General info

Colorify shaders come in 2 main varieties: real-time and baked recolor mask.

Real-time shaders perform color range calculations each frame, and can be used for dynamic effects, but they are more performance-heavy and mobile versions of these shaders do not support hue filtering.

Baked mask shaders use recolor mask that needs to be baked in editor. These shaders can't change color ranges at runtime (but they CAN change colors), but they're much faster and can provide precise filtering even on mobile devices. Also, you can edit generated mask with any image editor.

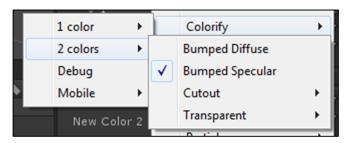
How to use Colorify (real-time versions of shaders):

Read this even if you want to use baked recolor masks mode.

1) Select material you need to repaint



2) Choose shader from "Colorify/Real-time" subfolder. Colorify shaders come in 3 varieties: "1 color", "2 colors" and "Mobile". 1 color and 2 colors are shader model 3.0 shaders that allow you to repaint 1 or 2 color ranges on your texture. 2 colors shaders are slower, so try to use 1 color where it's possible. Mobile shaders are



shader model 2.0 shaders that use simplified algorithms.

3) Choose "Pattern color" in the material window. This color and colors close to it will be repainted.



- 4) Choose "New color". This color will be painted instead of "Pattern color".
- 5) Set up range and Hue range variables that will define how large of color range will be repainted.

Range defines color range in RGB space, so the lesser range, the lesser variance in overall color will be allowed (including brightness).

Hue range defines variations in hue only. It's used to truncate undesirable recoloring of pixels close enough in RGB range to the pattern color. Be warned that grey colors also have hue value that's usually undetectable to the eye. Use "dropper" color picker to see what hue it really have.

NOTE: Mobile shaders don't support hue range truncation.

For examples of usage of range and hue range, see example scene.

6) If you use 2 colors versions of shaders, repeat the process for second set of parameters.

HINT #1:

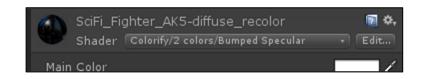
If your texture have predominantly white(or grey) color you need to repaint, set main color to a slight shade of one of the rgb colors (100% red, green or blue) to shift hue of the white-grey parts to one hue value.

HINT #2:

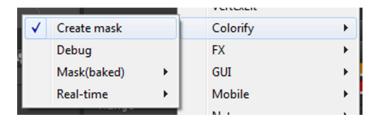
Texture compression can alter hue values of grey areas in a "blocky" way. If that's the case with your texture, try widening hue range or, if you can afford it performance-wise, switching texture to truecolor.

How to use Colorify (baked mask versions of shaders):

1) Select material you need to repaint



2) First you need to bake recolor mask. Choose "Colorify/Create mask" shader and set up your colors and ranges the same way as in real-time shaders. When you're satisfied with recolor options, press either "Generate PNG mask" or



"Generate JPG mask". Generated mask will be put in the same folder as main texture of the material with "_mask" suffix. If you already generated mask and want to preserve it(it will be overwritten by default), rename old mask.

3) Choose specific shader from "Colorify/Mask(baked)" folder. Your generated mask will already be put in "Recolor mask" texture slot, but you can put any texture in it. Note that these shaders don't need range and hue range parameters (since mask contains all info about color ranges), but they still need original color values to correctly perform recoloring. Please don't change "Patter color" values after mask generation unless you know what you're doing.

Recolor mask format:

Recolor mask uses red and green channels to store info about recolor coefficients - red channel for color #1 and green channel for color #2. Blue channel contains overall brightness of the texture and is not used in any of the Colorify shaders currently available. We're planning to add new family of shaders in future versions of Colorify that will use it.

Usage for dynamic recoloring in your code:

You can change your material parameters during runtime by using **Material.SetFloat** and **Material.SetColor**. (More info available at Unity Script Reference: <u>SetFloat</u> and <u>SetColor</u>)

List of parameter names and ranges:

Parameter	Internal name for scripting	Range	Default value
	purposes		
Pattern Color	_PatCol	Color	white
New Color	_NewColor	Color	white
Range	_Range	0.0 - 2.0	0.01
HueRange	_HueRange	0.0 - 4.0	0.1
Pattern Color 2	_PatCol2	Color	white
New Color 2	_NewColor2	Color	white
Range 2	_Range2	0.0 - 2.0	0.01
HueRange 2	_HueRange2	0.0 - 4.0	0.1

Contact info

Please send all your questions, suggestions and bug reports to:

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