

110mm mechanical iris



Wire

[VIEW IN BROWSER](#)

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Summary

This print is for a mechanical iris with a open ID of 110mm and a overall OD of 180mm minus mounting lugs.



10.65 hrs



3 pcs



0.10 mm
0.20 mm



0.40 mm



PLA



106 g



Prusa
MK3/S/S+

[Hobby & Makers](#) > [Mechanical Parts](#)

Tags: [iris](#)

This print is for a mechanical iris with a open ID of 110mm and a overall OD of 180mm minus mounting lugs. Files include cad drawings in FreeCad 0.19, STLs, PuraSlicer 2.4.1 3mf files, and pre sliced gcode for a i3 MK3.

If you re slice note the petals were designed for a 0.1mm layer height and a 0.4mm nozzle.

All the other parts can be printed at a 0.2mm layer height and 0.4mm nozzle.

Infill was 15% for all parts and no supports.

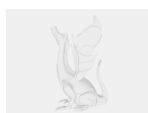
The pegs are set up to accept a #12 (imperial) nut. Note they like to break off if you force things. I used a die to partial thread the pegs to use normal nuts. A “speed nut” would be a better choice for this assembly but did not have any on hand.

When stacking the petals I got better results when stacked as shown.

Model files



top-ring-meshed.stl



110mm_iris.fcstd

FreeCAD 0.19



mounting-ring-meshed.stl



petal-meshed.stl

24 needed to make 1 iris

Print files



petal-meshed_01mm_pla_mk3s_2h45m.gcode

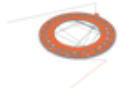
PLA 0.40 mm 0.10 mm 2.75 hrs 15 g Prusa MK3/S/S+

2 sets needed for one iris



mounting-ring-meshed_02mm_pla_mk3s_4h40m.gcode

PLA 0.40 mm 0.20 mm 4.66 hrs 53 g Prusa MK3/S/S+



top-ring-meshed_02mm_pla_mk3s_3h15m.gcode

PLA 0.40 mm 0.20 mm 3.24 hrs 37 g Prusa MK3/S/S+

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