



# Operation Manual

(For CA-023-49800-000)

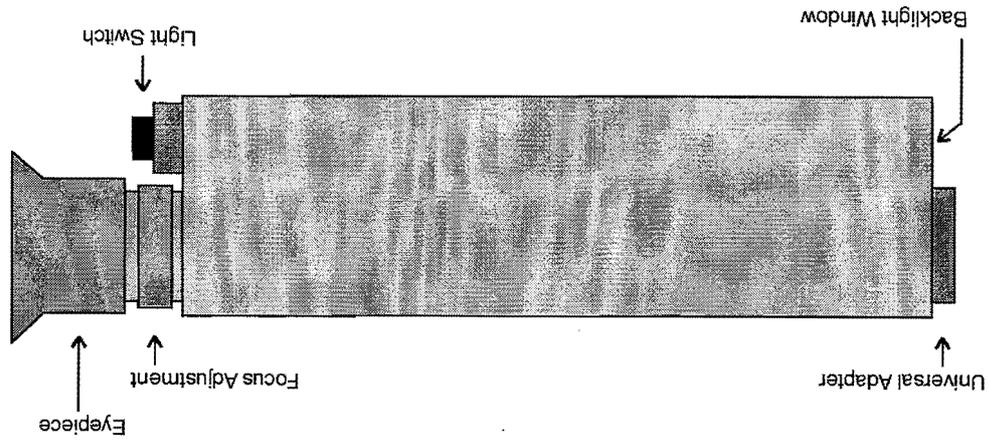


Figure 1

**Thank you for purchasing the Fiber Microscope.** This instrument was designed to provide years of service while delivering true optical performance.



## User Safety Warning

DO NOT use this or any, fiber inspection microscope to view active fiber signals under ANY circumstances. Active fiber signals contain laser light, and direct eye contact with laser light should be avoided. Failure to avoid direct eye contact with laser light can result in serious damage to the eye. The fiber microscope may magnify the laser light in active fiber signals; direct eye contact with magnified laser light should be avoided. Laser safety filters, as used on the fiber microscope, are no substitute for practicing good laser safety. If you are unfamiliar with laser safety practices, seek out professional training. There are many capable trainers working in the fiber optic field who can help.

## Setup

The Fiber Microscope comes fully assembled and requires only a few steps before it is ready to use.

1. Begin by removing the instrument from its case.

2. Your Fiber Microscope should come with the batteries already inserted. If not, you'll need to insert 3 AAA batteries. Unscrew and remove the "Light Switch". Insert the batteries with the "+" side up towards the Light Switch (see Figure 2). Replace the Light Switch and tighten.

3. Your Fiber Microscope comes with a Universal Adapter, it should already be in place and your instrument is ready to use. If the adapter is not in place, simply screw it into the threaded hole at the opposite end from the Light Switch. Your instrument is ready to use.

## Maintenance

Keep this instrument dry and clean. It is built for durability and field use, but careful operation will greatly extend life.

**Light Source-** This microscope utilizes a white LED light source. The LED has a life expectancy of over 100,000 hours. Therefore, you should never have to change the LED. If you have problems with illumination, please call your sales person to arrange for repair.

## Operation

In this manual, we will explain general use of the Fiber Microscope. However, it is important to read the specific termination instructions published by the manufacturer of the connector you are using. This will ensure proper termination.

**1. Begin by loading the polished connector into the Universal Adapter.** Simply slide the ferrule (2.5mm) into the adapter until you feel it hit a stop (Figure 3). It may require a little pressure to get it started as our adapter is equipped with a no-slip gripping mechanism. It is important to slide the ferrule all the way to the stop. This will minimize any refocusing that needs to be done when changing from one connector to the next.

**2. Now turn the light on.** This unit is equipped with a "Momentary Light Switch", the lamp will remain on only when the switch is pressed. Using this type of switch will extend battery life. The light operates by pressing and holding the momentary Light Switch. You can tell if the light is on by checking the "Backlight Window" (Figure 1). The Fiber Microscope is ready for use if you see light through the backlight window.

**3. Hold the eyepiece up to your eye and begin focusing.** Grip the rubber eyecup and turn it to focus the image. The first time you use the microscope, it may take a little longer to find the image. Once you find the image, very little re-focusing is necessary if the connector is properly loaded.

If you have trouble finding the image, there is a simple trick. Load the connector and check to see that the light is on. Then turn the "Focus Adjustment" clockwise until you feel the tube hit a stop. At this point, the lens is actually just touching the end face of the connector ferrule. If you look in the eyepiece, the image will be dim or black. Now hold the eyepiece to your eye and begin slowly turning the tube counter-clockwise. This will slowly back the lens away from the connector ferrule and at some point the fiber should come into view.

Once you can observe the ferrule, you can evaluate it for polish quality, cleave quality, and cleanliness. Optionally, you can hold the opposite end of a cable to the Backlight Window to give further contrast to the fiber core.

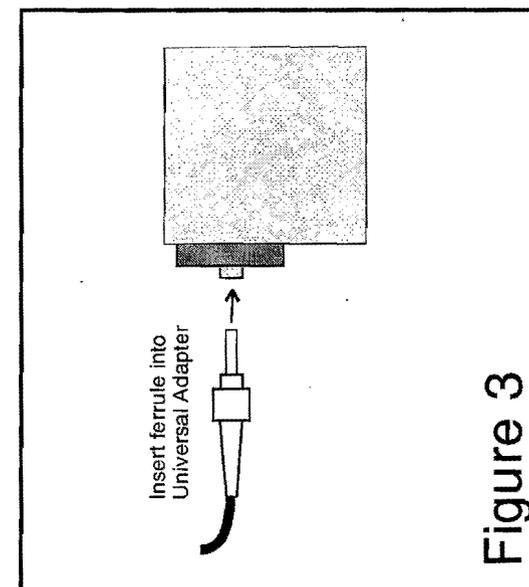


Figure 3

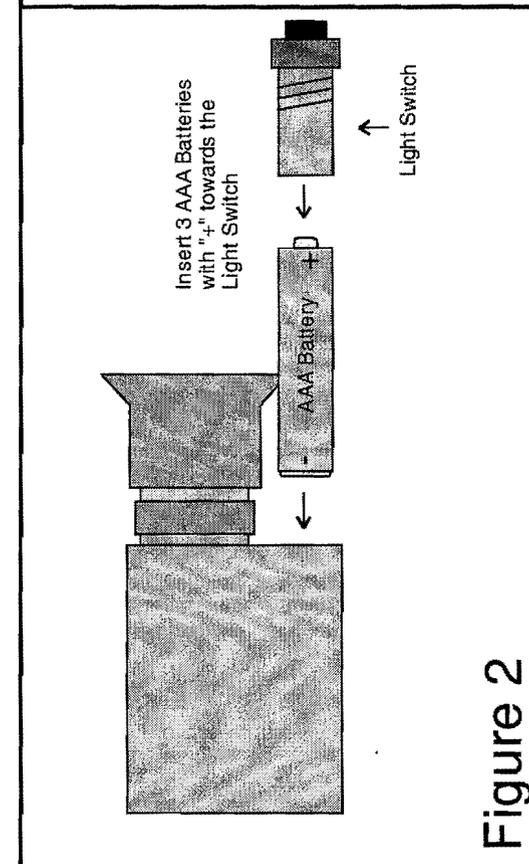


Figure 2