

vision's adaptive mechanisms, resulting in more relaxed viewing. Glare and reflections are then dramatically reduced by eliminating any light source from striking the front of the set. Colors appear richer and blacks darker. Contrast and brightness controls can be turned down. Doing this will prevent over-saturation of the phosphors in plasma TVs, thereby reducing the risk of "screen burn-in." Back light controls can be turned down on LCD displays. Power consumption is reduced and life extended for both plasma and LCD TVs.

The fluorescent lamps included feature rare phosphors that perform unusually well. The 'Color Rendering Index' (CRI) is 90 out of 100. Industries that rely on visual comparison for color accuracy recommend a minimum of 90 CRI for ambient lighting. CRI is the measurement of a light's ability to render pigments recognizable according to a prescribed standard. Put another way, it's the ability of a light source to illuminate all colors in a predictable balance. The CRI of most types of light bulbs is referenced to the spectral content of a standard element heated to a certain temperature on the Kelvin scale. Illuminants rated at 5000 Kelvins and higher are referenced to natural daylight at varying times of day. The color temperature of **Ideal-Lume** Panelight's lamp is 6500 Kelvins. This color of white light is the same as that displayed on a correctly calibrated TV set. While the eye strain benefits will continue throughout the rated life of the lamp, slight color shift will start to occur as the lamp ages. This is true for all fluorescents. When optimum color accuracy is a priority, the lamp should be replaced at about 5,000 hours. High CRI, 6500K, T5 fluorescent lamps are not common in retail. Our customers should consider purchasing extra lamps to have on hand.

A light of this type, placed behind the TV, provides more than enough illumination in most rooms for correct viewing. Locate the light behind the set to produce an even glow on the wall surrounding the TV. The SMPTE ideal recommends that the wall behind the set be a neutral color to further preserve correct color perception. Colors classified as neutral by the Munsell Color Order System, range from black to white throughout the gray scale. SMPTE suggests Munsell's 'nearly-neutrals' be used elsewhere in the viewing environment but not within the field of view while observing the screen. The lighter wall colors used in most rooms invariably reflect so much light that most users of **Ideal-Lume** Panelights require some degree of dimming. This is particularly necessary considering the close proximity of the lamps to the wall's surface when placed behind a wall-mounted panel.

SMPTE's research discovered that the optimum level of backlighting for extended viewing should be 10% of the brightest white the screen will produce. **Ideal-Lume** Panelight's output can be reduced by simply rotating the included light baffle tube around the lamp. In the absence of a light meter, there is a simple way to determine when the light is producing the correct amount of illumination on the wall behind the set. Joe Kane Productions' 'Digital Video Essentials' optical disc program series all contain a still-frame reference pattern labeled "Ambient Light Reference" that can be displayed on the screen to provide a visual comparison. Mr. Kane chaired the SMPTE Professional/Studio Monitor Working Group mentioned previously and produced this DVD to help consumers and technicians alike optimize their video displays and multi-channel audio systems. Another DVD including a test pattern of this type is: Ovation Software's 'Avia II Guide to Home Theater'. These titles, and others with this pattern, are available from our online store.

Available accessories:

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| Additional 1 meter linking cable for multiple fixture installations: | \$ 3.95 |
| X10 RF (radio frequency) remote- controlled on/off switch: | \$30.00 |
| Replacement Lamps: | \$12.95 |



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