



Christmas Ball with Intersecting Diamonds



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[VIEW IN BROWSER](#)

updated 29. 11. 2024 | published 29. 11. 2024

Summary

An elegant new design for the Christmas tree



6.60 hrs



2 pcs



0.15 mm



0.40 mm



PLA



28 g



Prusa
MK3/S/S+

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Tags: [christmas](#) [art](#) [abstract](#) [ornament](#) [holiday](#) [fine](#)
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Update: I've uploaded new PrusaSlicer 3MF and GCODE files (look for "New settings" in the file names). These keep the hot end at 190C and use other techniques to cool the filament, so it's less likely to clog. I made a few other changes, too, so it's a little faster, uses less filament, and the final print is lighter.

An elegant holiday decoration created by overlapping diamond patterns over a basic ball with stem. The ornament is printed as a single piece. It requires some infill, but only in certain places.

The ornament prints very well with the standard 0.4mm nozzle but prints even better with a 0.25 nozzle.

I've provided my PrusaSlicer 3mf file (for 0.4mm nozzle), which includes all the height adjustments to minimize weight while providing the necessary top, bottom, and infill needed for a beautiful print. Some supports are needed, but not a lot. I used organic supports.

I included GCODE in my 3MF file to reduce the nozzle temp at key places to avoid having the filament overheat. The nozzle starts at 200c and decreases at key points down to 180c. You may need to adjust these based on your filament.

The filament shown is MatterHackers Quantum Purple Gold. The design will look good in a variety of filaments, from single color silky or glitter filaments to rainbow and 2 or 3 color filaments.

Have fun and if you like how it turns out, please post a make.

Happy holidays!

Model files



quad-four-point-diamond-ball-final.stl



quad-four-point-diamond-ball-new-settings-v2.3mf



quad-four-point-diamond-ball-final.3mf

Print files



quad-four-point-diamond-ball-new-settings-v2_04n_01... .gcode

PLA 0.40 mm 0.15 mm 6.60 hrs 28 g Prusa MK3/S/S+



quad-four-point-diamond-ball-final_04n_015mm_pla_mk... .gcode

PLA 0.40 mm 0.15 mm 7.19 hrs 33 g Prusa MK3/S/S+

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