

Hi

Thank you for purchasing my asset. I have made this tool to help you focusing on you art and not technical work. Using lighting box, you have a similar workflow like Unreal Engine. So you can focus on your scene's lighting art instead of working on technical settings.

If you don't want to read this help, just watch the video tutorials,

Update 2.9 playlist:

<https://www.youtube.com/playlist?list=PLVXvfvDWvto3sTHaBGNLj34xbyNyjVBIZ>

Update 2.8 playlist:

https://www.youtube.com/watch?v=E-46SgO4Q6A&list=PLVXvfvDWvto0FT6kDNd77i8u_OfWebGh6

Update 2.7 play list:

https://www.youtube.com/watch?v=bpf7Wvatj9w&list=PLVXvfvDWvto2_wRRQ6Xu7tQaer-H4x6wP

Update 2.6 play list:

<https://www.youtube.com/watch?v=qjsMzHYILd8&list=PLVXvfvDWvto3JOyltaJ5NnlxWWW1yA15q>

Update 2.5 play list:

<https://www.youtube.com/watch?v=c50mFCLktQg&list=PLVXvfvDWvto0iZU1L9zQgXCStNONPeNsF>

Update 2.4 play list:

<https://www.youtube.com/watch?v=UAuZsYb7iiQ&list=PLVXvfvDWvto2iybID-GUGF5cBAQzL5nGi>

Update 2.3 play list:

<https://www.youtube.com/watch?v=XnBujeqiG4I&list=PLVXvfvDWvto06cQ3eX7Af1OIx5qj60Jhk>

Older updates:

<https://www.youtube.com/watch?v=9icSrQVi2v8&list=PLVXvfvDWvto3p5nJsqrUzYyZloE7M-Dzg>

Real-time GI archviz lighting:

<https://www.youtube.com/watch?v=x4FDJX-hLK8&list=PLVXvfvDWvto3dRuqDrAi2KILzQY60r9dR>

ArchViz using Lighting box:

<https://www.youtube.com/watch?v=IMRxOoJSZHE&list=PLVXvfvDWvto2QXIR6oxJssWghnryWC hWn>

Follow forums for the latest updates and news:

<https://forum.unity.com/threads/lighting-box-2-next-gen-lighting-solution.475644/>

Don't forget to write your review on the asset store page, thank you

<https://assetstore.unity.com/packages/tools/utilities/lighting-box-2-next-gen-lighting-solution-93057>

Open source effects that has been used:

Stochastic SSR:

<https://github.com/cCharkes/StochasticScreenSpaceReflection>

Volumetric Light:

<https://github.com/SlightlyMad/VolumetricLights>

Post Processing Stack 2 & 3+:

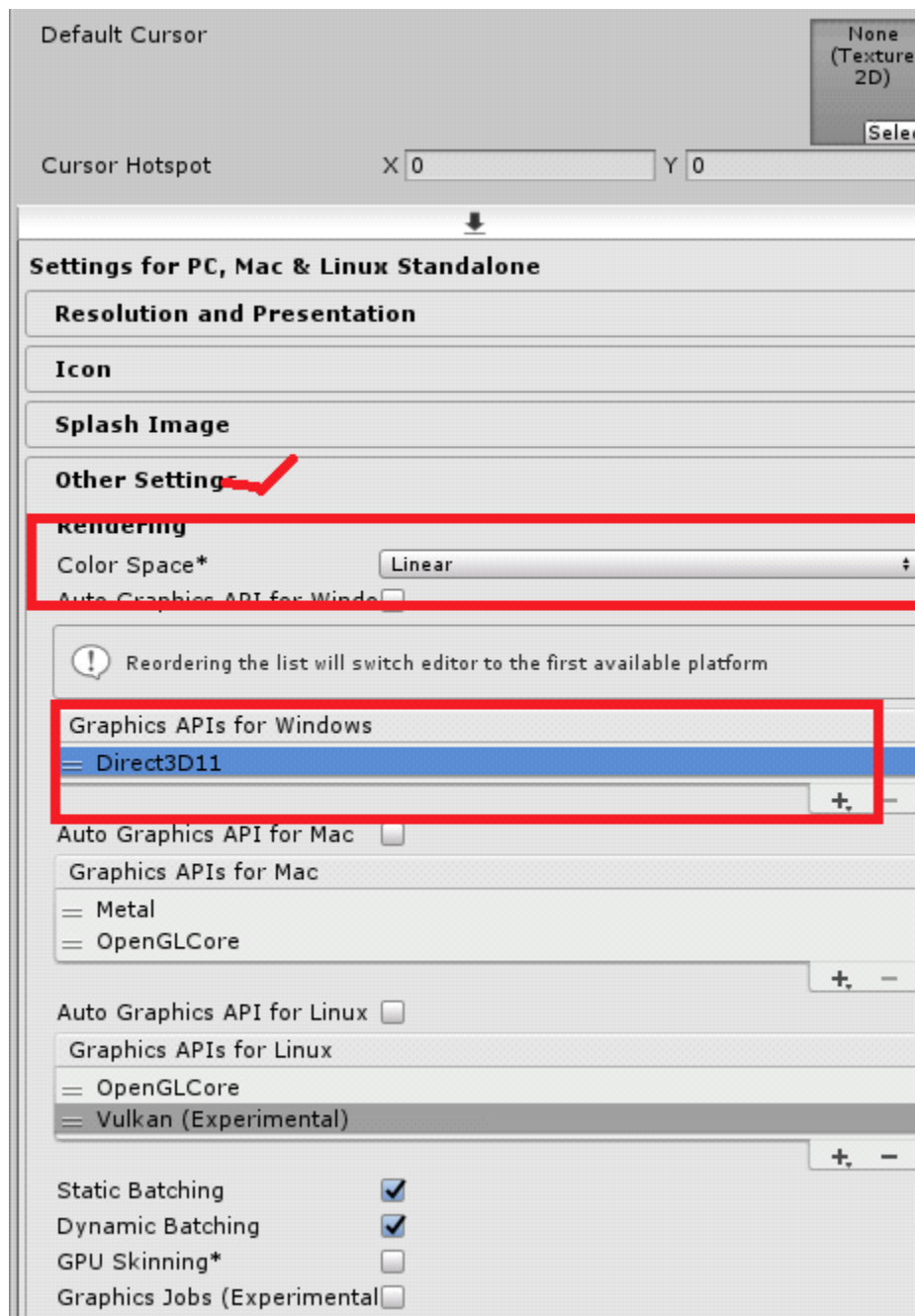
<https://github.com/Unity-Technologies/PostProcessing>

Some legacy post effects from unity (legacy means the original source of the current effects, that doesn't mean old effects)

Preparing Project:

Note: you don't need to switch to the following settings since the Unity 2020. All settings have been applied by default in the Unity 2020 or newer

- Go to Edit->Project->Player settings.
- Open Other Settings Tab
- Unchecked Auto Graphics API option
- Select Linear as color space



Now the Lighting Box 2 is ready to use

How to disable Lighting Box 2

Just close the lighting box 2 window to disable its actions. Also you can delete these 2 gameobjects created by Lighting Box 2 from your scene:

Global Volume

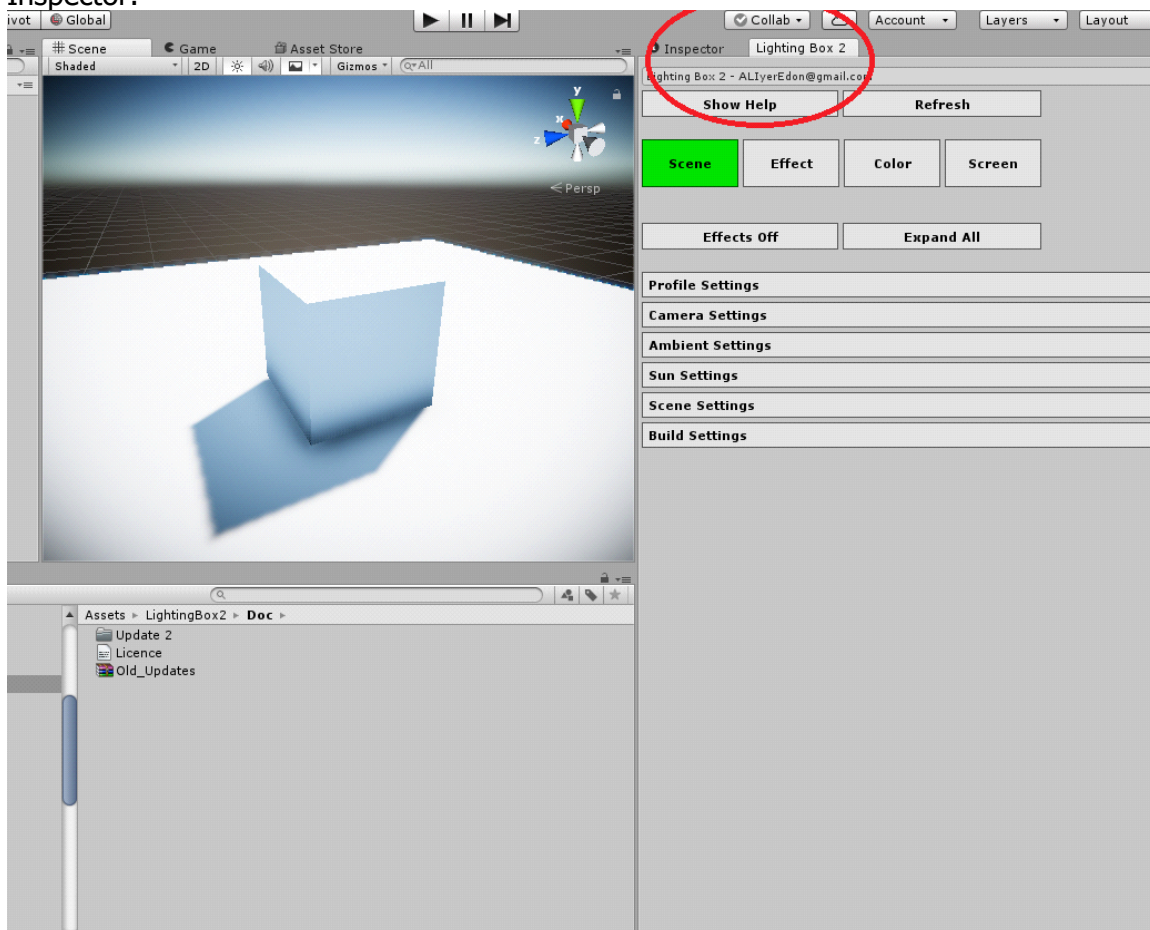
LightingBox_Helper

How to remove lighting box and switch to the standard workflow:

Find and delete "LB_LightingBox" script from your project files

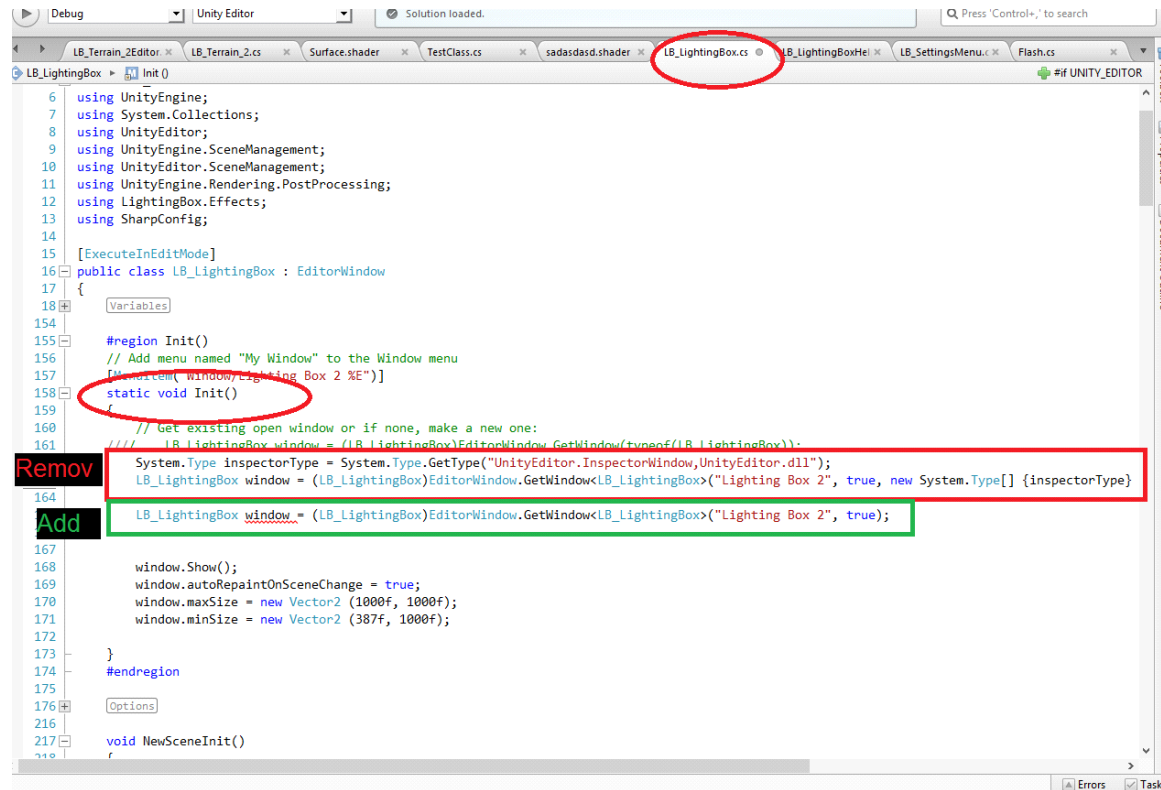
Opening Lighting Box Window

Go to Window->Lighting Box 2 or press Ctrl+E to open the lighting box 2 window. The window automatically docks into your Right section of the editor window on the right position of the Inspector:



If you had any problem related to the lighting box window position (pined on the inspector) , Open LB_LightingBox script and Remove line 186 and 187 (update 1.8) and add below green line code:

```
LB_LightingBox window =  
(LB_LightingBox)EditorWindow.GetWindow<LB_LightingBox>("Lighting Box 2", true);
```

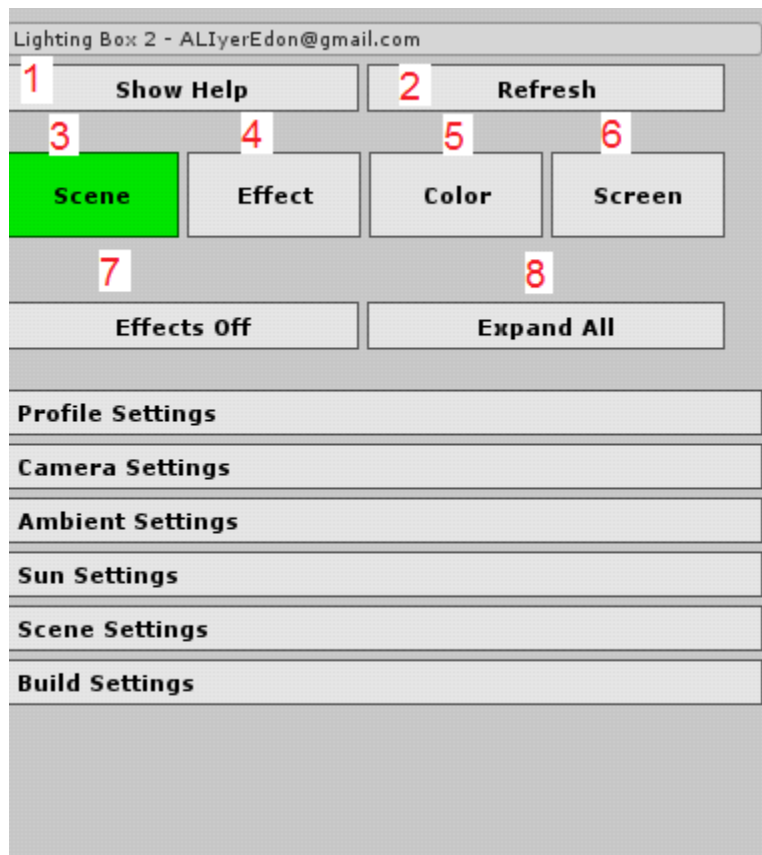


```
6 using UnityEngine;  
7 using System.Collections;  
8 using UnityEditor;  
9 using UnityEngine.SceneManagement;  
10 using UnityEditor.SceneManagement;  
11 using UnityEngine.Rendering.PostProcessing;  
12 using LightingBox.Effects;  
13 using SharpConfig;  
14  
15 [ExecuteInEditMode]  
16 public class LB_LightingBox : EditorWindow  
17 {  
18     Variables  
19  
20     #region Init()  
21     // Add menu named "My Window" to the Window menu  
22     [MenuItem("Window/Lighting Box 2 %E")]  
23     static void Init()  
24     {  
25         // Get existing open window or if none, make a new one:  
26         LB_LightingBox window = (LB_LightingBox)EditorWindow.GetWindow(typeof(LB_LightingBox));  
27         System.Type inspectorType = System.Type.GetType("UnityEditor.InspectorWindow,UnityEditor.dll");  
28         LB_LightingBox window = (LB_LightingBox)EditorWindow.GetWindow<LB_LightingBox>("Lighting Box 2", true, new System.Type[] {inspectorType});  
29  
30         LB_LightingBox window = (LB_LightingBox)EditorWindow.GetWindow<LB_LightingBox>("Lighting Box 2", true);  
31  
32         window.Show();  
33         window.autoRepaintOnSceneChange = true;  
34         window.maxSize = new Vector2 (1000f, 1000f);  
35         window.minSize = new Vector2 (387f, 1000f);  
36     }  
37     #endregion  
38  
39     Options  
40  
41     void NewSceneInit()  
42     {  
43     }  
44 }
```

Now you have Lighting Box 2 ready to use

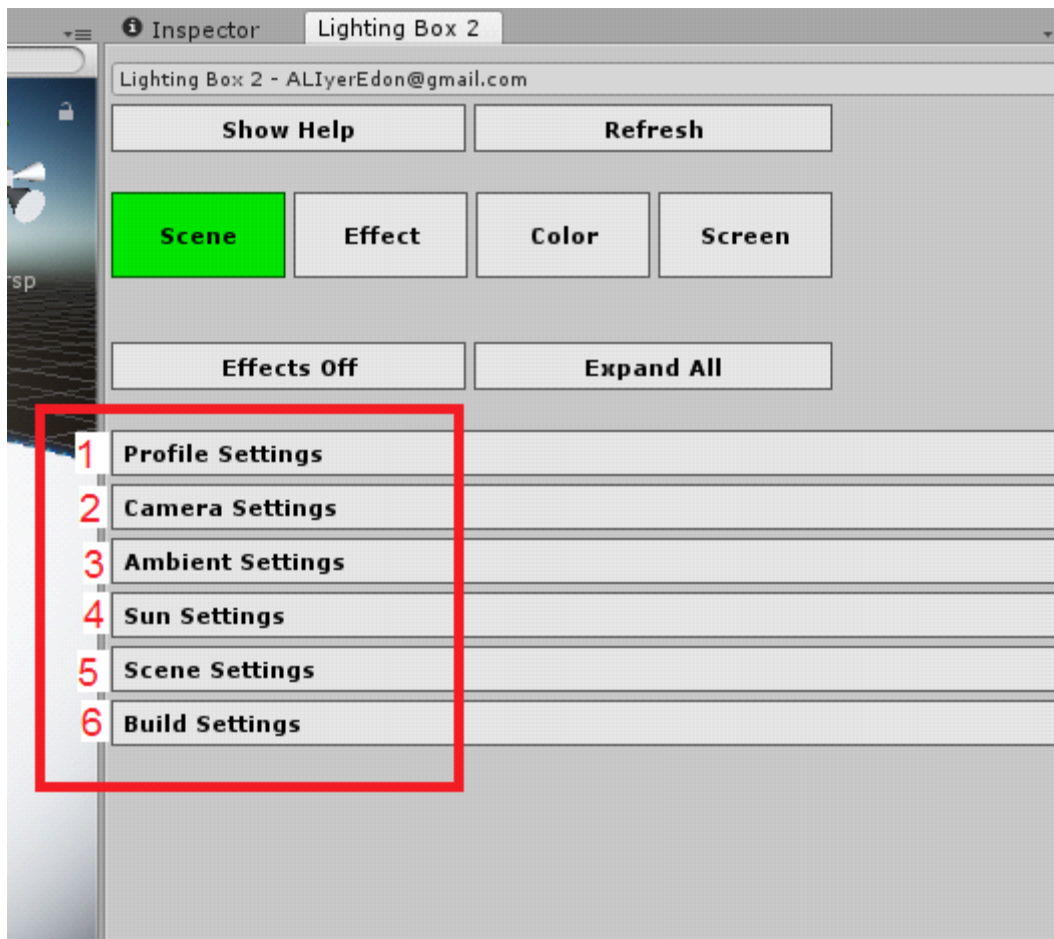
In the new design (update 2.4+), you can see expandable tabs. This feature will help you to get cleaner and simpler workflow when you are moving between settings.

Now I want to explain each button/tab usage:



1. Show a simple description for each effect or tab
2. Refresh un applied effects (press this button after you have used Undo action to update undo changes). Undo actions will not be applied automatically.
3. We have 4 main tabs. First tab is about scene lighting settings. For example ambient light, skybox, sun light, creating profile for each scene, Realtime Or baked GI mode and more.
4. Here you can apply few effects into your scene. Volumetric Light,Sun Shaft,Bloom,DOF and ...
5. Here you can adjust the color grading settings for your camera render view
6. Here you can apply final effects into your screen view. AO, SSR, Vignette, Anti-Aliasing ...

Scene Tab:



1. You must create a new profile for the each scene before start working on the lighting box settings. Create a new Lighting Profile and Post Effects Profile for your current working scene. Also you can share this profile or drag from other scenes here to apply settings automatically.

2. Here you can select camera mode. In this camera we will add all effects and settings (automatically by lighting box). Don't forget to assign "Main Camera" tag to your new created cameras.

3. Here you can adjust ambient lighting settings. Select Skybox as ambient light source (IBL, must be baked or use Precomputed Realtime GI). Or select an simple Color as ambient light source (Don't needs baking or Precomputed Realtime GI, also works in baked and Realtime GI mode)

4. Here you can adjust sun light settings. Direct intensity, indirect intensity (Only Realtime GI or Baked mode). and Sun flare effect

5. Here you can adjust main lighting settings for your Current scene.

Realtime GI, Fully Realtime or Baked GI mode. Realtime GI will switch your settings into Enlighten Realtime GI from Lighting Window. Baked mode will switch to progressive Lightmapper. Fully realtime will disable all of them.

Also you can switch to Deferred or forward rendering path for cameras. In Deferred rendering path you have better reflections and no limits on dynamic lights count. Forward rendering is good in performance for low end devices

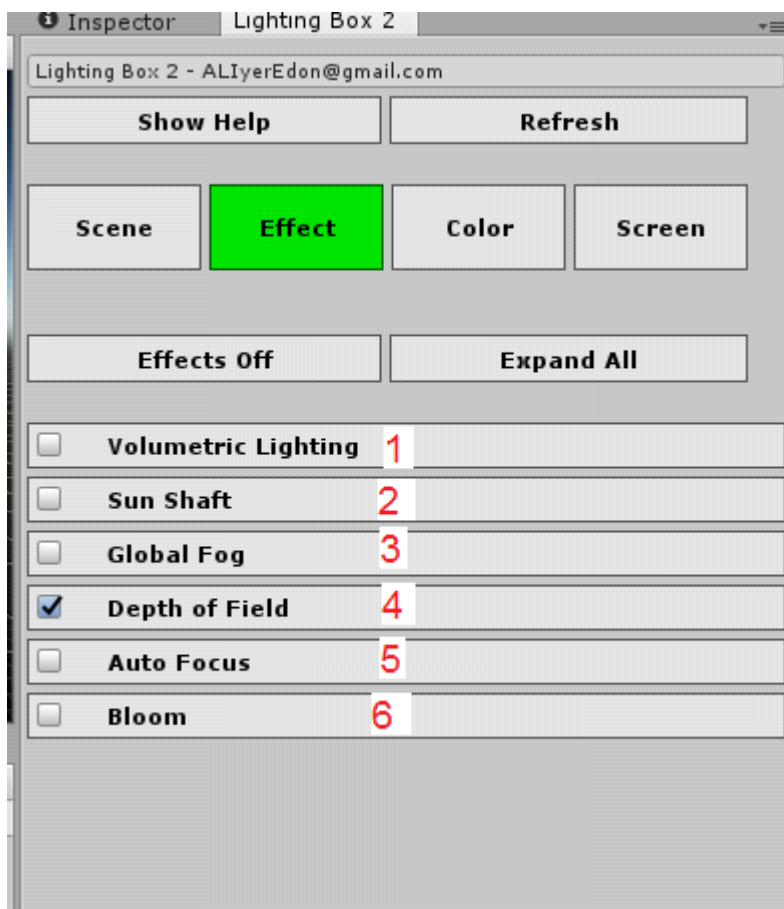
Also you can switch between Linear or Gamma color space or set shadows settings for light sources directly. Linear has been used in all next gen games and game engines. Gamma is useful for low-end mobiles (~30 fps=> ~40 fps on Mali T720)

The final option is Light probes. You can use proxy mode for light probes to get better Light probes quality for dynamic objects with less performance compare to Blend mode.

6. In this tab you can Bake/Build your lighting. Open Lighting Window with a single click (Window->Lighting->Settings)

Also you can add Camera Move Script into your camera to test your effect in play mode.

Effect Tab:



In this tab you can activate effects for your scene¹. Volumetric light will be works on every light source (Spot,Point,Directional). Needs DX11 or GL Core. You can use sun shaft for other platforms to habe better performance. It only works on directional light

Volumetric performance cost is about 5~10 % of overall performance

2. This is a sun shaft effect that can run on every platform even on mobile devices. Use low preset for low-end devices (very low end mobiles). Medium is good for most mobile devices. Only works on directional (sun) light and camera face

3. Here you can assign 3 different fog types.

Global: This is same fog in Lighting Windows. It's optimized for all platforms and will run without image effect.

Distance Fog: This is an image effect fog and is useful for cloudy environments

Height Fog: This is based on image effect

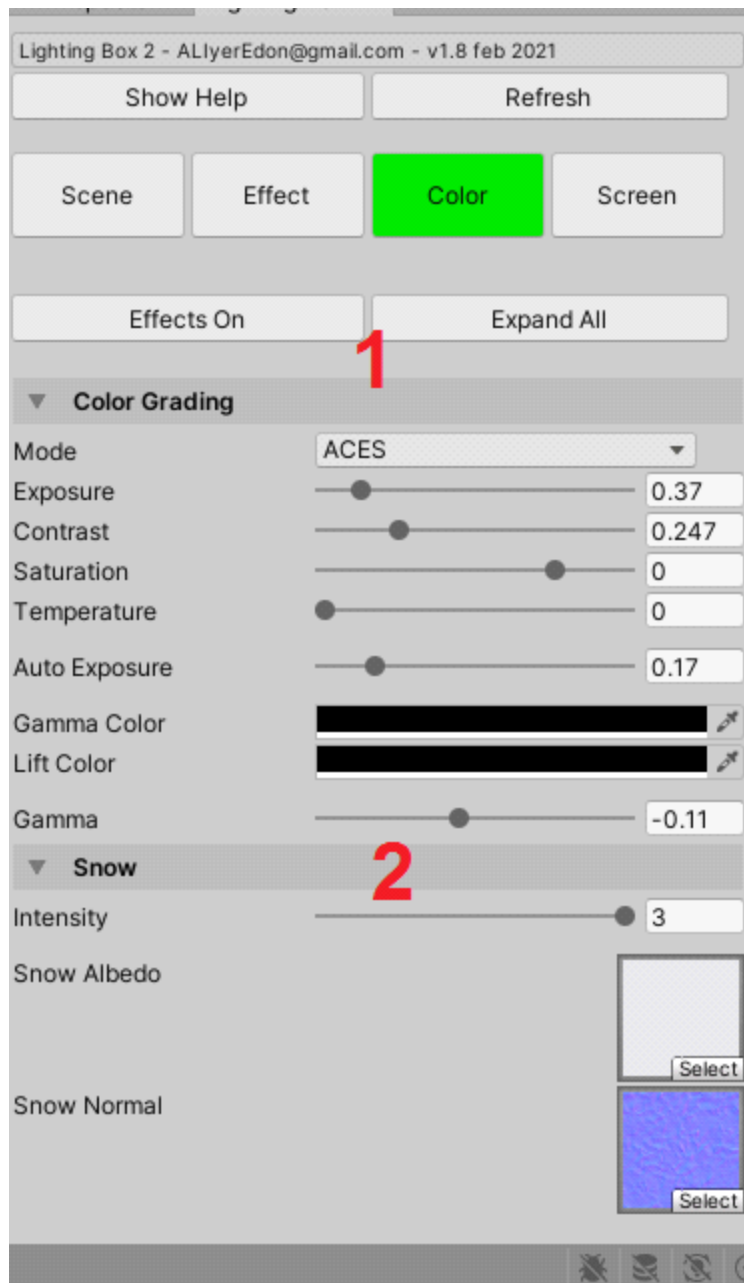
Global-Height: This is a combination of the global and height fog effects

4. This will blur the far distance based on your settings

5. This is auto focus option for Depth of field effect that works using colliders and raycast system. So objects need collider

6. This is bloom effect with proper settings range

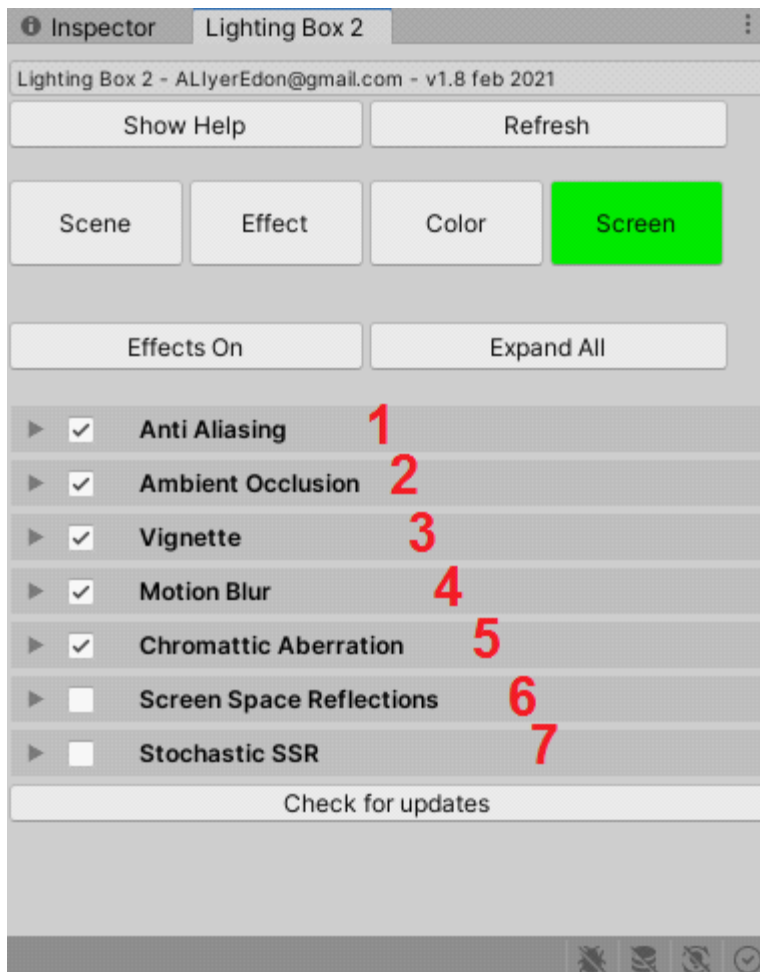
Color Tab:



This is very important tab especially for ArchViz projects. In ArchViz lighting workflow using Max, Maya and ..., you need Post Production part. The most important part in post production is the Color Grading. Using this tab you can do Post production / Color grading for your scene. Also you can manage snow shader's settings (global shader settings)

1. Here you can do color grading (Post Production)
2. Here you can control snow shader

Screen Tab:



1. Anti-aliasing effect. TAA only works in play mode and not editor mode. TAA performance is good for nextgen platforms. Use 2017.2 for WebGL 2.0 support.

2. AO effect is use full to simulate indirect shadows in a fake way. Use Modern version for outdoor and Classic version for Interior lighting mode s

3. Vignette will draw an black circle around screen

4. ...

5. ...

6. SSR is an ray traced solution to get realtime reflections on Smoothness standard shaders.

This is very expensive performance effect. Use lower value for higher fps. Don't use Overkill mode. The last quality should be Ultra (is good enough).

Also quality is depend on the screen resolution.

Works only on Deferred rendering path

7. Stochastic SSR solution is a real screen space ray traced SSR solution that has been used in most game engines like Unreal Engine 4 and the Dice Frostbite. The quality is very good but performance is a bit lower than unity's built-in one

Source: <https://github.com/Xerxes1138/StochasticScreenSpaceReflection>

Contact Me:

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My other assets:

URP Lighting Box 2:

<https://assetstore.unity.com/packages/tools/utilities/universal-lighting-box-2-181550>

HDRP Lighting Box 2:

<https://assetstore.unity.com/packages/tools/utilities/hdrp-lighting-box-2-nextgen-lighting-solution-180283>

And all my assets:

<https://assetstore.unity.com/publishers/23606>