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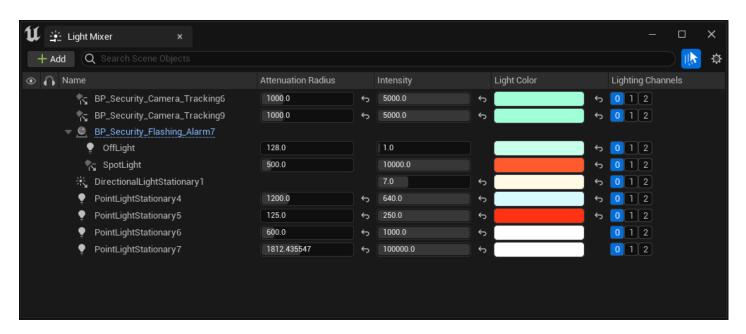
Light Mixer

Editor window that displays all lights in the scene in a compact tabular format for rapid inspection and editing.

The **Light Mixer** provides a dedicated interface tailored to the creative requirements for lighting. Artists can isolate lights, change their visibility, and have relevant settings readily available to achieve a desired look. Lights can also be grouped into collections for quicker access to groups of lights.

The Light Mixer focuses on management of standard <u>Light Types</u> and is complementary to the <u>Environment Light Mixer</u>, which focuses on environment lighting components, such as sky, clouds, atmosphere lights, and skylight.

The Light Mixer panel displays all the lights that exist in the currently loaded Level and its sub-levels. It even shows lights that are components of existing scene Actors or inside Blueprints. You can specify which light parameters you want to display in the panel and change their values directly within this panel.



Light Mixer Interface

Open the Light Mixer from the Editor main menu by selecting Window > Light Mixer.

The **Light Mixer** interface consists of these elements:



- 1. Toolbar
- 2. Light Mixer Panel

Toolbar

The **Toolbar** is where you can add different types of lights to the scene, and to the list of lights in this component panel.



You can do the following from the Toolbar:

- Add Lights to the scene.
- Filter Lights using the Search bar.
- Sync the Lights in the Level with Light Mixer.
- Toggle Light Mixer options.
- Manage Light Collections.

Sync Selection

The **Sync Selection** toggle synchronizes the Light selection in the Light Mixer to the Outliner selection.



If enabled, clicking items in the Light Mixer list also selects the same items in the Outliner.

You can use **Alt + Click** to select items only in the Light Mixer list without selecting them in the Outliner.

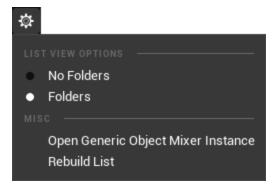
If this option is disabled, selections will not synchronize unless you hold down the **Alt** key while clicking lights in the Light Mixer.

Settings Menu

The Light Mixer **Settings** menu contains options to configure the list view, as well as a command to force the list of scene lights to rebuild.



The **Settings** menu contains the following options:



- List View Options to toggle whether folders are visible or not in the Light Mixer panel.
- Open Generic Object Mixer Instance opens a blank panel for development purposes.

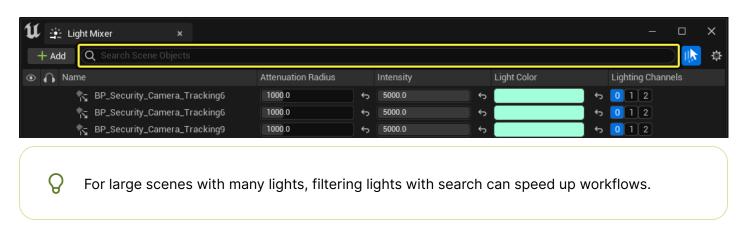
 This underlying toolset is used to make panels similar to the Light Mixer and Environment Light Mixer panels composed of different objects that can be edited in a singular place.
- Rebuild List forces the Light Mixer panel to re-evaluate the entire scene for lights and updates to lights if the list doesn't update as expected. This is like a hard refresh of the Light Mixer.

Managing Lights

The **Light Mixer** panel is where you can manage and edit Lights in your scene.

Filtering Lights

Use the Search Filter at the top of the Light Mixer panel to filter lights or objects by name.



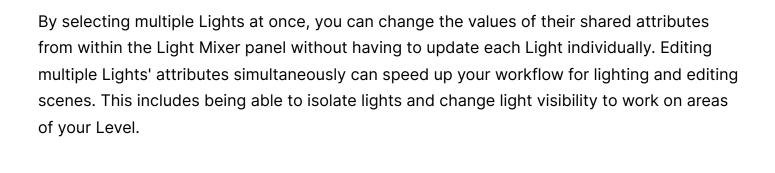
Selecting Multiple Lights

You can select one or more Lights using the following keyboard shortcuts:

- Individually select Lights by holding Ctrl and clicking them.
- Select groups of Lights by clicking one, then holding **Shift** and selecting another light in the list. Any objects between the first clicked and last clicked will be selected as a group.

You can deselect individual Lights or groups of Lights in the same manner.

Editing Multiple Lights



Light Visibility

Toggling the visibility (or muting) Lights will turn them off and on in a non-destructive way. Click the **Eye** icon to toggle the visibility of the selected Light or Lights.

Isolating Lights

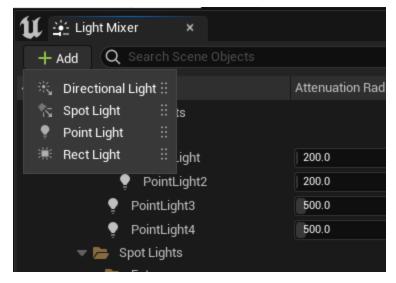
There is an option to isolate (or **Solo**) any selected Light(s) so that only they are visible. This way, you can quickly see the lighting influences from one or more lights in the scene in a non-

destructive way. Lights can be isolated individually or as a group when the parent object or folder is isolated.

Click the **Dash (-)** icon under the **Headphones** column to toggle the **Visibility** flag of all unselected Lights in the scene. When a Light is set to Solo, the dash is replaced by the Headphones icon. Clicking the **Headphones** icon next to a light that is set to **Solo** will reenable visibility of all other lights in the scene.

Adding Lights

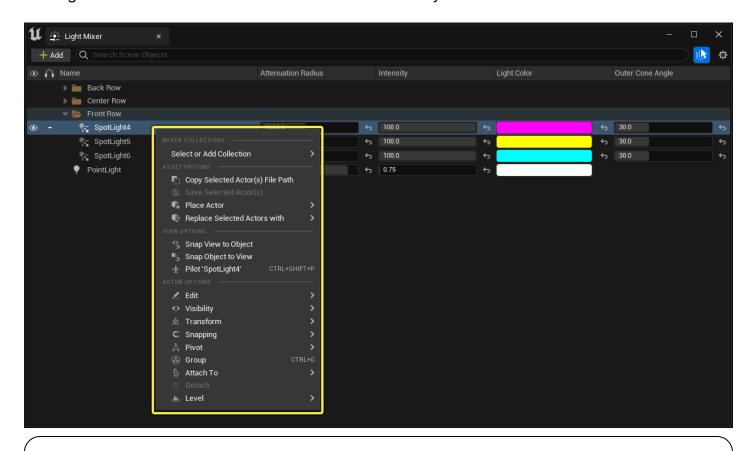
Use the **Add** button to add directional, spot, point, or rectangular area lights to the scene, which you can then click and drag into place.



Alternatively, you can drag any one of the light types directly from the menu into the scene to place it.

Light Context Menu

The right-click **Context Menu** looks and works similarly to the one used in the Outliner.



One additional option provided by the Context Menu is to **Select or Add Collection**, which you can read about in the <u>Light Collections</u> section below.

Edit Options

Use the **Edit** menu to **Cut**, **Copy**, **Paste**, **Duplicate**, **Delete**, and **Rename** lights. Alternatively, you can either use keyboard shortcuts (like Ctrl+X, Ctrl+V, and so on) in place of the menu options.

Replacing Lights

Use the **Replace Selected Actors With** option to replace a selected Light with another Light. You can even replace them with other Actors in the list that are not lights. All Actors in the list must have at least one light as a child component.

Reparenting Lights

There are two ways to reparent one or more lights:

Drag and Drop Method

 Select the Lights you want to reparent and drag them over the listed object you want them to be parented to.

Attach to Method

- 1. Select the Lights you want to re-parent.
- 2. Right-click the selected Lights and, from the context menu, select **Attach To**.
- 3. Select an Actor from the list you want to reparent the Lights to.

Light Collections

<u>Collections</u> serve as a way to organize Assets into groups into non-destructive user-defined sets. In the Light Mixer panel, you can use this same workflow to make a collection of lights to speed up lighting workflows by organizing and isolating lights that you frequently change for easier access.

All the lights in the scene automatically belong to a default light collection called **All**. This particular collection category doesn't appear until another collection is created.

Creating a Light Collection

Create Light Collections using the right-click **Context Menu** in the Light Mixer panel.

- 1. Select one or more lights in the **Light Mixer** panel.
- 2. Right-click the selected lights to open the **Context Menu**.
- 3. Click Select or Add Collection.
- 4. In the text field, give the collection a **Name** and press **Enter** to confirm.

The newly created Light Collection will be listed between the Search Filter and Light Mixer Panel columns. There is no limit to the number of Light Collections you can create to help manage your scene.

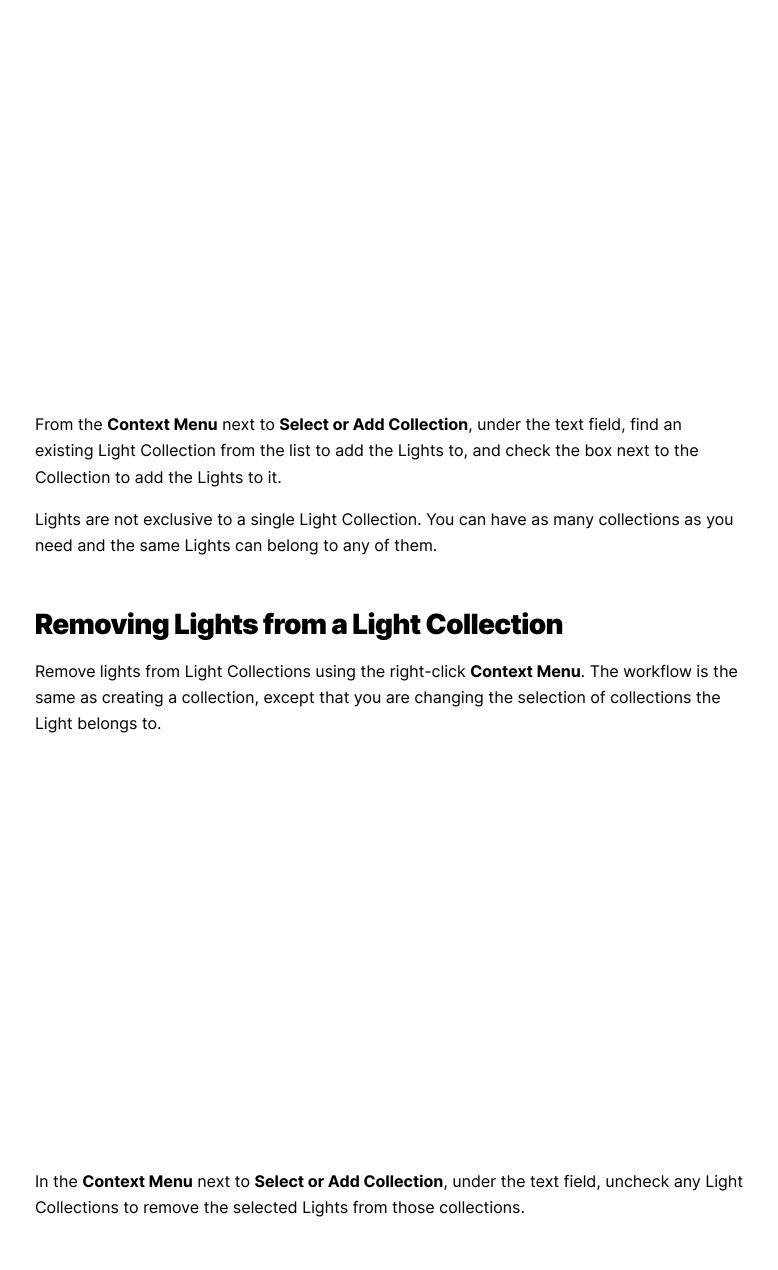


Viewing a Light Collection

You can view a Light Collection by clicking its name in the **Collections** bar under the Search. Clicking a collection shows only the Lights and components belonging to that collection. The **All** collection restores all the lights to the Light Mixer panel.

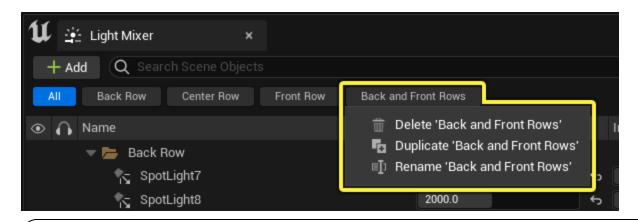
Adding Lights to a Light Collection

Add lights to Light Collections using the right-click **Context Menu**. The workflow is the same as creating a collection, except that you can choose from a list of existing Light Collections to add a light to instead of creating a new collection.



Deleting, Duplicating, and Renaming Light Collections

Right-click the tab of any Light Collection to **Delete**, **Duplicate**, or **Rename** that collection.



The **All** Light Collection is the only one that cannot be deleted, duplicated, or renamed. Right-clicking it will not expose these options.

Reordering Light Collections

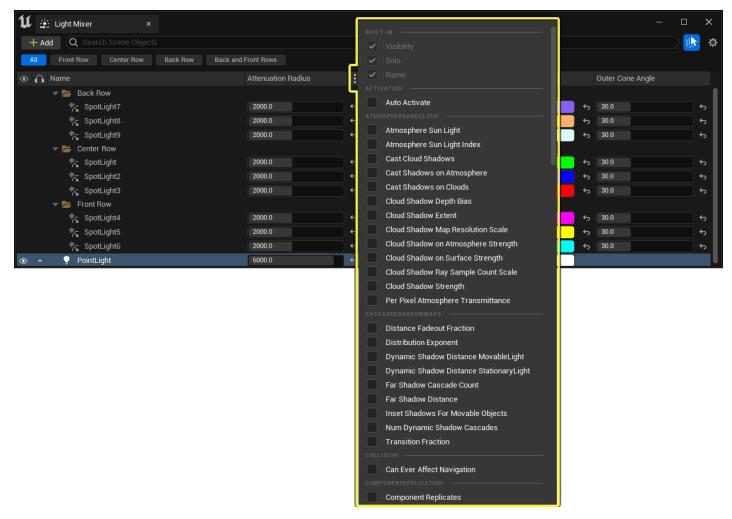
Reorder Light Collections by left-clicking and dragging them to a new position.

The **All** Light Collection is the only one that cannot be reordered.

Customizing Light Mixer

The Light Mixer provides a customizable list of light attributes to display in the panel. You can add and remove light attributes to fit the needs of your workflow by exposing the most

important light information and the options you need most frequently for editing.



The light attributes available to choose from to add to the Light Mixer panel.

Adding and Removing Light Attributes

The attributes columns list Light attributes for quick access without the need to go back and forth between the Details panel and Light Mixer panel.

You can add and remove light attributes by moving the mouse over any **Column** header and clicking the **Overflow Menu** icon (it looks like three vertical dots), which opens a list of user-editable Light attributes. You can perform these actions in the attributes list:

- Add a column for the selected attribute by enabling the checkbox next to the Light attribute.
- **Remove** a column for the selected attribute by disabling the checkbox next to a Light attribute that has an enabled checkbox.
- **Search** for a particular attribute by starting to type when the attribute list is open. A search filter will replace the menu and then only display results that match your search terms.

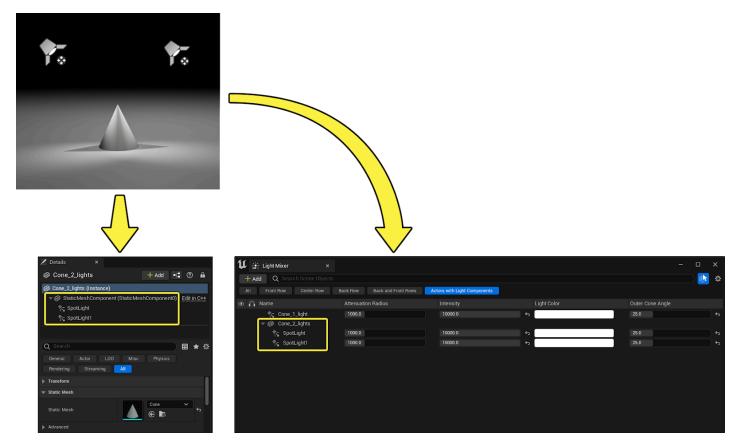
Currently, when you add any attribute columns to the Light Mixer panel, columns are added in the order in which they appear in the list. Column placement will be configurable in a future release.

Lights as Components

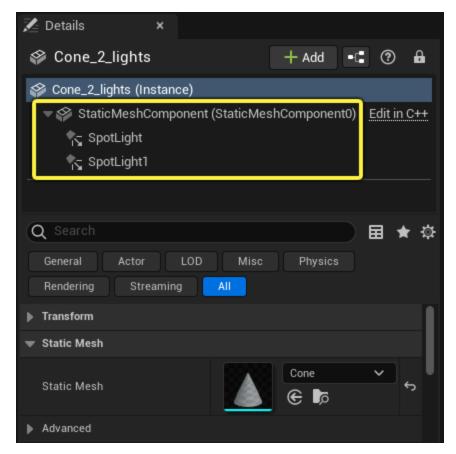
The Light Mixer lists and displays Lights that are components of other Actors and Blueprints in the scene. You can edit the Lights contained within these other Actors and Blueprints like any other light in the scene, but you can't move or reparent them within the Light Mixer panel.

Lights Contained Inside Other Actors

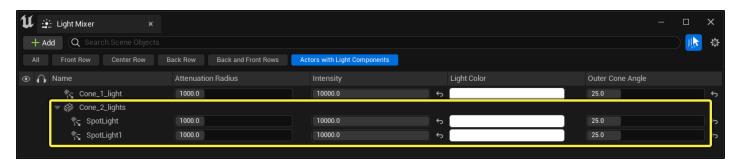
You can add Lights to scene Actors as components using Level's Details panel. These Lights will be listed as components in the Light Mixer Panel, along with their parent Actor.



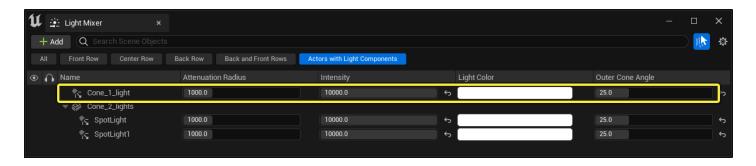
This is an Actor in the scene that has two Point Lights as components.



The Light Mixer recognizes that this Actor has two Lights as components and lists them in the Light Mixer panel, along with the Actor they are components of.

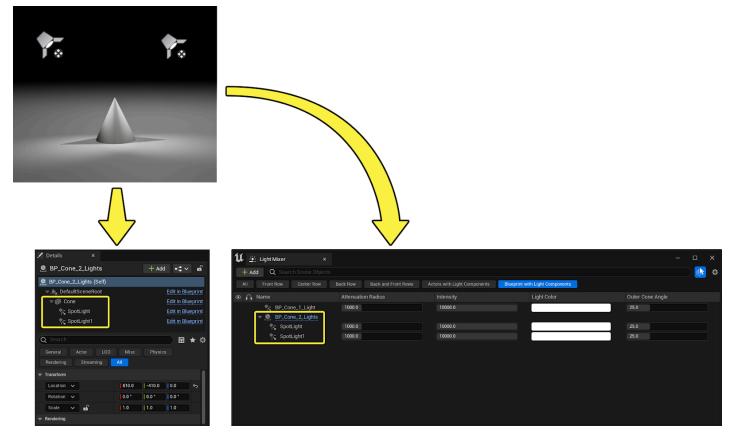


If the Actor only has a single Light as a component, it collapses into a single editable line.

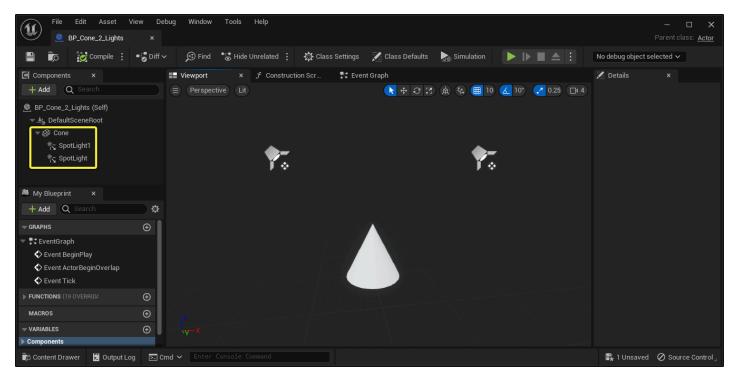


Lights Contained Inside Blueprints

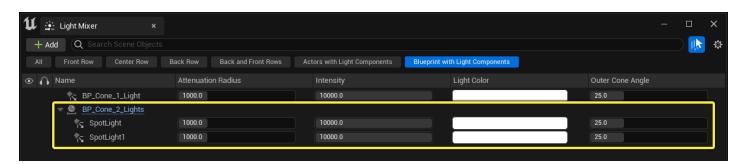
Lights contained within a Blueprint Actor as a component are listed in the Light Mixer. You can also click the Blueprint to open it for editing directly in the Blueprint Editor.



This is a Blueprint that has two Point Lights as child components of a Static Mesh component.



When this Blueprint is added to a Level, the Light Mixer recognizes that it contains Lights as components and lists them in the Light Mixer panel.



If the Blueprint only contains a single Light, it collapses into a single editable line.

