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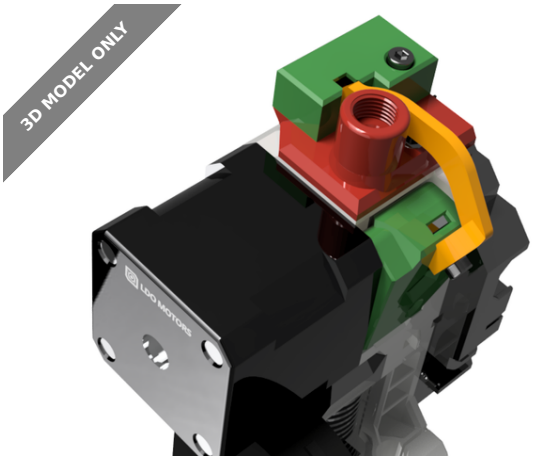

Prusa MMU2S Door Sensor for Bear Extruder and MK3S Sensor

v vertigo235

VIEW IN BROWSER

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Summary

7/5/2019: Everything is synced up with the bear 0.7.0 extruder release, I also updated the FS cover to allow usage of...

3D Printers > 3D Printers - Upgrades

Tags: prusa mmu mk3s mmu2s mmu2 bear prusammu2

7/5/2019: Everything is synced up with the bear 0.7.0 extruder release, I also updated the FS cover to allow usage of the M2 screw that comes with the MMU2S upgrade kit. The FS cover and FS cover cap were changed to accommodate this.

6/7/2019: Added latest parts that are compatible with the latest bear MK3S extruder design (dev branch). These parts all have a prefix of "bear_dev_190604"

5/25/2019: Updated passthrough body to sync with latest bear dev design, per Greg's notes should improve heatsink cooling efficiency. Also improved bridging over the 3d printed filament path above gears.

5/23/2019: For those 100% committed to the cause, I have added a passthrough body, this guts out all the mk3s sensor parts at the top of the body and allows you to feed your MMU2S feed tube almost all the way down to the gears (bear_dev_passthrough_body_v3.stl). If you use this you do not need the plug parts.

5/17/2019: Updated arm to allow more clearance around bowden coupler stack (Sensor_Arm_v4.stl), updated cover to have taller stack (fs_cover_v4.stl), this helps prevent from bumping the arm when unscrewing a bowden coupler. Added a new ball bearing plug with tighter tolerances to prevent filament from hanging up on edges of walls (Ball_Bearing_Plug_01_v3.stl) I recommend printing the arm and plug at .1mm layer heights.

5/7/2019 Update: Updated the cover to allow PTFE to go all the way through and butt up against the body.

4/26/2019 Update: Updated the sensor arm to beef it up a little near the tip, I recommend pringing this at .10mm layer heights, or .15mm at least

4/25/2019 Update: I have uploaded new files that are compatible with the new bear extruder DEV branch. These should also work with the supplied molex connector. The sensor is shifted forward and requires the curved arm. Print the arm as it is oriented when loaded into your slicer. I recommend a brim. I have not yet tested the new design but hope to install it shortly.

This is an adaptation of the Prusa MMU2S door sensing mechanism.

You will need the parts that came with the MMU2S mod (IR sensor, the M2 Screw), you will not be using the magnets or the steel ball.

You will need 2 extra M3x10 screws and 1 of the thin square nuts.

The arm is removable and adjustable.

You will want to update your Single extruder multimaterial parameters in Prusa Slicer. Here are the settings that I am using.

Cooling tube position: 35
Cooling tube length: 15
Filament perking position: 85
Extra loading distance: -16

Print instructions

Unassociated tags: mk2.5s
Licence: GNU - GPL Category: 3D Printer Parts

Model files

bear_070_mk3s_mk25s_passthrough_body_v1_6614.stl

bear_070_cover_v1stl_6614.stl

bear_070_sensor_arm_v1_6614.stl

bear_070_extruder_idler_bondtech_v1_6614.stl

bear_070_plug_wedge_v1_6614.stl

bear_070_extruder_idler_bondtech_v1.stl

bear_070_plug_wedge_v1.stl

bear_070_cover_v1stl.stl

bear_070_mk3s_mk25s_passthrough_body_v1.stl

bear_070_sensor_arm_v1.stl

bear_070_plug_v1.stl

bear_070_cover_cap_v1.stl

Find source .stl files on Thingiverse.com

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