

What are these?

These shaders are post processing effects that are saved as objects in the scene via shaders and materials. These use a shader feature in Unity called "GrabPass" to read pixels from the screen and modify them.

There are also a few other non screen space shader effects.

How to use

These are shaders you can set in the material editor **BUT** I do not recommend setting them manually and just using the objects from the add menu because these objects are set up a certain way.

You can find these in the add menu under xukmi.

FX

These are screen space effects that you can just drop into the scene and use MaterialEditor to adjust the settings of the effect.

- Color Correction
 - Allows you to control stuff like tint, brightness, contrast, saturation, etc.
 - You can use these in conjunction with the Color Adjustment options in scene effects.
 - You can set values over -2 and 2 by typing them in material editor but the colors will be pretty wild
- Two Tone Fog
 - A fog effect that lets you tint the color of the fog in the back and the slight fog near the camera.
 - The falloff of the two tones can be controlled with the density and hardness slider
- Contrast Adaptive Sharpness
 - A sharpening filter from <https://gpuopen.com/fidelityfx-cas/>
 - It can be quite subtle, but this can help sharpen lower res textures.
 - Comparison [here](#)
 - YMMV depending on the colors/textures of the scene
- Sharpness
 - A regular sharpening filter
- Vignette
 - Can change the color falloff of the vignette
- Chromatic Aberration
 - Can adjust the offset of the red and blue channels in the XY directions or radially from the center
- Depth of field
 - Blurs object depending on the focal point, this can blur distant and close objects
 - There are three types of blur at three quality levels
 - HQ Regular and LQ is how many passes (thus quality) the blur takes

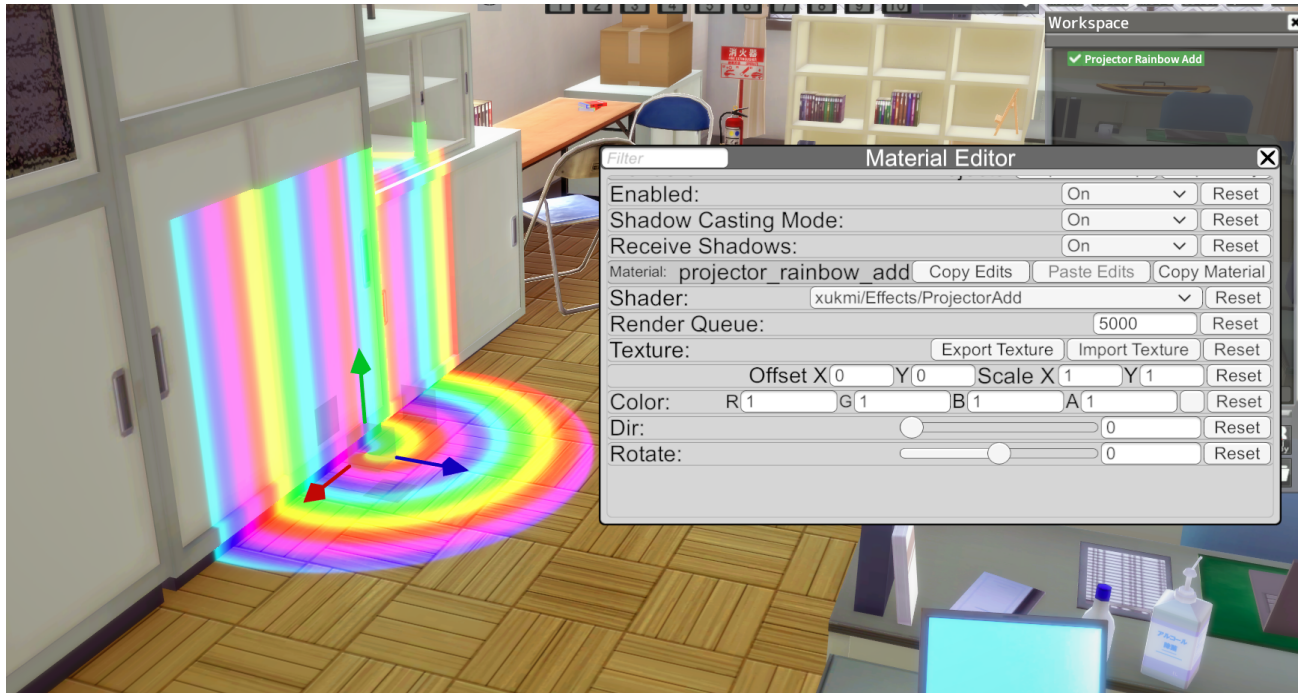
- Bokeh, Gauss, and Box are different types of blurring methods, in terms of performance hits Bokeh > Gauss > Box
- There are also slider to control the focal point, distance controls how far the focal point is, range will control how much can be in focus, and hardness controls the falloff of the focus.
 - VisualizeBlur can be enabled to visualize where the focal point is and how big it is. Things in the dark will be blurred



Projectors

Projectors are objects that can project an image onto any surface. Rotations are a pretty complex issue so avoid rotating projectors with the gizmos, unless the axis you want to rotate is parallel to where the projection is (eg. for the second image below only rotate it with the blue gizmo). And if your projection isn't appearing that means that the projector isn't intersecting with the geometry to project properly scale it in the same axis you can rotate.

- Dir = 0 | Rotate/Scale Y
- Dir = 1 | Rotate/Scale Z
- Dir = 2 | Rotate/Scale X



Projectors come in three types, Add, multiply, and alpha. This controls how the projector blends its colors with the environment.

Unfortunately you cannot have the projection affect only the top geometry

You can use your own image by replacing the texture, if the colors don't look right use the GammaCorrection slider

Blur

These are blur shaders that you can apply on any mesh without much issues. But I still suggest using the options via the add menu as those have variants in terms of blur quality. You can also add a texture as a mask which allows you to make any blur shape you want. You can also use `fresnel(rimV)` to control the blur mask