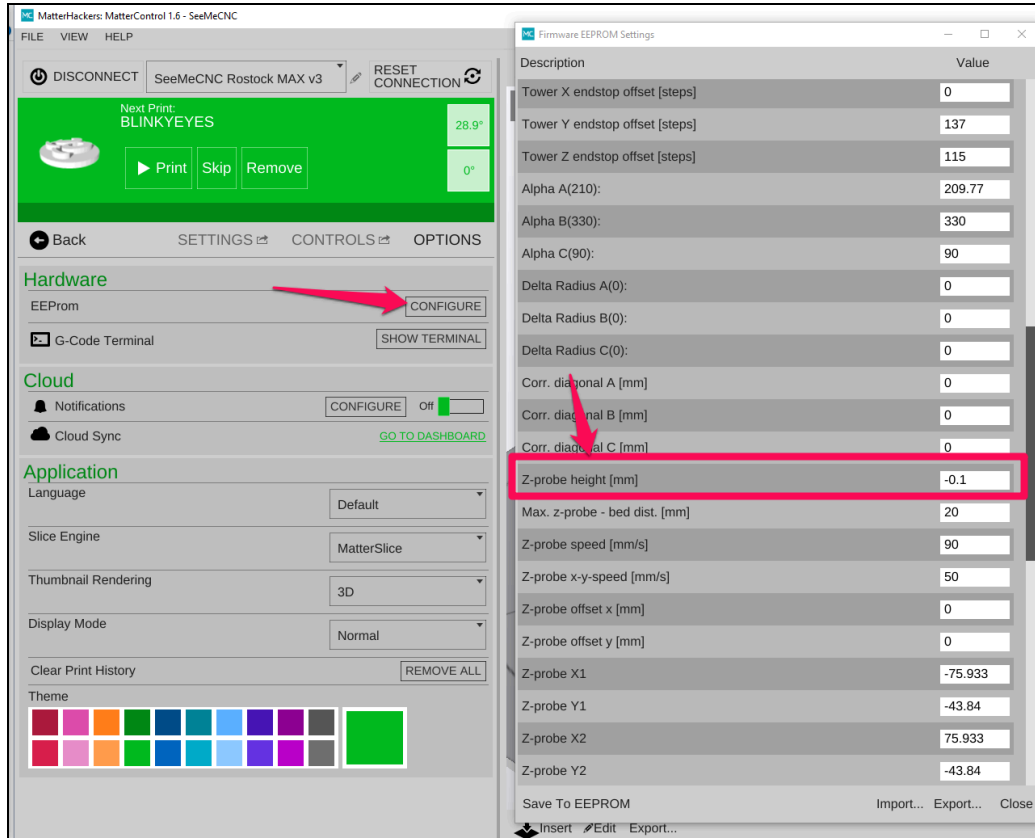
- Save the change to EEPROM
- Perform the G29 calibration a final time.