

## INSTRUCTIONS FOR SETUP OF DUAL FIBER SWITCH, DUAL LAMPHOUSE VERSION

Please refer to the installation instructions throughout the setup process.

Your Dual Fiberoptic Scrambler system is fully assembled. Please do not move the white lens focus knobs on the modules. Please do not remove the tape from the X and Y adjusting knobs until called for in the instructions. This system has been critically pre-centered at the factory!

References are to the basic instructions that are with the Scrambler System. The DFS system differs somewhat so please use this sheet to set up your system:

### TO SETUP AND MAXIMIZE THE LIGHT THROUGHPUT

Follow the Installation Instructions from the asterisk (\*) toward the end of **part 1** concerning mounting the two Input Modules to the two tripods. Then go to **part 2**, Lamp Setup, adjust the lamphouse as required and mount the lamphouses to the Input Modules.

**Part 3** The CCR's are already installed on the fiberoptics.

**Part 4** The LOP (Light Output Photoresistor) is special for the DFS system. To use it, you must first remove the lens from the output module with the DFS attached. To do this safely, place the module face down on a clean surface and pull the white focus knob out about 1/2". This should release the lens and when you lift up the module the lens will be sitting on the surface. Note which end goes into the module! Now lay the module on its side and insert the LOP as far as it goes. Use a small piece of removable tape if necessary to keep the LOP from shifting while you are setting up each lamphouse.

Do not move any knobs! Plug the LOP jack into a multimeter set to read ohms.

NEXT, make all adjustments possible on the arc lamp for centering, focus, and mirror centering, to achieve the lowest ohms reading. Do this two or three times until you are satisfied that you cannot improve it. Then remove the tape from the X and Y knobs on the module and if you have set up the lamphouse properly, you will need to move these knobs slightly, if at all. Also adjust the white focus knob for lowest ohms. Perform these 3 tweaking adjustments several times.

NOW switch the DFS so that the other lamphouse/module is providing the illumination and repeat all of the above. When you have finished, replace the lens in the Output Module. The easiest way to do this is to hold the module horizontally, completely remove the white focus knob, insert the lens with the slot engaging the focus knob up, and insert it into the module until the slot is visible in the focus knob hole. Insert the knob and rotate gently until it engages the lens slot and seat it.

Finally, aim the output module at a surface 3 feet or more away and adjust the focus knob until the perimeter of the disk of light is sharp.

Attach the module to the microscope port; make sure there are no diffusers in the light path! Follow the instructions from **part 6** to complete the setup.

For the Axiovert 200 for trans illumination, place the Auxiliary lens 3 on the swing out filter holder.