

Additive Color Mixer



To Do and Notice:

Flip the front switch up. The intensity of three additive primary colors – red, green, and blue - may now be individually adjusted with the dials.

1. Color Addition - two colors. Turn on two colors at a time and observe the color that results where the two primary colors overlap. The combination of two primary colors is called a *secondary* color.

Use the color mixing to produce the three secondary colors:

- **cyan** (blue + green)
- **magenta** (blue + red)
- **yellow** (green + red)

Any two colors that produce white light when added together are called *complementary*. The complement of a primary color is a *secondary* color. Thus cyan is the complement of red, magenta is the complement of green, and yellow is the complement of blue.

2. Color Addition – three colors. Turn on all three colors and adjust the dials until the center (where all three colors overlap) is white.

What's Going On:

It possible to mix red, green and blue light in the right proportions to obtain nearly any desired color. Color television and electronic signs produces color images through the combination of these three colors.