



## TERMINATION KITS – FIBER OPTIC

OZ Optics offers complete fiber optic termination kits. These kits include all of the tools necessary to make field terminations of fibers with commercially available connectors. The kit comes in a sturdy, dent proof aluminum case, providing easy transport with rugged protection. The total weight of the kit is 16 lbs. The kit contains enough consumable supplies to make about 100 connectors. The consumable supplies may be ordered separately.

A special version of the termination kit is available for PM connectors. This kit includes special low shrinkage epoxies, to minimize stresses on the fibers. The epoxy is available as a separate item.

The kit includes the following tools:

- Five 9" by 13" 5 micron grit polishing film
- Five 9" by 13" 1 micron grit polishing film
- Ten 9" by 13" 0.3 micron grit polishing film
- 100X Microscope with a connector adapter
- Five packs of two component epoxy
- Three sizes of buffer tube strippers
- Screwdriver with four bits
- Glass polishing plate
- Diamond pen scribe
- Compressed air
- Polishing disc
- Cotton swabs
- Epoxy mixer
- Alcohol
- Utility knife
- Scissors
- Folding knife
- Index matching gel
- T-type stripper
- Crimping tool
- Epoxy mixer pad
- Kim Wipes
- Tape
- Tweezers
- Cable stripper



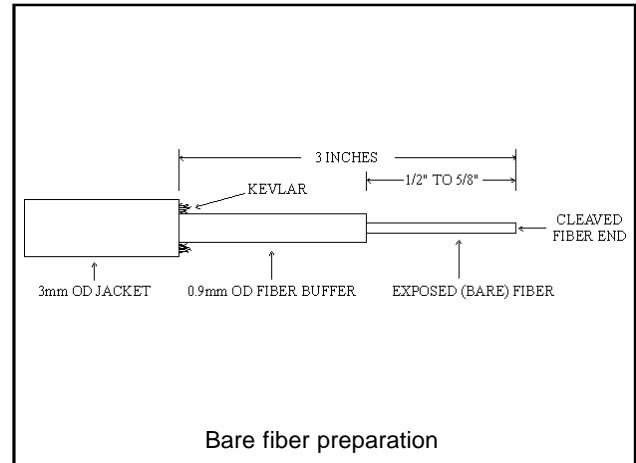
In addition, a number of accessories are available for the kit that may be ordered separately. A connector heater is available for curing the epoxy used in the terminating kit. The heater can handle 24 connectors at once, and ensures even curing. A heat gun for curing epoxy and to shrink heat shrink tubing is also available.

## ORDERING INFORMATION:

| <u>Part Number</u> | <u>Description</u>   |
|--------------------|--|
| <b>OFOC-01-X</b>   | Fiber optic termination kit. X indicates the connector type (3 for FC, 5 for SMA 905, 8 for ST). |
| <b>OFOC-P1-3</b>   | Fiber optic termination kit for FC compatible PM connectors.                                     |
| <b>HEAT-0X-V</b>   | Fiber optic connector heater. V indicates the input AC line voltage (120V or 240V).              |
| <b>HEGU-01-V</b>   | Fiber optic heat gun. V indicates the input AC line voltage (120V or 240V).                      |
| <b>GLUE-P1</b>     | Two part epoxy for PM connectors.  |

**EXAMPLE:** A termination kit is required for terminating ST type connectors. OZ Optics part number: **OFOC-01-8**. A connector heater for ST connectors is also requested, with a 120V AC input. OZ Optics part number: **HEAT-08-120**.

## BARE FIBER ADAPTER



Bare fiber adapters provide a simple and effective way to use unterminated fibers with commercial receptacles. Simply strip and cleave your fiber and insert into the bare fiber adapter. Broken fibers are easily removed with piano wire, allowing hundreds of insertions. They are recommended for power meter hook-ups, temporary system repairs or wherever a quick fiber connection is required. Standard adapters accommodate 81 micron, 125 micron or 140 micron cladding fibers with a typical insertion loss of less than 1dB.

### OPERATING INSTRUCTIONS

**Note: When using alcohol and acetone, carefully follow all safety, health and disposal information given on the container label, and on any material safety data sheets.**

1. If you are using the bare fiber adapter with uncabled fiber, proceed to step 2. If you are using cabled fibers, strip at least 3 inches of the cable's outer jacket and cut away the exposed strength members (usually Kevlar fibers near the stripped edge).

2. Strip a sufficient amount of the buffer to allow for fiber cleaving. The length of buffer stripped from the fiber will depend on the type of cleaving tool used. (Usually 1" to 2" is adequate.)
3. Cleave the fiber, leaving approximately 1/2" to 5/8" of exposed fiber. (See the illustration above.)
4. Clean the exposed cladding with acetone and/or isopropyl alcohol (reagent grade).
5. Depress the spring-loaded buffer clamping mechanism and insert the cleaved fiber into the acceptance hole. Push the fiber through until the cleaved fiber end is flush with the ceramic ferrule end face. At this point release the buffer clamping mechanism, to hold the fiber in place. Inspect the end face with an eye loop and if necessary, adjust the fiber until it is flush.
6. Clean the surface of the ceramic ferrule with a lint-free, alcohol dampened cloth and blow dry with compressed air.
7. The fiber is now ready for use. Insert the adapter into the optical test equipment's coupler.

### ORDERING INFORMATION:

| <u>Part Number</u>      | <u>Description</u>                    |
|-------------------------|---------------------------------------|
| <b>BARE-03-<i>b</i></b> | Bare fiber adapter for FC connectors. |
| <b>BARE-08-<i>b</i></b> | Bare fiber adapter for ST connectors  |

Where *b* is the ferrule hole size, in microns Standard sizes are 81 microns, 127 microns and 144 microns. Hole size tolerance is +1/-0 microns

Contact OZ Optics for bare fiber adapters for other adapter types, and other hole diameters.

**ORDERING EXAMPLE:** An FC style bare fiber adapter is needed for use with 127 micron cladded fibers. OZ Optics part number: **BARE-03-127**.