

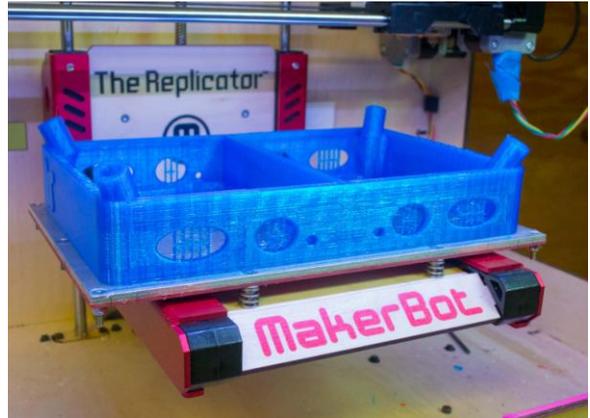
3D Printing guide for the KAPtery [Titan 2 Rig Kit](#)

Parts List and User Guide at KAPtery.com/guides

For spare parts: KAPtery.com Technical support: <http://kaptery.com/contact/>

Files at Thingiverse

Below are some typical settings for printing on a Makerbot Replicator 1 with PLA filament, single 0.4 mm MK8 nozzle, 205° to 215°C, build plate at 45°C. These are hot temperatures for PLA, but with many brands, cooler temperatures will not produce parts strong enough to trust with your camera in the air.



Layer height = 0.2 mm, base print speed = 120 mm/second, travel speed = 200 mm/second (acceleration is ON).

The dual camera tray was designed to be as large as a MakerBot Replicator 1 could print.

I print all leg brackets from ABS for extra resilience.

Slicing: I have sliced these parts with good results in both MakerWare and Simplify 3D, except that the large dual-camera tray would not slice properly in Simplify 3D.

For other printers, slicers, and materials different settings may be appropriate.

Upper frame:

- *Position:* The frame must lie on its back with the printed labels upward. The model has tabs at the end of each arm to improve adhesion to the build plate there.
- *Size:* The long dimension of the part should be 155 mm.
- *Support:* ON (required for the suspension attachment bracket on top, otherwise none is needed)
- *Infill:* 25%
- *Shells:* 2
- *Time:* 3.8 hours

Leg brackets:

- *Material:* Inserting dowels into the tubes can crack the plastic, so I print these in ABS.
- *Position:* Lay horizontally on the flat back.
- *Size:* The long dimension should be 36.3 mm
- *Support:* OFF (otherwise you will have to ream the support structures out of the long tube)
- *Infill:* 35%
- *Shells:* 4
- *Time:* 1.3 hours (for two)

Dual Camera tray:

- *Position:* Lay upside down with “Titan 2” facing up.
- *Size:* The long dimension should be 215 mm. This just fits on the build tray of the Replicator 1. Ensure good adhesion so the corners do not curl up (they will otherwise).
- *Support:* OFF – This model can be printed with support off because support structures for the oval windows have been added to the model itself. This version slices well in MakerWare. Simplify 3D would not slice these fine structures, nor would it slice other parts of the model properly.
- *Infill:* 25%
- *Shells:* 2
- *Time:* 8 to 9 hours

Single Camera tray (regardless of model):

- *Position:* Lay upright on bottom.
- *Size:* The long dimension should be 140 mm
- *Support:* ON (just for the curve at the base of the sides)
- *Infill:* 25%
- *Shells:* 2
- *Time:* 2.5 to 3 hours