

## Shadow Receiver URP V3

Tested in Unity 2021.3LTS, 2022.3LTS, Unity 6

Only works with the Universal Render Pipeline! (Built-in render package included as legacy support)

Transparent shadows, shadow cascades, screen space shadows, and soft shadows only in paid version:

<https://u3d.as/2T4d>

### Included shaders:

- *ShadowReceiverTransparent* uses transparency (best used for AR planes)
- *ShadowReceiverTransparentDoubleSided* uses transparency and is double sided
- *ShadowReceiverOpaque* uses an opaque shader with alpha cutout
- *ShadowReceiverOpaqueDoubleSided* uses an opaque shader with alpha cutout and is double sided
- *ShadowReceiverAdditional* uses transparency and gets shadows from additional lights
- *ShadowReceiverDirectionalAndAdditional* gets shadows from main directional and additional lights

### Note:

- To show Transparent shadows enable 'Transparent Receive Shadows' in URP Forward Renderer Asset
- Make sure 'Cast Shadows' is enabled for Main Light/AdditionalLights, depending on which you use
  - o Make sure the Shadow Max distance is set to an appropriate distance as well
- Make sure the lighting mode is set to 'Per Pixel'
- This shader only supports 1 directional light, any additional directional light might cause issues
- Opaque shaders do NOT support soft shadows!
- Forward+ supports more than 8 realtime shadows from additional lights, but the lights are not infinite. Use as many spotlights instead of point lights, as point lights take up 6x the shadow texture memory (so you can get 6x more spotlights than point lights)

### ShadowReceiver Shader Properties:

Shadow Color - 4 channel color of rendered shadow (alpha included as transparency)

Alpha Clip (Opaque only) – Used to tune the visuals when using opaque shadow receivers

### How to use:

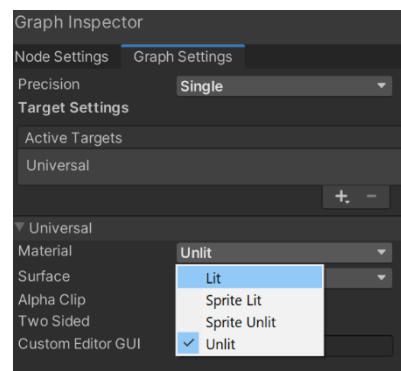
- Make new material (or go to included ShaderReceiver.mat material)
- Assign 'Shader Graph/ShadowReceiver' shader to material
- Set desired Shadow Color
- (Transparent shaders) If needed set alpha for transparent shadows (paid only)
- (recommended) When using this material on multiple objects enable GPU Instancing when you want to use Dynamic Batching
- Drag material onto desired object (for AR put this on the plane detection plane prefab)

### How to use Lit shading:

- Open desired shader by double clicking
- In Graph Inspector set Material to Lit

### How to use single precision (mobile only):

- Current implementation used half precision for performance on mobile.
- If this is undesired open the preferred shader graph and change the precision on 'graph settings', and on each node to Single



## Unity 2020 support:

Unity 2020 does NOT support additional shadows!

- By default this package now works in Unity 2021.3+ for better performance and stability across platforms.
- To use this package in Unity 2020, install the Unity 2020 shaders Unity Package from the ShadowReceiverURP folder
- You may need to delete the AdditionalLights and additional lights subgraphs to avoid compiler errors

## How to use different blending modes?

1. Open the used shader graph in Assets/DevDunkStudio/ShadowreceiverURP/Shaders
2. Head to the Graph Inspector, Graph Settings
3. Scroll down to Rendering Mode and change the blending mode

