



Four Color ROME 4 to 1 Filament Entry with Sensor (for orbiter2)



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Summary

This is for a 4 color ROME setup (see photo)

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Tags: [multicolor](#) [filament](#) [rome](#) [filamentsensor](#) [orbiter](#)
[orbiter2](#) [4colors](#) [orbiterv2](#) [4way](#)

Update Feb 15 2024 Removed support block file it needs slight changes to be more effective. Updated my rome.txt file (rome.cfg)

*** Print the 4 to 1 filament entry with the 4 way bowden couplers side facing the bed. No supports necessary ***

I have a 4 color ROME setup (for more information on Helge Keck's ROME see link: <https://github.com/HelgeKeck/rome>) on my vcore3.1-500 with v1 enclosure. It was remixed from this design: <https://www.printables.com/model/441886-vcore3-rome-alternate-prints-with-ebb42-toolboard->

My 4 color setup also uses a filament cutter: <https://www.printables.com/model/647352-filament-cutter-for-eva3-orbiter-rapido>

And I also use elements of this toolhead design: <https://www.printables.com/model/589678-eva-mod-for-orbiter2-rapido-beacon-ebb42-toolboard>

To prevent de-spooling during color changes I use this design: <https://www.printables.com/model/516380-one-way-filament-guide>

I have attached a step file of the 4 way filament sensor for you to mod as you wish.

I have also attached my rome.cfg for your reference.

I added an additional mcu to my vcore3 to handle the two additional steppers. (SKR MINI E3 V3). All that was needed was these lines in my printer.cfg:

```
[mcu skrmini]
serial: /dev/btt-skr-mini-e3-30
```

This setup works amazingly well.

Hardware for the 4 to 1 filament entry: 5mm diax2mm magnet, 6mm dia carbon steel ball and a microswitch exactly like this: https://www.amazon.com/Cylewet-25Pcs-Switch-Arduino-CYT1073/dp/B073TYWX86/ref=sr_1_8? And for the filament entry self thread this exact style: <https://www.amazon.com/dp/B08QMRLPC5?>

For mounting info see the second link at the top of this description.

This remix is based on



VCORE3 ROME alternate prints with EBB42 toolboard mount

by billyd

Model files



filament_4way_with_sensor_rome_short.stl

filament_4way_with_sensor_rome.stp

Other files

rome.txt

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