ROSCO

How To Create Backlit Effects with RoscoLED Tape

With space and power continually at a premium, backlighting scenic graphics or creating interesting color backgrounds can be a formidable task for set and lighting designers alike. The solution to this task is our new RoscoLED Tape! Available in static white (3000K or 5600K), variable white (3000K-6000K), or color-mixing (RGB+W) variations – this customizable LED product is an affordable solution for any lighting or scenic designer to create attractive accent lighting in their projects.

Backlighting Graphics or Scenic Backdrops

White light LED tape illuminates a background image of London's Tower Bridge in this broadcast set

RoscoLED Tape can illuminate a backlit graphic from as little as 6" away – providing a solid wall of light, with no dead spots or hot spots. Whether it be a simple logo, or an image that is more scenic in nature (such as cityscapes or other background imagery) – RoscoLED Tape is an excellent solution for backlighting any graphic in your set or installation
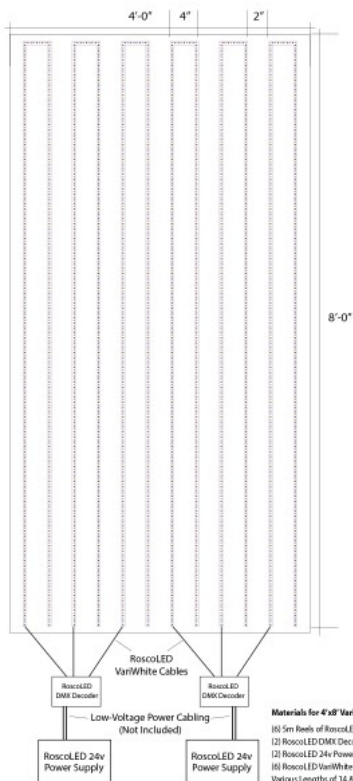
The RoscoLED Tape system is designed not to flicker on camera, and all of the white LEDs used in RoscoLED Tape system have exemplary CRI and TLCI ratings. This makes them an excellent choice for broadcast sets and architectural environments that necessitate superior color rendering. The Static White RoscoLED Tape may be used to backlight simple graphics and posters, or to add an accent glow around monitors and other furniture pieces on set. However, we

strongly recommend using the VariWhite RoscoLED Tape when backlighting scenic backdrops, such as Duratrans or Rosco SoftDrops due to its color temperature control features. The VariWhite RoscoLED Tape allows designers and technicians to shift the background lighting from cool – warm to match the needs of the set.
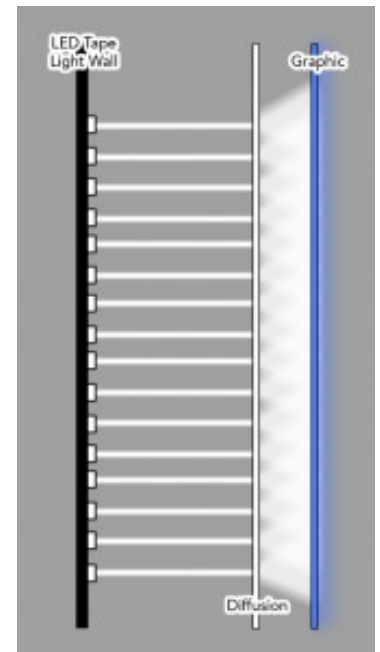

White LED tape installed vertically (L) to backlight blue, frosted Plexi (R)

An effective way to install RoscoLED Tape is to lay the product out vertically on sheets of white Foamcore or Coroplast at 4" or 6" centers (depending on your brightness needs). A 5m Roll of RoscoLED Tape will allow for 2 complete runs along the length of an 8' sheet. When complete, you'll have a feather-weight "light wall" that can be prepared in the shop, and then easily installed behind the areas you want backlit once the walls of the set are in place.

It is highly suggested to install a layer of diffusion between the RoscoLED wall and the graphic you're trying to back light. In some cases, the substrate the graphic is printed on will be enough to diffuse the point-sources of the LEDs, but in most cases you'll want to have either a heavy Rosco diffusion filter, such as Cinegel #3026 Tough White Diffusion, or a rigid piece of material like ACRYLITE® Satinice, to soften and homogenize any hot spots out of your graphic.

All that remains is to make the power and control connections through the DMX decoders to provide the operator with complete control over the color temperature and intensity of the graphic or backdrop.

Creating a Gradient Color Wash

Many sets are utilizing colored LED fixtures to add a color wash into their set. A wash of graduated color, however, is a unique, visually captivating effect that can be achieved using the color-mixing VariColor RoscoLED Tape installed behind frosted Plexiglas® walls and grey-scale graphics.
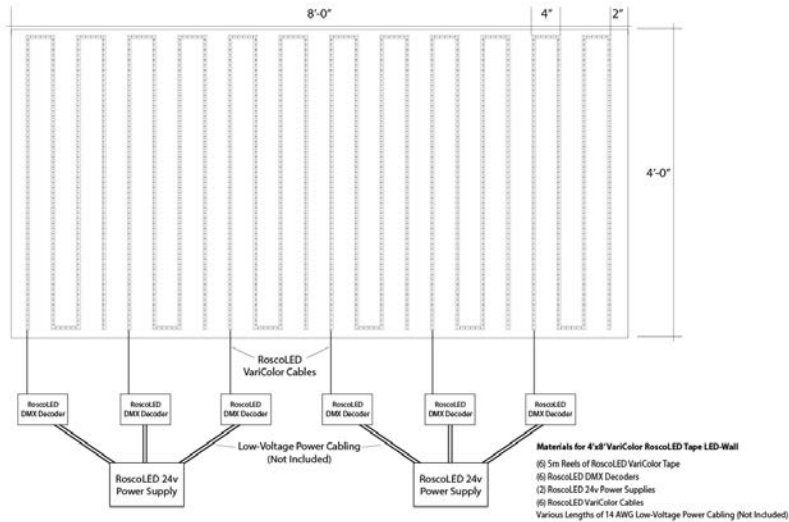

Color Mixing LED tape provides a bold color gradient

The trick in creating a gradient effect is two-fold – layered installation and multiple control encoders. Layering the product horizontally onto the sheets of Foamcore or Coroplast using an S-Curve is best to achieve the desired color graduation.

One 5m roll of RoscoLED product will cover approximately 20" of a 4' wide board by gently winding the product back on itself at 4" centers. A minimum distance of 6" between the RoscoLED product and the frosted Plexi is advised in order for the color to blend evenly without any dead or hot spots.

The concept here is to create multiple 20" sections, and wire each section to its own DMX decoder. This allows color-control over each 20" section, thus allowing designers and technicians to create different color effects in each section. This technique gives set and lighting designers a multitude of gradient options – including graduations of color that range from nuanced and subtle to vivid and bold.

Visit the website to download data sheets, see a full list of all the RoscoLED Tape Components and learn more about this innovative lighting solution.

Images and LED installation courtesy of TAD Lighting Services