

# DUPLEX INSTRUCTIONS

The **DUPLEX SUPER-SAFELIGHT** is not a conventional safelight. It has been designed to flood the darkroom with a soft, evenly diffused monochromatic 'bounce-light' of high intensity for maximum visibility and comfort. This is best achieved by suspending the **DUPLEX** from a light-colored ceiling in the approximate center of the room with the bottom of the unit about seven feet from the floor. All direct light will then strike the walls above eye-level and the work areas will receive only soft, indirect light.

## ASSEMBLING THE DUPLEX

The **DUPLEX** is shipped carefully packed and each unit consists of the following parts:

- 1 Main Housing with Movable Vanes**
- 1 Bayonet-base Monochromatic Lamp**
- 2 Smaller filters for the Vanes (either Red or Black tape)**
- 2 Larger filters for the Housing (either Yellow or Green tape)**
- 2 Support Chains (18" long)**
- 1 'U'-shaped support strap for lamp**

The above parts should be removed from the inside of the housing where they are stored and carefully unwrapped. **NOTE- The colored tape should NOT be removed from the filters!**

The Monochromatic Lamp fits into the bayonet socket visible inside the housing and locks into place with a slight clock-wise turn. The free end of the lamp is then supported by the U-strap which hooks into the appropriate two holes in the housing.

With the vanes open, a larger filter is placed into each of the recessed openings in the main housing of the **DUPLEX**. A smaller filter is then slid into the side opening in each of the two moveable vanes. Either side of the filter can face the bulb.

A support chain should then be hooked to each of the two support tabs on the top of the main housing. For safety, each S-hook should then be closed with a pair of pliers.

## INSTALLING THE DUPLEX

The assembled **DUPLEX SUPER-SAFELIGHT** should be suspended from the ceiling by two sturdy eye-bolts or hooks installed about 13" apart. The **DUPLEX** weighs 20 lbs., and every precaution must be taken to install it in a completely safe and secure manner. The chains supplied are the proper length for a standard 9'6" ceiling. For other heights, the chain length may need to be adjusted so that the bottom of the **DUPLEX** will be at the recommended 7 foot height.

The special monochromatic lamp consumes only 35 watts and can be operated from any convenient switched standard outlet supplying 2 amps at 120 volts. Upon special order, the **DUPLEX** can be supplied for 230 volts.

The **DUPLEX** is turned on by simply plugging it into an active electrical outlet. When cold, the special lamp requires about 5 minutes to reach full operating brilliance. Because of the unusual nature of this lamp, it is not recommended that it be turned on and off frequently.

## IMPORTANT

Working conditions and materials can vary greatly from lab to lab, making it difficult to specify the exact performance of the **DUPLEX SUPER-SAFELIGHT** for any given installation. Since it is understood that **any** safelight will eventually produce fogging, it is strongly recommended that each new **DUPLEX** installation be carefully tested with all the materials that are to be used. If necessary, the transmission characteristics of the filters may be custom altered to meet unusual requirements.

## **BLACK & WHITE PRINTING (Type DUB) AND ORTHO PROCESSING**

For all **Black and White Printing Papers**, including the faster variable contrasts, the vanes should be open with the yellow-edged filters in the body and the red-edged ones in the vanes. At the maximum opening, the **DUPLEX** should provide perfect illumination for darkrooms approximately 12 x 14 feet, with a standard ceiling height and light-colored walls and ceiling. Smaller darkrooms may require a reduced level of illumination. This is easily accomplished by setting the vanes to one of the intermediate positions by the convenient pull-chain.

For **Ortho Films**, papers and many graphic arts materials, the vanes should be fully closed so that the light passes through both the yellow and red-edged filters. Make certain that the vanes close tightly to avoid leakage of unfiltered light.

## **COLOR PRINTING (Type DUC) AND BLACK & WHITE PRINTING**

For **Color Printing Papers**, the vanes should be fully closed, so that the light passes through both the black-edged and yellow-edged filters. The light level will appear rather low, but it still will be many times brighter than that of conventional color safelights. Make certain the vanes close tightly to avoid leakage of unfiltered light. For black and white printing, the vanes should be opened and the **Duplex** used as the Type **DUB** described above.

## **X-RAY PROCESSING (Type DUX)**

For **X-Ray Materials**, the main housing should contain the green-edged filters and the vanes the red-edged ones. Since medical and industrial X-Ray materials vary over an exceptionally wide range of sensitivity and spectral response, preliminary tests should be made with each material being used. For unusual situations, upon consultation, our technical staff may be able to supply special filters.

## **SERVICE**

The conservative design and robust construction of the **Duplex** assures a lifetime of trouble-free, productive service. While the Monochromatic Lamp should provide a minimum of several years of normal usage, it is strongly recommended that a spare lamp be kept on hand to avoid needless delay and inconvenience. As the lamp nears the end of its useful life, the light output will gradually diminish and the lamp will begin to flicker noticeably. It is also recommended that the filters be examined periodically for any deterioration and should be replaced every 5 or 6 years.

## **REPLACEMENT PARTS**

<b>LDS</b>	Special Monochromatic Lamp
<b>FBD</b>	B & W Printing Filters (yellow edge)
<b>FCD</b>	Color Printing Filters (black edge)
<b>FOD</b>	Ortho Film Filters (red edge)
<b>FXD</b>	X-Ray Film Filters (green edge)

For service or technical assistance, contact:

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