

# Denoiser AOVs

Setting up a scene in RIB for denoising is more involved if you are doing it manually, but most of the work is in adding the correct `DisplayChannel` lines to the prologue.

Here is the basic snippet that you will need:

## Ai Denoiser AOVs

```
# Beauty...
DisplayChannel "color Ci" "string source" ["Ci"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "float a" "string source" ["a"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "color mse" "string source" ["Ci"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978] "string statistics" ["mse"]

# Shading...
DisplayChannel "float sampleCount" "string source" ["sampleCount"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "color albedo" "string source" ["color lpe:nothruput;noinfinitecheck;noclamp;unoccluded;overwrite;C<.S'passthru'>*((U2L)|O)"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "color albedo_var" "string source" ["color lpe:nothruput;noinfinitecheck;noclamp;unoccluded;overwrite;C<.S'passthru'>*((U2L)|O)"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978] "string statistics" ["variance"]
DisplayChannel "color albedo_mse" "string source" ["color lpe:nothruput;noinfinitecheck;noclamp;unoccluded;overwrite;C<.S'passthru'>*((U2L)|O)"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978] "string statistics" ["mse"]
DisplayChannel "color diffuse" "string source" ["color lpe:C(D[DS]*[LO])|[LO]"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "color diffuse_mse" "string source" ["color lpe:C(D[DS]*[LO])|[LO]"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978] "string statistics" ["mse"]
DisplayChannel "color specular" "string source" ["color lpe:CS[DS]*[LO]"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "color specular_mse" "string source" ["color lpe:CS[DS]*[LO]"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978] "string statistics" ["mse"]

#Geometry...
DisplayChannel "float zfiltered" "string source" ["zfiltered"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "float zfiltered_var" "string source" ["zfiltered"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978] "string statistics" ["variance"]
DisplayChannel "normal normal" "string source" ["normal lpe:nothruput;noinfinitecheck;noclamp;unoccluded;overwrite;CU6L"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "normal normal_var" "string source" ["normal lpe:nothruput;noinfinitecheck;noclamp;unoccluded;overwrite;CU6L"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978] "string statistics" ["variance"]
DisplayChannel "normal normal_mse" "string source" ["normal lpe:nothruput;noinfinitecheck;noclamp;unoccluded;overwrite;CU6L"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978] "string statistics" ["mse"]
DisplayChannel "vector forward" "string source" ["motionFore"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
DisplayChannel "vector backward" "string source" ["motionBack"] "float[2] exposure" [1 1] "float[3] remap" [0 0 0] "float shadowthreshold" [0.00999999978]
```