Blackbody

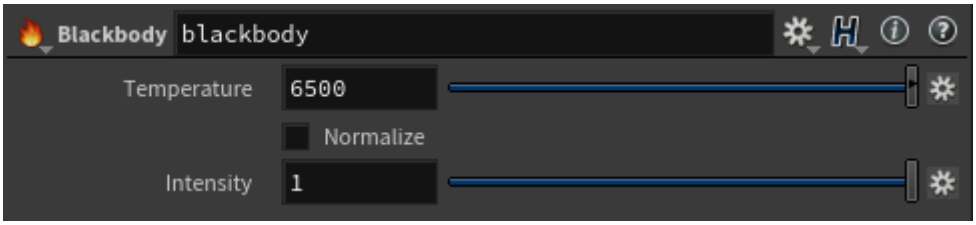
blackbody* (*temperature* 0-3000) -> *emission_color

The *blackbody* shader emits a color based on color temperature. It is useful for fire and explosions, or for light emission using the *blackbody* spectrum.

For volumes, a volume sample shader reading from a temperature channel should be connected to the *blackbody* shader.

> ⚠ The *blackbody* shader is a copy of the Houdini Pyro shader and is thus tailored for the output of pyro simulations.

> ⚠ You must ensure that a volume sample shader is connected to the *blackbody* shader.



Temperature

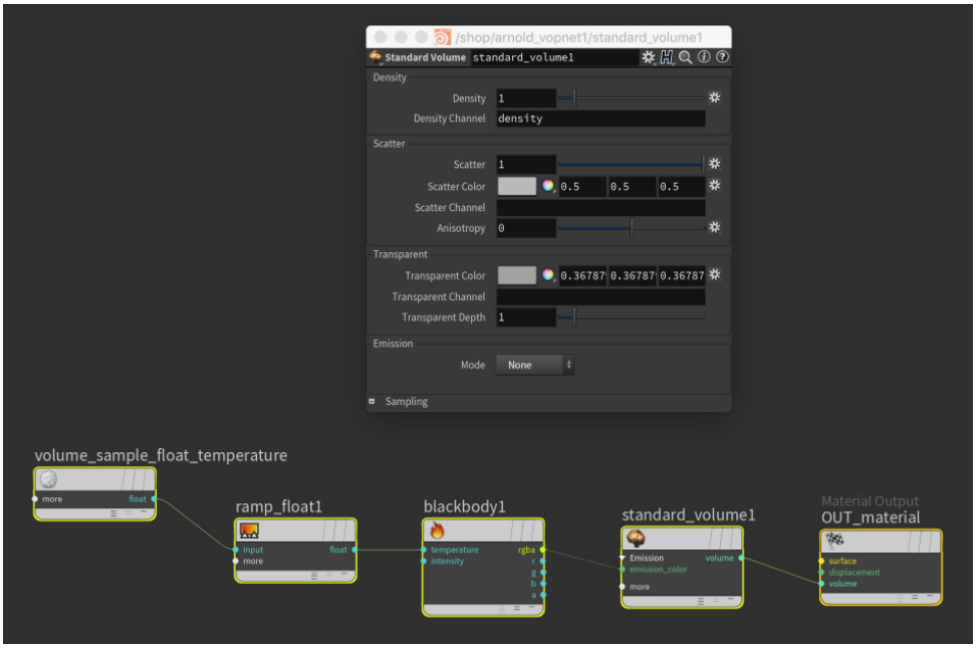
The temperature corresponding to an input value of `1`. For example, if this parameter is `6500` (the default 6500K, is considered as the "daylight" white point), then an input value of `1` means a temperature of 6500 degrees Kelvin. The color ranges from red, through to white and then to blue. Values above 6500 will give a cool color, whilst values below will show a warm color.

Normalize

By enabling normalize, the intensity is discarded, and a normalized color is output instead. This can be used to control the intensity separately from the color.

Intensity

This controls the intensity of the *blackbody* emission. For physically correct results intensity 1 must be used. This can result in extremely bright light, however, and lower values may be used to reduce the intensity.



This kind of setup is useful for when you want to remap the temperature field. Here a ramp shader is used to add *noise.*

The *Emission* mode is set to *None* so that all emission comes from the *emission_color.*