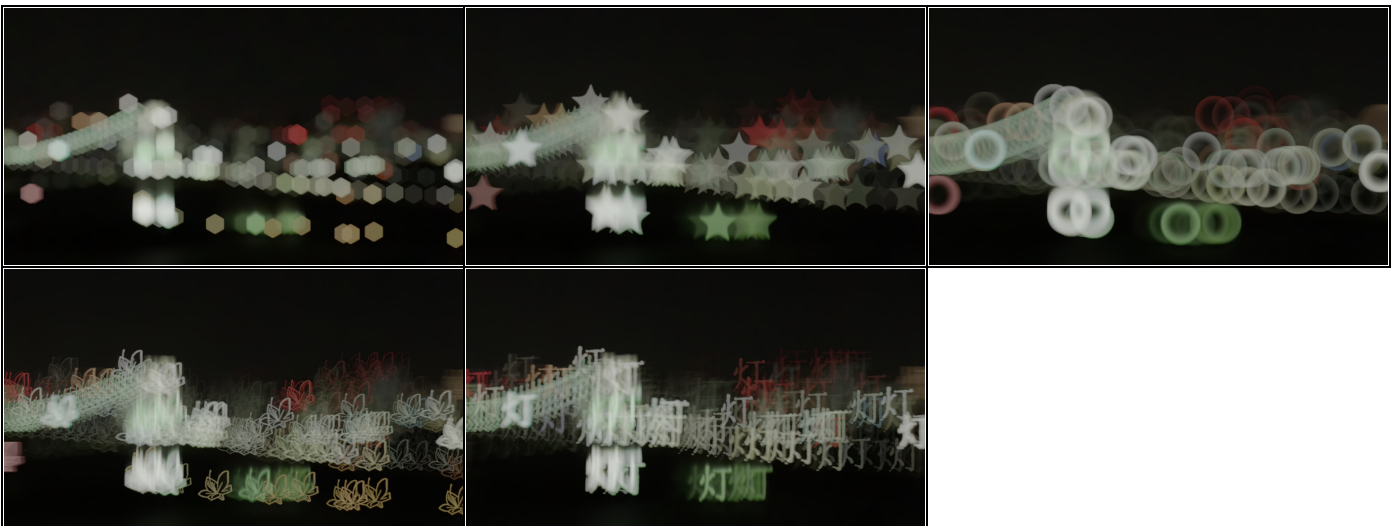# CROSSPHERE Bokeh User Manual
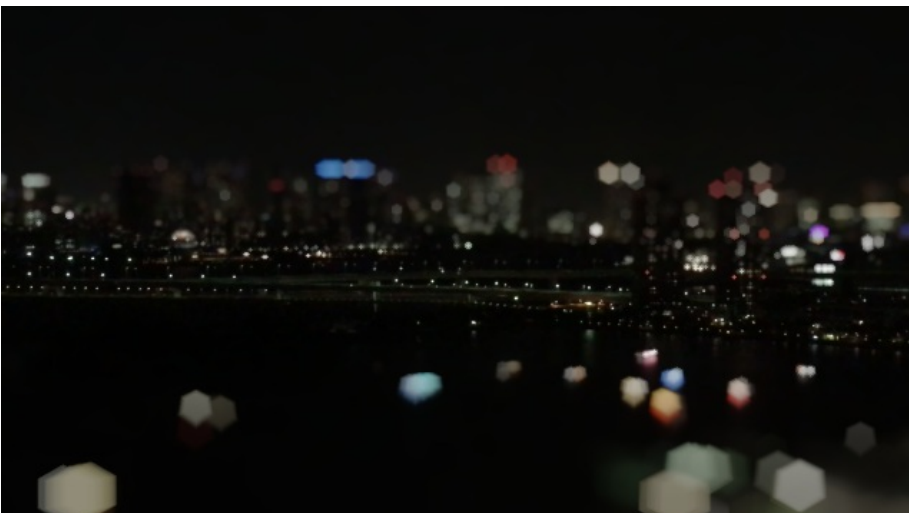
version 1.40
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## Overview

CROSSPHERE Bokeh is a native plugin of Adobe After Effects®
It applies a customizable lens blur effect parametrically or by a custom layer.



Upper : The blur shapes set parametrically.
Lower : The blur shapes set by a custom layer.

It can also use a depth map to apply a more realistic lens blur to simulate a depth of field effect.

# Platform

Adobe After Effects (OS Windows, MacOS) CS6 or later
The MacOS version is compatible with Mac computers with Apple silicon.
Color depth 8bpc, 16bpc, 32bpc and multi-frame rendering.

# Install

Place the plugin in the 'Plug-ins' folder inside the After Effects folder.

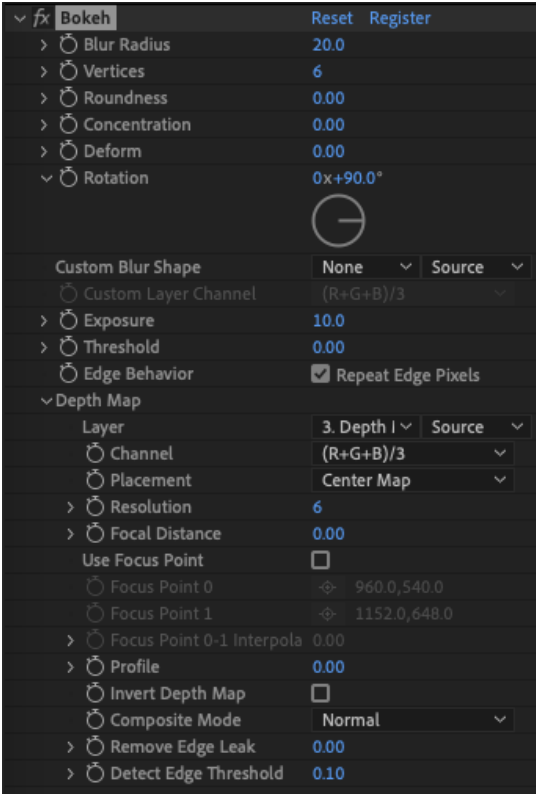Adobe After Effects 2023 (OS Windows)
C:\Program Files\Adobe\Adobe After Effects 2023\Support Files\Plug-ins

Adobe After Effects 2023 (MacOS)
/Applications/Adobe After Effects 2023/Plug-ins

Restart After Effects and find the "Bokeh" effect under the CROSSPHERE category of the Effect menu.
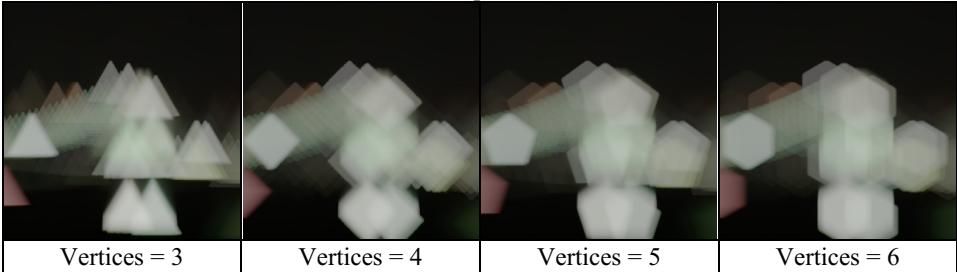
# Parameters

## Blur Radius

Controls the radius of the blur shape.

## Vertices

Controls the number of vertices of the blur shape.

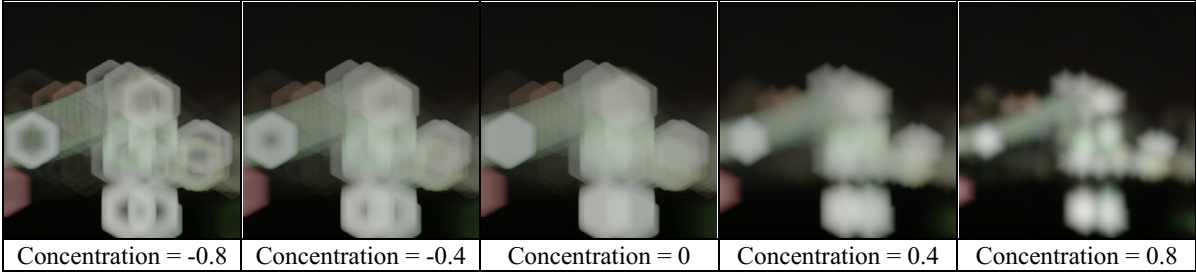

| Vertices = 3 | Vertices = 4 | Vertices = 5 | Vertices = 6 |

## Roundness

Controls the roundness of the blur shape. Negative value can also be set.



| Roundness = -0.8 | Roundness = -0.4 | Roundness = 0 | Roundness = 0.4 | Roundness = 0.8 |

## Concentration

Controls the weight distribution (or concentration) of the blur. Negative value can also be set.



| Concentration = -0.8 | Concentration = -0.4 | Concentration = 0 | Concentration = 0.4 | Concentration = 0.8 |

### Deform

Stretches the blur shape vertically or horizontally.

### Rotation

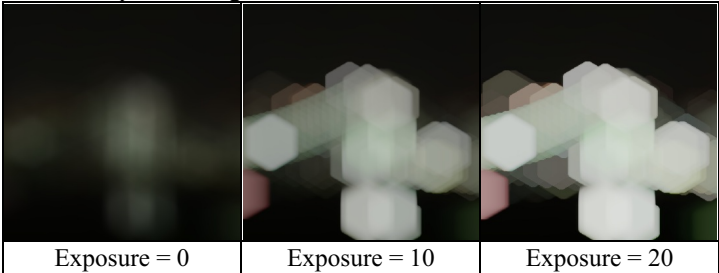Controls rotation of the blur shape.

### Custom Blur Shape

Specifies the layer to be used as the blur shape.
Set the blur shape by adjusting the Blur Radius parameter.

### Custom Layer Channel

Specifies which channel of the Custom Blur Shape layer is used as the blur shape.

### Exposure

Controls exposure. Negative value can also be set.



| Exposure = 0 | Exposure = 10 | Exposure = 20 |

### Threshold

Specifies the threshold of the part affected by exposure.

### Edge Behavior

Specifies edge behavior.

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# Depth Map

By using a depth map, it is possible to simulate a depth of field blur effect.

**Caution**
Using a depth map can require a lot of memory depending on Blur Radius and Resolution of the depth map.
If enough memory cannot be allocated, an error will be displayed.
In this case reduce the Blur Radius or Resolution of the depth map. Alternatively, if possible by your operating system, you can increase the memory allocation for After Effects.

### Layer

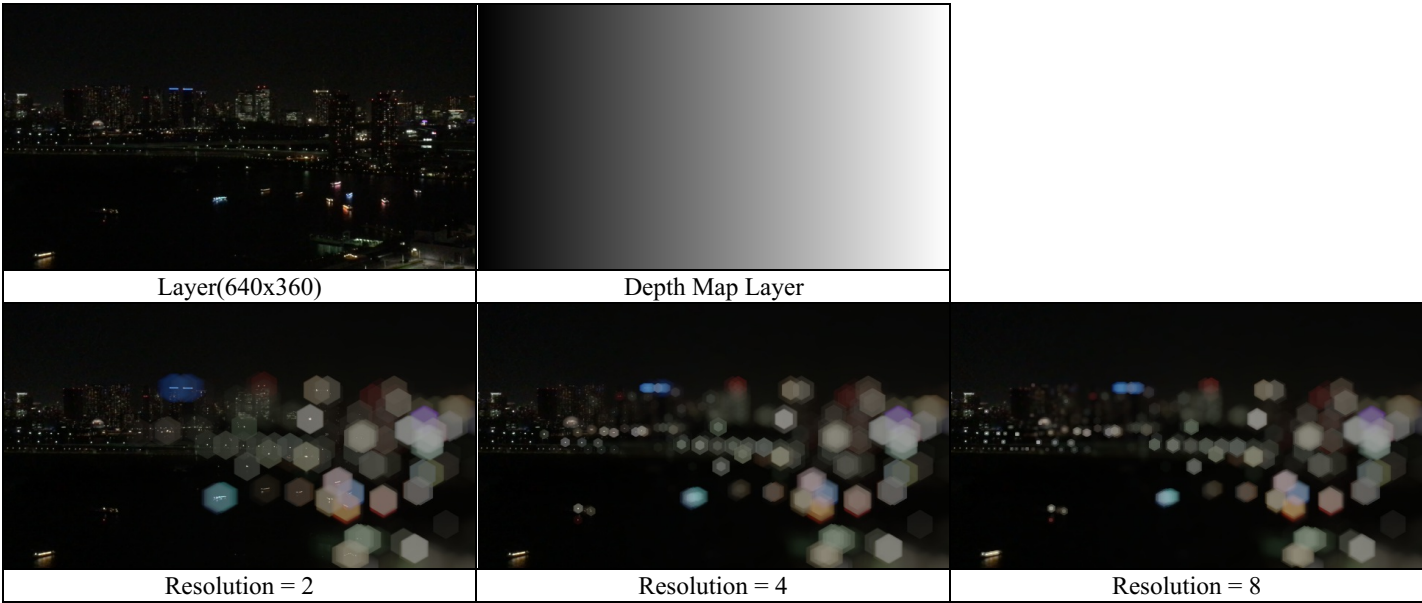Specifies the layer to be used as the depth map.

### Channel

Specifies which channel of the depth map layer is to be used as the depth value.

## Placement

Specifies how the depth map layer is fit to effect the layer.
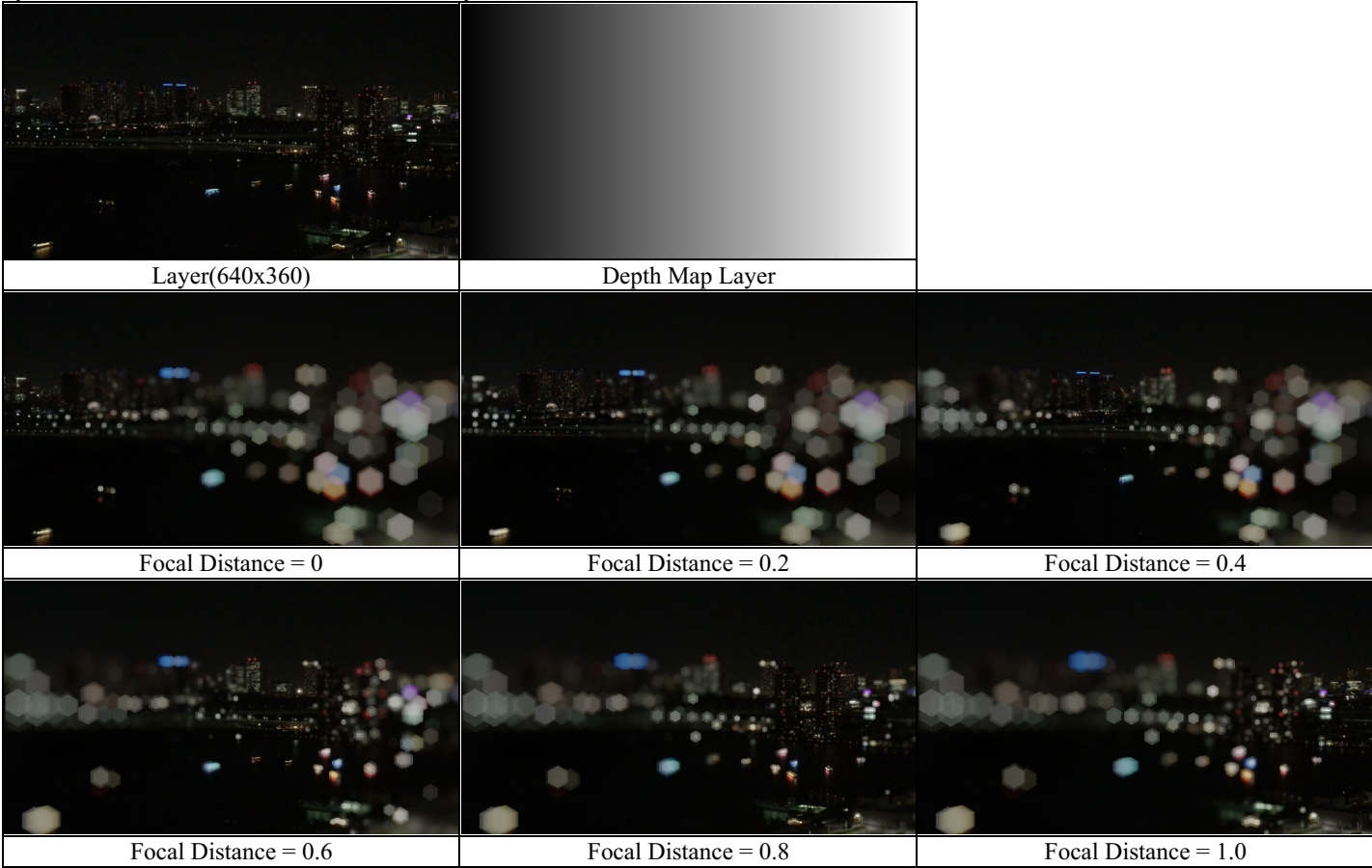
## Resolution

Specifies the resolution of the depth values of the depth map layer. Please note that higher resolutions consume more memory and take longer to render.



| Layer(640x360) | Depth Map Layer | |
| --- | --- | --- |
| Resolution = 2 | Resolution = 4 | Resolution = 8 |

## Focal Distance

Specifies the focus distance in the simulated depth of field effect.



| Layer(640x360) | Depth Map Layer | |
| --- | --- | --- |
| Focal Distance = 0 | Focal Distance = 0.2 | Focal Distance = 0.4 |
| Focal Distance = 0.6 | Focal Distance = 0.8 | Focal Distance = 1.0 |

By specifying a value smaller than 0 or larger than 1 for the Focal Distance value, it is possible to produce a blurring of the overall focus.
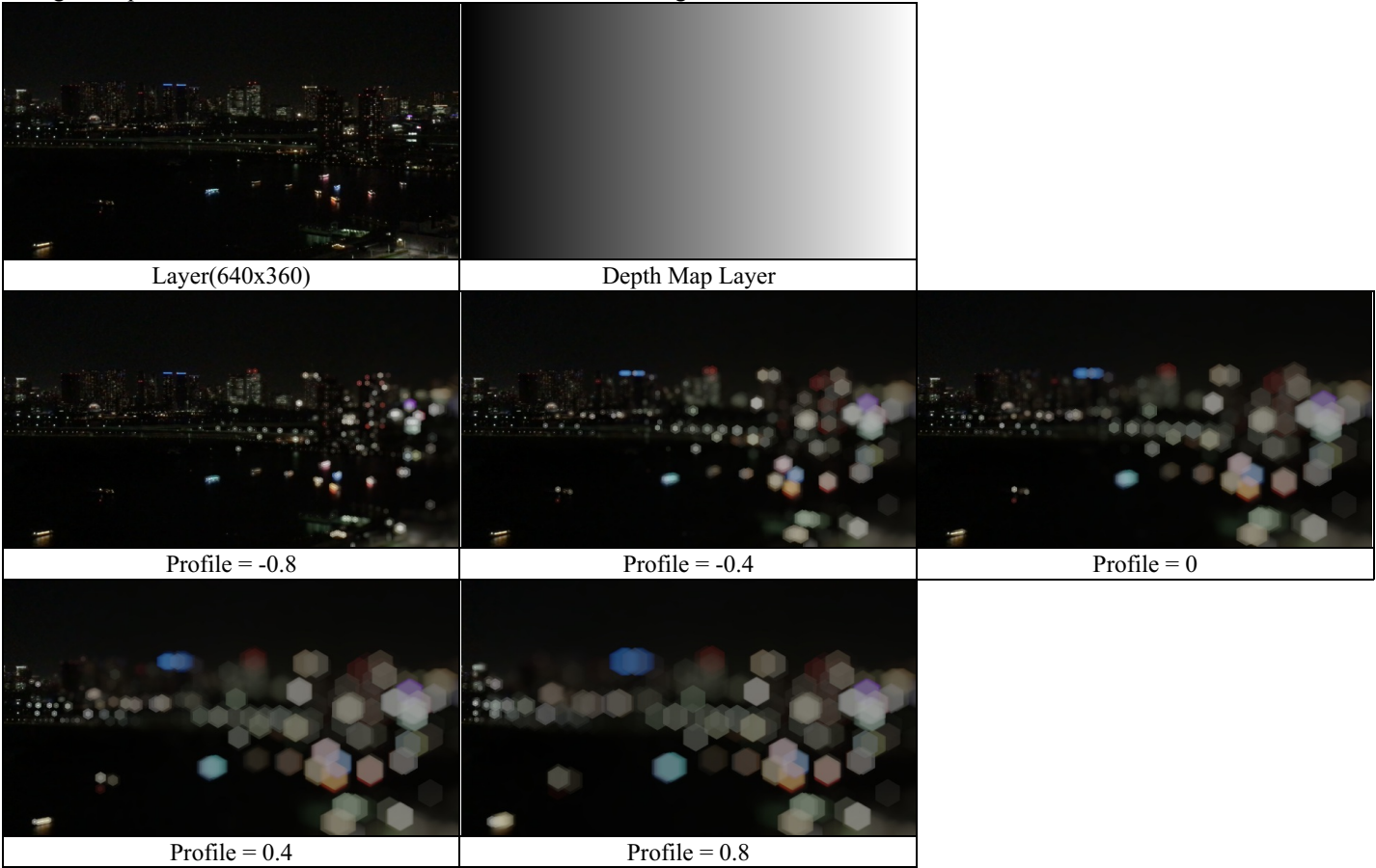
## Use Focas Point

Instead of Focal Distance, use Focus Point which specifies the point to be focused.

## Focus Point 0, Focus Point 1, Focus Point 0-1 Interpolation

Specifies the focus point in the simulated depth of field effect.
Focus Point 0 and Focus Point 1 specify the points to be focused on, and the Focus Point 0-1 Interpolation value allows these two focal points to be smoothly animated.

## Profile

Changes the profile of the blur radius. Positive values set a wider range.

| | |
|---|---|
|  |  |
| Layer(640x360) | Depth Map Layer |

| | | |
|---|---|---|
|  |  |  |
| Profile = -0.8 | Profile = -0.4 | Profile = 0 |

| | |
|---|---|
|  |  |
| Profile = 0.4 | Profile = 0.8 |

## Invert Depth Map

Inverts the input value of the depth map.

## Composite Mode

Specify the composite mode between depth slices when using the depth map.
If it is Normal, colors between depth slices are mixed, but if it is Split, color between depth slices is separated.

## Remove Edge Leak

Reduce mixing of colors in the part where depth values switch.

## Detect Edge Threshold

Set the threshold of the depth map that is determined to be switched.

# Change log

2023 4/20
version 1.40
Extended the range of parameter "Focal Distance" from -1 to 2.
Parameters "Focus Point 0", "Focus Point 1", "Focus Point 0-1 Interpolation" added.

2018 3/28
version 1.30
Parameters "Remove Edge Leak", "Detect Edge Threshold" added.
Minor bug fixes.

2018 3/20
version 1.20
Parameters "Threshold", "Use Focus Point", "Focus Point" added.
2018 3/8
version 1.10
Parameter "Composite Mode" added.

2017 11/14
version 1.00 Released.

# Author

Koizumi
Mail address : koizumim83@gmail.com
Webpage : http://aescripts.com/authors/crossphere/