RETROWAVE SKIES V1.0.0

Thank you for purchasing Retrowave Skies! This guide will show you how to set up the shader for your Unity URP scenes in versions 2020.3 and above.

If you end up using this asset in a project, feel free to Tweet me a screenshot @CreationsSuggo. I'd love to see what you do with it!

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ASSET PACK CONTENTS

The asset pack contains (per version 1.0.0):

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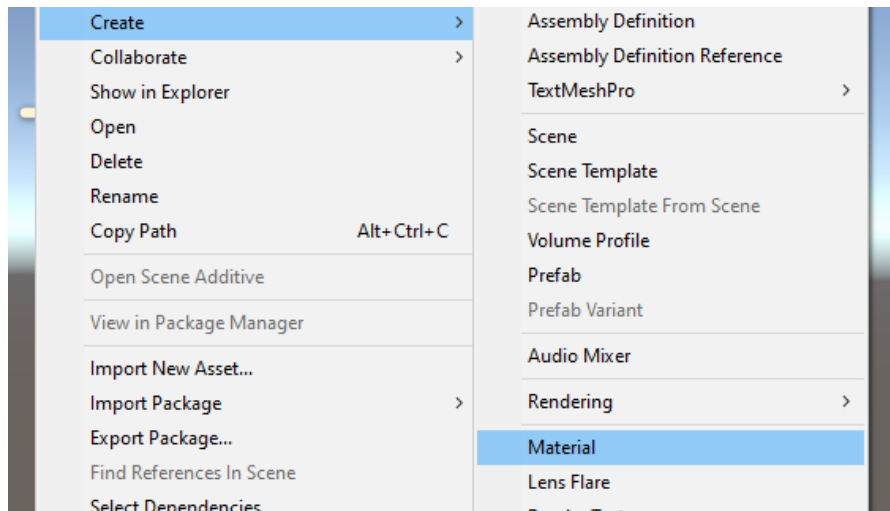- Demo Scene

Scripts

- GetGlobalMatrix.cs

Particle Effects

- Ambient Dust Particle Effect

SETTING UP

Applying the Skybox shader

If you're making a new scene and want to customize your own skybox from scratch, simply create a new Material. Navigate to your Project folders, right click somewhere in your Assets folders > Create > Material.


 (Tip: After hovering over "Create" you could alternatively press "M" and it'll create a new Material immediately.)

After you've created your Material, it'll have the Universal Render Pipeline/Lit shader by default. To change it to the Skybox shader, select the drop down menu and browse the Shaders to find the Retrowave Skybox shader. The same process applies to the Grid Shader.
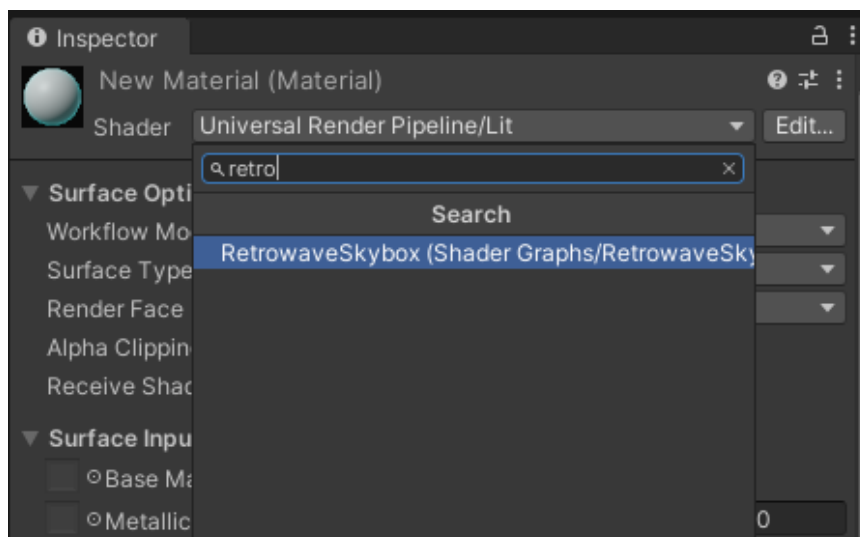
Applying the Skybox Material

Once you've applied the shader to the Material, you can simply drag and drop the Material into the Scene window and onto the sky. Alternatively, you can navigate to the Lighting Window > Environment > Select the Retrowave Skybox Material you've made from there.
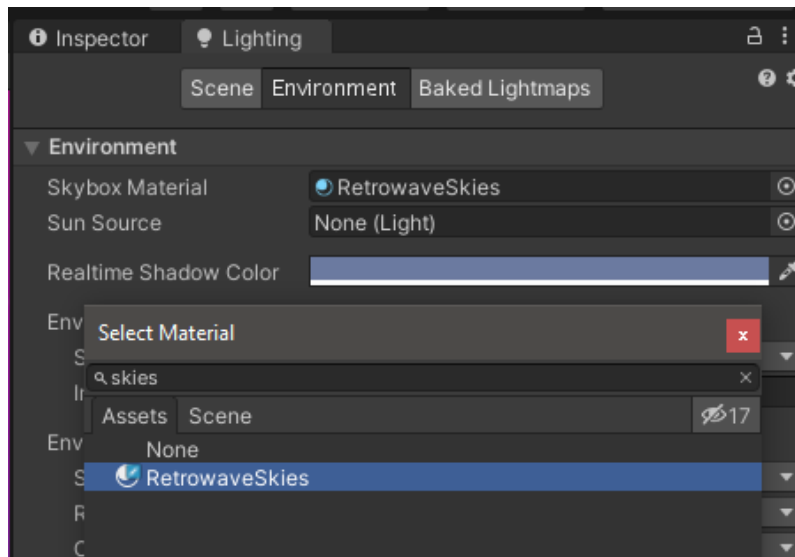
If you do not have a Lighting tab, navigate to the top bar of Unity, Window > Rendering > Lighting.

Fog

The skybox shader is reactive to the fog currently in the scene. If you load the Skybox Shader into a new scene you might have noticed the gray tinted fog. By default, scenes start with the Fog turned off – and with a gray tint. Simply Enable the Fog and select the color you want! The Fog settings can be found under Window > Rendering > Lighting > Environment > Other Settings.


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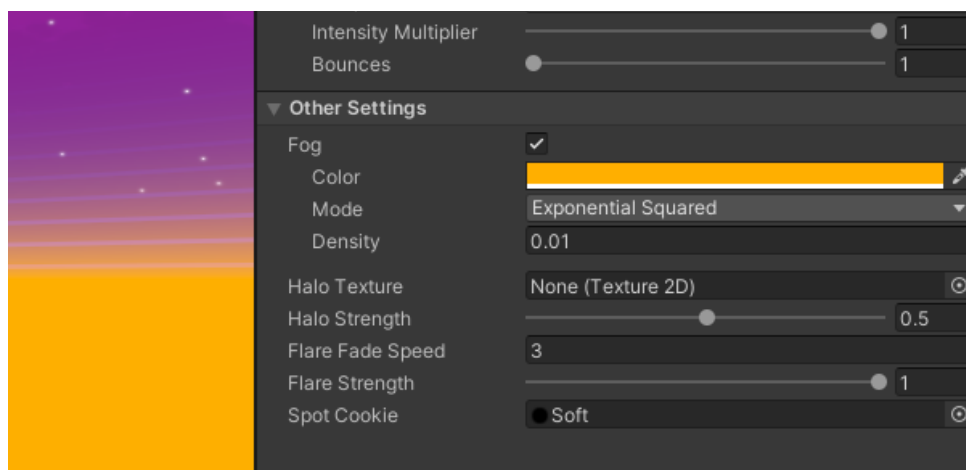
Sun movement based on Directional Light

The Shader needs the GetGlobalMatrix.cs script in order to pass the rotation information of the Directional Light into the Shader.

If the Directional Light doesn't have the GetGlobalMatrix.cs script on it, it will not be able to move the Sun Mask. However, the regular Sun Disc will still work.

[ExecuteAlways] is enabled in the script in order to make the Sun Mask movable even outside of Play Mode.

To apply the script, simply drag and drop it – or select it – as a component under the Directional Light.
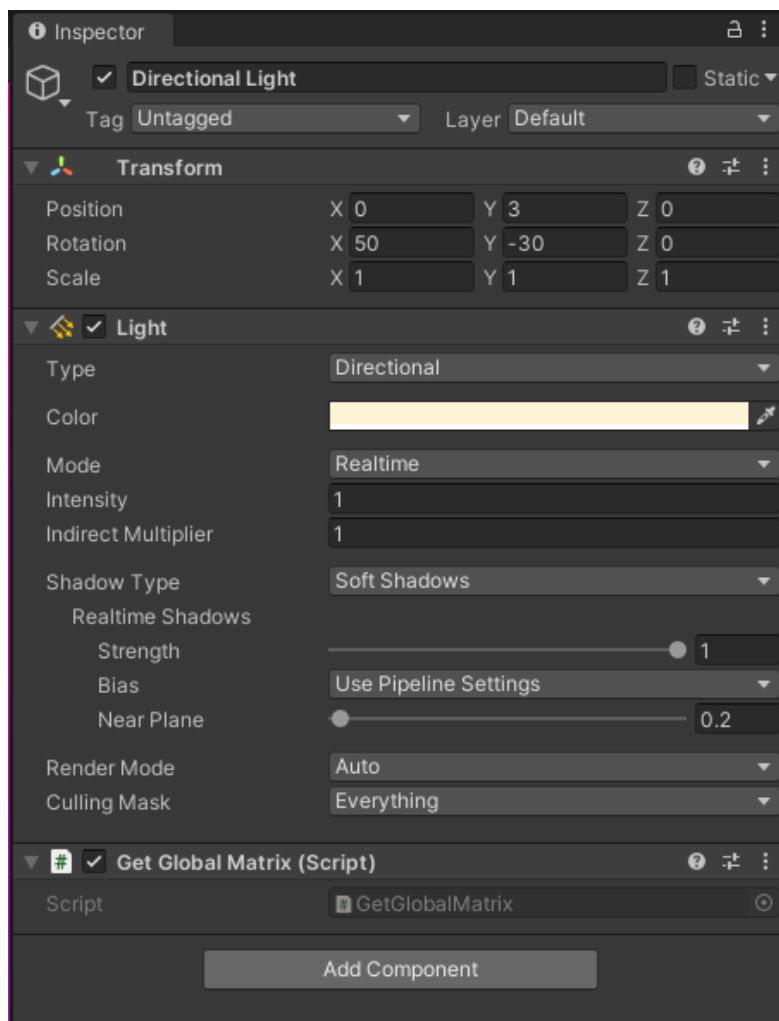
Setting up Reflections

By default Unity will make a Reflection capture of the current Skybox and apply it to all your reflective objects in the scene.

If you want to reflect the moving elements of the shader (Sun, Lines, etc.), you'll need a Realtime Reflection probe. You can add these by adding a Reflection Probe and simply setting it to Realtime.

But be very mindful of using Realtime Reflection probes, as they can be quite performance costly – especially at high resolutions.
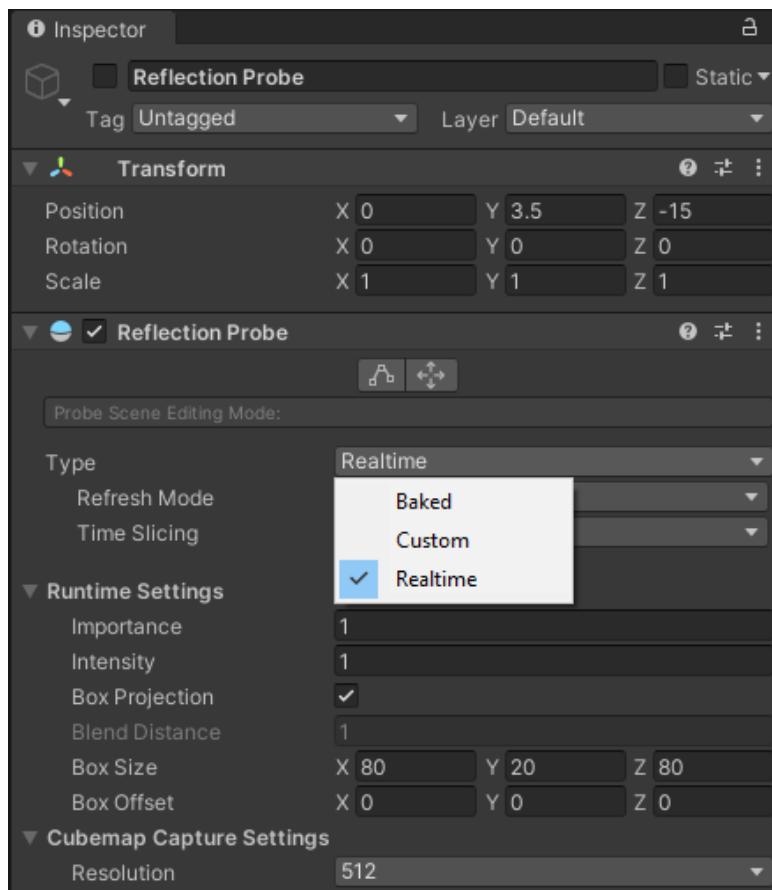
TROUBLESHOOTING

The sun isn't moving with my Directional Light

1. Make sure you've applied the GetGlobalMatrix.cs to the Directional Light.
2. Make sure the script's code is all intact.
3. Check if the file is not corrupted.
4. Check in the RetrowaveSkybox Shader Graph if the Matrix4x4 Property has _LightMatrix as its Reference.
5. Restart Unity.
6. If it still doesn't work, reload the script from the Retrowave Skies Package in from the Package Manager.

## My shaders are pink/give an error

1. Check if you are in Unity version 2020.3+, preferably one of the stable LTS versions.
2. Make sure you're in the Universal Render Pipeline and not the Built-in Render Pipeline.
3. Go to Window > Package Manager and check if you have Shader Graph loaded in. If you're in Universal Render Pipeline, Shader Graph should be in your project by default.
4. Reload the Retrowave Skies Package in from the Package Manager.

My shaders are grey

1. Check if your Shader Graph nodes are connected to the Master Node.
2. Reload Shader Graph file by reloading in the Retrowave Skies Package in from the Package Manager.

My custom Sun Mask is showing weird artifacts

1. Check that there's no stray Gray/White pixels near the edges of your mask image.
2. Make sure your Black in your image is 100% black.
3. Your custom Sun Mask could show artifacts due to Unity's Built-in Mipmapping system. This can be disabled by navigating to the texture file's Inspector > Advanced > "Generate Mipmaps".
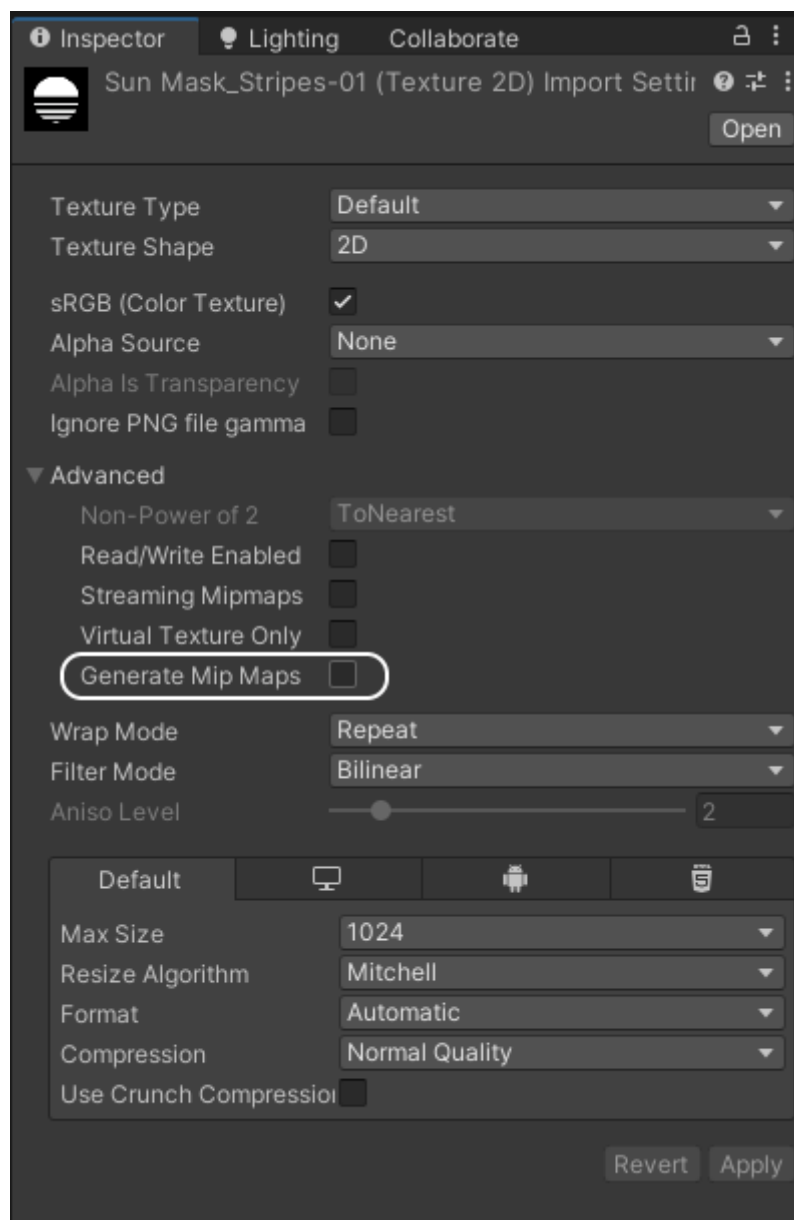
SOURCES

- The Cubemap **LowTrees_2k.hdr** is from **hdrihaven.com**, granted under a **public domain/CC0 license**.
- Special thanks to **Cyan** (@Cyanilux on Twitter) for personally helping me figure out the Sun UVs! He also has many shader tutorial resources over on his website, I highly recommend you check it out.

THANK YOU NOTE

I sincerely hope you enjoy **Retrowave Skies**! This has been my first asset released since quitting my job to do full time game development and I'm excited to work on more. If you have any inquiries or need technical support, e-mail support@suggocreations.com. As I'm only a single person, it may take a few work days before I get back to you. But I'll try my best to help!

If you enjoyed this asset pack, please take the time to **leave a review**. I highly value any comments, feedback or suggestions you may have.