

# Auto leveling feaure user guide (Z9V5Pro)

Bed Leveling Sensor: **ZL-Sensor**

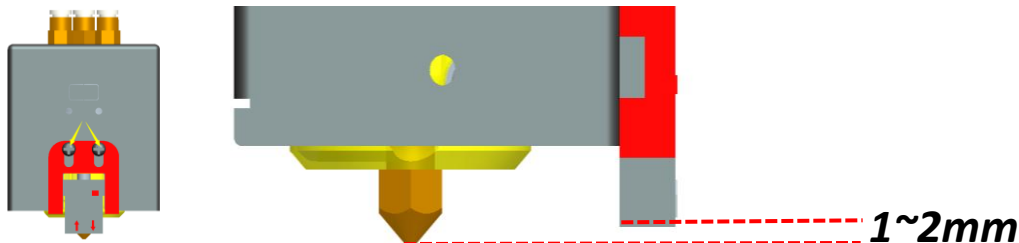
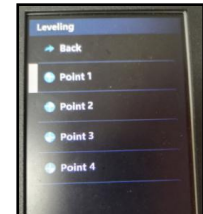
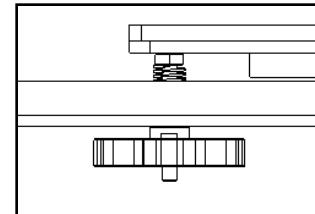
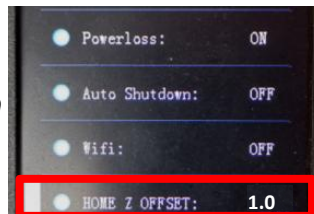
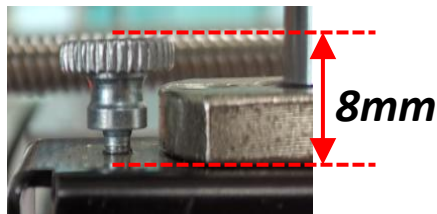
Firmware Version V2.0.0 or last

**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.

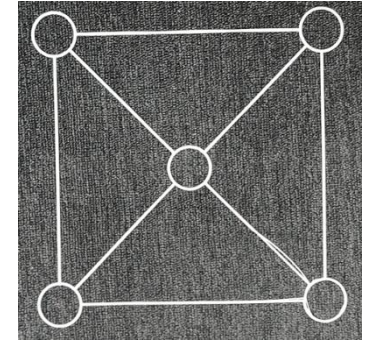
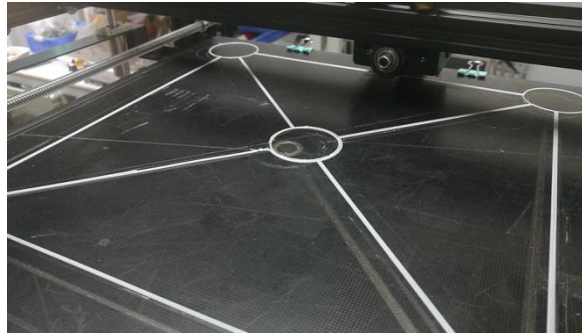
# Prepare

1. Adjust the hotbed adjusting screws on the Z carrier to is about 8mm height.
2. Set **MENU>>Config>>Configure>>HOME Z Offset: 1.0**
3. Make sure the hotbed and nozzle are cool, clean the filament on the nozzle.
4. Turn on the 3d printer.
5. Do **Prepare>> Bed Leveling>> Point1 ~ Point4.**
6. Adjust the screws under the hotend, let the nozzle almost touch the bed at the four corners.
7. Check if the bottom of the leveling sensor is higher 1~2mm than the nozzle, move it if need.



# Print test file

After leveled coners, please 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: ON* to turn on “Auto leveling” menu



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



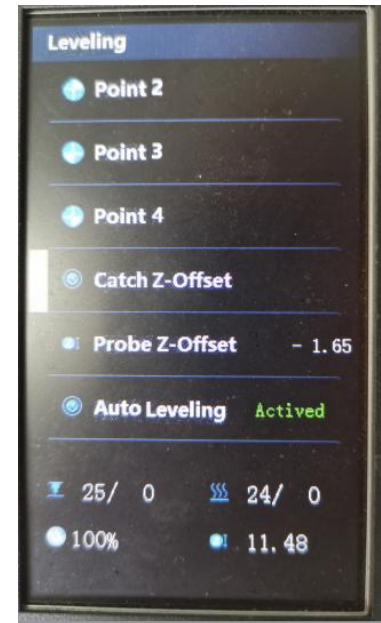
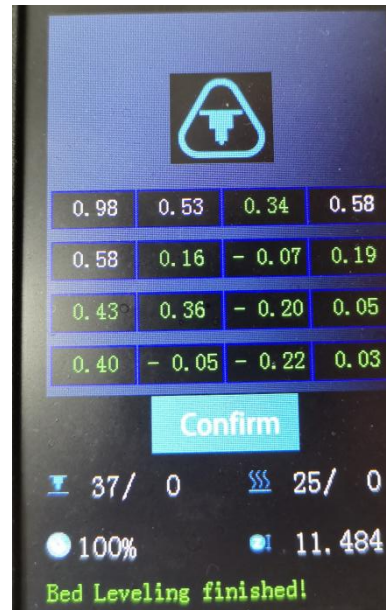
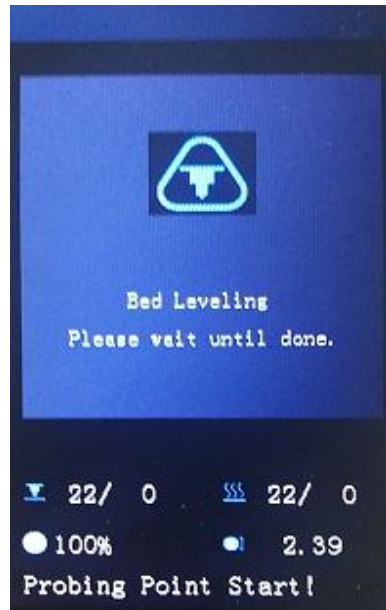
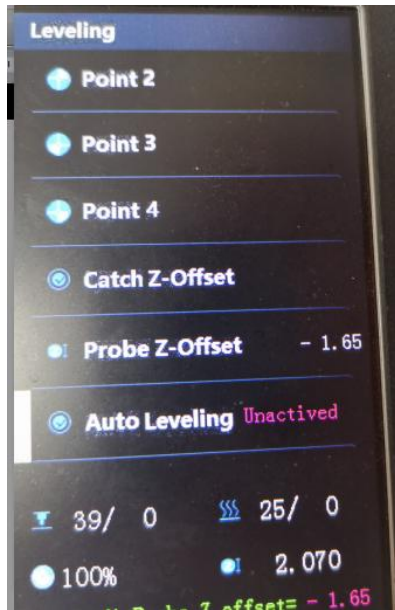
If Catcha Z offset is failed, to check:

1. The leveling sensor wire connect well?
2. The leveling sensor installed too high? - The bottom of leveling sensor should be higher than the nozzle about 1~2mm.

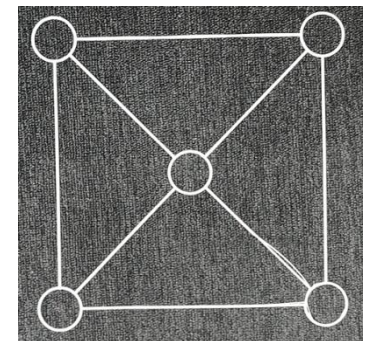
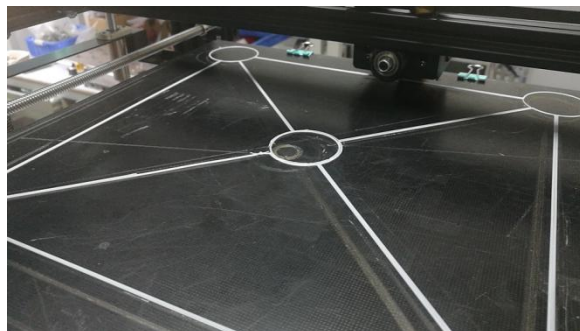
# Auto Leveling >>> Leveling measure

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

After measure done, the state of Auto leveling on Leveling menu will change from **Unactivated** to **Activated**.



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





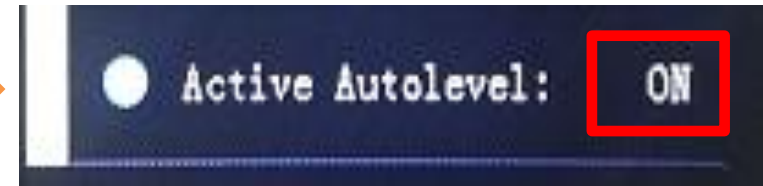
# Active auto leveling after printer reset

Auto leveling feature will be disabled automatically when the printer resets, you can turn it on manually from the LCD screen.

Step 1. **Menu>>Prepare>> Auto Home**

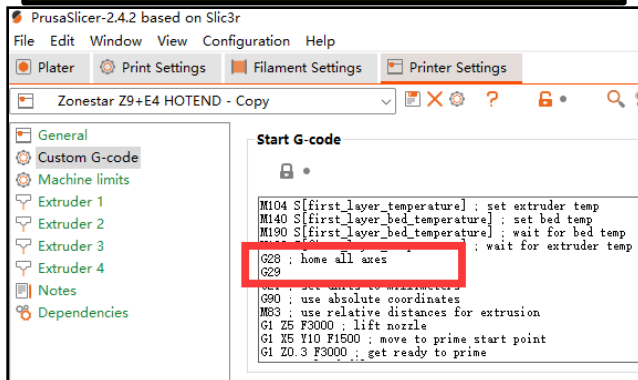
Step 2. **Motion>> Control>> Configure>>Active autolevel: ON**

**NOTE: After doing these 2 steps, the printer will apply stored leveling correction parameters in the last "bed level".**

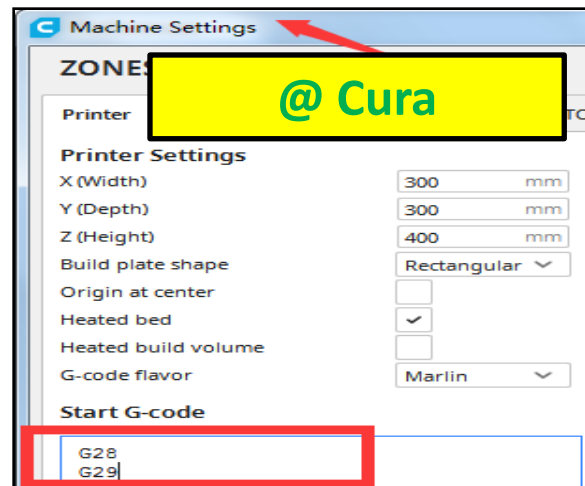


Also you can let the printer do bed auto leveling for each printing, only need to add a "**G29**" command (following the G28 command) in the "**start gcode**" of printer(machine) settings of the slicing software.

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