# How to set up the directional dissolve shader:

The directional dissolve shader is, in principle, the same as the regular URP shader you would use in your Unity project, only reconstructed and expanded. The setup is thus the same as with any other shader – create a material and assign the dual emission shader to it. Then assign the new material to your in-scene objects. That's it!

# Shader options:

### Albedo Texture:

The main (albedo/color) texture used by the shader.

### Albedo Color:

An additional color multiplied with the one already present in the albedo texture. Use this to further customize the look of your sprite.

### Alpha Cutoff:

This is a threshold value – all parts of the texture whose alpha-value is less than the alpha cutoff will not be rendered.

### Metallic Map:

The metallic map is a black-and-white texture that determines the surface type of the object. It is used to make certain parts of the sprite reflect light like a metal would (metallic), and others like sand would (smooth).

### Metallic:

This value determines how "metallic" the surface should be, i.e. whether it should reflect light like a metal or a wet surface, or should absorb it like sand or another rough, non-metallic surface.

### Normal Map:

The normal map is used to simulate a 3D-surface by containing information on how the light should be reflected by the surface.

### Normal Strength:

This value is multiplied with the normal map and is used to make the effect stronger or weaker. A negative value will mirror the 3D-effect (i.e. protruding surfaces will now be concave, and vice versa).

### Emission Map:

A black-and-white map that determines which parts of the sprite will emit light. The white pixels of the texture are areas where the emission will have an effect, and the black pixels are the areas with no emission.

### Emission Color:

The emission color. As it is an HDR color, an RGB-value as well as an intensity can be specified. Keep in mind that **different post-processing effects** (most notably **bloom**) will have a profound effect on the look of your emission.

### Emission Extra Intensity:

Since the default HDR color has a limited intensity (-10 to 10), this shader offers an additional intensity option that allows you to make your emission even stronger.

### Noise Texture:

A black-and-white gradient texture that determines the direction of the dissolve effect. For ease of use, 4 such textures are provided in the shader pack - horizontal gradient, vertical gradient, circular gradient, and irregular gradient.

### Dissolve Edge Thickness:

The thickness of the dissolve effect's edge. The edge is the visible colored border between the dissolved texture and the remaining texture.

### Dissolve Edge Color:

The color of the dissolve effect's edge. Since this color is in HDR format, an emission can also be specified.

## Dissolve Effect Controller:

The controller value for the dissolve effect. This value can be controlled via scripts (an example is provided) to create a smooth progressive dissolve effect (e.g. death of an enemy, or revealing an illusory wall) by lerping the controller value, or to keep the dissolve effect set to a certain amount by setting the controller to a constant value (e.g. burning paper or clothes, or a ghost enemy who lacks some parts of its body). Recommended values are 0 for no dissolve effect, and 12 for complete dissolution. These values may need to be tweaked manually on highly irregular shapes or on very big objects.

## Ambient Occlusion:

The regular ambient occlusion from the URP standard lit shader.

For further details, visit https://docs.project-gamedev.com/directional-dissolve-shader/directional-dissolve-shader.html.

Congratulations! You are now ready to use the shader!
In case you experience any problems with the shader, can't manage to set it up properly, or would simply like to propose an improvement, don't hesitate to contact us at **contact@project-gamedev.com**, or fill out the form at **https://project-gamedev.com/contact.html**.
Best of luck with your game development journey!