

# Lighting



Pixar Animation Studios powerful lights have come to Houdini and you can find specific information on parameters by looking at the RenderMan [documentation](#).

There are three main ways to light a scene:

- Analytic Lights - These are the preferred choice. These provide superior memory usage, flexibility, and speed. Their visibility is a simple on and off for camera visibility.
- Mesh Lights - These are great for using arbitrary shapes in lighting. These consume more memory since they are geometry and complex shapes may increase noise. These can make use of visibility like any other object: camera, shadow/transmission, and indirect visibility.
- Emissive Surfaces - These typically use a constant bxdf or "glow" parameter to light a scene indirectly. This is inefficient and should usually be avoided but may be useful for texture mapping "lights" onto futuristic objects and panels!