The Incandescence Light

The *Incandescence Light* allows editing the incandescence material attributes of one or more objects as light attributes (provided that the object material has support for incandescence). The difference between a mesh light and an incandescence light is that an incandescence light directly controls the incandescence parameter of the geometry's surface shader, preserving the other surface shader properties; a mesh light applies the area light shader on its source mesh instead of its surface shader. One incandescence light can control as many such object/materials as desired.

As with any other light sources, incandescence lights will be listed in the *Multi-Light list*; each incandescence light can thus be output in its own *Multi-Light* layer. They also can be edited by *3Delight Display's Mixer*.

Creating an Incandescence Light

An incandescence light source can be created in the *GafferThree's Object table* by right-clicking in the light list section and selecting *Add Incandescence Light*, or by pressing the I key. Incandescence lights are not drawn in the *Viewer*; the object they control normally is.

> ⓘ The *GafferThree* node should be placed **downstream** of the nodes that define the geometry to control, its material and its material assignment in order for the Incandescence Light to operate properly.
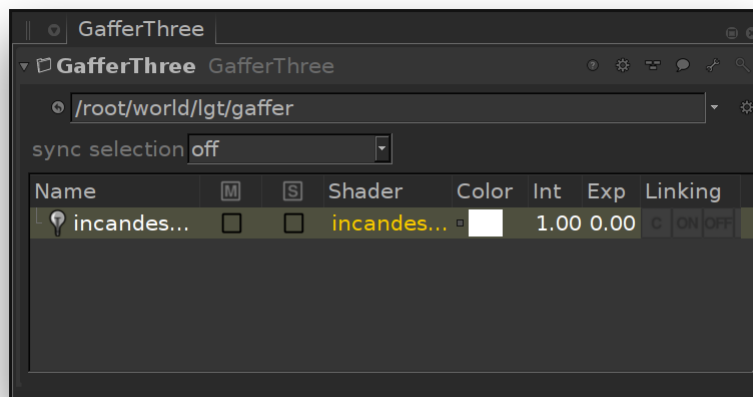
The Incandescence Light in the GafferThree node.

Shaping the Incandescence Light

The *Geometry to Control* parameter from the *Object* tab specifies the scene graph location of the object or group of objects whose incandescence attributes will be controlled.

The object scene graph location can be specified by a few different means:

- middle-clicking the object in the scene graph and dragging it to the *location* text field;
- clicking the down arrow to the right of the *location* text field and choosing the relevant item to adopt the current selection of the *node graph* or the *scene graph;*
- typing in a scene graph location or an expression designating one in the *location* text field.
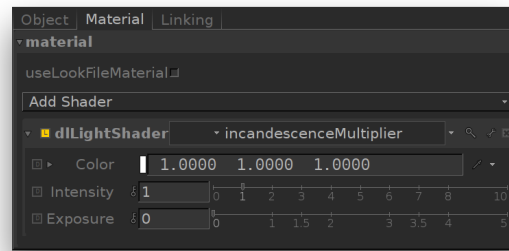
Note that the assigned object should have its scene graph location defined by node placed **upstream** in the node graph.

Controlling the light from an Incandescence Light

The *Material* tab serves to control a few light parameters. Their effects are explained the the next section.
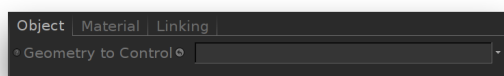
The Object *parameters of an incandescence light.*

The Material *parameters of an incandescence light.*

> ⓘ *Color, Intensity* and *Exposure* can be adjusted using their respective gadget in the *GafferThree*'s object table.
>
> *Exposure* and *Intensity* can also be adjusted through *3Delight Display*'s Mixer for lights that have their own Mutli-Light image output.

Incandescence Light Controls

Color
Intensity
Exposure

These parameters act as multipliers of the controlled geometry's incandescence color. The original material's *Incandescence Intensity* parameter will be multiplied by this value.