

Blender Object Conversion for Gryphon 3D Engine Lib V2

3D Engine File:

<http://www.lexaloffle.com/bbs/?tid=28077>

Python script:

http://s000.tinyupload.com/index.php?file_id=56902566375777023329

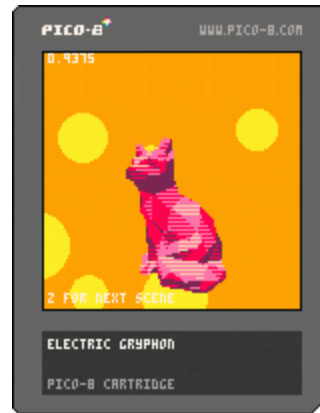
Python Download:

<https://www.python.org/downloads/>

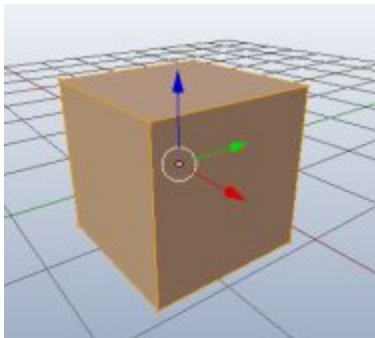
(Download version 2.7)

Blender Download:

<https://www.blender.org/download/>

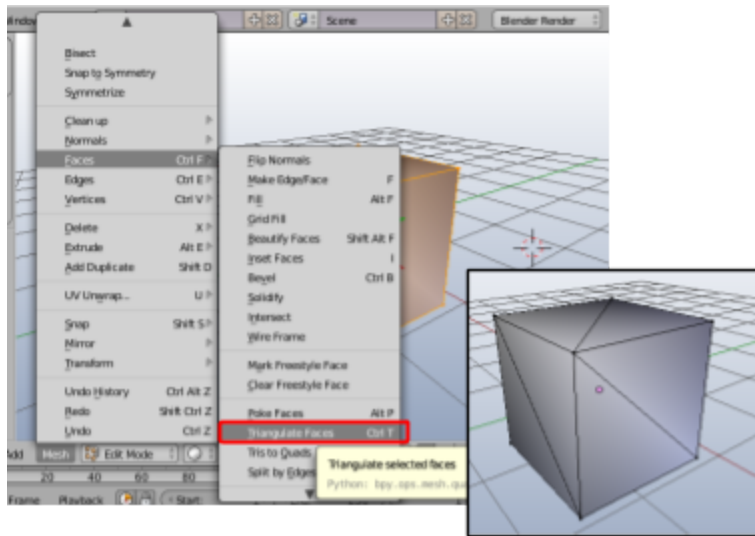


1. Load model in Blender (I'm using Version 2.72b)
2. Enter object edit mode
3. Select All Faces <a>

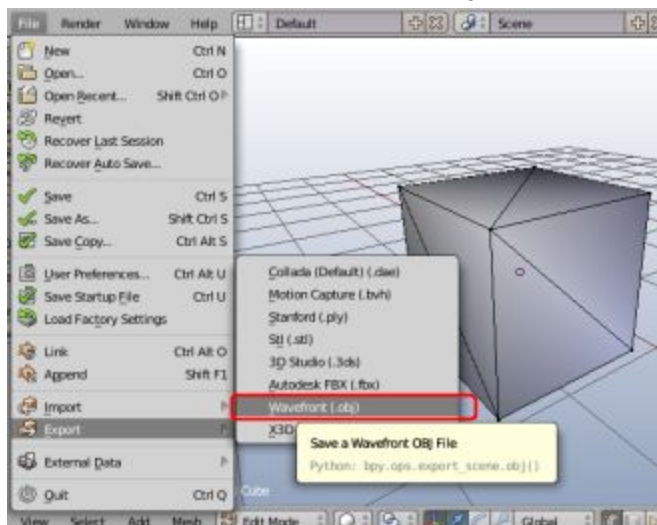


4. Select Mesh->Faces->Triangulate Faces

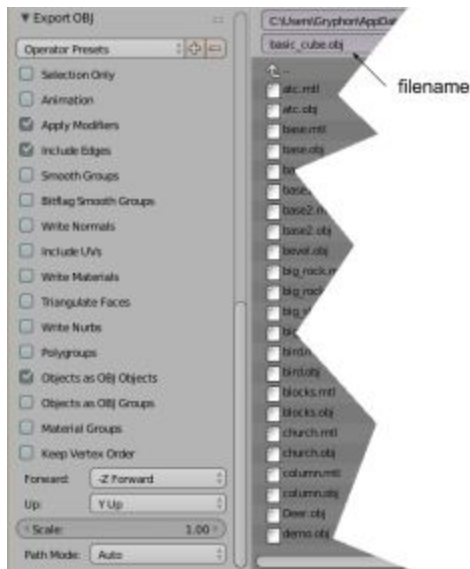
Faces need to be triangulated. The engine doesn't handle quads right now.



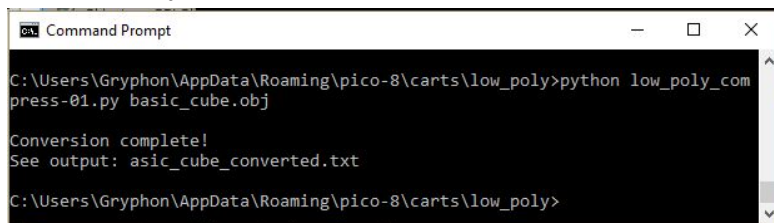
5. Select File->Export->Wavefront (.obj)



6. Set export settings as shown:



7. Place python script in same folder as file.
8. Open a Command Prompt window in that folder.
9. Run: `python low_poly_compress-01.py <filename>.obj`
(This is for Python 2.7)



10. File will look like this when opened in a text editor:

basic_cube.converted.txt

```
model_v="0100ff00ff000100ff000100ff00ff000100ff00ff0001000100ff0000ff0100
0100ff0001000100ff000100ff00"
model_f="02030408070601050602060707080401040801020405080602010603020703070405
0108"
```

- Copy these two strings to your Pico 8 file.
- Example main code section:

```
...
-----end copy-----
-----electric gryphon's 3d library-----

model_v="0100ff00ff000100ff0000100ff00ff000100ff00ff00ff0001000100ff0000ff0100
0100ff0001000100ff000100ff00"
model_f="02030408070601050602060707080401040801020405080602010603020703070405
0108"

function  init()
```

```

    cur_frame=0
    init_3d() --need to call init_3d() to set up player, camera and lights

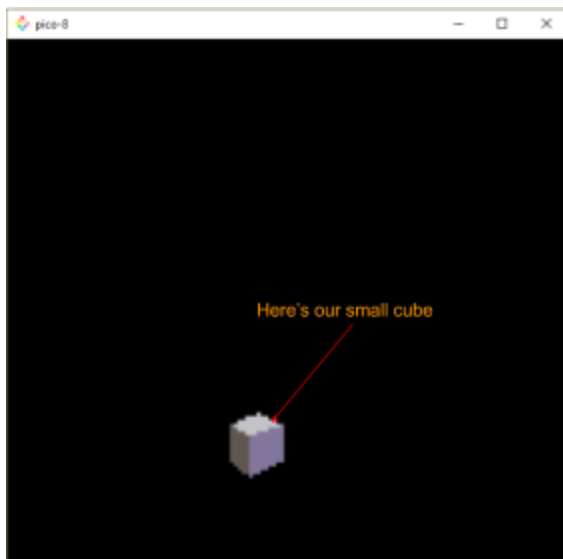
    basic_cube=load_object(read_vector_string(model_v),read_face_string(model_f),
    x,0,z,0,0,0,false,k_colorize_static,13)
end

function _update()
    handle_buttons() -- handle default buttons for player-- this can be
    overwritten obviously.
    update_player() -- update the player with default movement, stopping at
    obstacles
    update_camera() -- update the camera based on player location and
    direction
end

function _draw()
    cls()
    update_3d() -- call update_3d() at the end of the _update() function to
    transform etc.
    draw_3d() --render objects into triangles, sort the triangles and draw
    them onto the screen
end

```

13. Pico-8 output



With the default player position and a 2x2x2 cube, the model looks a bit small, but here it is.