

## [ LOWPOLY SOLAR SYSTEM ]

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*This pack offers a high quality lowpoly solar system,  
to detail your next level.*



## Introduction

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Thank you for purchasing the Lowpoly Solar System!

This document describes the features of the Lowpoly Solar System Set.

For more information, please visit [www.niehoff-designs.de](http://www.niehoff-designs.de)

If you have any questions, suggestions, comments or feature request please do not hesitate to contact me at [support@niehoff-designs.de](mailto:support@niehoff-designs.de)

## Brief overview

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The Lowpoly Solar System Set is a collection of all (planets) of our solar system in a lowpoly style. Each model in the set is available with vertex & pixel color to choose from, depending on your needs. All textures are supplied in a resolution of 2048 x 2048 pixel.

**All Screenshots rendered in Unity 5.**

**This package contains:**

- Solar System Demo Scene
- Planet Orbit/Trajectory & Rotation Scripts
- Sun Vertex Shader & Heat Distortion Effect
- Sun with Vertex & Pixel Color
- Mercury with Vertex & Pixel Color
- Venus with Vertex & Pixel Color
- Earth with Vertex & Pixel Color
- Moon with Vertex & Pixel Color
- Mars with Vertex & Pixel Color
- Ceres with Vertex & Pixel Color
- Jupiter with Vertex & Pixel Color
- Saturn with Ring both with Vertex & Pixel Color
- Uranus with Vertex & Pixel Color
- Neptune with Vertex & Pixel Color

**+ 3 small vertex colored asteroid fields as bonus to detail your scene.**

**+ Example space skybox & Prefabs**

*The package contains 'ready to animate' objects.*

## Getting started

The models, where initially designed for the use in Unity 5 and are therefore optimized for Unity's material setup, but they should in theory work in any other game engine.

I recommend to use vertex color (Requires an adjusted standard shader in Unity), to reduce your asset sizes. If you don't mind the additional texture files just use the pixel shaded meshes as shown in the provided demo scene. If you require any additional texture setup, feel free to write me an email at the above-mentioned address.

### 1. Import the Unity Package

To import the **Lowpoly Solar System** go to **Assets > Import Package > Custom Package** and select "**Lowpoly Solar System.unpackage**" from your browser.

OR

Double click on the "**Lowpoly Solar System.unpackage**" from your external file browser.

### 2. Place a prefab in your scene

To use the assets simply drag one of the prefabs or models you want to use, from the prefabs or models folder into your scene and place it on a position you like.

### 3. Include external dependencies

The Heat Distortion effect of the Sun is using the Bumped Glass Shader from the Unity Effect Assets. Therefore, if it shows up pink in your scene, just go to "**Assets > Import package > Effects**" to resolve the issue.

That's all you need to do. Have fun detailing your level!

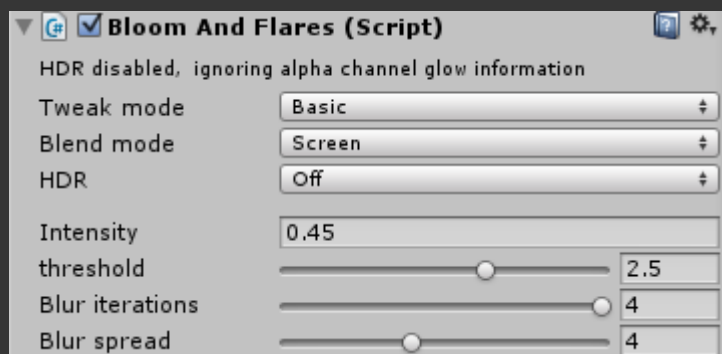
## Presentation

The example screenshots from the asset store are using an external dependency from the "**Unity Standard Assets**", therefore you need to import the asset into your project to ensure, that you get the same quality as shown in the example images.

To import the required package to go:  
**"Assets > Import Package > Effects"**

Afterwards create an instance of the "**Bloom and Flares**" script with the shown settings on your camera entity.

**Time to enjoy your new asset!**



## Scripts

Version 1.2 added a bunch of scripts for you to better utilize the included assets of these Package. These are rather simple scripts to give you a jumpstart in setting up your space environment and by no means meant to replace any full-blown programming asset, as this package is focused on its assets. However, if you feel like this package is really missing a specific functionality feel free to drop me a request per mail.

### The Planet Rotation,

script allows you to add some simple rotation to any given GameObject in your scene, but its main purpose is to simulate the self-rotation of a planet in space. Just define the amount of hours, that the object will need for a full rotation, e.g. 24 for the earth, or 0,4 if it should do a full rotation in one minute, depending on your gameplay needs.

### The Planet Orbit,

script allows you to let any given GameObject rotate in an Orbit around a given center of Gravity. This is especially useful for setting up small Solar Systems with multiple planets rotating around a Sun, like in your Solar System.

But you can also utilize it to let a Moon or Satellite rotate around a planet. Furthermore, the script allows you to easily visualize the trajectory of the object. To do so just attach the script to your GameObject and play around with its settings, but make sure to have a **"Line Renderer"** component with a **"Particles/Alpha Blended"** Material attached to your GameObject, like shown in the "Solar System" example scene.

Orbit Simulation	
Center Of Gravity	Sun
Orbit Axis	X 0 Y 1 Z 0.75
Orbit Radius	5
Orbit Speed	16
Gravity Change	30
Trajectory Visualization	
Show Orbit	<input checked="" type="checkbox"/>
Line Color	<div style="background: linear-gradient(to right, red, black); width: 100px; height: 10px;"></div>
Line Width	0.025

## Shader

Version 1.2 also added a Vertex Shader to bring your mighty Sun to life. Just change the Shader of your Sun to **"NiehoffDesigns/SunVertexShader"** and make sure to supply the correct diffuse and normal maps. Afterwards feel free to play around with the different properties of the shader.





**For any issue or question you can drop a line at**  
***[support@niehoff-designs.de](mailto:support@niehoff-designs.de)***