

Fiber Microscope Operation Manual

(For All FM-C series Fiber Microscope)

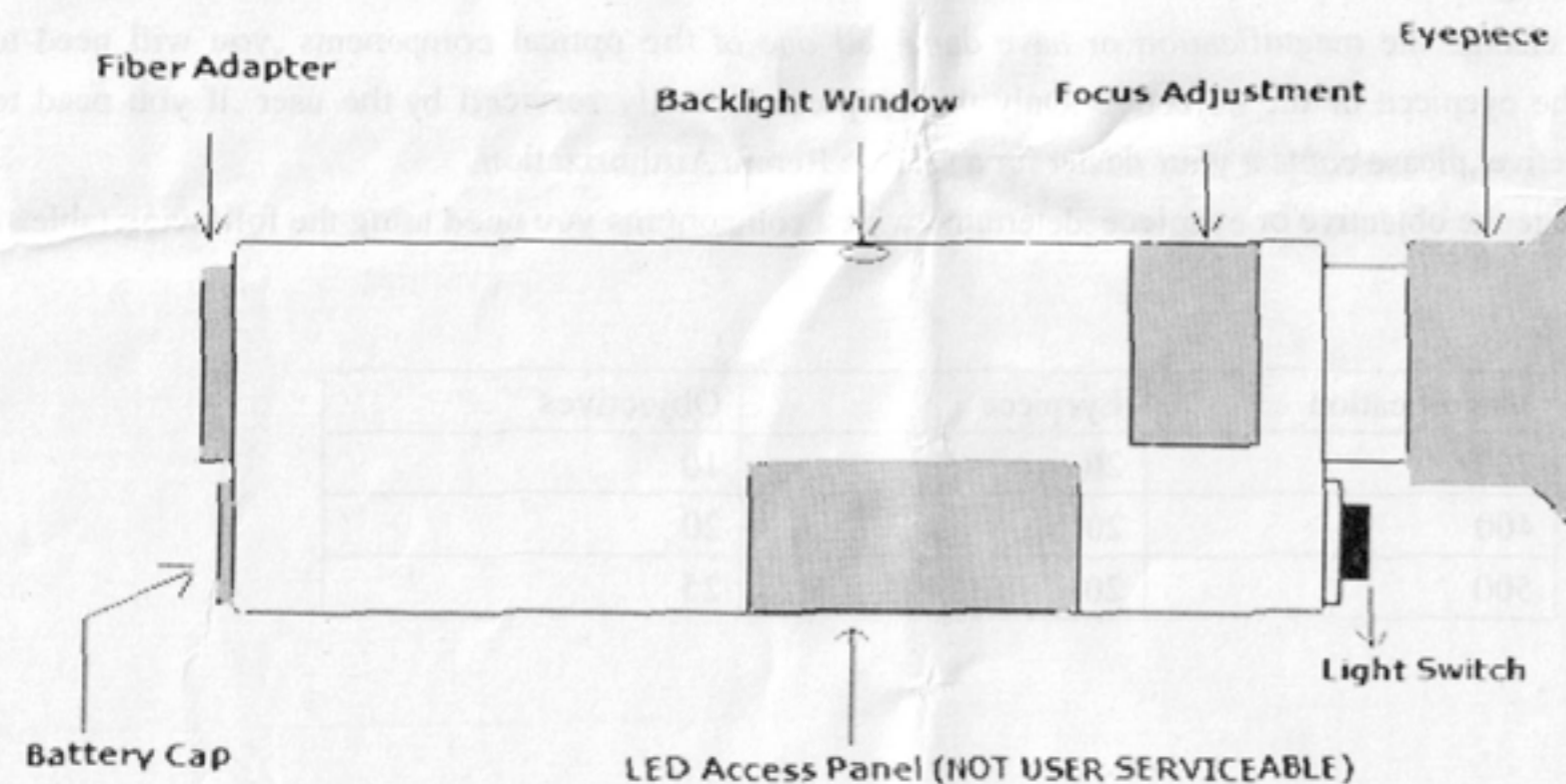


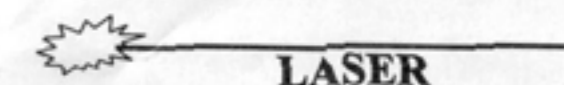
Figure 1

Thank you for purchasing the Fiber Microscope. This instrument was designed to provide years of Service while delivering true optical performance. The instrument is available in any of 5 magnifications (200x, 400x or 500x), and can be purchased with a universal 2.5mm And 1.25mm ferrule adapter or system you've purchased, this manual will help you through operation & maintenance.

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. You'll need to insert 3AAA batteries .Unscrew and remove the "Battery Cap".Insert the batteries with the "-"side up towards the Battery Plug;"+" side down towards the Light Switch (see Figure 2).Replace the Battery Cap and tighten.
3. If you have purchased the Fiber Microscope with a Universal Adapter,it should already be in place and your instrument is ready to use.if you purchased an adapter separately,simply screw it into the threaded hole at the opposite end from the light Switch .Your instrument is ready to use.



User Safety Warning

DO NOT use the fiber 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.The 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.

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.**Also,be sure you have read the User Safety Warning and fully understand that direct eye contact with laser light and magnified laser light should be avoided.**

1. Begin by loading the polished connector into the adapter .If you have purchased our Universal Adapter ,simply slide the connector ferrule(2.5mm)into the hole until you feel it hit a stop (see figure3).it may require a little pressure to get it started as our Universal adapter is equipped with a no-slip gripping mechanism.it is important to slide the connector 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 .if you have purchased one of the dedicated adapters,insert the connector just as you would into a patch bay or mated connector.
2. Now turn the light on.The light operates by pressing and holding the light Switch in .You can tell if the light is on by checking the "Backlight Window"(see figure1) . If you see light through this window ,you are ready to work .
3. Once the connector is loaded and the light is on,hold the eyepiece up to your eye and begin focusing.Unlike many instruments of this type,the Fiber Microscope is always centered so there is no alignment to be done .Grip the focusing adjustment(brass wheel with rubber grip,see figure#1) 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.

4. Once you can visualize the connector 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 core. Check with the manufacturer of your connector for further instructions.

Changing the Lamp

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

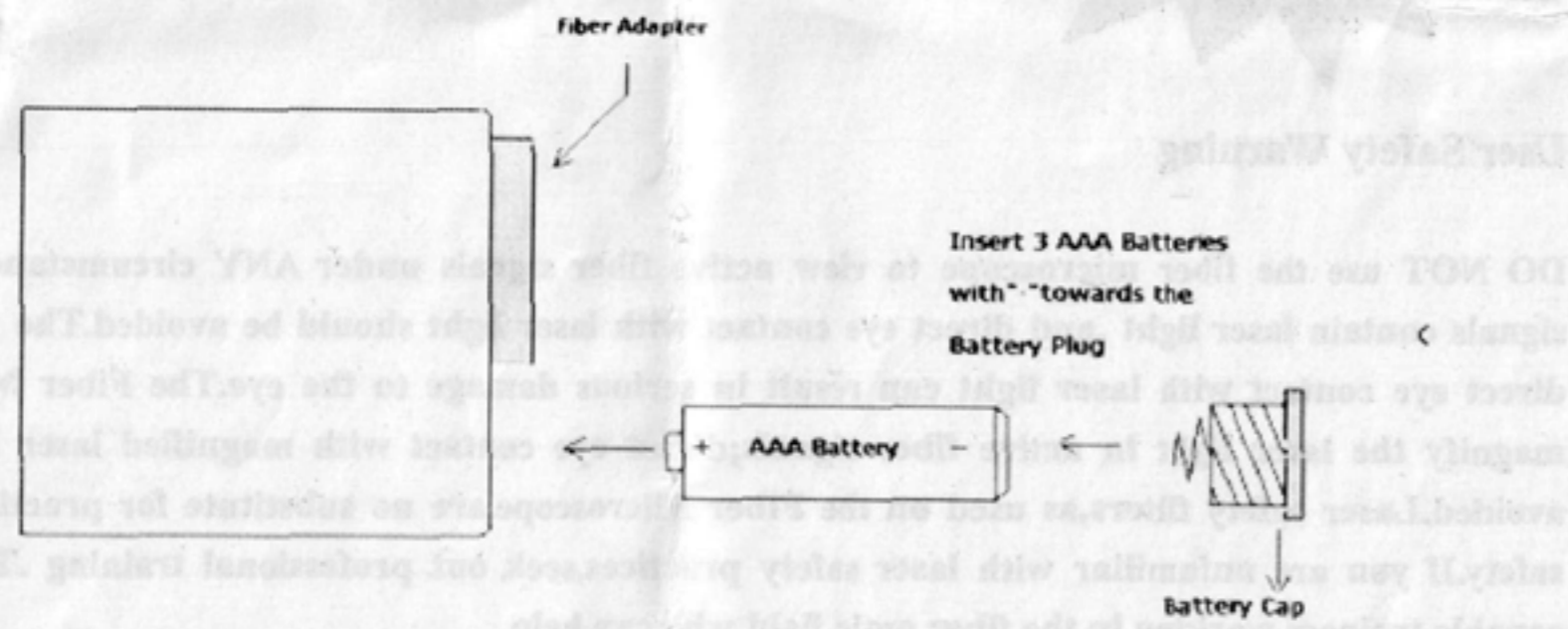


Figure 2

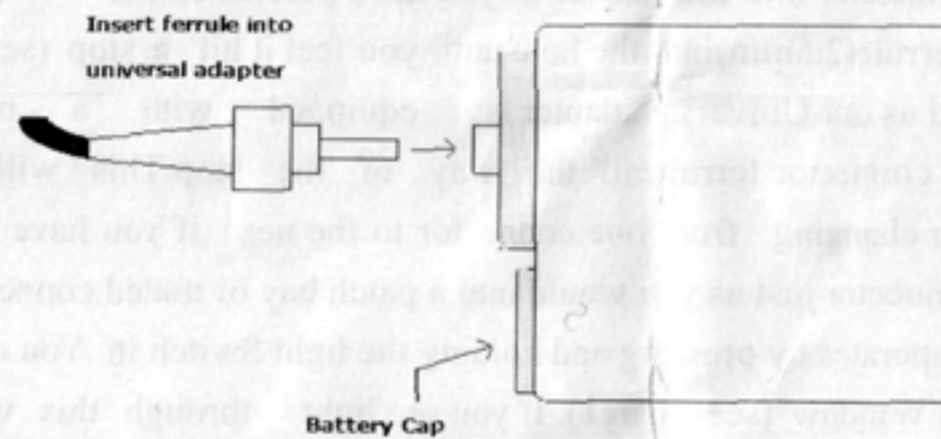


Figure 3

Maintenance

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

Changing the Magnification

If you wish to change the magnification or have damaged one of the optical components, you will need to change either the eyepiece or the objective. Only the eyepiece is easily serviced by the user. If you need to change the objective, please contact your dealer for a service Return Authorization.

Before you change the objective or eyepiece, determine which components you need using the following table.

Magnification	Eyepiece	Objectives
200	20	10
400	20	20
500	20	25