

# **DARKLITE INSTRUCTION SHEET**

**RECOMMENDATIONS:** The Darklite will perform the best if used with the microscope slides that have squared edges (not beveled). The standard Darklite is designed to illuminate the slide from each end. Since frosted or paper labels will occlude the light, the “DARKLITE VERTICAL” version was introduced as an option. The “DARKLITE VERTICAL” illuminates the slide from both sides instead of from the ends, thus bypassing the label.

**SET-UP:** Install the Darklite slide holder on the microscope stage in place of the standard slide holder. The Darklite will fit most X and Y stages from Nikon, Zeiss, Leica, and Olympus. The metal plate is drilled for the screws that have been provided with your microscope. Simply find the two holes on the plate that align with the two holes on your stage and fasten the plate to the stage with the two lock-down screws. Be sure to select holes that will allow full travel. The new Olympus belt-drive stages will require adapter #MOD-1015.

**CONNECTING TO THE FIBER OPTIC ILLUMINATOR:** The ferrule on the Darklite fiber bundle is 5/16” (7.92mm) in diameter. For the metal halide illuminator sold with the Darklite an adapter is supplied that fits on the ferrule and is held on with a setscrew. For other light sources the proper adapter must be fabricated to accommodate the ferrule.

To connect, be sure the adapter is tightly mounted to the ferrule, then insert into the opening in the lamp housing. Consult the illuminator manual for specifics regarding operating features and bulb changing.

**TO LOAD A SLIDE:** Place the slide on the stage in front of the Darklite, push the Right-Hand fiber optic slide gripper to the right (it is spring loaded), move the slide into position and release the gripper. Be sure that the slide is seated and that none of the light from the Darklite passes over the top of the slide.

**FOR LOW MAGNIFICATION OBJECTIVES:** Very low magnification objectives such as 1X and 1.25X may pick up reflections when viewing specimens near the edge of the slide. Covering the interface between the slide and the fiber optic can help to control these reflections. It may also be possible that the microscope condenser below the slide will cause reflections. If so, lower the condenser until they disappear.

**FOR OIL OBJECTIVES:** As in darkfield microscopy, objectives with numerical apertures of 1.0 or higher will require an iris in the lens.

**NOTE:** The Darklite works well for most autoradiography and immunogold preparations, in particular if the counterstain is not too heavy. It may also work well with other types of specimens, but M.V.I., Inc. makes no claim in this regard. If you are not satisfied with this product for any reason, you may return it for a full refund within 3 months of the date of delivery.