

QUICK SET-UP FOR THE GW ELLIS FIBEROPTIC LIGHT SCRAMBLER

PLEASE READ BEFORE UNPACKING THE SCRAMBLER COMPONENTS!!

These instructions are to be used with a VOM or Multimeter. The LIGHT OUTPUT PHOTORESISTOR (LOP) is a device made by Technical Video Ltd. specifically for *maximizing light* throughput in the G.W.Ellis Fiberoptic Light Scrambler. Installation of the Scrambler is greatly facilitated by using the LOP. You must refer to the **Installation Instructions** to properly install the CCR.

The **Light Output Photoresistor** indicates the relative light output from the fiber. It requires a **VOM or Multimeter**. The double banana plug will fit into the jack on your meter, or it can be used by attaching clip leads to the plugs. Your LOP was calibrated using an HBO 100W mercury lamp. Your readings may vary depending on arc lamp life, filters, etc.

Lenses are installed in both the Input and Output Modules. Both lenses are set to the middle of their travel.

1. After unpacking components do not move the preset X & Y adjusting knobs.
2. Secure the tripod to the finned Input Module 1/4-20 threaded hole. Position it so the **lamphouse will be over the long tripod leg for stability.** Be careful with the attached fiberoptic.
3. Install CCR, if not installed already.
4. Turn on the lamp and focus to infinity. Center the arc and the reflected image. Mount lamphouse to Input Module.

5. Plug the LOP that is secured to the end of the fiberoptic into the meter. Turn the meter on and set it to read Ω .
6. The **Red-banded Input (lamp) end** of fiberoptic is already installed in the Input Module. A fiberoptic end cooling device (FinTip) is secured to the tip of the fiber. This prevents the fiberoptic from being removed from the Fiber Holder. Call if you need to do this.
7. **Next**, adjust the white Z-axis knob on the Input Module, *then* adjust all knobs and screws on the lamphouse until you get the **lowest possible reading.** Now adjust the X and Y screws on the Input Module to optimize the throughput. Do this sequence two or three times until you are satisfied that you have maximized the light throughput. Readings will vary depending on setup, arc lamp, filters, lenses, etc.
8. Hold the Output Module, as you slowly insert the fiber, so that it will project a disk of light on a flat surface some distance away. Lock the fiber when the perimeter of the light disk is sharp. Fine focus with the Z-axis knob. Attach the Output Module to the appropriate microscope port.
9. Install auxiliary lens, 1X Extender Tube, field diaphragm, dual lamp mount, etc., as required. (see Installation Instructions.)

Refer to **Installation Instructions** for more details.

Please call us for technical assistance!!