

# FourColorDynamicGradient Shader

## Overview

The "FourColorDynamicGradient" is a dynamic and colorful shader designed to work in the Unity engine. This shader allows you to create an engaging gradient effect with up to four colors that can be animated. The FourColorDynamicGradient shader can be used as a Skybox or standard mesh material, providing flexibility in application.

## Package Contents

This package includes the following:

- FourColorDynamicGradient Shader code
- Custom Inspector for the Shader
- DemoScene Unity scene with various presets

## Features

The shader includes several features that make it highly customizable:

- Four color inputs for the gradient
- Configurable blend factors
- Animation speed control
- Initial positions for the color sources
- Maximum movement range for the color sources
- A background color
- Ability to enable/disable animation

## Getting Started

Download and import the FourColorDynamicGradient shader package from the Unity Asset Store. To assign this shader to a material, select or create a new Material, then in the Inspector view, go to the Shader dropdown and select LTN -> FourColorDynamicGradient.

## Shader Properties

- `_Color1`, `_Color2`, `_Color3`, `_Color4`: These represent the colors that will be used in the gradient effect.
- `_BackgroundColor`: Sets the base color for the shader.
- `_IsAnimating`: If set to 1, the gradient will animate over time. Set to 0 to disable animation.
- `_BlendFactor`: Adjusts the smoothness of color blending in the gradient.
- `_BlendChange`: Controls the rate of change for the blend factor during the animation.
- `_AnimationSpeed`: Controls the speed of the animation.
- `_MaxMovement`: Adjusts how far each color source can move from its initial position.
- `_InitialPos1`, `_InitialPos2`, `_InitialPos3`, `_InitialPos4`: Set the starting positions for each color in the gradient.

## Customizing the Shader

Open the shader in the Inspector window to view its properties.

Adjust the four color parameters `_Color1`, `_Color2`, `_Color3`, `_Color4` to define your gradient.

Use `_BackgroundColor` to change the shader's base color.

To animate the gradient, make sure `_IsAnimating` is set to 1.

Control the blend between colors using the `_BlendFactor` and `_BlendChange` properties.

Set the animation speed with `_Speed` property.

The `_MaxMovement` and `_InitialPos` values can be used to control the positions and motion of the color sources in the gradient.

## Demo Scene

The DemoScene included with this package showcases various presets of the shader. This is a great starting point for seeing the possibilities with the FourColorDynamicGradient shader. Feel free to explore and modify the presets to better understand how the shader properties affect the final look.

## Support and Contact

For support or inquiries, feel free to contact us at [ilhanaltan@gmail.com](mailto:ilhanaltan@gmail.com).