

Crack Shader – Overview & Usage Guide

Shader Introduction

The Crack Shader is a lightweight, stylized effect for Unity URP, designed to create dynamic crack, line, or energy beam visuals on any mesh. The effect animates over time and is based on the object's local Y position, making it ideal for stylized cracks, magical fissures, or scanning lines in your scenes. The shader is double-sided and unlit, ensuring consistent appearance regardless of lighting.

How to Use

1. Import the Shader

- Add the Crack Shader files to your Unity project.

2. Create a Material

- Right-click in the Project window and select Create > Material.
- In the Inspector, set the Shader to Lee/Crack.

3. Assign the Material

- Drag and drop the material onto any mesh (plane, custom mesh, etc.) where you want the crack effect.

4. Adjust Parameters

- Color: Set the main color of the crack effect. The alpha channel is always fully opaque.
 - The crack's intensity and animation are automatically controlled by the object's Y position and time—no extra setup needed.

5. Rendering

- The shader is double-sided (Cull Off) and unlit, so it works well for both front and back faces and does not react to scene lighting.

Features

- **Animated Effect:** The crack pulses and animates over time for a lively look.
- **Y-Based Masking:** The effect is strongest at the center ($Y=0$) and fades outwards.
- **Easy Customization:** Just change the color to match your scene.
- **Double-Sided:** Renders on both sides of the mesh.
- **Optimized:** Minimal performance impact, suitable for real-time effects.

Example Use Cases

- Stylized cracks on the ground or walls
- Magical fissures or energy lines
- Scanning or highlight effects

Tips

- For best results, use on meshes where the Y axis represents the desired crack direction.
- You can duplicate and rotate meshes for more complex crack patterns.

Enjoy creating dynamic, stylized cracks and lines in your Unity projects with the Crack Shader!