Softlights and Fluorescent Light

by Bentley Miller

This month's article continues Bentley Miller's description of Lighting Fixtures, begun in the September issue. It discusses Softlights, Fluorescent Light, HMIs and other related Light Sources.

Softlights

Up to this point, we have been discussing fixtures that make use of a specular reflector to intensify and shape the light cast by the fixture or luminaire. Now we will look at fixtures that make use of diffuse reflectors in order to cast as soft a light as possible. These fixtures are collectively known as softlights. The lowest wattage available is the 750/1000 watt fixture. The softlight has a box-like construction to take full advantage of diffusing the light source over the greatest area possible within the fixture, so as to cast as soft a shadow as possible. This is accomplished through reflection—all of the light emanating from a softlight is indirect, as all of the light rays are bounced from the bulb/reflector assembly onto a matte parabolic shaped surface. This surface is usually a matte white, etched or pebbled aluminum finish, to further enhance the soft quality of the light coming from this source. This makes the softlight particularly useful for fill light as it doesn't create a shadow secondary to that produced by the key light if it is used properly.

The 2000 watt softlight comes in two sizes, the standard and the 2K ZipLite. The 2K Zip, as it is known, is roughly one-half the size of the standard. It features two 1000 watt bulbs that can be switched on or off independently of one another to control light intensity. Many lighting people prefer the zip over the standard because it is compact and has a punchy, more directional quality to it, while remaining soft. The 4000 (4K) and 8000 (8K) are larger versions of the 1000 or 2000 watt fixture. One of the big drawbacks of softlights is that they are bulky and cumbersome to store and use, especially when you consider their relatively low light output.

(Of interest is the fact that a company from Georgia called Modulight designed and built a novel product, the folding softlight, made from a special heat-resistant fabric. The Modulight is available in 5 sizes: 2K, 4K, 6K, 8K and 16K. One need only think of the weight of a regular 16K softlight, if it were available, to recognize the utility of this unique product. Lowel Light, another U.S. manufacturer, had made a folding softlight previous to Modulight but its capacity was limited to under 2000 watts.)

There are a number of other sources in the softlight category; two that are frequently used are the scoop and the spacelight.

- The scoop is a bell-shaped, open-faced fixture that casts soft illumination. This is accomplished by the use of a frosted bulb and the shape of the fixture; these two elements in combination produce light which is diffused in nature because of indirect illumination. The bell shape of the fixture reflects light rays back on each other breaking them up softening and diffusing them.
- The spacelight is a large soft source that is shaped like a barrel and measures roughly three feet in diameter and three feet in height. It is comprised of a support ring made of metal, to which six 1000 watt bulbs (not unlike nooklites), are attached in a circle, like the blades of a fan pointing downwards. A secondary ring with a wire grate is suspended by wires to form the bottom of the fixture. The grate is actually a tray for diffusion material to soften the light through the bottom of the fixture. The spacelight projects soft light through the use of white silk which encloses the upper and lower rings, forming the sides of the "barrel". This source is large and cumbersome to use, but the quality of the light that it casts justifies its use.
- *SEALED BEAM UNITS*—this is another category of light sources commonly used in television. This category encompasses the Cinequeen, the PAR 64, the 6-light minibrute, 9-light maxibrute, and the PAR 34 Jupiter. The Cinequeen is a PAR 64 bulb mounted in a shiny specular reflector, producing an intense high light output. (The number 64 is a manufacturer's designation used to indicate the diameter of the bulb. This is measured in eighths of an inch, so a PAR 64 bulb is 8 inches in diameter.) Common to all of these sealed beam units is the fact that the light source, its reflector and lens are fused together during manufacture to form a single component unit.

The generic name for this range of fixtures is PAR, an acronym for Parabolic Aluminized Reflector. These fixtures look very familiar as they closely resemble a car lamp, but of course, the voltage used