Ideal-Lume®

The ideal viewing environment luminaire for video monitors.

Product Information Sheet

Model: #SW-13WT5-IL65X1, 120 volt, 60 Hz
Color: Black
Size: L 22 1/2" x W 7/8" x H 1 3/4"
Lamp: 6500K, 90 C.R.I., up to 10,000 hour, T5 fluorescent, 20 3/4" long, 13 Watt
Warranty: 1 year (please contact our office for help)
Other features:

- Includes spare lamp ($12.95 Value)
- Assembled in the USA
- Side-Mounted on/off rocker switch
- Simple, variable baffle, mechanical dimming tube (with color correction) installed
- Clear, acrylic, wrap-around diffusor lens (not needed or recommended in most cases)
- High frequency electronic ballast for instant start, quiet, cool, energy-efficient operation
- 6 ft. power cord with polarized plug
- Joining adapter for connecting two fixtures end to end
- Mounting kit with screws, drywall anchors and high-temperature, industrial, self-stick Velcro
- UL and C-UL Listed

MSRP: $59.95

Award winning viewing technology!
Reduce eye strain!
Eliminate glare and reflections!
Enhance perceived black levels and contrast!
Improve color perception!
Increase image depth and three-dimensionality!
Preserve maximum resolution and correct geometry!
Reveal nuances in hue and shading!
Prolongs the life of your TV!
Color correct for all color television standards!

In the mid 1980's the Society of Motion Picture and Television Engineers (SMPTE) conducted human factors research to identify optimum standards for the viewing conditions in professional monitor environments. Their work addressed issues applicable to all forms of electronic displays. These findings, as set forth in their 'Recommended Practices Document #166: Critical Viewing Conditions For Evaluation Of Color Television Pictures', can be applied to the consumer's own viewing environment at home to get the highest level of performance and enjoyment from any television. SMPTE's work focused on helping the viewer see the picture correctly but also on making the viewing experience comfortable over a long period of time - minimizing eye strain as an example.

All TVs require a darkened room to present their best picture. The color, point of origin, and intensity of light in a viewing environment, all affect the quality of image obtainable from any television, as well as the viewing fatigue experienced. A small fluorescent fixture, with a proper 'color temperature' lamp, placed behind a direct-view monitor, flat panel TV or rear-projection set, fulfills much of what is needed to achieve the SMPTE recommendations pertaining to ambient light in the room.

Viewing a TV in a darkened room can cause eye strain in as little as 30 minutes. This is primarily due to the iris

opening and closing dramatically as scenes change from dark to light on the screen. Dark adapted vision becomes much more sensitive to intense brightness. For a vivid demonstration of how frequently light levels change throughout a typical program, turn your back to a TV in a darkened room and notice how much the light changes in the room, both in intensity and frequency. Providing a small amount of light behind the set 'biases' the iris (reducing the range of motion in the iris muscle), 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 phosphors, thereby reducing the risk of 'screen burn-in' and preserving maximum sharpness and detail. This also preserves correct picture geometry on CRT-based displays and actually prolongs the life of picture tubes. Phosphor life will also be extended for plasma panels and LCD monitors with adjustable cold-cathode backlighting.

The fluorescent lamp included in this product features 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 colors recognizable according to a prescribed standard. Put another way, it's the ability of a light's source to illuminate all colors in a predictable balance. The CRI of most types of lamps 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***'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 near the lamp's rated half-life. 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 extremely rare over the counter. Our customers are advised to purchase extra lamps from us to have on hand.

A light of this type, placed behind the TV, provides more than enough illumination in most rooms for serious 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 require some degree of dimming.

SMPTE's research discovered that the optimum level of backlighting for extended viewing should be less than 10% of the brightest white typically on the screen. ***Ideal-Lume***'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' DVD contains a still-frame reference pattern (Title 12, Chapter 16) 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 title 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'. Both of these DVD titles are available from our online store.

Available accessories:

Special 1 meter linking cable for multiple fixture installations	$ 3.95
X10 RF (radio frequency) remote-controlled on/off switch	$30.00
'Digital Video Essentials: HD Basics' Blu-ray Disc	$16.99
'Avia II Guide To Home Theater' DVD	$44.95
X10 Command Console for IR control of X10 remote switch	$43.95
X10 Remote with compatible IR codes, 5 device, learning	$29.95
Munsell 10-Step Neutral Value Scale (a fan deck of reference color samples, from black to white)	$44.95
Replacement Lamps	$12.95

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