Switch-Operated Rotating Phone Stand 3D Printing Guide

3D Printing Summary (Prusa MK4)

Metrics	Servo Base
Total Print Time (min)	610min
Total Number of Components	1
Typical Total Mass (g)	261.84g
Typical Number of Print Setups	1

3D Printing Summary (Prusa MK3S)

Metrics	Adapted Phone Mount
Total Print Time (min)	616min
Total Number of Components	1
Typical Total Mass (g)	100.84 g
Typical Number of Print Setups	1

3D Printing Settings (Prusa MK4)

Print File Name	Qty	Total Print Time (hr:min)	Mass (g)	Infill (%)	Support (Y/N)	Layer Height/ Nozzle Diameter (mm)	Notes (orientation, special settings, etc.)
Servo_Base.stl	1	10:10	261.84g	15	Y (on build plate only)	0.3/0.4	Print in orientation given in STL Used 0.20mm STRUCTURAL rather than speed

Files available at https://github.com/JMura18/Phone-Stand-Template

Switch-Operated Rotating Phone Stand 3D Printing Guide

3D Printing Settings (Prusa MK3S)

Print File Name	Qty	Total Print Time (hr:min)	Mass (g)	Infill (%)	Support (Y/N)	Layer Height/ Nozzle Diameter (mm)	Notes (orientation, special settings, etc.)
Phone Stand Parts.stl	1	10:16	100.84g	15	Y (on build plate only)	0.3/0.4	Print in orientation given in STL Used 0.20mm QUALITY rather than speed

Post-Processing

It is good to use support for this device. I chose to let my slicer program, the Prusa slicer, automatically insert supports on the build plate only. I also chose to use 0.20mm structural/quality instead of speed, so that the build has a higher chance of being printed stably. I had access to two different printers, the MK4 and the MK3S, during this time. This is likely why the phone stand took so much longer, relatively, when comparing overall mass to the servo base. If printing using different printers, expect different speeds of printing.

Customization Options

The user can request the color of the stand or any other custom markings they may want on the device.

Switch-Operated Rotating Phone Stand 3D Printing Guide

Examples of Quality Prints

Below are pictures of what the quality of the print is expected to look like:

Phone Stand:



Servo Base: