

## Doom 2099 Instructions



This was modeled in 3ds Max Design 2013.

### 1. Installation:

- [1] Unzip folder to desktop. Textures should work fine if the Max file is opened from there.
- [2] Copy texture files to wherever you keep them and reassign the 2 bitmaps from the new location. (See **Texture** section below).
- [3] Save the Max file as a new file to wherever you keep your MAX files.

### 2. Mesh structure

Main mesh is Doom, which is rigged with BIPED and Physique. Physique is not perfect, but works okay. If anyone can tweak it to give a better physique envelope fit, shoot me a copy of the \*.phy file.

Sub-pieces of Doom can be selected as elements and, for example, new textures added.

Accessory objects:

- [1] Cowl
- [2] Cowl Lining.
- [3] Cape
- [4] Collar
- [5] Collar Spikes

The cowl, cowl lining, and cape are left as procedural objects. Because of this, the cape lining is a separate object. If you convert them to polys or meshes, you can add the lining as an element to the cowl. The cape can be independently animated with Cloth modifier after animating biped, but good luck! It is finicky!

### 3. Link structure

The accessories are linked to the BIPED for animation purposes as follows:

- Collar linked to biped SPINE 3
- Collar Spikes linked to Collar
- Cape linked to Collar
- Cowl linked to Bipod Head
- Cowl Lining linked to Cowl

### 4. Textures.

This does NOT use UVW or normal maps. It's designed for iRAY but also kind of works in mental ray. See the included sample renders. Mental ray works, but iRAY looks way better. Default scanline looks bad.

This has two iRAY materials so you need the iRAY material:

<http://area.autodesk.com/blogs/maxstation/n148-iray-material-for-3ds-max-2013>

(Download and install as per instructions)

The two iRAY materials are:

- red eyes 2 mod again – self illumination for red eyes
- bkue cape = used on cape and cowl (sorry for misspelling!)

### 5. Environment.

I used an HDRI map to light the scene, and it is included.

HDRI map from: <http://www.hdrilabs.com/sibl/archive.html>

(Rhode Island School of Design, Arboretum In Bloom)

I use iRAY Manager 2013: [http://www.youcandoitvfx.com/?page\\_id=12](http://www.youcandoitvfx.com/?page_id=12)

(Download and install as per instructions)

Here, set background to sphere, radius = 750, Texture Scale = -75, "use map" on and "ground shadows" on. Leave everything else at default.

My **Environment** settings are:

- Use Map - checked
- mr Photographic Exposure Control
- Active - checked
- Process Background and Environment - checked

Exposure Settings:

- Photographic Exposure = selected
- Shutter Speed = 0.1
- Aperture = 5.29
- Film speed (ISO) = 1390.99

Image Control settings:

- Highlights (Burn) = 0.1
- Midtones = 1
- Shadows = 0.11
- Color Saturation = 0.54
- Whitepoint = 6500
- Vignetting = 0

Everything else at default.

Following these instructions should get you the iRAY sample render in the **sample renders** folder.

Special thanks to [Dawood Kano](#) and his [classic Dr Doom mesh](#), the head of which served as the starting point for sculpting Doom 2099's head. Thanks, Dawood!