Artificial Lighting
Using abstract backgrounds to add interesting lighting effects to other footage clips.

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Good lighting can make the difference between an amateurish shot and a professional-looking one. But even if the lighting is good, it may not be sexy. By using abstract stock footage clips plus the blending modes available in most editing and compositing programs, you can add cool, moody, sexy lighting to virtually any clip – well after the shoot is over.

Overview
This technique can be boiled down to four steps: choose the underlying clip (the normal footage), choose a “lighting” clip to place on top of it, choose a mode to blend the two together, and then tweak the intensity of the effect by adjusting the color and transparency of the lighting clip on top.

The real magic in this technique comes in using a “blending,” “composite,” or “transfer” mode to blend the lighting clip into the underlying clip. These modes are built into compositing and motion graphics programs such as Adobe After Effects (bring the Timeline panel forward and press F4 to reveal the Mode popup) and Apple Motion (right-click on the layer on top and select a Blend Mode). Some editing programs also include these modes (in Apple Final Cut Pro, right-click the clip on top and select a Composite Mode); some require third-party plug-ins (such as Elastic Gasket from Profound Effects for Avid systems <http://www.profoundeffects.com/products/gasket/>). We’ll use After Effects for the examples shown here, but the concept is the same across programs.

To have the lighting clip illuminate the underlying clip, use modes such as Add, Screen, and Dodge. To have it darken the underlying clip, use modes such as Multiply or Burn. To add both highlights and shadows to the underlying clip, use Overlay or the “light” modes such as Soft, Hard, Linear, and Vivid Light.

Modes in the Overlay grouping rely on the gray balance of the clip used for the lighting effect, in that 50% gray in the lighting clip will result in no change in the underlying clip. You can easily use a Levels plug-in to change the gray balance of the lighting clip.

Indistinct, oozing clips often work best for the lighting clip. We often try several different lighting clips until we hit upon one we feel works best with the underlying clip. It is best if the lighting clip can be looped, so that you can add the resulting lighting effect to any length clip underneath.

Highlights & Shadows
The grandaddy of “artificial lighting” stock footage collections is Soft Edges from Artbeats. This collection features 80 looping, mostly amorphous clips. We prefer the Soft grouping, and in particular clips that are predominately shades of gray, such as SF102, 107, 109, 110, 113, 115, 117, and 118 – these make it the easiest to add highlights or shadows to a clip without tinting it too much.

Figure 1a-f: This trick involves placing a lighting layer, such LAB123 from Artbeats Liquid Abstracts (a), on top of an ordinary footage clip, such as MN147 from Artbeats Musical Instruments (b). Different modes applied to the lighting layer have different effects on the underlying layer, such as Add (c), Color Burn (d), Overlay (e), and Soft Light (f).

Figure 2: Artbeats’ Soft Edges was the first collection we used to create these lighting tricks, as its Soft clips made it easy to add highlights or shadows to other clips. Pictured are SF109, 110 and 113.
Let’s walk through an example. For our underlying video, we chose a clip of rusty gears (NGM108) from the Artbeats Industry: Gears & Machines collections. It is nicely, evenly lit with deep shadows. But even though the gears move, the lighting doesn’t. To change this, we then place a grayish Soft Edges clip on top, and set its Blending Mode to Overlay. We kept swapping in different clips until we found one we liked – in this case, SF109.

When we toggle the lighting clip on and off, we noticed that it was brightening the underlying clip, perhaps blowing it out a bit. To verify this, we selected the lighting clip, and applied a Levels effect. The Levels Histogram confirms that the luminance levels in the clip all reside above 50% gray – and when using a mode such as Overlay, levels above 50% result in a brightening effect. A quick fix for this is to grab the Gamma slider (the gray triangle under the Histogram) and drag it to the middle of the luminance ranges displayed in the Histogram.

SF109 happens to be designed to be darker in the middle and lighter at the sides. This overall lighting is imposed on the underlying gears clip. If we wanted the opposite – a highlighted middle and darker edges, to create a vignette effect – we would just apply an Invert plug-in to the lighting clip.

Colored Lighting
When you use colored footage for the lighting clip, the result is colored highlights and shadows being added to your underlying clip. Again, soft, amorphous clips are the easiest to employ, but ones with more structure can be used to create specific effects. Our favorites are clips based on water, such as from the Liquid Ambience and our own Liquid Abstracts collections, or those based on light sources, such as the Dreamlight, Light Alchemy, and Light Illusions collections.

Figure 4a-c: Adding a looping background clip with a colored wash – such as DRM202 from the Artbeats Dreamlight 2 collection (a) – on top of a normal footage clip (in this case, MN106 from Artbeats Musical Instruments (b)) using a mode such as Overlay creates a lovely colored lighting effect (c) – pay particular attention to the metal on the sax.

In many cases, you will have the most success using Overlay and the “light” modes for your blending. Overlay is a good starting point, with Soft Light being less intense, and Hard Light being more intense. After coming up with a good combination of lighting and underlying clips, it is common for us to then add a Hue/Saturation plug-in to the lighting clip and scrub the Master Hue value to tweak the color of the final composite. You can also use this plug-in to change the saturation of the lighting; reducing the saturation turns any clip into a grayscale lighting effect like we demonstrated earlier. We will also still add Levels to the lighting clip to improve the contrast and gray balance of the final effect.
Figure 5a-d: A highly saturated, colored clip such as NAB117 from Artbeats Nature Abstracts (a) can be moded on top of an otherwise dreary clip, such as VNC122 from Artbeats Incarcerated (b) to create a richly colored composite (c). To dial in a subtler but still striking effect, we tried Soft Light mode, and then altered the hue and increased the contrast (d).

Special Effects
Although we generally look for lighting clips that are a nice wash over the entire frame and which have a good gray balance, there are cases where lighting clips with a bit more character are also useful. For example, if the lighting clip has a strong texture such as cloth or stone, this texture will also be imparted upon the underlying clip. Several clips in the Digital Moods collection fit this bill.

Figure 6a-c: Applying a clip with both lighting and texture – such as DMD104 from Digital Moods (a) – onto an otherwise plain underlying clip, such as DT101 from Desktop Technology (b) can result in a nicely stylized composite (c).

In several previous articles, we have written about taking clips that have a predominantly dark or black background, and using modes such as Add or Screen to add them into a composite. This works well with the Dreamlight and Light Alchemy collections, as many of them were created against black. We also encourage you to try the Color Dodge mode, as it this makes the added lighting appear only where the background clip is also bright, and not where the underlying clip is dark.

Figure 7a-d: Here, we combined DRM106 from Dreamlight 1 (a) (shown here with some hue shifting) – a lighting clip with a black background – on top of MN120 from Musical Instruments (b) using Add mode (c). To get a more subtle effect that illuminates just the brighter areas of the underlying clip, try Color Dodge mode (d).

Also look for lighting clips that focus attention on a certain part of the screen. Many of the Dreamlight 2 clips form squares or rectangles in the center of the screen, which can help focus attention on a logo or other object centered in a shot. Conversely, we designed many of the clips in our Liquid and Nature Abstracts collections to leave the center dark, and fill in around the edges of the screen, which can help frame a shot.

Figure 8a-b: LAB126 from Liquid Abstracts had a dark center and lighting just around the edges (a). Applied in Add mode, it creates a nice, subtle glowing vignette around the drummer from the previous example (b).

Zooming Out
A large part of our job is making a client’s footage look better. When we need to use “conventional” footage for an opener, chapter head, or other shot where it needs to be special, we almost always use this lighting trick. Indeed, we have all of the Artbeats collections mentioned in this article loaded onto our server so we can quickly access them when a new job comes in.
Chris and Trish Meyer are the founders and owners of CyberMotion (www.cybmotion.com), an award-winning motion graphics studio in Los Angeles that has created a wide variety of work for film, broadcast, corporate events, and special venues. They were one of the original development sites for After Effects, wrote the highly-acclaimed books Creating Motion Graphics and After Effects in Production, and are long-time Artbeats users.