

## INTRODUCTION

The FVFLY Visual Fault Locator provides a visual method to verify field fiber contact with the pre-polished fiber stub when terminating SC or ST *OPTI-CRIMP* Pre-polished Crimp Connectors and FJ *OPTI-CRIMP* Jack Modules.

## FVFLY VISUAL FAULT LOCATOR SPECIFICATIONS

Product: Class II Laser

Wavelength:  $650 \pm 10\text{nm}$

Maximum Output Power: < 1mW

Operating Temperature: 32-104° F (0-40° C)

## FVFLKITY INCLUDES:

FVFLY Visual Fault Locator

FVFLPCY Visual Fault Locator Patch Cord (50/125 $\mu\text{m}$ )

(For use with 50/125 $\mu\text{m}$  and 62.5/125 $\mu\text{m}$  connectors)

Operation and Maintenance Instructions

## SAFETY PRECAUTIONS

The FVFLY contains a Class II laser product. Under normal, correct operation, the FVFLY is safe to the human body.

### WARNINGS

- **NEVER** look into the path of the Laser Beam.
- **NEVER** look into the end of a fiber that may have any visual fault locator, or any other laser, coupled to it. Direct eye contact with laser beam may cause serious eye injury and should be avoided at all costs. If direct eye exposure has been suspected, seek medical attention immediately.
- **NEVER** launch visual fault locator into active equipment or microscope. Make sure that the end opposite the Visual Fault locator is not connected to any electronics or active equipment during termination.

**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Tampering with the device or any labels in any way may also result in injury and voids warranty.

## BATTERY INSTALLATION

The FVFLY is shipped with batteries installed. There is a pull tab to prevent battery drainage during shipment. Remove the pull tab before using the unit.

Make sure that the unit is OFF (green LED is off) and that the dust cap is on. Remove the slide cover located at the rear of the unit. Insert two (2) new AA batteries of equal condition.

## OPERATION AND CARE

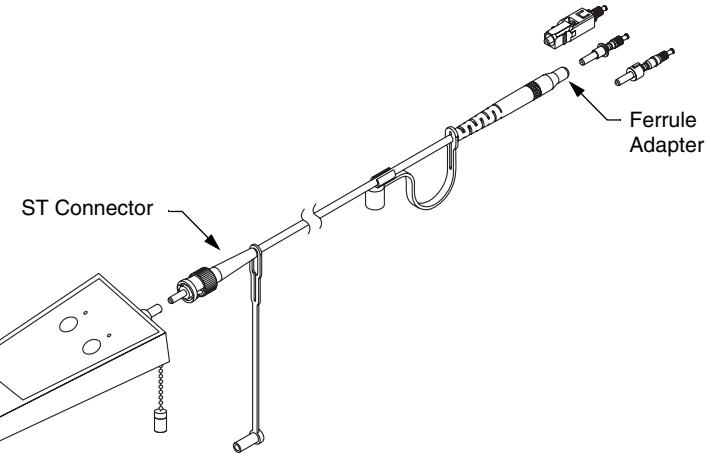
- To turn on the FVFLY, press and hold the ON/OFF button for approx. 2-3 seconds. The green LED will illuminate to indicate that the unit is on. The green LED will blink if the batteries require replacing.
- To toggle between continuous and pulsed modes, use the 2Hz button. In continuous mode the red LED will be off and in the 2Hz mode the red LED will be on.
- Always clean the ST connector on the FVFLPCY before connecting to the FVFLY.
- NEVER rotate the FVFLPCY when mated to the FVFLY or another connector. This will cause damage to the FVFLPCY and the connector.
- FVFLY should be kept away from water, dust, static electricity, and environments of extreme temperature.
- Exercise care when handling the FVFLY. Do not drop your FVFLY on hard surfaces.
- Always replace the FVFLY dust cap and switch the unit off after use.
- Remove the batteries for prolonged periods of storage.

## MAINTENANCE

Clean both ends of the FVFLPCY and FVFLY after 50 matings or sooner if performance diminishes.

1. Clean ST connector ferrule endface with a lint-free wipe (FWP-C) soaked with alcohol (reagent grade isopropyl alcohol, with a minimum 90% concentration).
2. Clean Ferrule Adapter end by unscrewing housing and removing split sleeve. Clean the ferrule endface with an alcohol soaked lint-free wipe. Clean the split sleeve with an alcohol soaked cleaning swab (FSWB-C). Replace the split sleeve onto ferrule and screw housing into place securely. Do not mix the split sleeve from the FVFLY with the FVFLPCY.
3. Clean FVFLY output by unscrewing housing and removing split sleeve. Be careful not to lose the small spacer ring around the ferrule. Clean the ferrule endface and split sleeve as in step 2. Replace the split sleeve onto ferrule and screw housing into place securely.

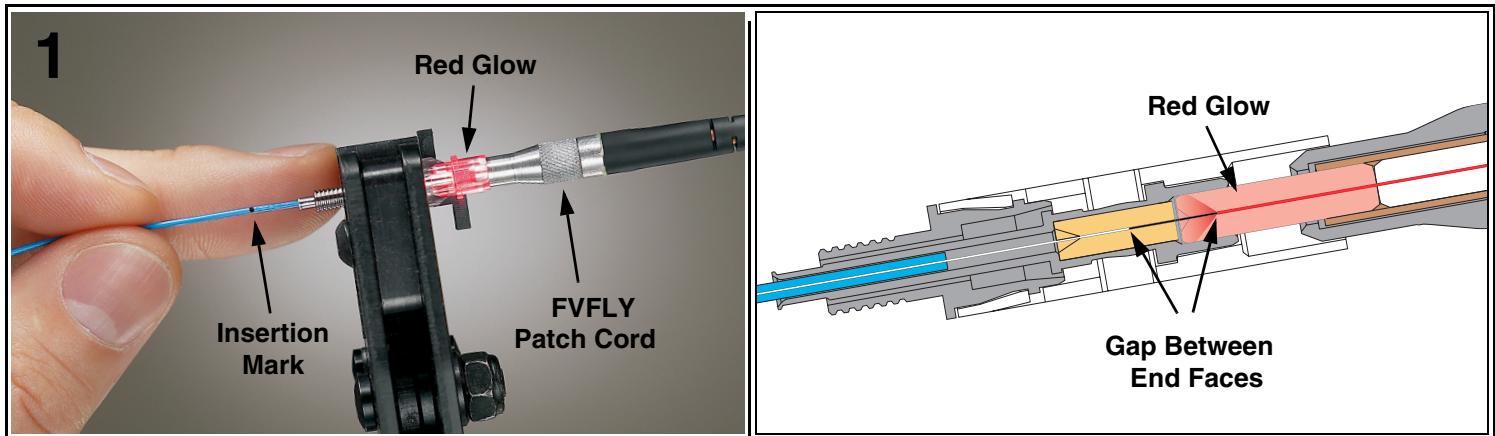
**NOTE:** Replace the split sleeves if the FVFLPCY continues to have diminished performance after three cleanings. Additional split sleeves for the FVFLPCY are located in the FVFLPCY package. Additional split sleeves for the FVFLY are stored in the battery compartment of the FVFLY.



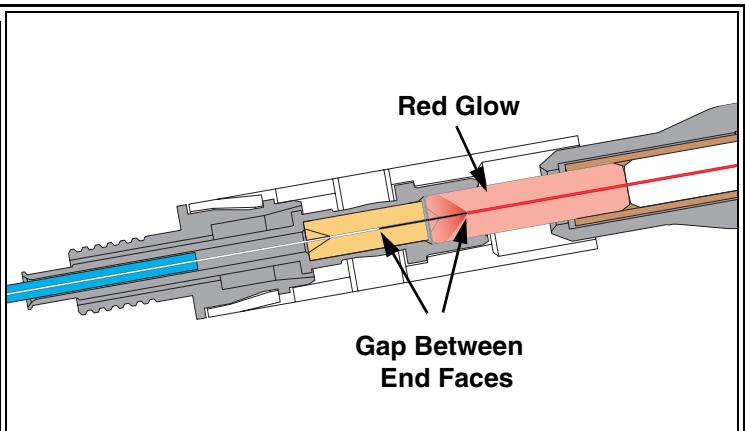
## PANDUIT OPTI-CRIMP Connectors: Optimal Crimp Termination with FVFLY

The FJMVKITY *OPTI-CRIMP* Connector Termination Kit includes the FVFLY Fiber Visual Fault Locator (also available separately). The FVFLY Fiber Visual Fault Locator provides a visual method to verify field fiber contact with the pre-polished fiber stub when terminating SC, ST, or FJ *OPTI-CRIMP* Pre-polished Crimp Connectors or Jack Modules. This provides the installer with a definitive signal that optimum face-to-face contact has been made, at which time the connector should be crimped. It takes the guesswork out of crimp connector termination to achieve the highest performing crimp termination yields.

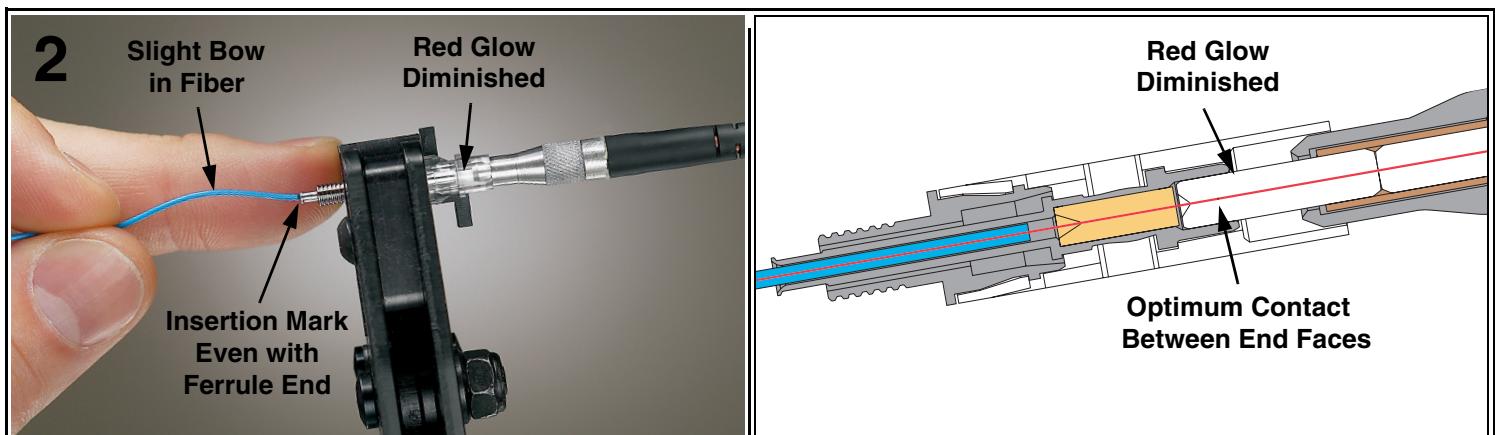
**IMPORTANT:** Always refer to Safety Precautions on opposite page, and the Installation Instructions included with the specific connectors to be terminated before proceeding with termination.



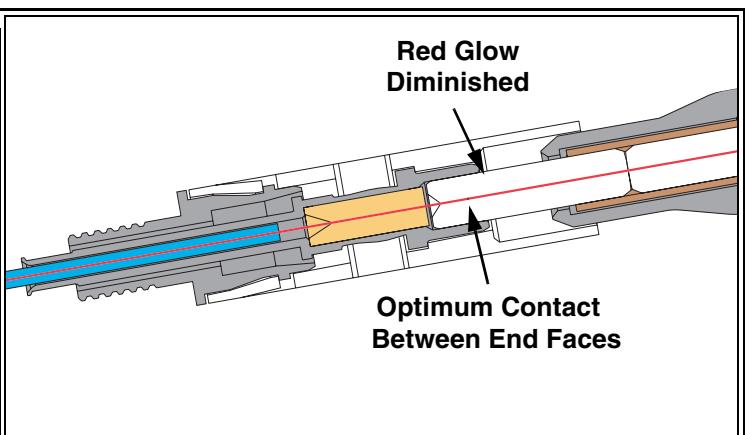
After connecting the FVFLY Fiber Visual Fault Locator to the *OPTI-CRIMP* connector ferrule (with the included patch cord), turn the FVFLY "on". Notice the red glow in the connector ferrule. While carefully inserting the cleaved field fiber into the connector using constant light pressure, notice the red glow diminish as the cleaved field fiber approaches the pre-polished fiber stub in the connector. The insertion mark on the fiber will also approach the end of the connector ferrule.



**WHY DOES THE FERRULE HAVE A RED GLOW?** The red laser light from the FVFLY Fiber Visual Fault Locator will continue to radiate from the end of the pre-polished fiber stub until optimum contact is made between the cleaved field fiber and the pre-polished fiber stub in the connector. As the field fiber approaches the pre-polished fiber stub, less red laser light radiates from the end of the pre-polished fiber stub as it begins to continue through the field fiber.



When the cleaved field fiber stops solidly against the pre-polished fiber, the red glow will diminish until it is barely noticeable or disappears. The insertion mark should be even with the back edge of the connector ferrule. Continue to maintain light pressure until a slight bow forms in the fiber to maintain contact between the cleaved field fiber and the pre-polished fiber stub. Crimp the connector one time. The red glow should remain diminished (barely noticeable) after crimping the connector.



**WHY DOES THE RED GLOW DIMINISH?** When optimum contact is made between the cleaved field fiber and the pre-polished fiber stub, the red laser light continues through the field fiber rather than radiating from the end of the pre-polished fiber stub. If the end faces make contact and the red glow does not diminish significantly, a poor cleave may be preventing optimum face-to-face contact. This allows red laser light to radiate from the end of the pre-polished fiber stub rather than continuing through the field fiber. If this occurs, re-strip and re-cleave fiber.

For Instructions in Local Languages  
and Technical Support:

[www.panduit.com/resources/install\\_maintain.asp](http://www.panduit.com/resources/install_maintain.asp)



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