

ABL Magnetprobe Anycubic i3 Mega MK4 Carrier



FoxMckraut

[VIEW IN BROWSER](#)

updated 2. 3. 2022 | published 1. 3. 2022

Summary

Magnetprobe instead BLTouch on i3 mega S but works also on other printers.

[3D Printers](#) > [3D Printers - Upgrades](#)

Tags: [anycubic](#) [anycubici3mega](#) [autobedleveling](#) [autolevel](#)
[i3megas](#)

What you need:

Mk4 Carrier

1x **Microswitch** it needs to be normally closed(NC)

1x4M3

2x3M3

4 **Magnets**

the printed parts. For the bottom its better to use ABS, ASA, PC or Nylon because the bed of the most is more than 60°C hot at printing and meshbedlevel on a hot bed is the best way you can level.

You need a Ground and a i/o pin from your board. For me it is PH1 on the Trigorilla board.(marked on the pic)

my klipper config looks like this:

```
[probe]
pin: ^PH1
x_offset: 25.90
y_offset: -24.1
speed: 5.0
samples: 2
sample_retract_dist: 2.0
samples_result: average
samples_tolerance: 0.100
samples_tolerance_retries: 0
```

for i3 mega S as special the meshbed macro but you can use your own too:

```
[bed_mesh]
speed: 80
horizontal_move_z: 8
mesh_min: 27,10
mesh_max: 210,195
probe_count: 5,5
fade_start: 0.5
mesh_pps: 2,2
fade_end: 10
relative_reference_index: 12
```

```
[gcode_macro G29]
gcode: BED_MESH_CALIBRATE
```

solder 2 cables on the microswitch for NC.

put the Microswitch in the bottom part. if needed use glue.

the 2 cables go up to the hole.

Put 2 Magnets on the top side of the Bottom part. Over the first magnet place one of the cables than put the other magnet on it so the cable is fixated by the magnets. They should sit tight(hammer needed)

same on the other side. put 1 magnet on every side in the top part take the cables through the top part and place it on the first magnet. Than the other magnet on top of it. BE AWARE!!! put the magnets the right way around that the bottom part glues on the top part!

if you ask: Why is there a lever on the bottom part?

it is because i wanted to build a Parking spot for the probe so the carrier can get the probe before the print and put it back after probe is finished. Thats how it is usually used on xycore. For bedslinger its more tricky and im still working on it.

When everything is placed, soldered and programmed: start the mesh bed leveling :)

Commands:

"probe_calibrate" for zoffset of the probe.

"probe" to test the probe

"g29" to start mesh bed leveling.

Besonderer Dank geht an @AnakinCaesar und @Rejd für die unterstützung bei diesem Projekt.

Model files



11_bltouch_mount_e3d_v5.stl



11_bltouch_mount_e3d_v6.stl



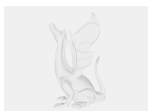
04_cover_plate_e3d_v5_bltouch_tbi.stl



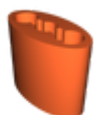
04_cover_plate_e3d_v6_bltouch_tbi.stl



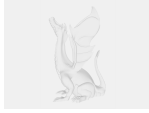
bottom_magnetprobe_mk4_carrier_anycubici3megas-v6.stl



bottom_magnetprobe_mk4_carrier_anycubici3megas-v6.ipt



top_magnetprobe_mk4_carrier_anycubici3megasv2.stl



top_magnetprobe_mk4_carrier_anycubici3megasv2.ipt

License ©

This work is licensed under a
[Creative Commons \(4.0 International License\)](#)



Attribution

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✓ | Commercial Use
- ✓ | Free Cultural Works
- ✓ | Meets Open Definition