Moddler™

2325 Third Street, Suite 342
San Francisco, CA 94107

T (415) 252-1063
F (415) 230-5607

www.moddler.com
info@moddler.com

HOW TO PREPARE DIGITAL FILES FOR 3D PRINTING WITH MODDLER

File Formats Accepted:
.stl, .obj, .ztl, .iges, .mb, .max, .3ds

Polygons Only
Our 3d printer only understands explicit geometry. All files that we receive ultimately end up as .stl files before being sent to be printed. This format is quite old and contains very little information: vertices, edges, normals and scale. There is no implicit geometry like patches, nurbs or subdivision surfaces. So make sure your implicit geometry is converted to explicit polygons before sending it to us.

Turn off smooth shading while modeling
Smooth shading is controlled by your software and hardware and changes the look of the geometry. Use a faceted shading method that allows you to see each polygon explicitly. This is how your model will look when printed.

No Bitmaps
We cannot accept bump, normal, displacement or texture maps, due again to the need for explicit geometry. If you color variation, so we cannot accept texture maps.

Closed Geometry
All the objects that make up your model must be closed or “watertight”. Overlapping geometry works fine as long as there are no unattached edges. (We can easily Boolean a large amount of objects at once.)

Appropriate amount of geometry
Make sure you have enough geometry on your curved surfaces to prevent faceting. This will of course depend on the size of the model you are printing.

Feature size
In general, long thin features are difficult to print. A rule of thumb is for every 1mm of length a feature should be .5mm thick. So, a 5mm long robot’s antenna would need to be about 2.5mm in diameter to survive once printed.

Scale
Be aware of the final size of the object you will be printing. Think about how large the final print will be. Don’t put too much geometry in a spot that will only be a few millimeters across.

Structural integrity
Will your model be able to support itself? Beware of chicken-like proportions: a large body supported by thin legs. The legs could easily break during shipping or from the weight of the heavy body.