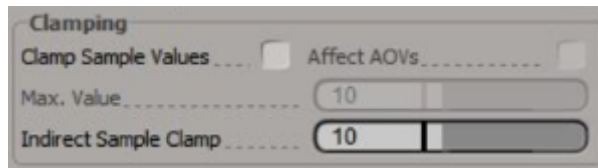


# Clamping



**i** Pixel clamping can be useful in scenes that contain 'spike noise' or 'fireflies': isolated, super bright pixels that jump around from frame to frame.

## Clamp Sample Values

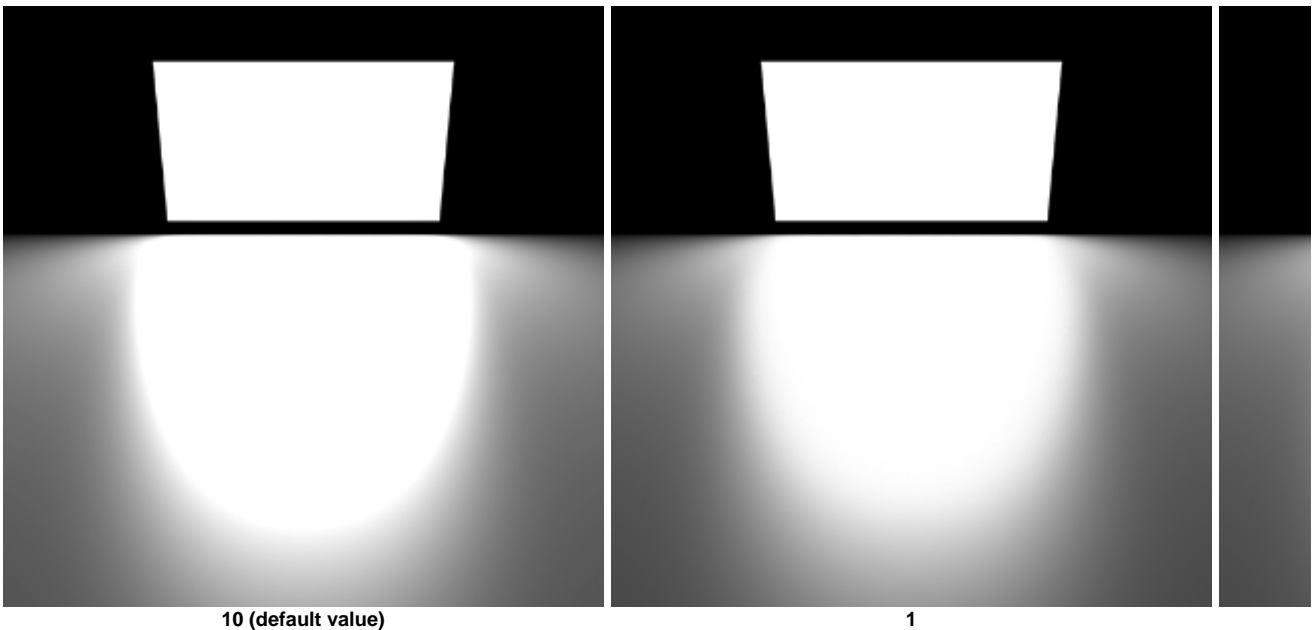
Enables/disables clamping.

## Affect AOVs

With this control enabled the pixel samples of the AOVs will also be clamped. AOV clamping will affect every RGB and RGBA (except the A component) AOV. Currently, there is no way to tell Arnold which AOV's to clamp and which ones to preserve.

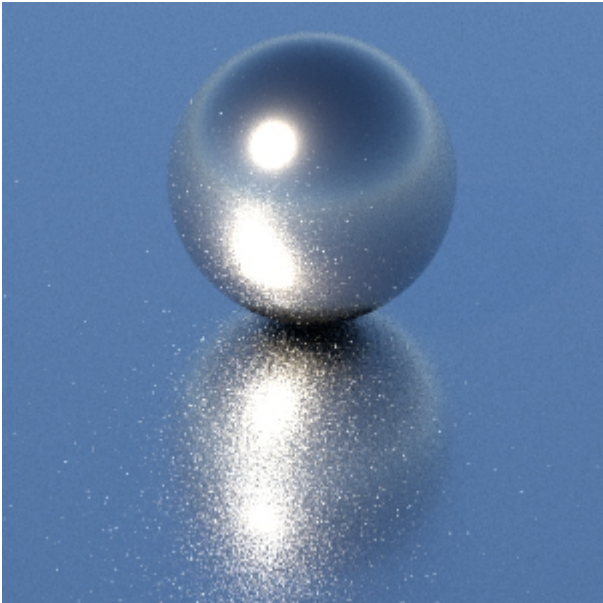
## Max Value

If enabled, this control will clamp pixel samples to this specified maximum value. This can make it easier to anti-alias certain high-dynamic-range effects such as bright motion-blurred specular streaks (at the cost of reduced contrast). What is clamped is the resulting output value of the renderers computations of each pixel sample. Example: If the *max\_clamp\_value* is set to 2, no pixels will have an RGB value greater than 2.0, 2.0, 2.0

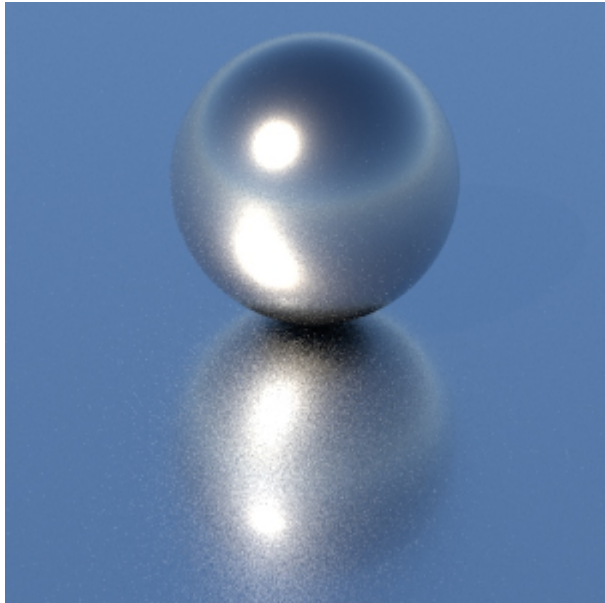


## Indirect Sample Clamp

The threshold to clamp away fireflies from indirect light samples and reduce noise. This works similarly to *AA\_sample\_clamp* but preserves specular highlights from direct lighting. Lower values result in more aggressive noise reduction, possibly at the expense of dynamic range.

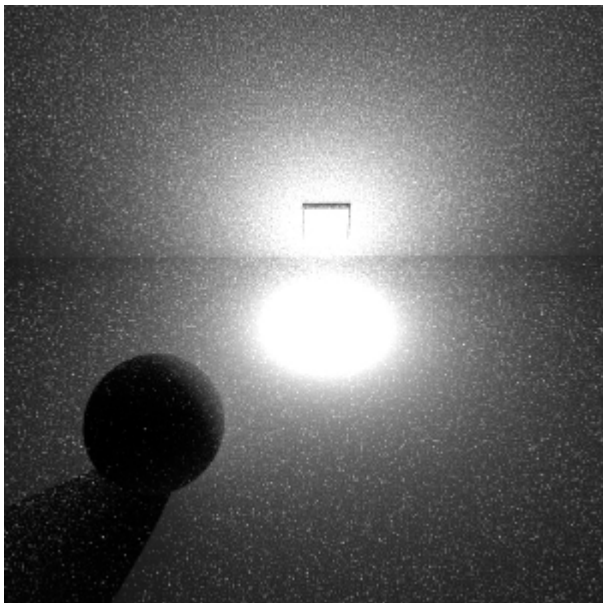


10 (default value)

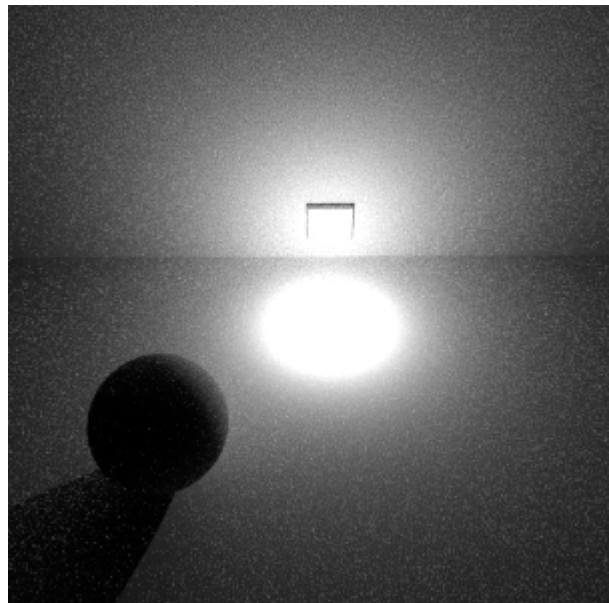


4

This can also help with diffuse scenes when a light is very close to the ceiling/walls.



10 (default value)



1