

Stylized Lit Explosion Pack



Stylized Lit Explosion Pack - Documentation

Introduction:

Thanks for purchasing the Stylized Lit Explosion pack. This asset comes with 25 different explosion effects that react to lighting. Everything is built in URP but can also be ported to other rendering pipelines. You have to create your own shaders in that case though. The project is optimized for realtime PC and console games but could probably also be used on mobile and simplified, if needed. This documentation will serve as a backup in case the full use or intention of the assets is not clear enough by itself.

Let's get started!

How to use:

All of the assets are prepared for instant use via Drag-&-Drop. Just drag one of the prefabs in the Assets folder into your level.

Shaders:

This pack comes with one shader graph based standard shader:

6DLighting_Standard:

This standard shader can be used to play the sprite sheet animations, either on a separate mesh or as a particle system.

On the top you can see 3 ways to tweak the color. By default just the Main Color is used, but you can use the Keywords dropdown at the bottom to set different color grading.

For everything to work well you also have to set the NumberFramesXY to your X- and Y- tiles on your spritesheet. AnimationSpeed is used to time the animation. If you use particle custom data to drive the effect, just set its value to X times Y tiles ($8 \times 8 = 64$ in this case). In case you want to debug something you can use this timestep. Set it beforehand using the Dropdown at the bottom of the material.



Next you can setup the supported textures. Base Colors and Motion Vectors are self explanatory, you can use DistortionStrength to set the value of distortion between frames.

The other two textures contain directional light data in RGB and Depth and Temperature in their alpha channel.



The Emission parameters are used to tweak and potentially overshoot emission based on SixPointBTemp texture's alpha channel. You can also set the type of emission via the Keyword dropdown at the bottom.



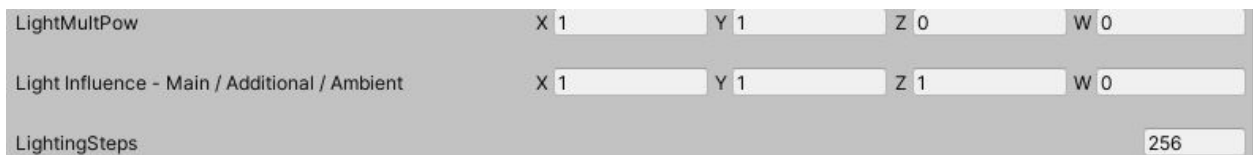
The depth parameters can be used to tweak depth blending in case its enabled.



LightMultPow.xy can be used to tweak the effect of the light on the asset.

Using Light Influence.xyz you can tweak the influence of the Main Directional Light, additional lights (like point lights) and scene ambient light on the whole effect.

In case you want to stylize the light falloff, you can reduce the LightingSteps.



Finally, the keyword parameters can be used to make variations and optimize, if needed. Color Grading can be set to lerp or Gradient if you want to use more advanced tinting options. Emission color can be set based on the Base texture, based on Blackbody or based on a gradient.

If you want more smoother blending between frames, enable Motion Vector Blending.

If you want your effects to soft-blend into the environment, enable DepthBlend.

Finally you can set where the time comes from. If you want to use particle systems as a source, set it to UVzw and set the custom data in the particle effect respectively.



Closing words:

Once again thank you a lot for purchasing the Stylized Lit Explosions pack. Your purchase helps me developing more asset packs and keep a high quality standard.

If you're satisfied with the overall quality please consider rating it on the store. Ratings help me support the project in the long run and create more.

Hope you enjoy using the assets to the fullest and will have an easy time using them. If there is anything I can help you out with, feel free to let me know. I'll also be happy to give your projects that use this pack a shout-out on social media if you tell me about them.

All the best from the creator of this pack,

Simon Kratz