

Realistic 6D Explosions Pack Vol.1 - Read Me

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Overview

Thank you for purchasing the Explosion Pack! This package provides high-quality explosion effects that are ready to use in your Unity projects. Simply drag and drop the prefabs into your scene to add dynamic explosions to your game.

Usage

Adding Explosions to your scene:

- 1. After importing the package, navigate to Assets/DAVFX/Realistic6DlightingExplosions/URP/Prefabs or HDRP/Prefabs.
- 2. Drag and drop any prefab from the Prefabs folder into your scene.
- 3. Position the prefab where you want the explosion to occur. 4. The explosion will automatically play when the scene starts. Customizing Explosions:
 - Adjust the properties of the explosion effects by selecting the prefab and tweaking parameters in the Inspector (e.g., particle size, duration).
 - ► For stylistic reasons, debris are disabled by default on some explosions, but you can easily enable them in the Inspector.
 - ► Each explosion prefab includes a **material variant** of the original material, allowing for greater customization. You can modify settings such as **emissive intensity**, **color**, **emissive highlights** and other shader properties to achieve the desired look.



Key Features

- Custom 6D Lighting Shader: Explosions respond to environmental lighting, enhancing scene realism.
- ► **Motion Vector Support**: Smooth animations for natural movement in explosions.
- ► **Heat Distortion Effects**: Simulates realistic heatwave effects for added depth.
- Advanced Customization: Easily adjust the intensity and color of fire and smoke for each explosion.
- Ready-to-Use Prefabs: Drag-and-drop prefabs with no additional setup needed.
- Compatibility: Fully compatible with Unity's URP and HDRP.

Important Settings

URP

Make sure to enable the "Opaque Textures" option inside the Universal Render Pipeline Asset, otherwise the initial distortion effect of the explosions will not work.

HDRP

To make 6D lighting work on HDRP, you need to attach the "LightDataToShader" script inside the script folder to all your lights in your scene.



6D Lighting Shader

This package includes a custom **6D Lighting Shader** that simulates **realistic lighting** from **multiple directions**. The shader dynamically adjusts light reflection and diffusion based on the surrounding environment, creating a more immersive effect.

How to use:

- ► To modify the shader settings, select the desired explosion prefab, then go to the Material section in the Inspector.
- Tweak the shader properties like the lightness or the 6-way shadow multiplier to match the lighting in your scene.

Additional Details

- ▶ Particle System: All explosion effects are created using Unity's built-in Particle System, ensuring compatibility and ease of customization.
- ► Textures: All explosion textures are 2048x2048.
- Motion vector intensity: To work correctly, the motion vector intensity should be kept very low (default is 0.0008). Avoid increasing the intensity too much
- Smoke explosion customization: If you want to customize the color of explosions that do not have an emission map (such as smoke explosions), you need to disable the "Has Emission Map" checkbox in the shader properties.
- ▶ Common heat distortion issues: To prevent heat distortion from occluding other transparent particles, the render queue is set to 2980. This ensures that heat distortion is rendered behind both opaque objects and other transparent particles.



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Looking for tips, support, or inspiration? Join my Discord community, where you

- can: ► Receive quick support for any questions about the pack.
 - ► Stay updated on future releases and exclusive content!
 - ► Get exclusive discounts!

Join now: https://discord.gg/FXPdnA8phm

Contacts

If you have any questions, need support, or want to provide feedback on the Explosions pack, feel free to contact me directly:

➤ Email: davide.mezzaqui01@gmail.com

Discord: davide_mezzaqui