Auto leveling feaure user guide
(Z9V5Pro)

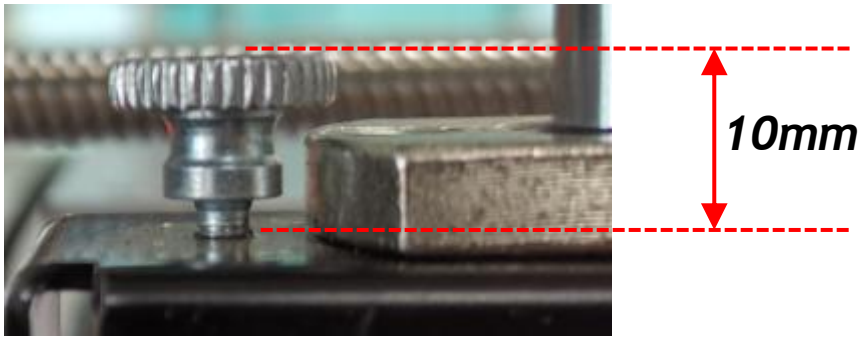
Bed Leveling Sensor: PL-08N Proximity Sensor

Firmware Version V1.0.9 or last

Note:
If the hot bed is enough level without auto leveling, don't use bed auto leveling feature, Bed automatic leveling will slightly reduce the printing quality and increase the printing time.

Prepare

Adjust the hotbed adjusting screws on the Z carrier, height is about 10mm

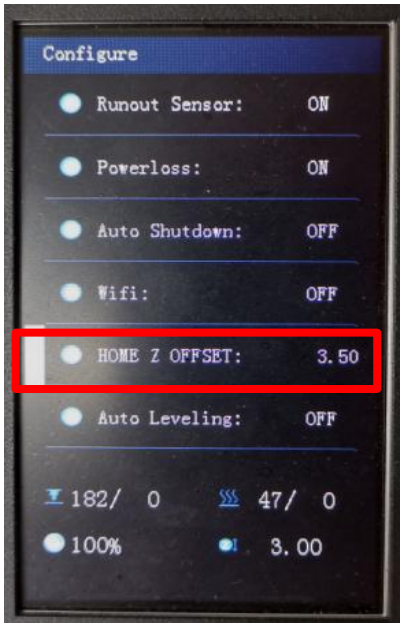


Set the **HOME Z OFFSET**, MENU>>Config>>Configure>>**HOME Z Offset**: x.xx

For SuperGlass, set to 3.5mm

Speical hotbed sticker, set to 0.4mm

Magnetic hotbed sticker: set to 1.0 mm

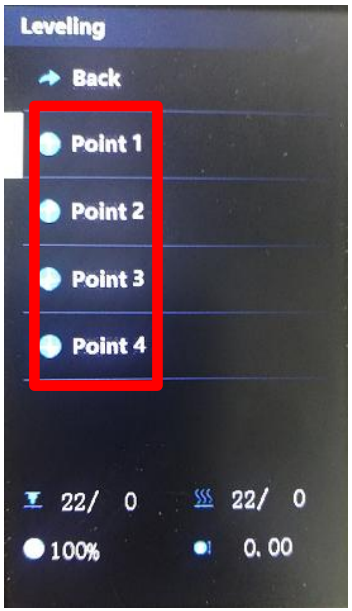


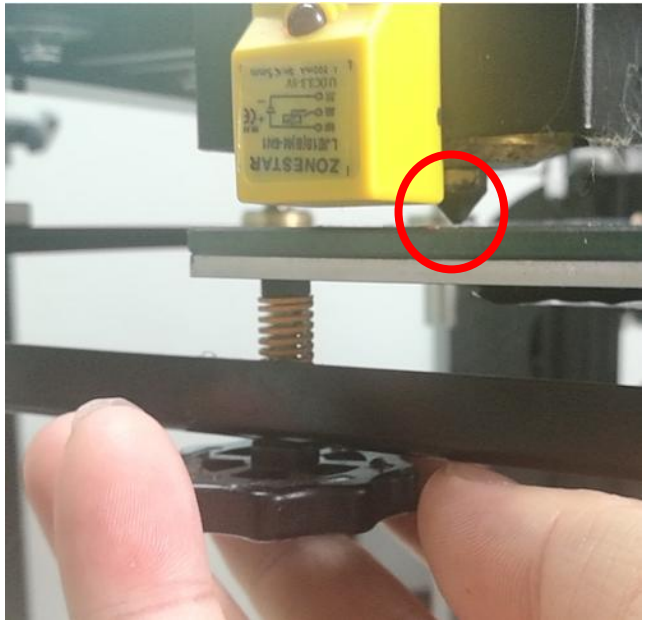
!ATTENTION!

HOME Z OFFSET is tell the printer the distance between the actual printing plane and the sensing plane. If you use different sensors and hotbed materials, you need to set this value. For example, if you use bltouch or zltouch, you need to set it to 0

Level Corners

1. Make sure the hotbed and nozzle are cool, clean the filament on the nozzle.
2. Turn on the 3d printer.
3. Do *Prepare>> Bed Leveling>> Point1~4.*
4. Adjust the screws under the hotend, let the nozzle almost to touch the hotend in the four corners.

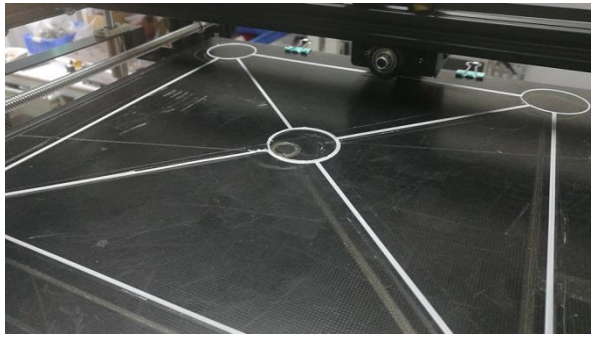


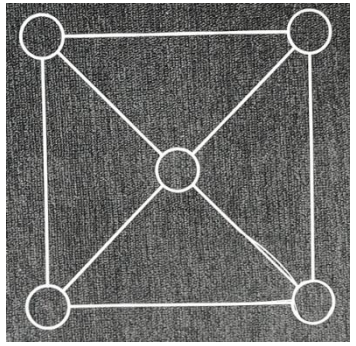


NOTE: If you moved the position the nozzle or Z ENDSTOP, you need to do this step again.

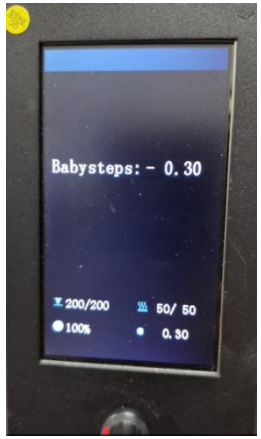
Print test file

After level coners, please try to print ”level_test_310.gcode” from SD card, and check if the hotbed is enough level.





Press the knob twice within one second to open the babysteps menu, and then rotate the knob to fine tune the distance from nozzle to hotbed.



NOTICE: if the hot bed is enough level, Don’t need to use bed auto leveling feature. You can ignore the below steps and start to print

Auto Leveling >>> Catch Z offset

Step 1. Do *Control>> Configure>> Auto Leveling(From OFF to ON) to* turn on "Auto leveling" menu

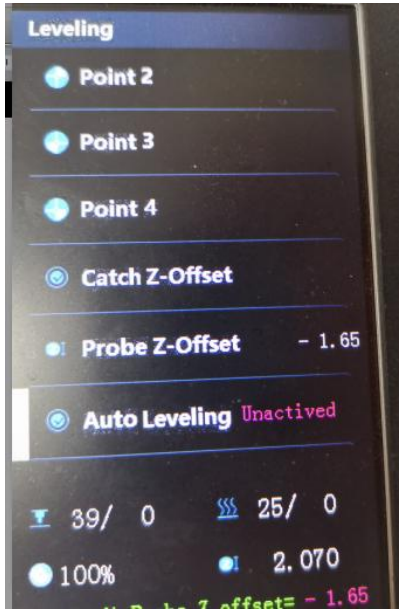
Step 2. Do *Prepare>> Bed Leveling>>Catch Z-Offset.*

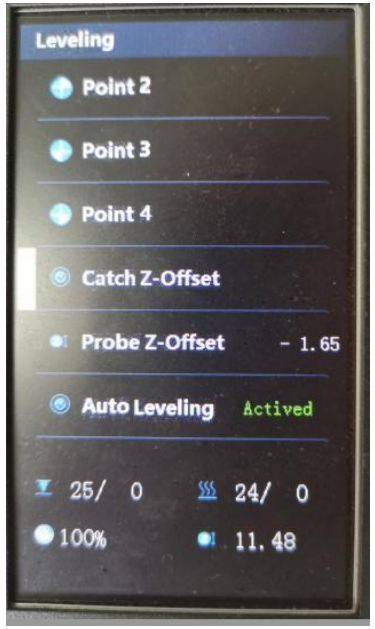
PS: if the HOME Z OFFSET is over(>=) 2mm, it will has a menu to remind *to remove the glass first. If you doesn't use a glass bed, just press the knob to continue.*

Auto Leveling >>> Leveling measure

Step 3. Do *Prepare>> Bed Leveling>>Auto Leveling.*

After measure done, the state of Auto leveling on Leveling menu will change from Unactived to Actived.

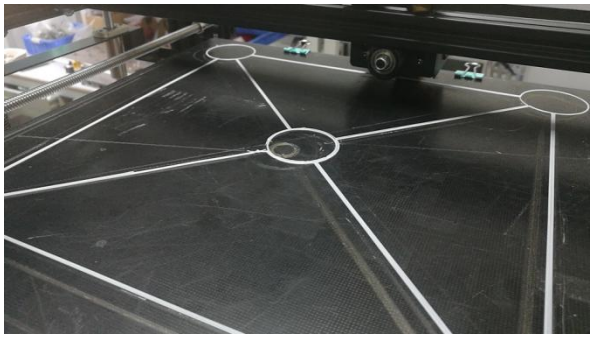


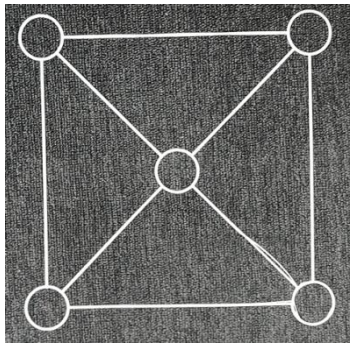


1. The measurement result should be between -1.0 to 1.0 mm. If it exceeds, it is recommended that you try to fine tune the printer or improve the flatness of the hotbed, because it may affect the printing quality.
2. If it is found that there is a large deviation in data arrangement between the Left/Right sides or the Front/Back sides, please adjust the bottom screw of the hotbed **(when the data is + turn down the hotbed, when the data is - turn up the hotbed)**.

Active auto leveling after printer reset

Step 4. Print the test file again refer to the page 4





Step 5. Do *Prepare>> Bed Leveling>>Active Autolevel*

Once power off, the bed autolevel feature will auto unactive, you need to turn on it on LCD menu.