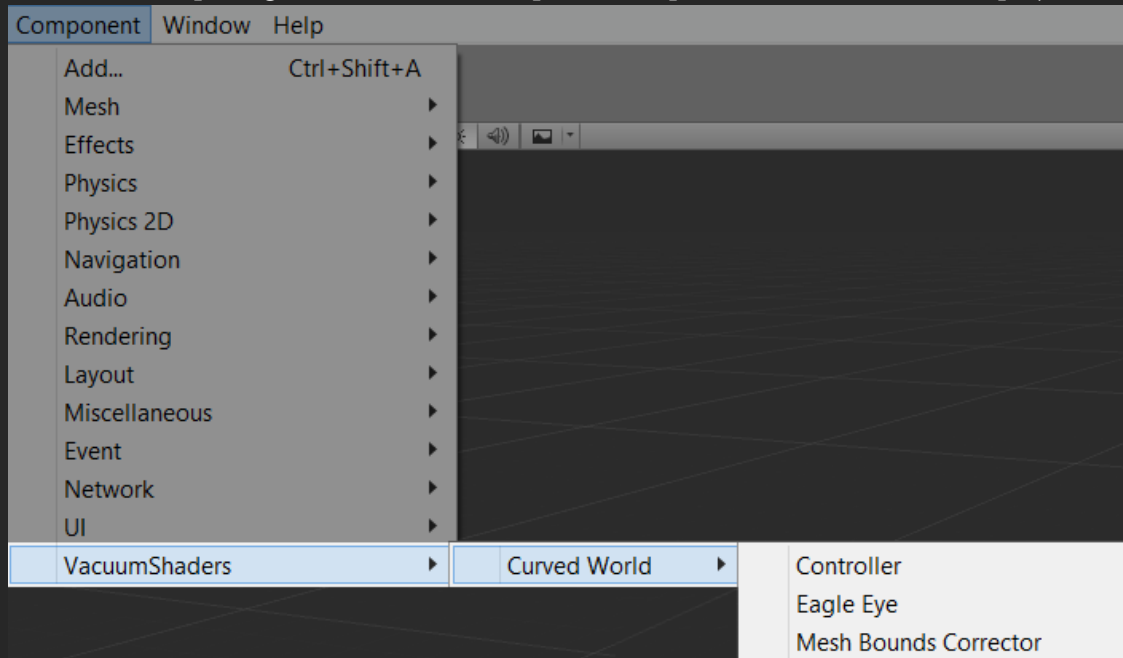


# Curved World API

Curved World package contains three component scripts that can be used inside project.



- Controller – Scene must contain one instance of this script.
- Eagle Eye – Overrides camera's field of view parameter for rendering meshes outside its view frustum. Solves mesh disappearing problem.
- Mesh Bounds Corrector – Scales mesh render bounds, if it is not visible to camera or light source.

All three scripts are inside `VacuumShaders.CurvedWorld` namespace.

## CurvedWorld\_Controller

Public variables:

- For controlling bend size per axis
  1. `public float _V_CW_Bend_X = 0;` – X axis bend size control
  2. `public float _V_CW_Bend_Y = 0;` – Y axis bend size control
  3. `public float _V_CW_Bend_Z = 0;` – Z axis bend size control
- For controlling bend size bias per axis
  1. `public float _V_CW_Bias_X = 0;`
  2. `public float _V_CW_Bias_Y = 0;`
  3. `public float _V_CW_Bias_Z = 0;`
- Pivot point  
`public Transform pivotPoint;` – If not defined (0, 0, 0) is the center of the bend.  
For Perspective2D pivot point is always active camera screen center.
- Bend type  
`public BEND_TYPE bendType = BEND_TYPE.ClassicRunner;` – Bend type can be changed only from Menu / Edit / Preferences / Curved World

Public functions:

- `public Vector3 GetBend()` – Returns axis bend size as Vector3
- `public void SetBend(Vector3 _newBend)` – Sets axis bend size from Vector3
- `public Vector3 GetBias()` – Returns axis bend size bias as Vector3
- `public void SetBias(Vector3 _newBias)` – Sets axis bend size bias from Vector3
- `public Vector3 TransformPoint(Vector3 _transformPoint)` – Receives world space point position and bends it using `CurvedWorld_Controller` parameters.

Public static functions:

- `static public Vector3 TransformPoint(...)` – Receives world space point position and bends it using custom parameters.

## CurvedWorld\_EagleEye

The only public variable - `public float fieldOfView = 60;`

## CurvedWorld\_MeshBoundsCorrector

The only public variable - `public float meshBoundsScale = 1;`