

PARTICLE LIGHTS MANUAL

1. Changelog

v1.0 - Initial version

2. What's inside

First of all: Thanks for buying this package!

In this package you will find:

1. "ParticleLights.cs" : This is the basic script that pass that gathers all the particles info
2. "ParticleLightsManager.cs" : This is the responsible of creating the lights and configure them
3. A sample scene with some particle lights effects

3. How it works

This package uses the position and color of each particle of the desired particle systems to create and move lights in the same way as the particles. It uses a pooling system so you can control how many lights are going to be updating at the same time.

It uses the normal unity lights, so how they behave can be found in the Unity's docs. Because of that this package looks the best when using deferred lightning.

4. Step-by-step

This section will guide you in the process of making a particle system to have also lights:

1. Add an empty GameObject to the scene
2. Add the script "ParticleLightsManager.cs" to that GameObject
3. Create a Shuriken particle system
4. Add the "ParticleLights.cs" script to the particle system
5. Configure the particle system as your likes. Have special attention to "Max particles", this value its at 1000 by default, you should put it in a correct way
6. Configure the "ParticleLights.cs" as you like
7. If you have set a color over lifetime gradient in your particle system put the exact same gradient int the "Color over life time" of the "ParticleLight.cs"
8. Press "Sync with particles". This will sync the "Max particle value"

NOTE: You have to manually configure the "Color over life time" because there is a limitation in the Unity's particle system, where that variable is private

5. Configuring the system

Here there is a description of all the configurable options that the system has.

PARTICLE LIGHTS

1. Light max intensity: The light max intensity
2. Light range: This will set the light range for the particle lights
3. Color over lifetime: This has to be exactly the same as the one configure in the particle system. If you haven't configure it in the particle system let it as default
4. Max particles: This value is auto sync with the Particle System Max particles when you press "Sync with particles" button
5. Light shadows: Configure the shadows for each particle
6. One light only: This will create only one light in the particle system transform position. Useful for muzzle flashes for example
7. Use first particle: Use the life data of the first emitted particle. If is set to false it will choose a random particle each frame

Particle Lights Manager

1. Pool behavior: This will configure how a petition for a new particle is handled. **"Create new"** will create a new light if the others are in use. **"Return nearest"** will return the furthest light form the camera when the pool limit is reached
2. Max lights: Max number of lights at the same time
3. Pre instantiated lights: Create this amount of lights when loading to avoid runtime hiccups
4. Disable by distance: Disable lights when they are farther form this value
5. Start fadeout distance: When to start to fadeout the particles
6. Camera to check distances: The camera used for checking distances, If none is set it will try to search for a main camera