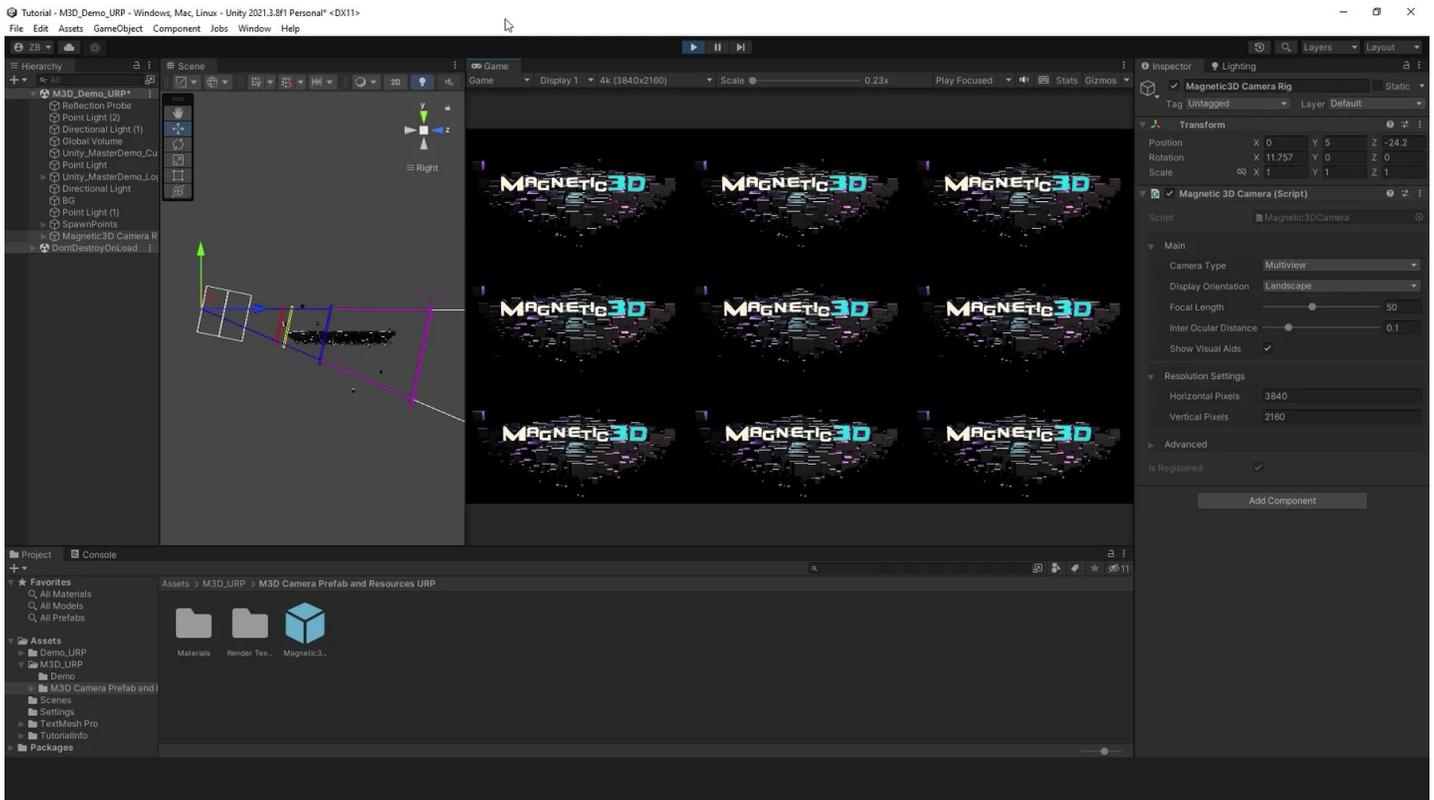


# Multiview Camera Plugin for Unity

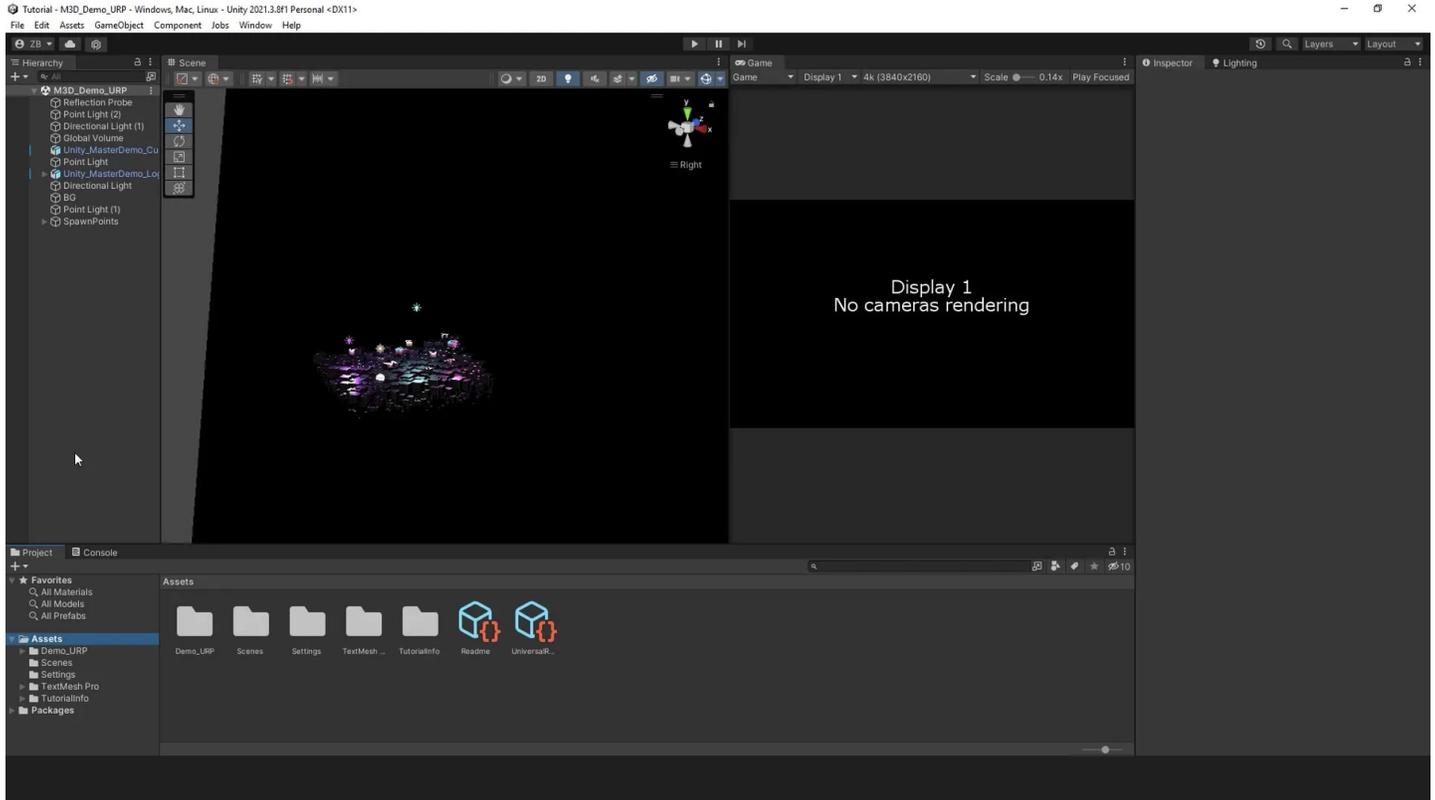
## Quickstart Guide



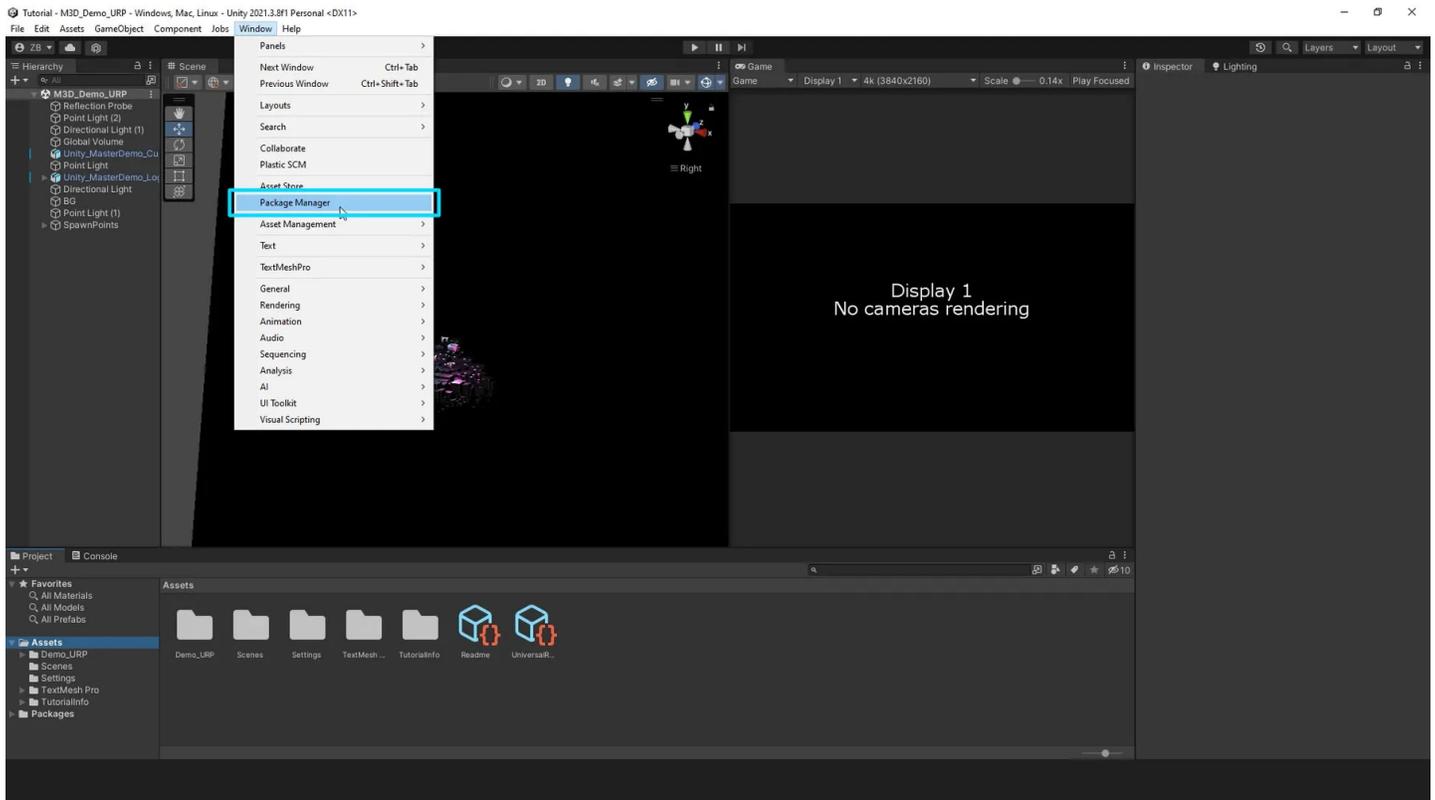
Git URL:

<https://github.com/Magnetic3D/UnityPlugin.git>

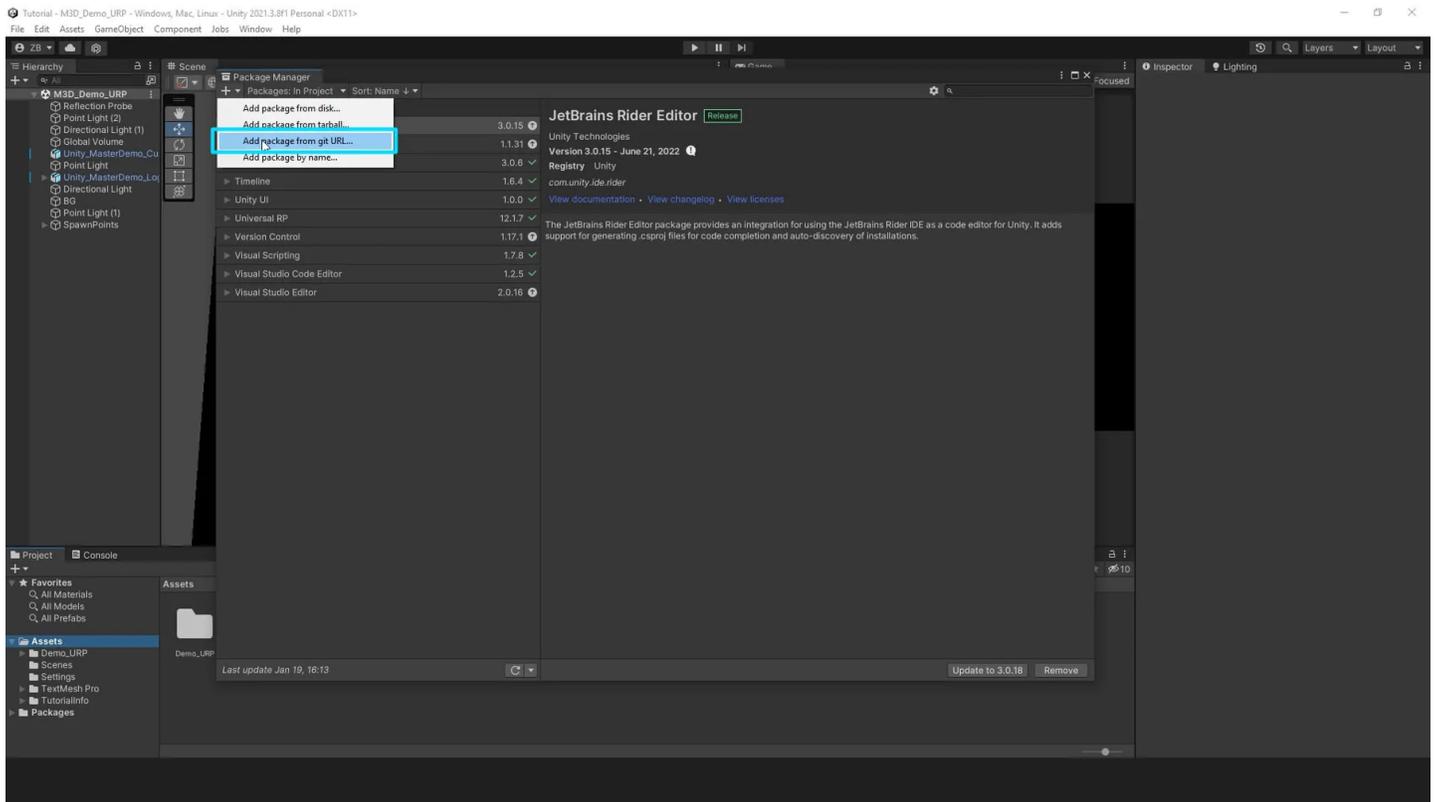
# A. Setup & Installation



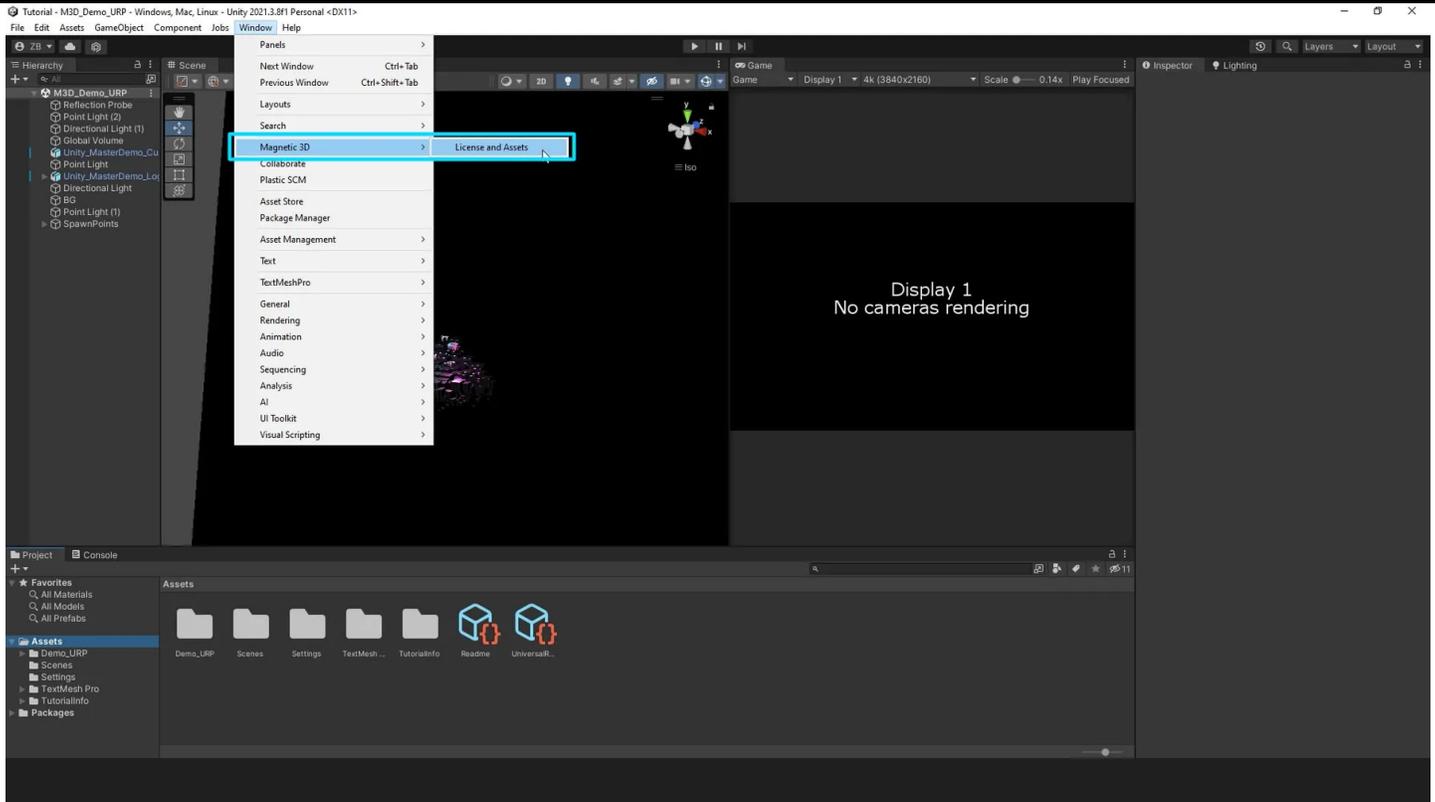
01: Open a new project or existing project with your preferred render pipeline.



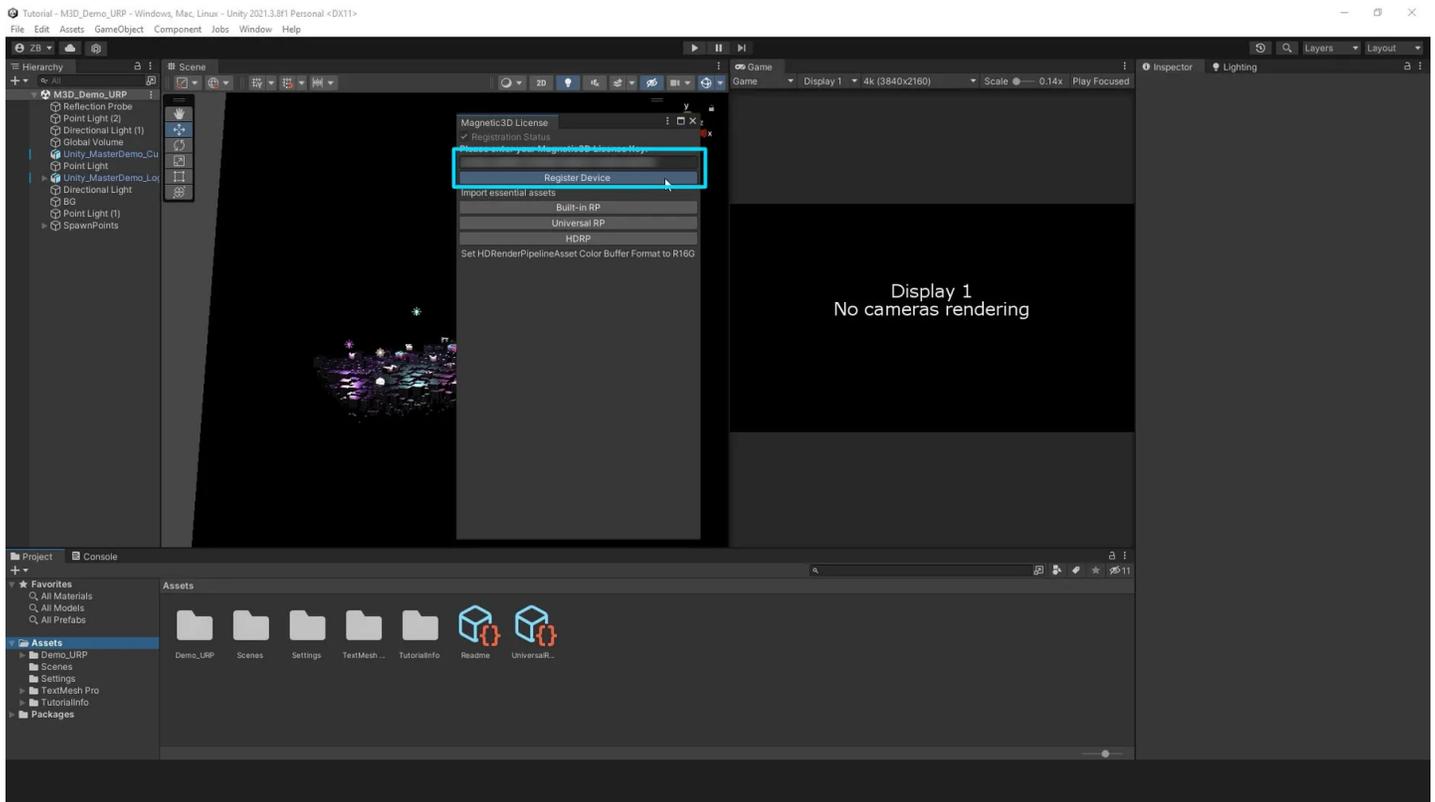
02: Open the **Package Manager** from the **Window** menu at the top.



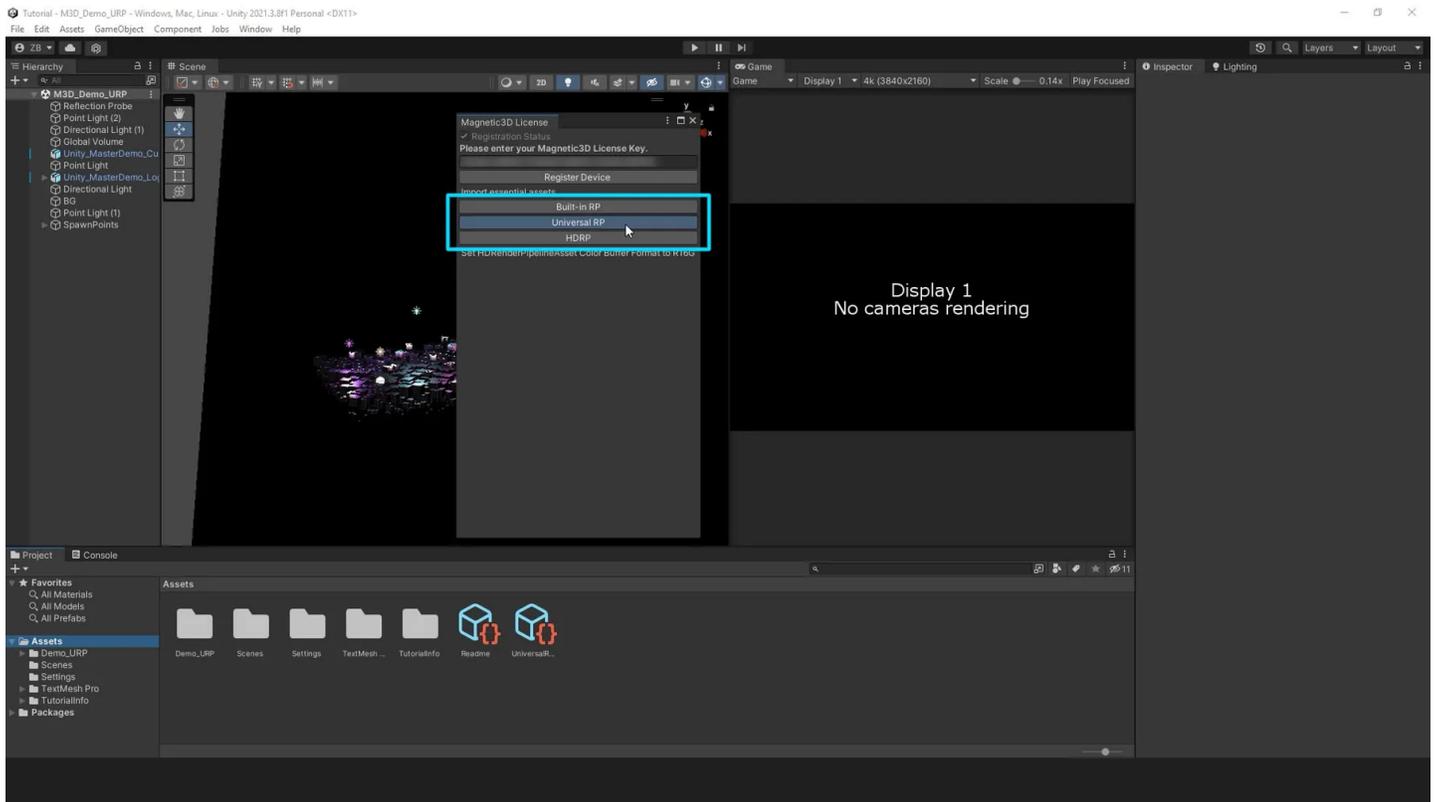
03: Click the **+** icon in the top left and choose **add package from git URL**. Then enter this URL, <https://github.com/Magnetic3D/UnityPlugin.git>



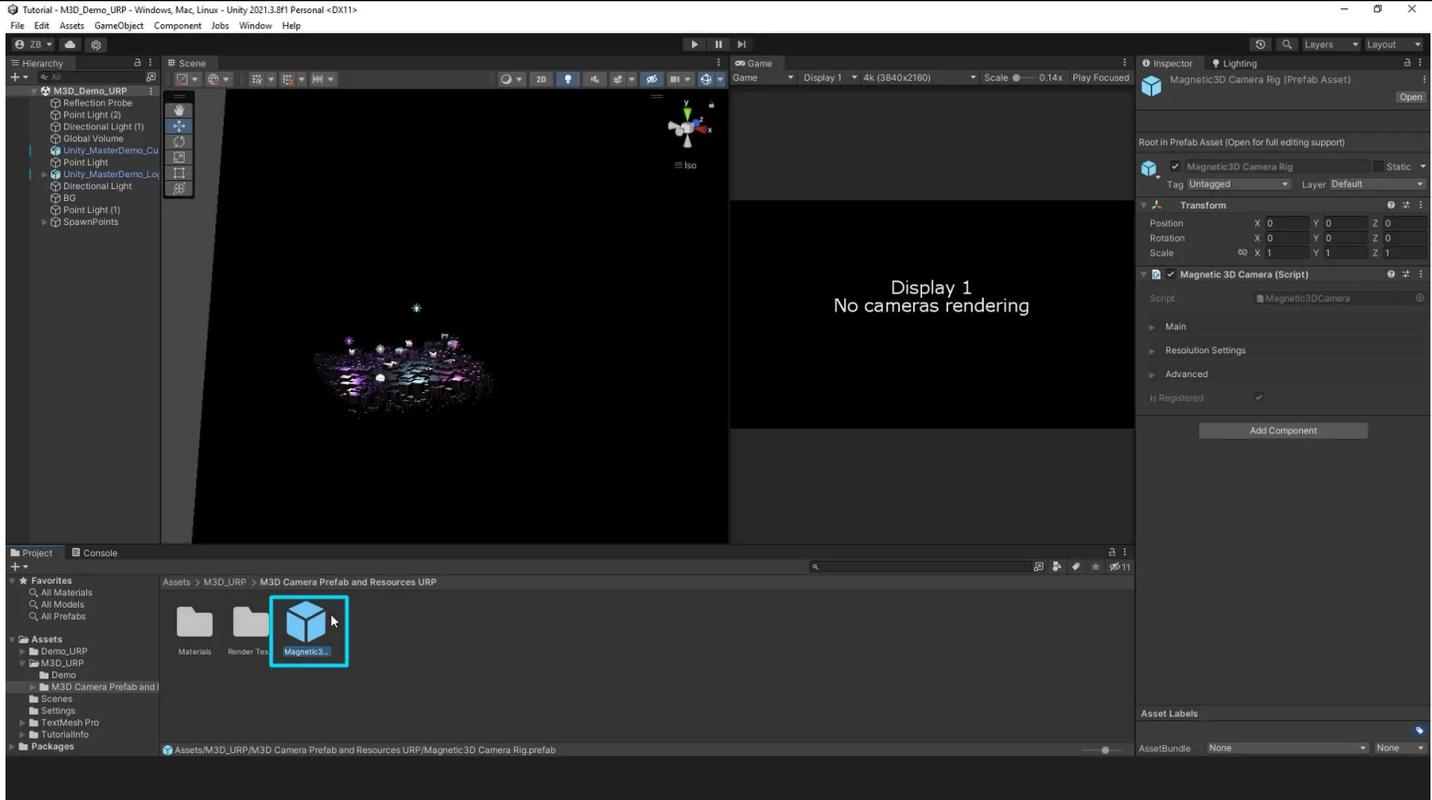
04: Open the **Magnetic 3D** menu from the **Window** menu at the top. Then click on **License and Assets**.



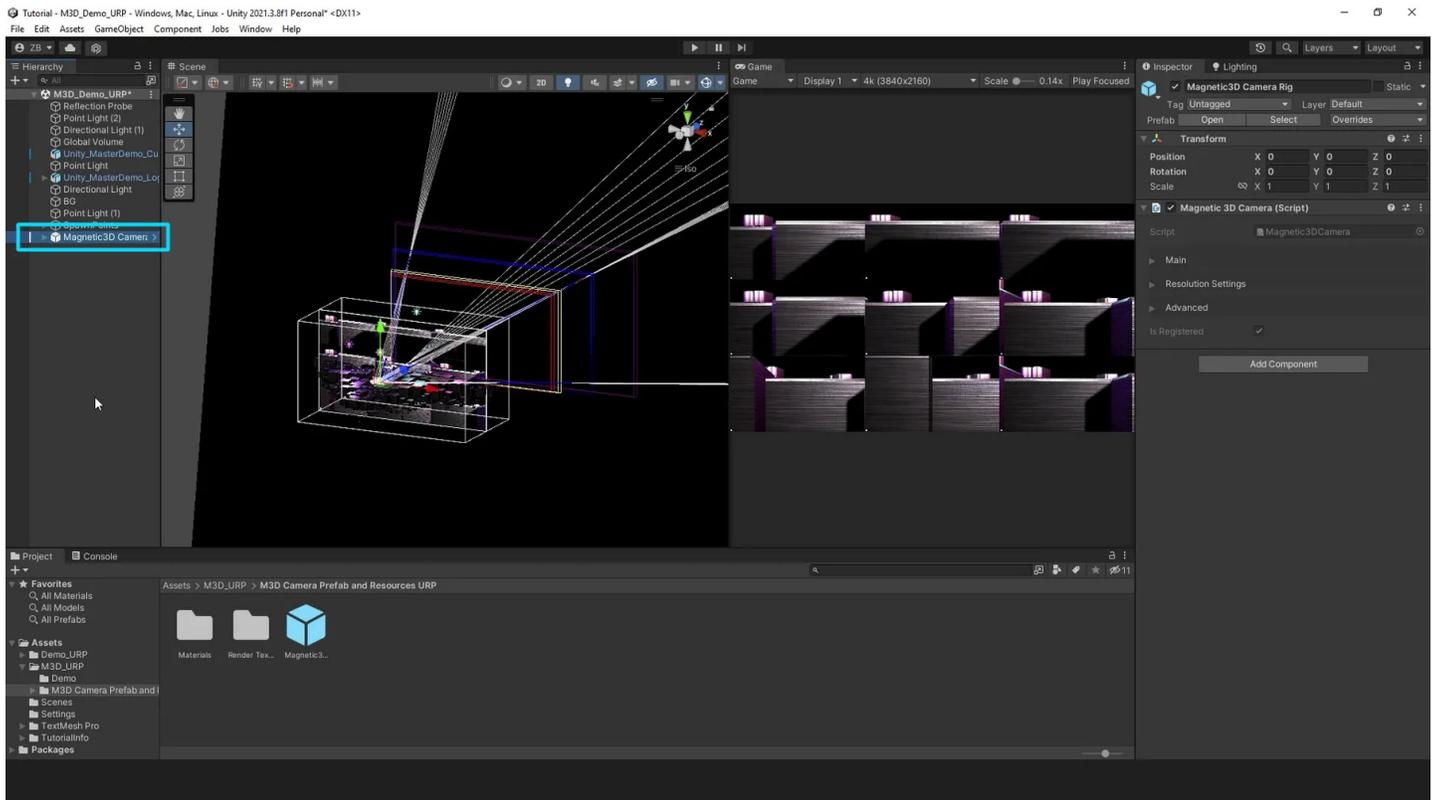
05: Enter your **License Key** and click **Register Device** to unlock the features of the plugin.



06: Below the License, click on the button corresponding to your current **Render Pipeline**. This will install the necessary assets to use the plugin.

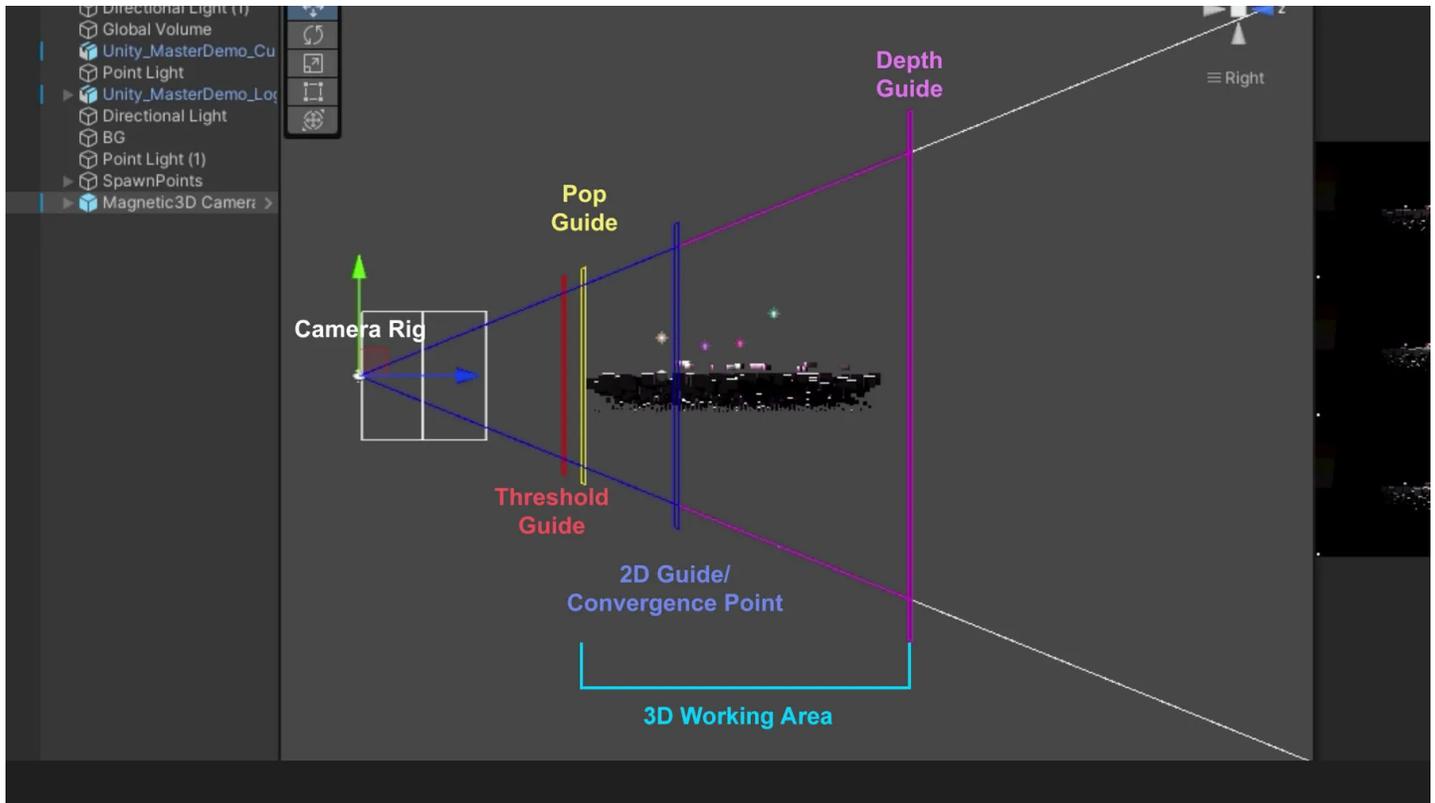


07: Once the assets are installed, find the **Magnetic 3D Camera** prefab in the newly created folder in the **Project** panel.



08: Drag the **Magnetic 3D Camera prefab** into the **Hierarchy** of your scene.

## B. Visual Guides



01: **Camera Rig** - the camera rig prefab

02: **Threshold Guide** (Red) - This is the absolute pop limit. Moving objects can cross the Pop Guide (yellow) up to the Threshold Guide for short amounts of time during an animation.

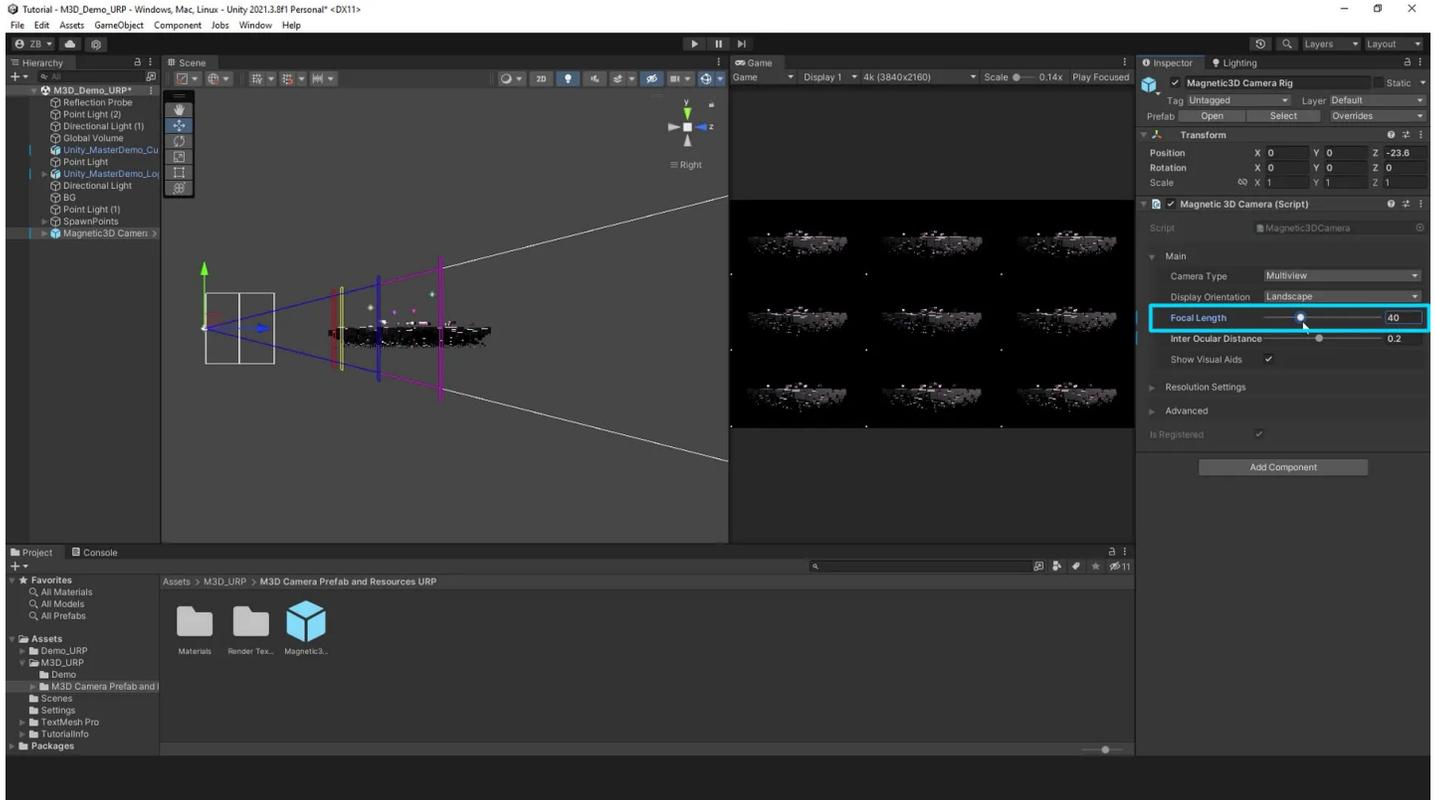
03: **Pop Guide** (Yellow) - This is the pop limit. Objects should generally stay at or behind this guide to ensure there are no parallax issues.

04: **2D Guide** (Blue) - This is the convergence point. Anything at this plane will appear 2D. It represents the transition from positive parallax (popping out of the screen) to negative parallax (receding into the screen).

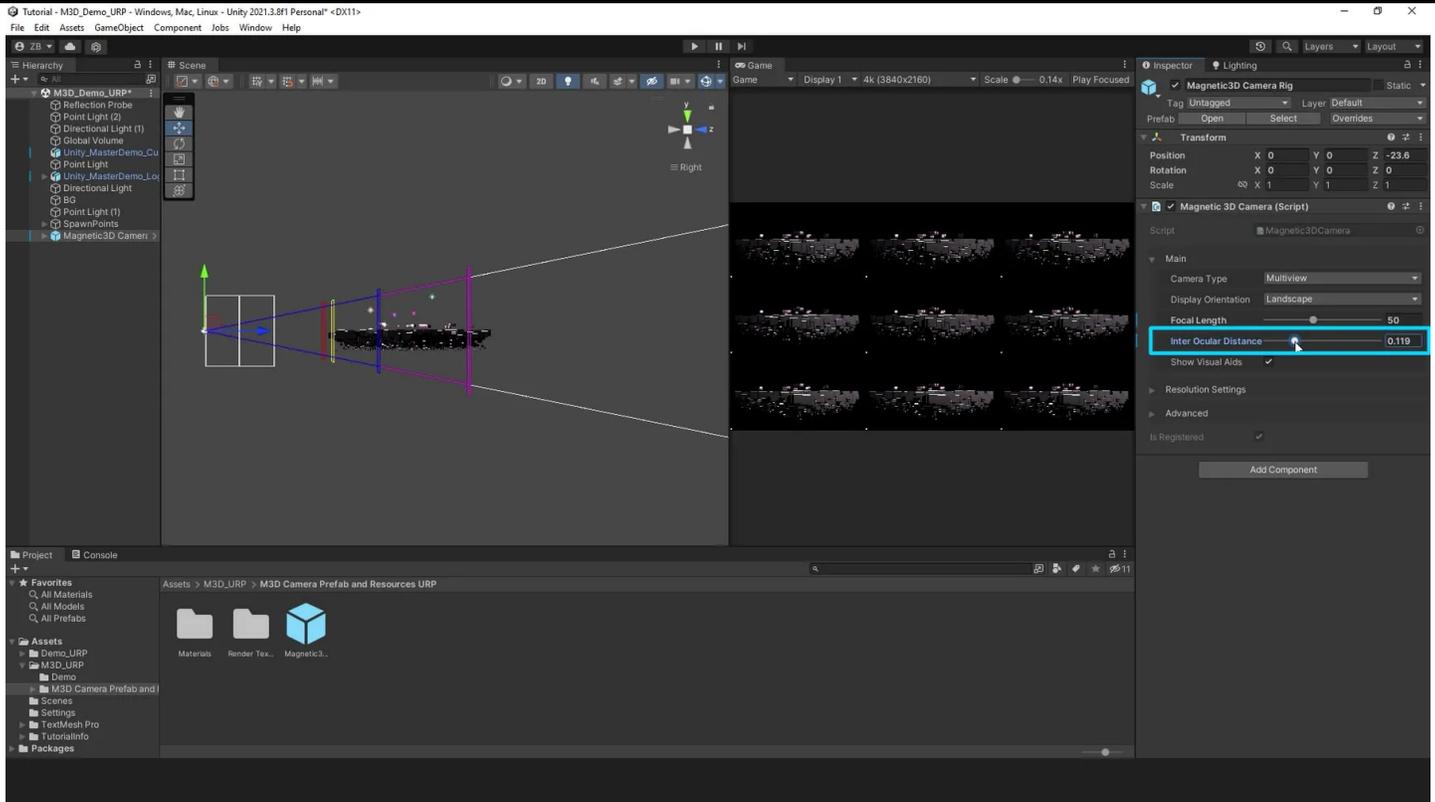
05: **Depth Guide** (Magenta) - This is the depth limit. Objects should generally stay at or in front of this guide to ensure there are no parallax issues. *(If the interocular is less than 0.05, objects can be placed at any distance beyond this guide.)*

06: **3D Working Area** - This is the area between the Pop Guide and the Depth Guide. This will serve as the main area where objects can be located without having issues when viewed in 3D.

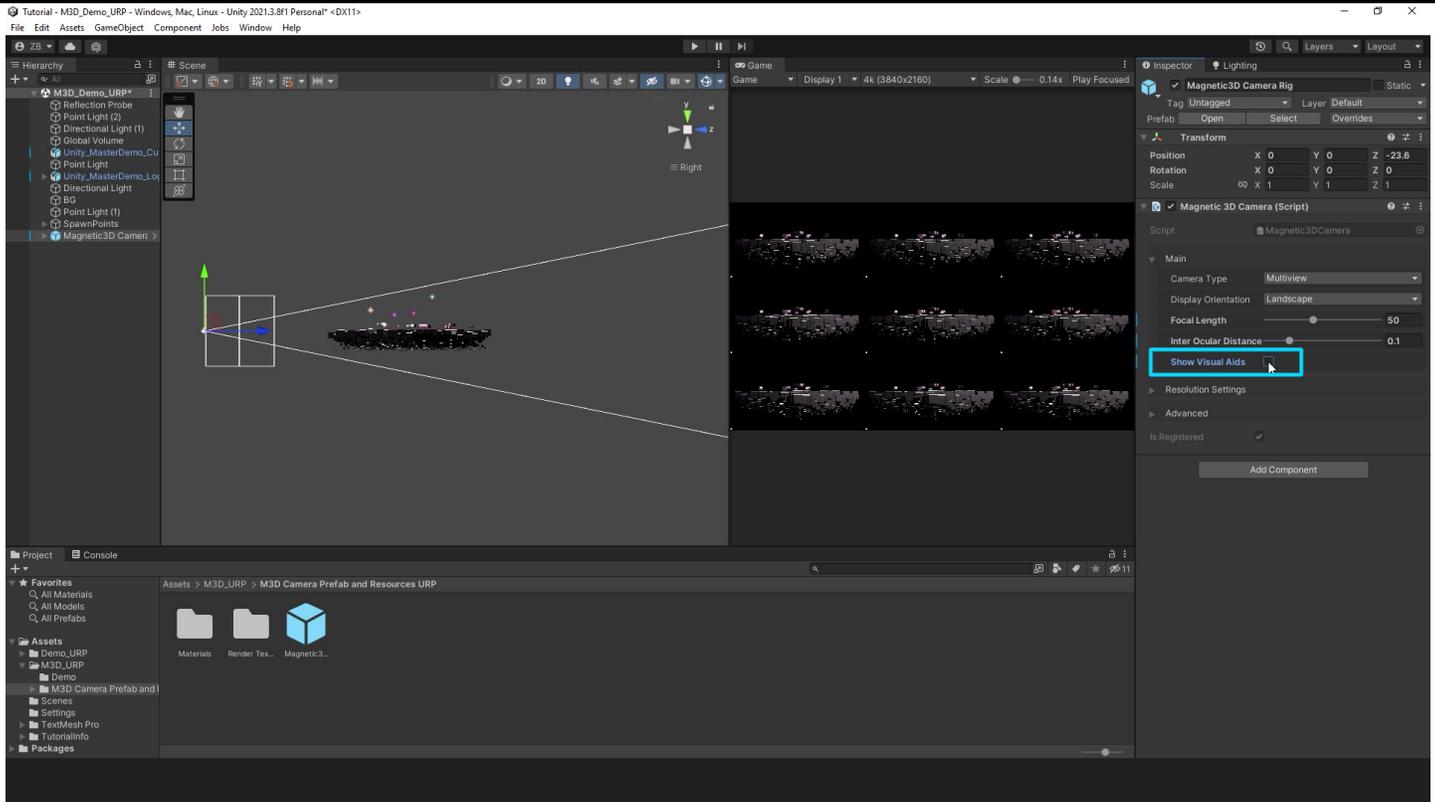
## C. Settings & Parameters



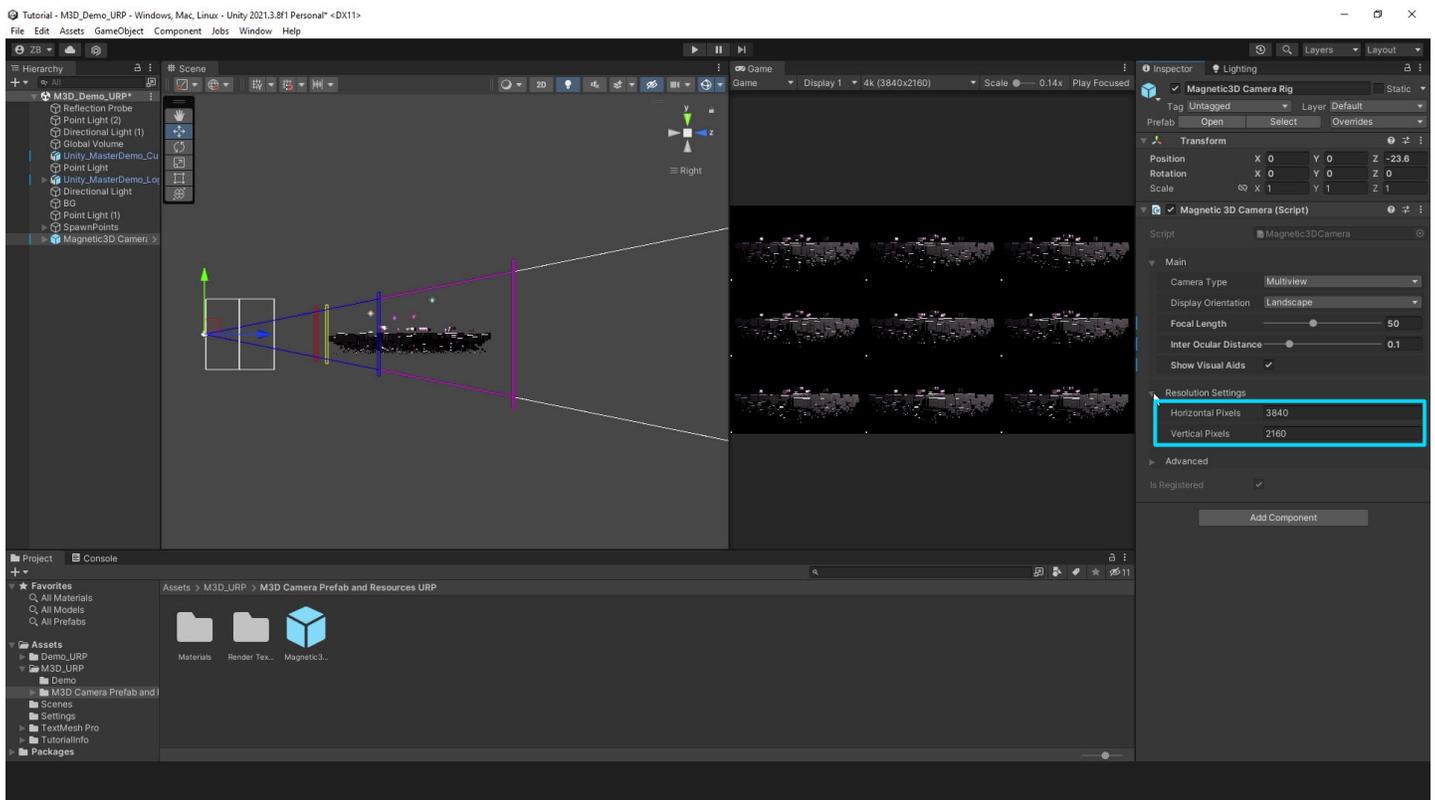
01: **Focal Length** - the focal length will adjust the lens of the cameras in the rig. You will see the Visual Guides adjusting automatically based on the focal length you choose.



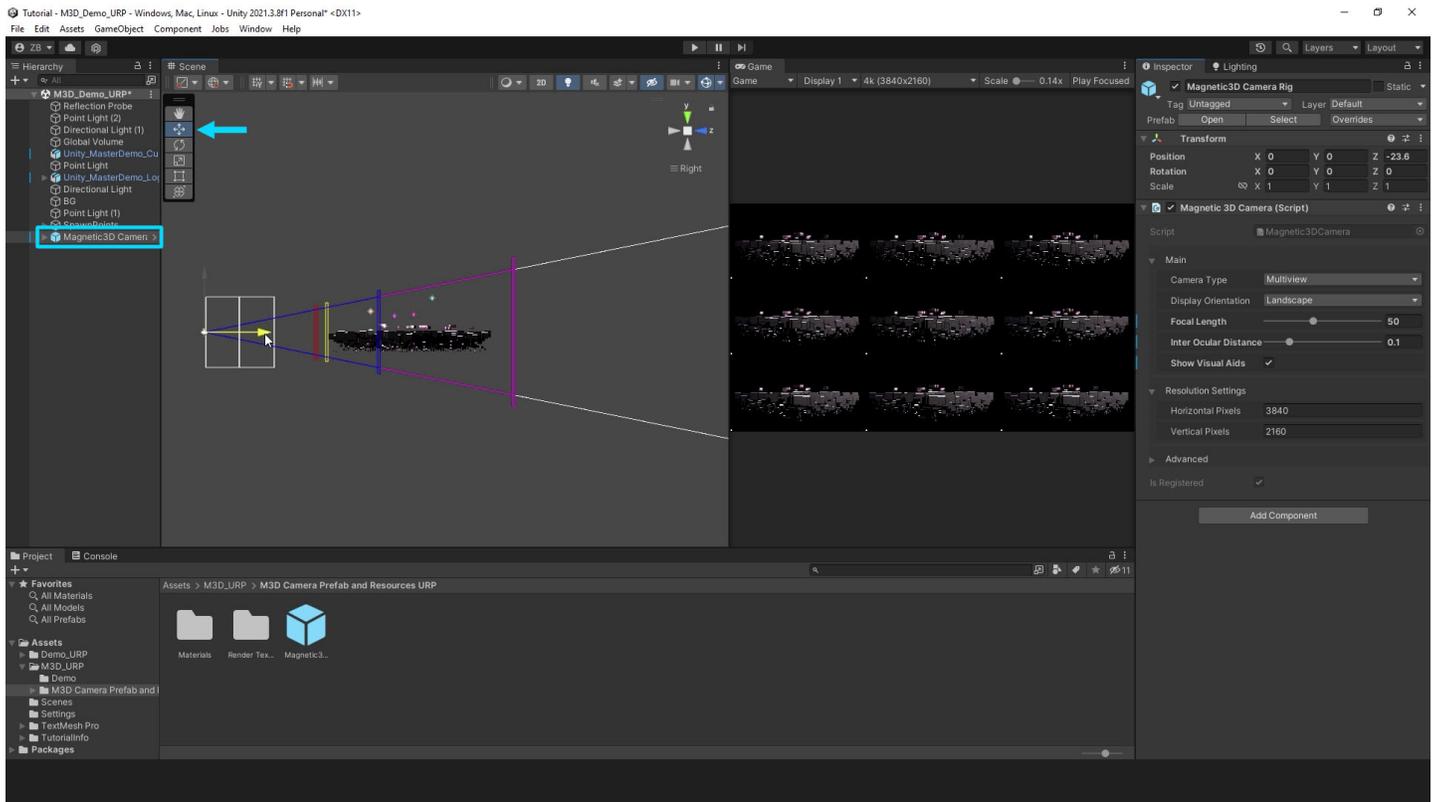
**02: Interocular Distance** - the interocular is the distance between each of the cameras in the rig. A larger interocular will compress the 3D Working Area, but objects within will look very 3D. A smaller interocular will expand the 3D Working Area, allowing you to make larger scale scenes. The Visual Guides will automatically update while changing the interocular.



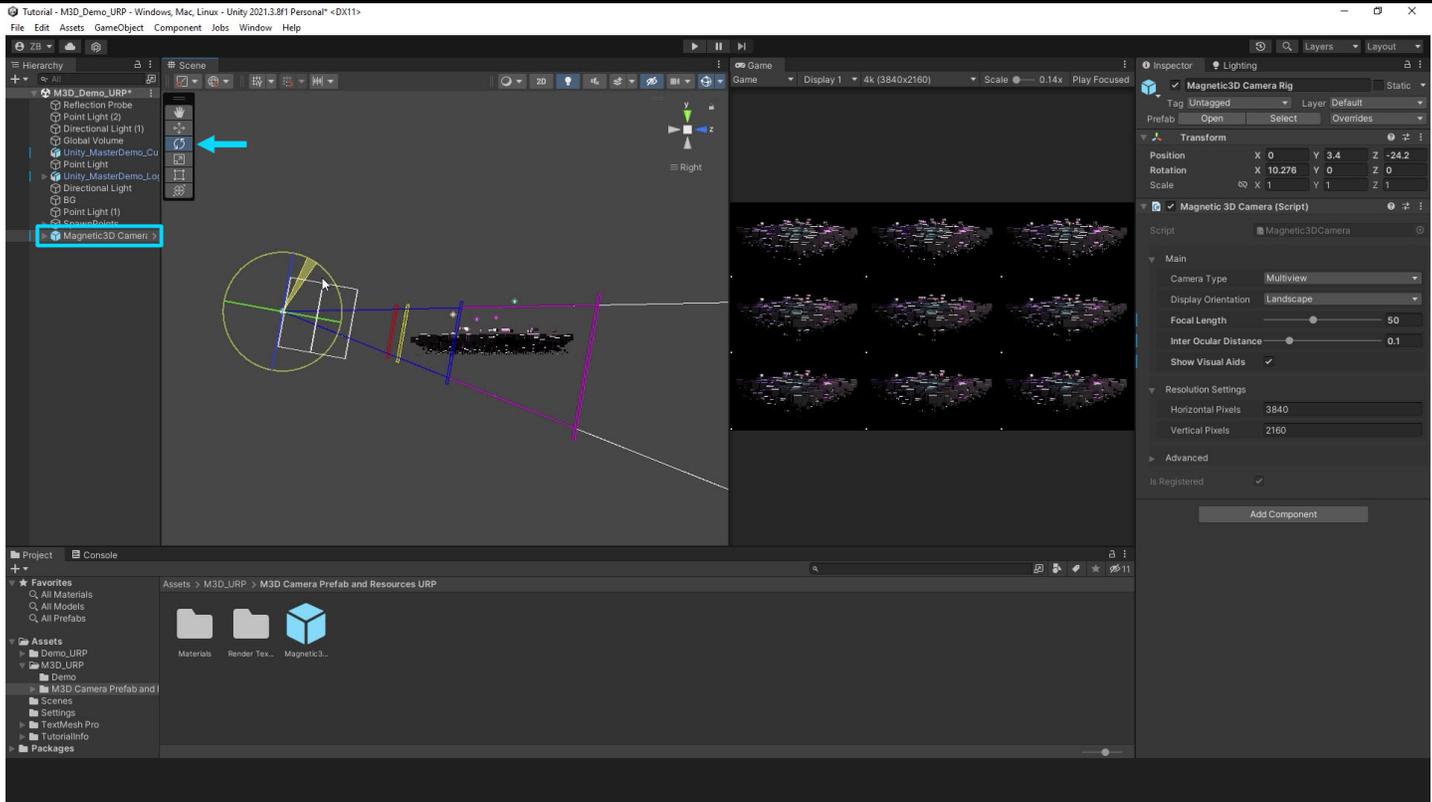
**03: Show Visual Aids** - this checkbox will enable or disable the Visual Guides. You may want to toggle them off while working on the details of your scene so they are not in the way.



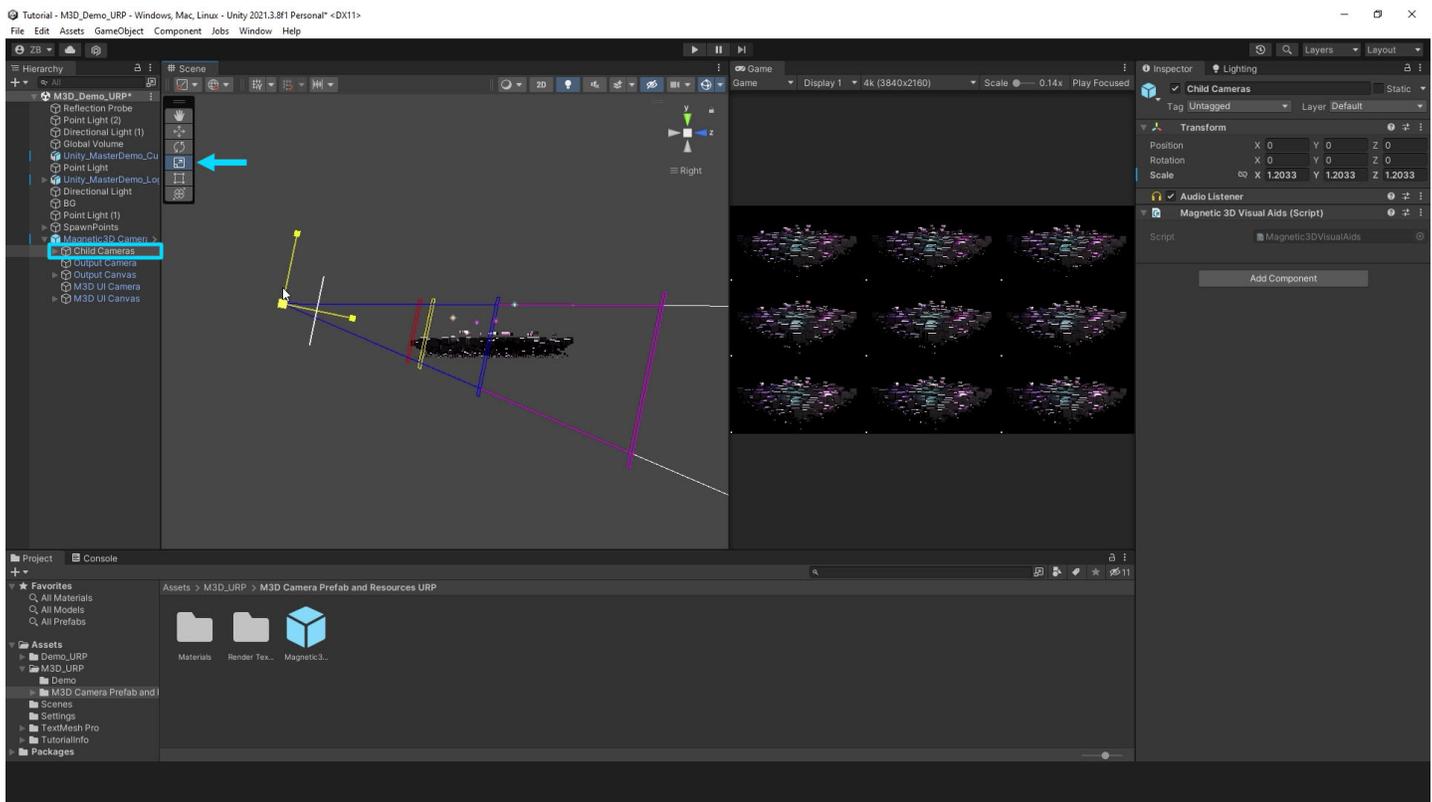
**04: Resolution Settings** - this shows the target resolution for the final output. Keep this at 3840 x 2160 for most Magnetic 3D devices.



**05: Position** - changing the position of the Magnetic 3D Camera prefab will move the Visual Guides along with it. Positioning it properly in your scene is important, keep everything within the 3D Working Area.

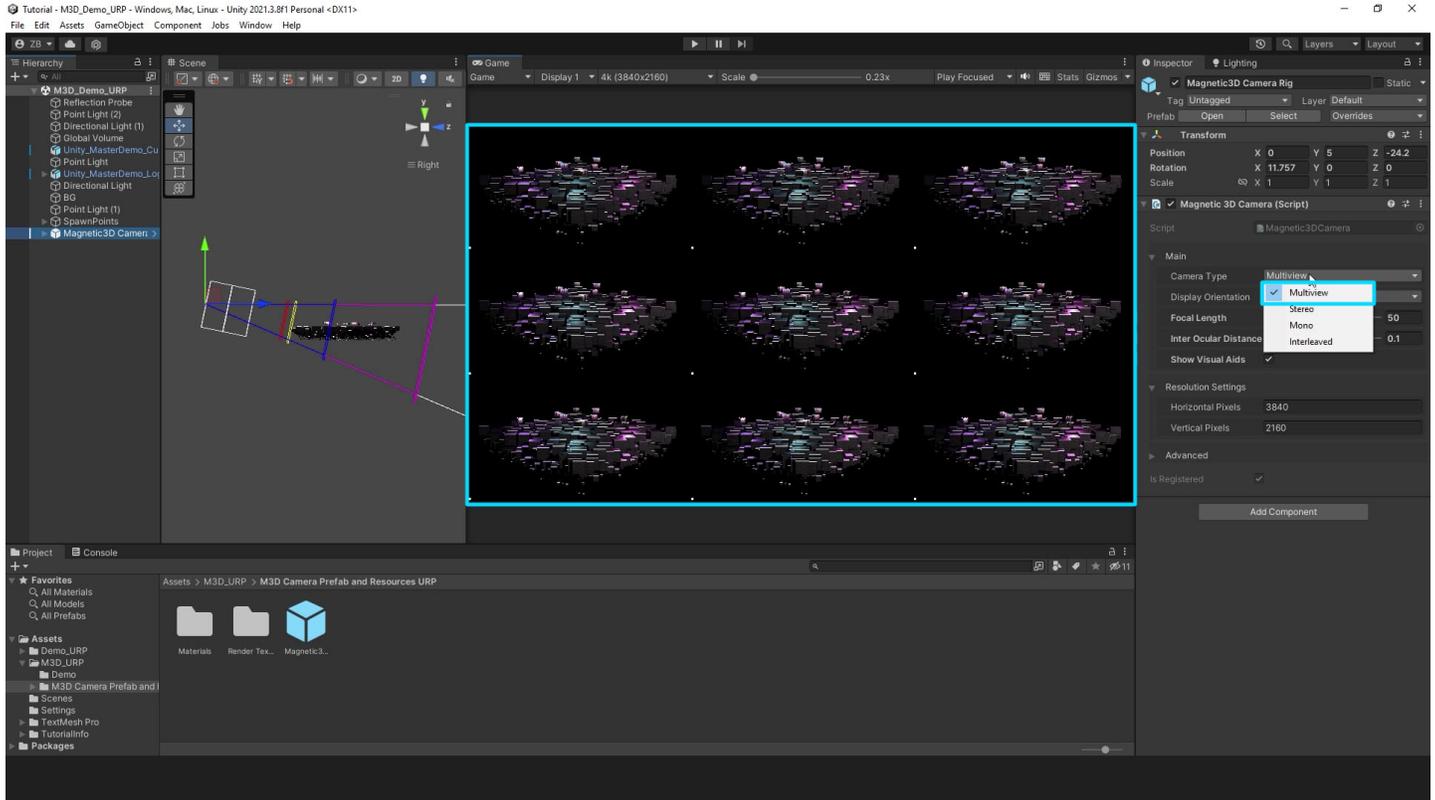


06: **Rotation** - changing the rotation of the Magnetic 3D Camera prefab will adjust the Visual Guides along with it.

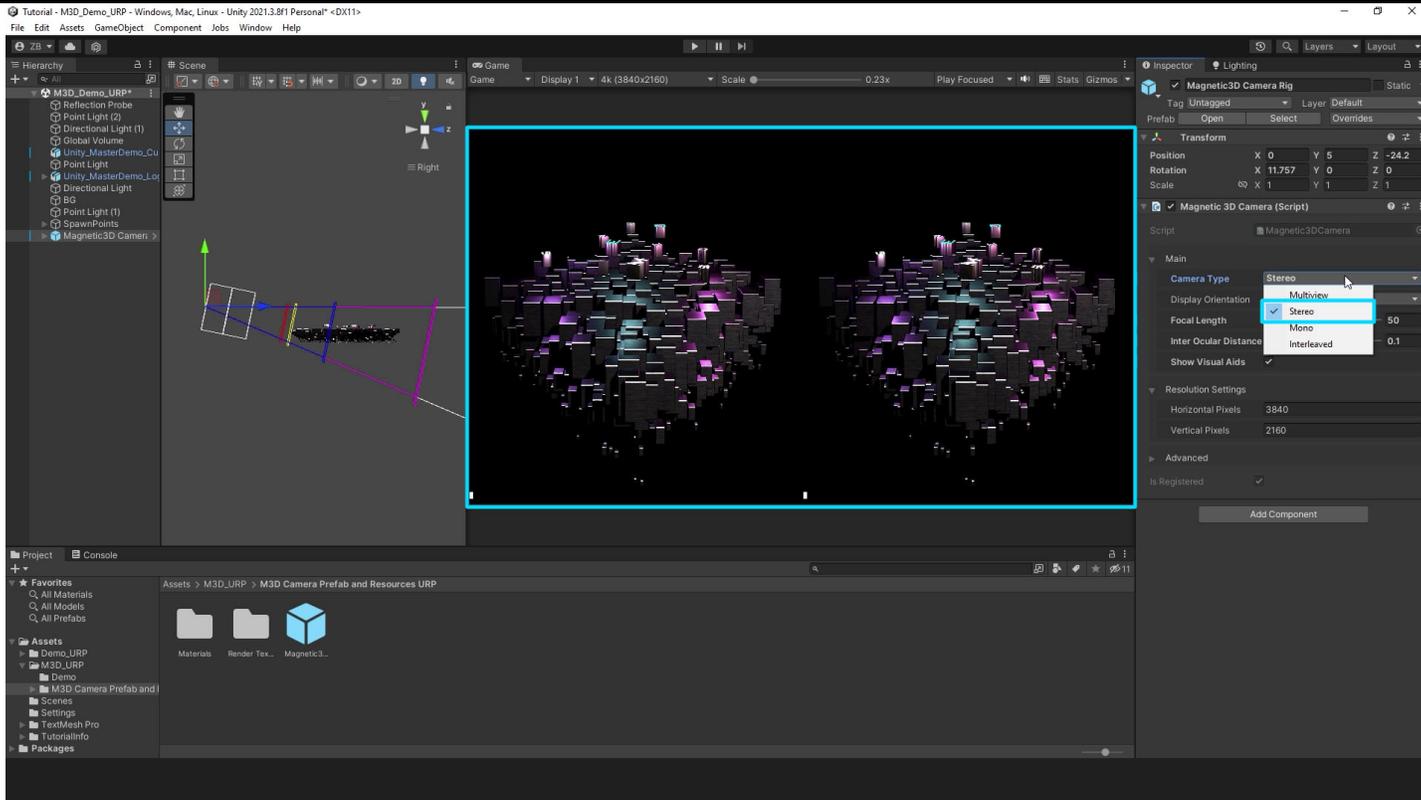


07: **Scale** - do **NOT** scale the Magnetic 3D Camera prefab directly. Scale the Child Cameras object inside of the prefab. This will scale the entire 3D Working Area and move the convergence point closer or farther from the camera.

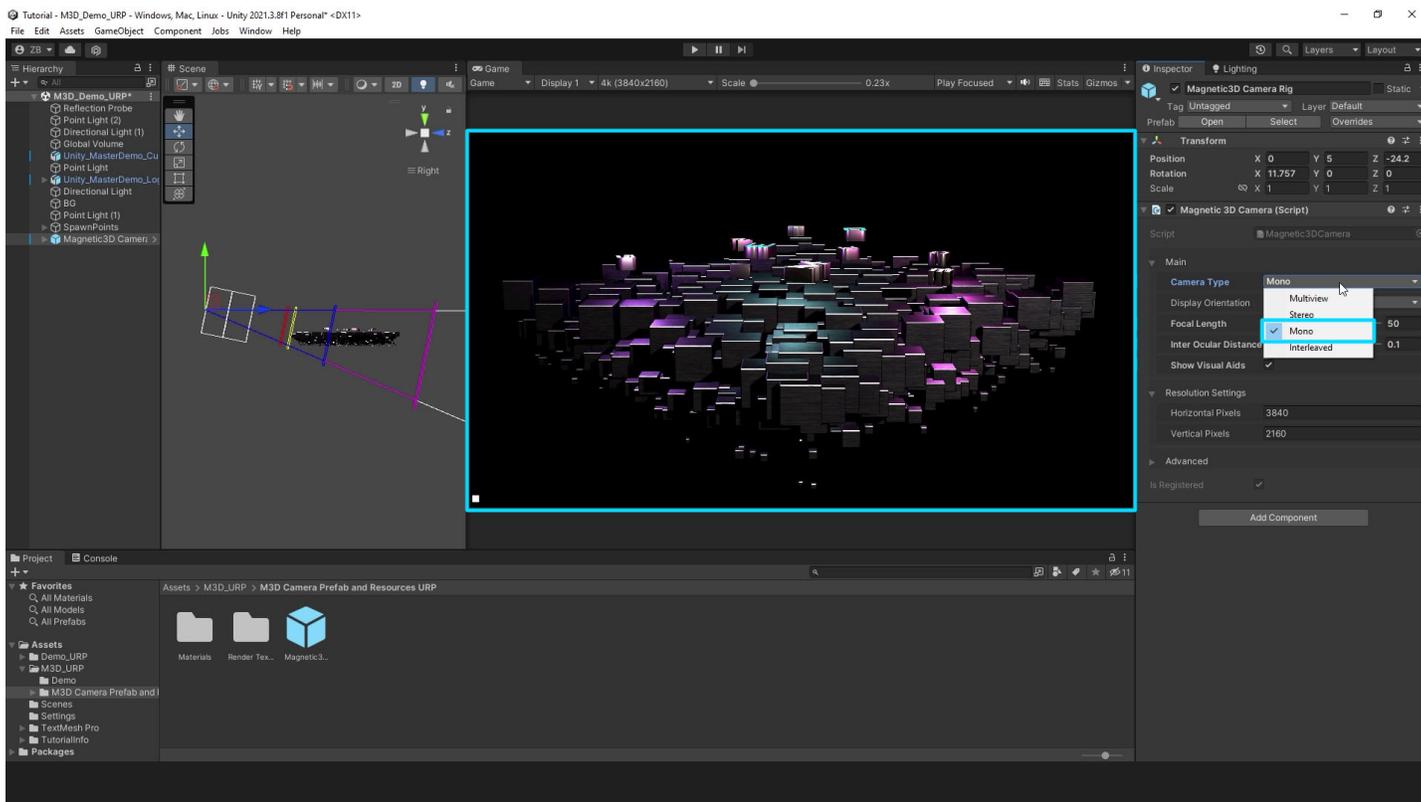
## D. Output Options



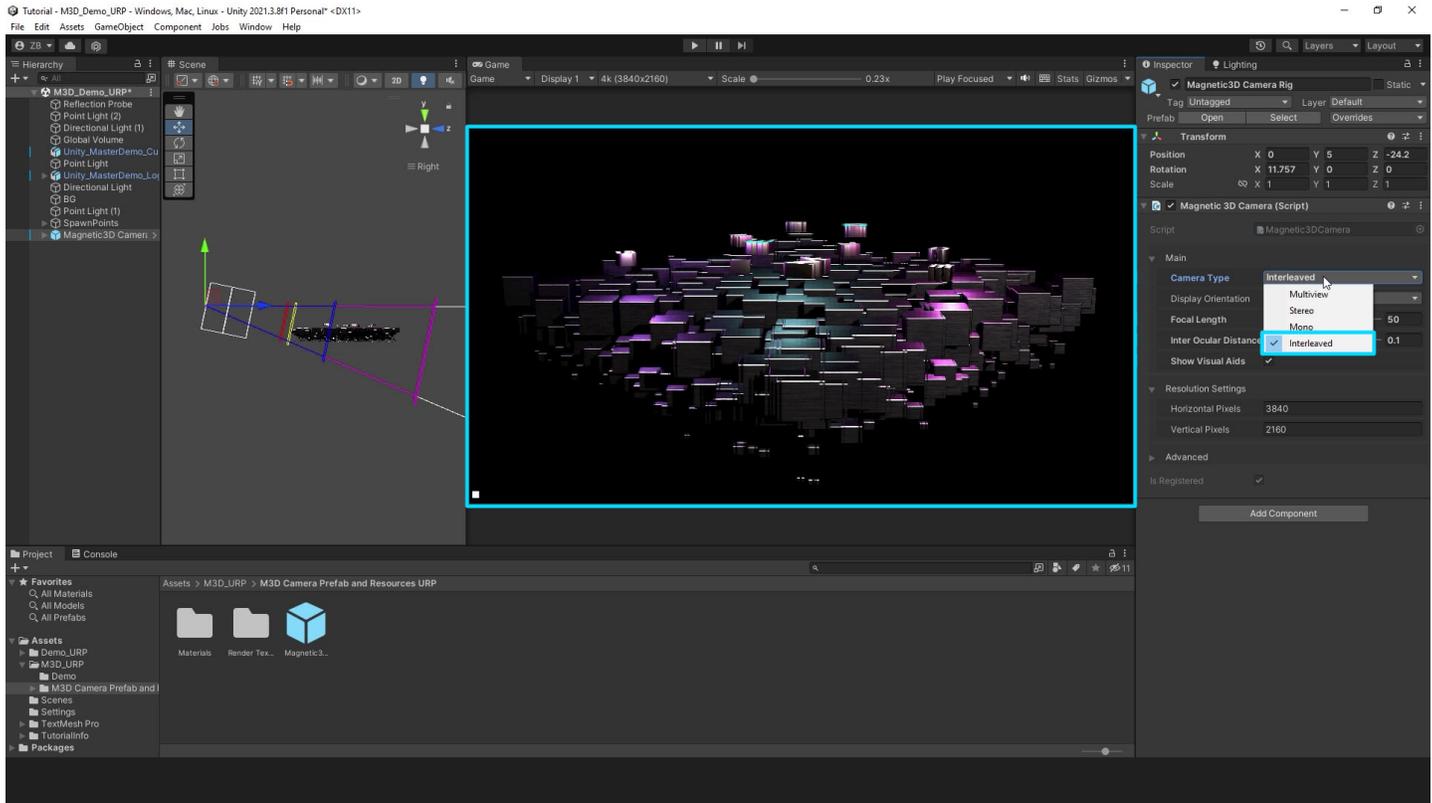
01: **Multiview** - this is the standard output for Magnetic 3D's Wildfire displays. It has multiple views that get tiled into a grid so the display can read and combine them.



02: **Stereo** - this is a common 2-view output. It is used for Magnetic 3D's Emersa desktops but is also compatible on Wildfire displays.

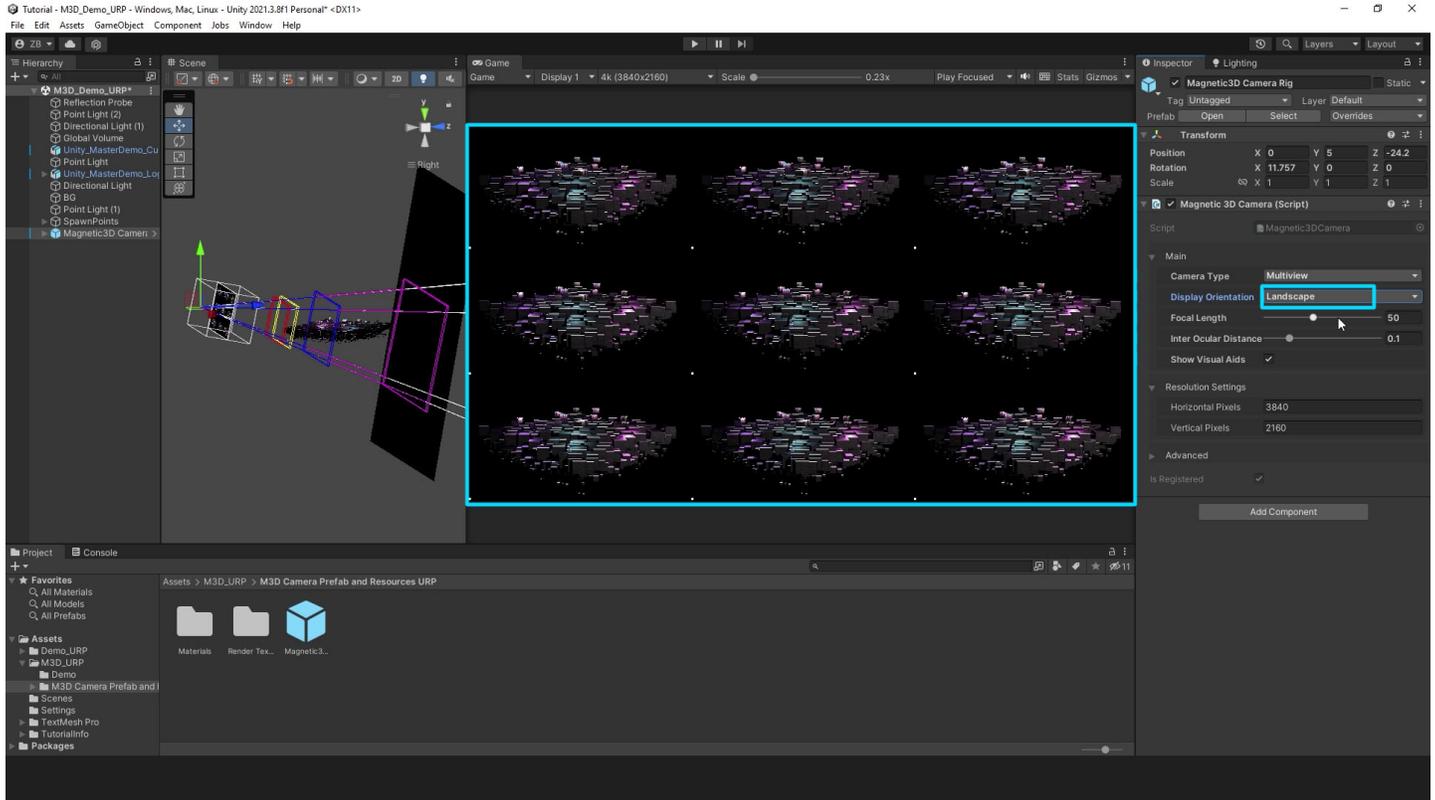


03: **Mono** - this is a single view output or 2D. It is useful to use this to preview your final output on a 2D screen.

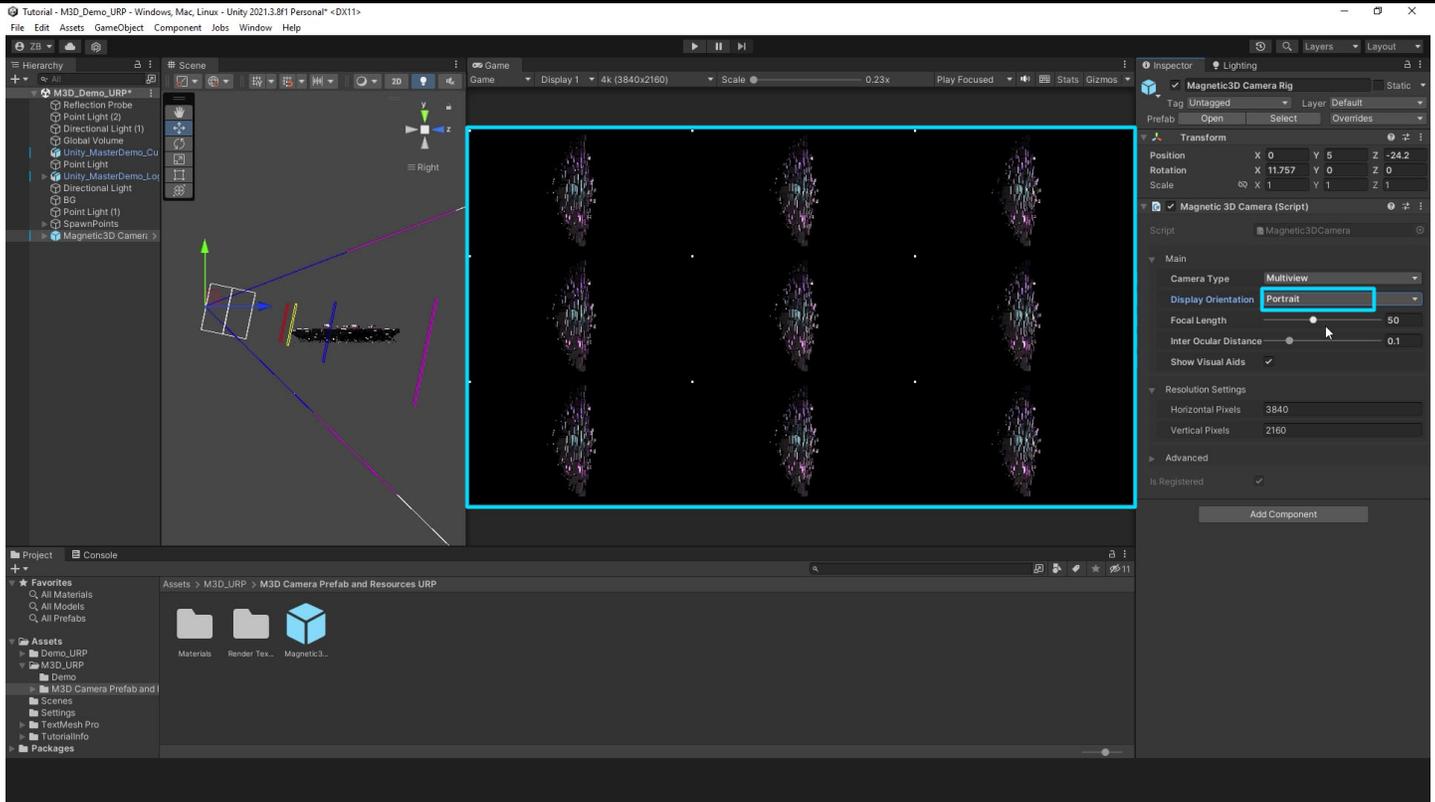


04: **Interleaved** - this is a 2-view output, where the views are combined line by line. This is used for Magnetic 3D's Emersa tablets and other mobile devices.

## E. Orientation Options

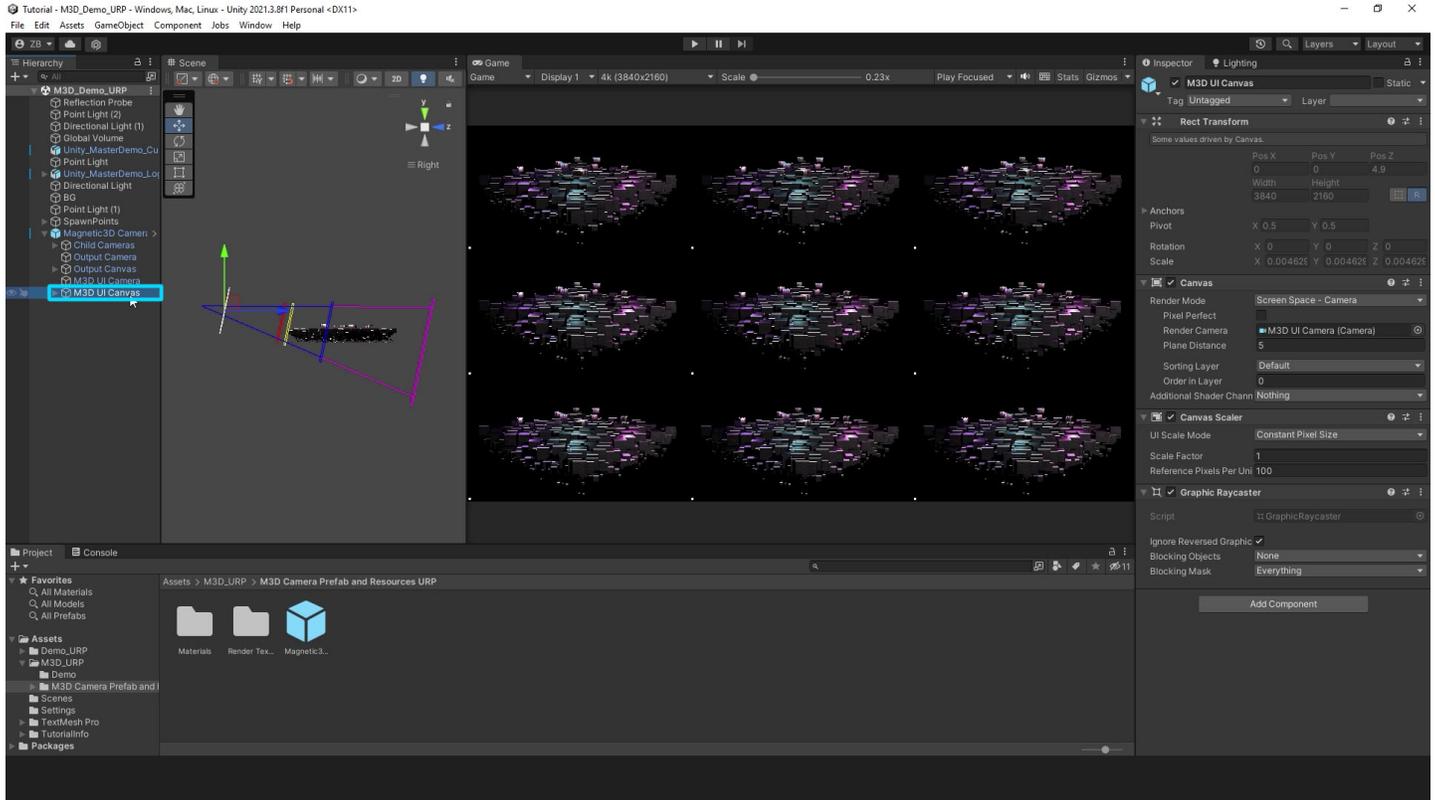


01: **Landscape** - landscape orientation is used for all landscape devices. This works with all the previously mentioned outputs.

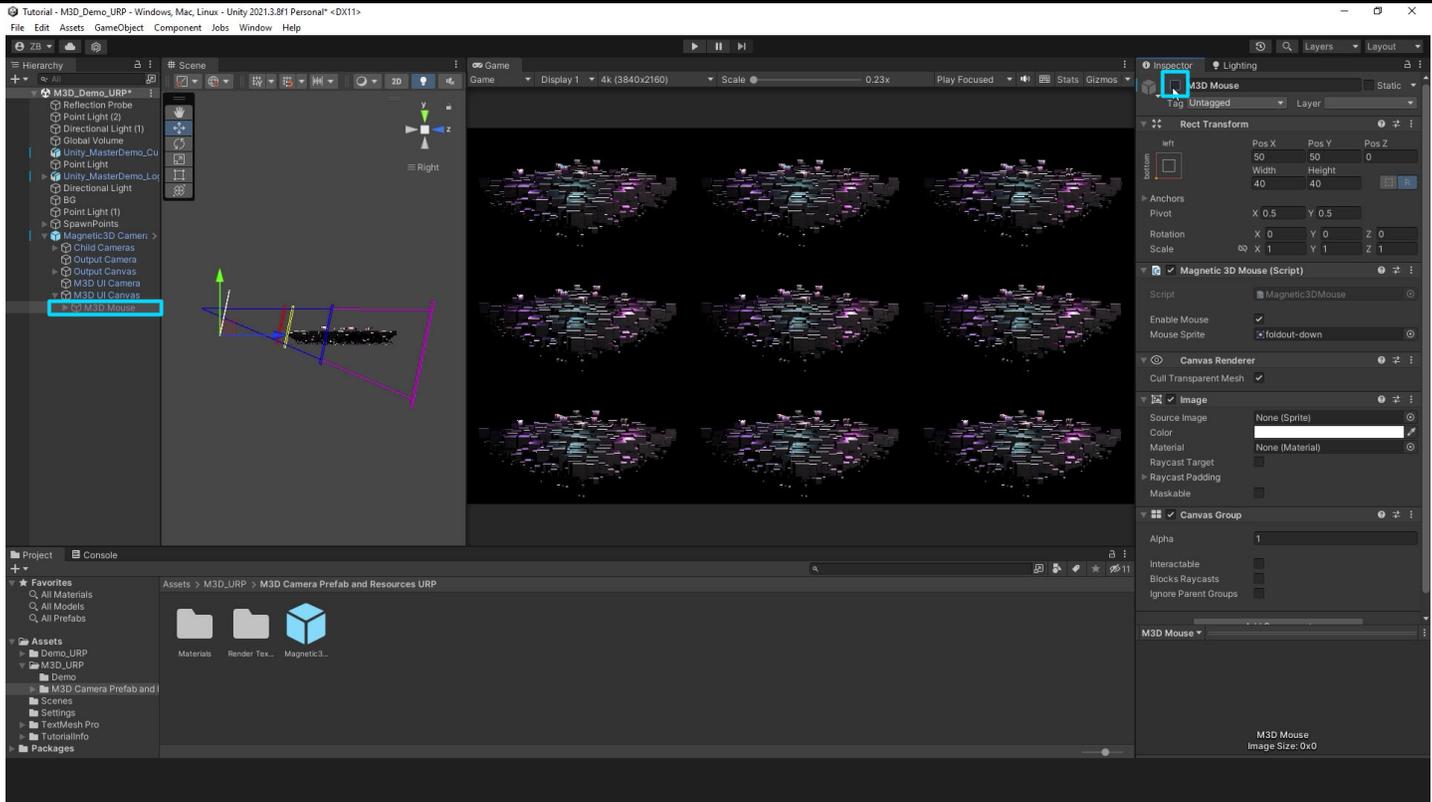


**02: Portrait** - portrait orientation is used for all portrait devices, like the portrait format Wildfire displays. This only works with Multiview output.

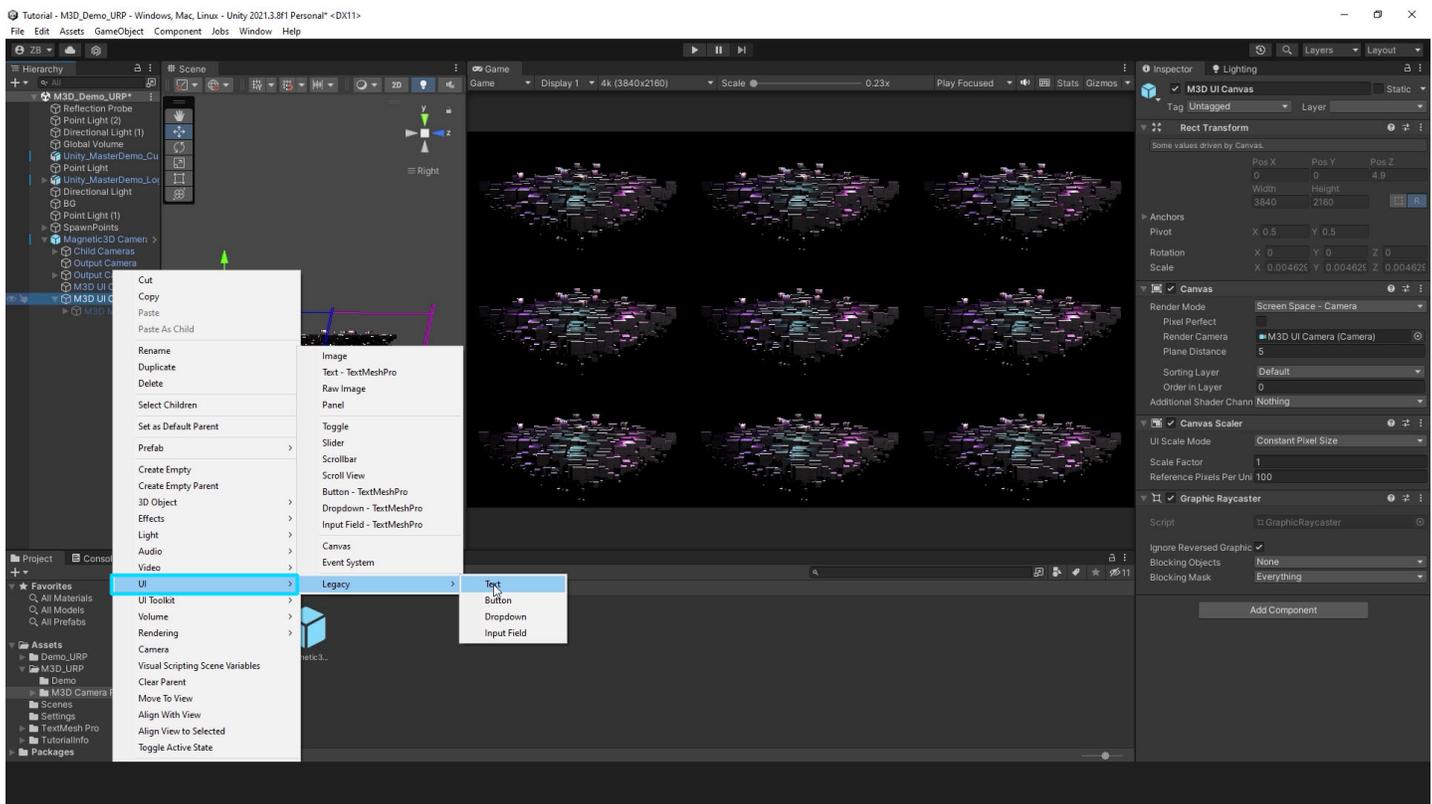
## F. User Interface



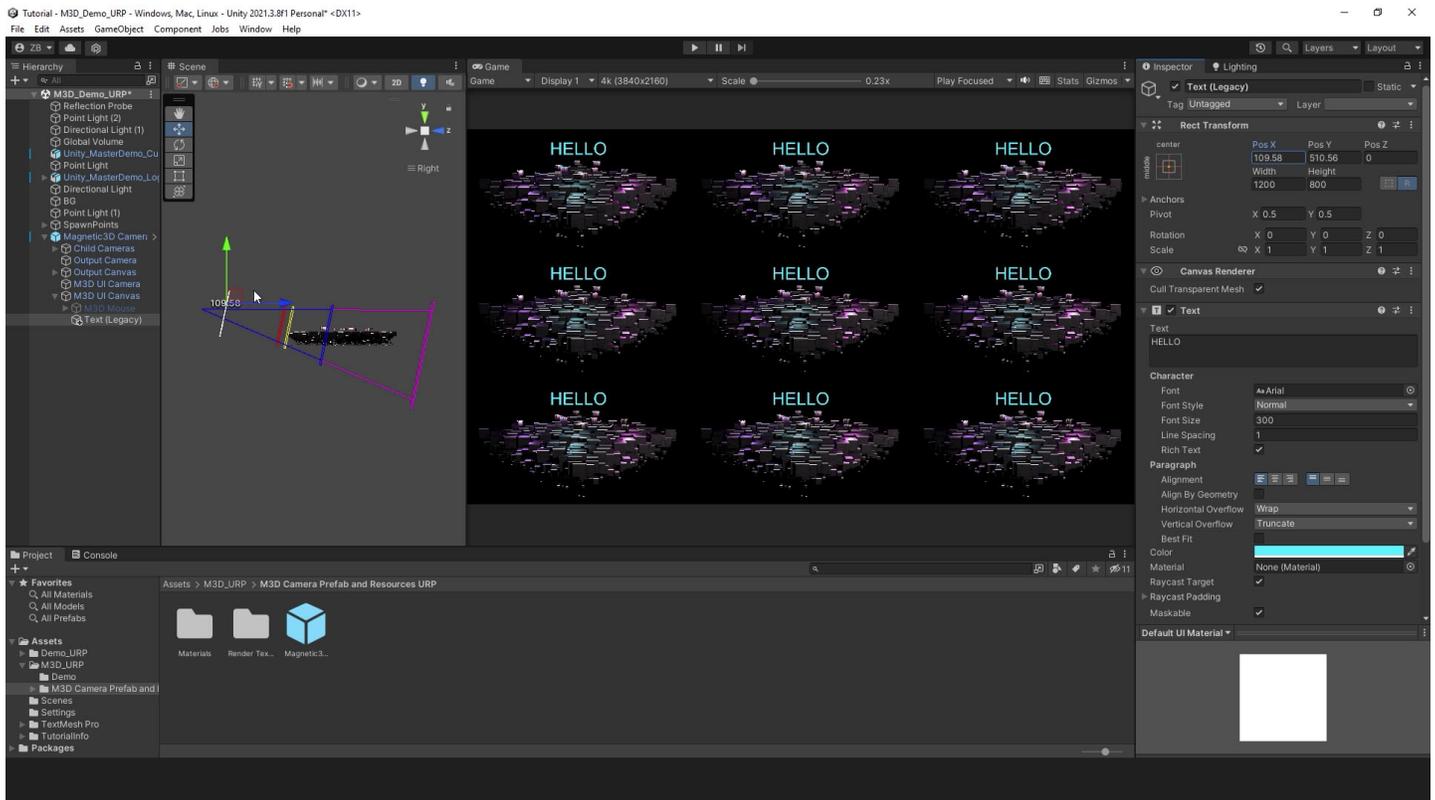
01: To use Unity's UI tools with all the different outputs, expand the **Magnetic 3D Camera prefab** and find the **M3D UI Canvas** object.



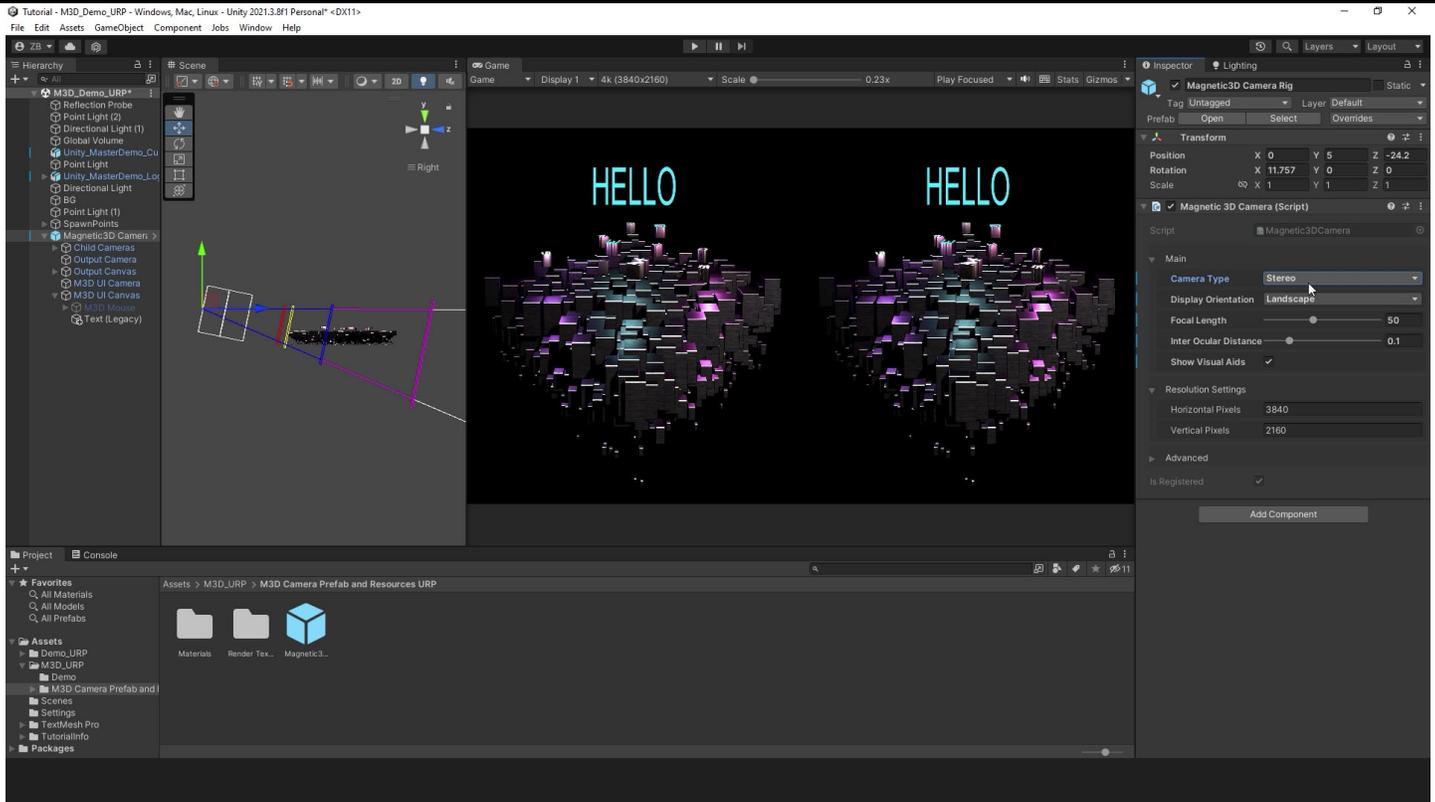
02: Expand the **M3D UI Canvas**. If the **M3D Mouse** object is enabled, disable it so it does not show up.



### 03: Create any **UI objects** inside of the **M3D UI Canvas**.



### 04: Set up and style your **UI objects** as you would with a normal Unity project.



05: You will see that the single UI canvas will be duplicated and conformed to any of the 3D outputs in the plugin.