1. Description

The Color Mixing Apparatus is a compact device for demonstrating the additive effects of mixing colored light and the colored shadows and secondary colors generated by subtractive color mixing. It consists of three ultrabright LED projectors (Figure 1) mounted on a support and control box (2) so that the angles of the projected beams can be adjusted to show either individual or overlapping light spots on a white screen (3) placed up to 50 cm from the projectors. The projectors generate red, green, and blue light respectively and the brightness of each can be regulated individually. The images on the supplied screen are sufficiently bright to be used in a normally illuminated room, and for a larger audience in a darkened room, adequately bright light spots up to 1m in diameter can be produced at a projection distance of about 3m. The apparatus operates on low voltage (6VDC) delivered by a wall-mount power supply.