# Lights Receiver URP Documentation

Tested in Unity Unity 2021.3 LTS, 2022.3LTS, 2023.1 Linear color space is recommended for the best quality. Only works with the Universal Render Pipeline!

### Included shaders

- LightsReceiver: Shader used to visualize lights, with options to enable and disable features
- LightsReceiverNoSpecular: Shader used to only visualize the diffuse of the lights, which is better for performance
- Light Receiver subgraph: Subgraph used to receive lighting information for new shaders
- Light Receiver No Specular subgraph: subgraph to receive only diffuse from the lights, which is more performant
- CustomLighting shader library: Used for custom light receiving with PBR estimated lights

## **LightReceiver properties**

Transparency: Increase the transparency of the received lighting (e.g. to show the AR background)

*UseMainLight:* Enable or disable the main light specular reflection *Specular:* Change specular color (white will take the light's color)

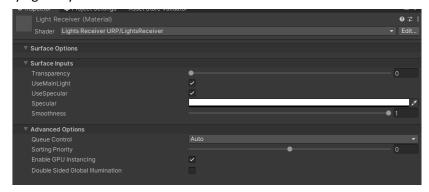
Smoothness: Change the specular smoothness value

# LightReceiverNoSpecular properties

Transparency: Increase the transparency of the received lighting (e.g. to show the AR background)

### How to use

- (Forward rendering) To render additional lights, make sure the *Per Object Limit* of additional lights in your URP Asset is set to the number of lights used.
   Forward+ rendering can use many lights by default.
- Make new material (or use included LightReceiver.mat material, then skip to step X)
- Assign Lights Receiver URP/LightReceiver shader
- 4. Set the desired properties
- Add the material to the desired object (usually AR plane prefab for AR)



## How to use single precision

If the shader were placed at very big positions single precision might be needed. This will perform a bit worse, but would fix graphical inaccuracies.

- 1. Open LightsReceiver shader
- 2. Go to Graph Settings at the top right
- 3. Set precision mode to Single