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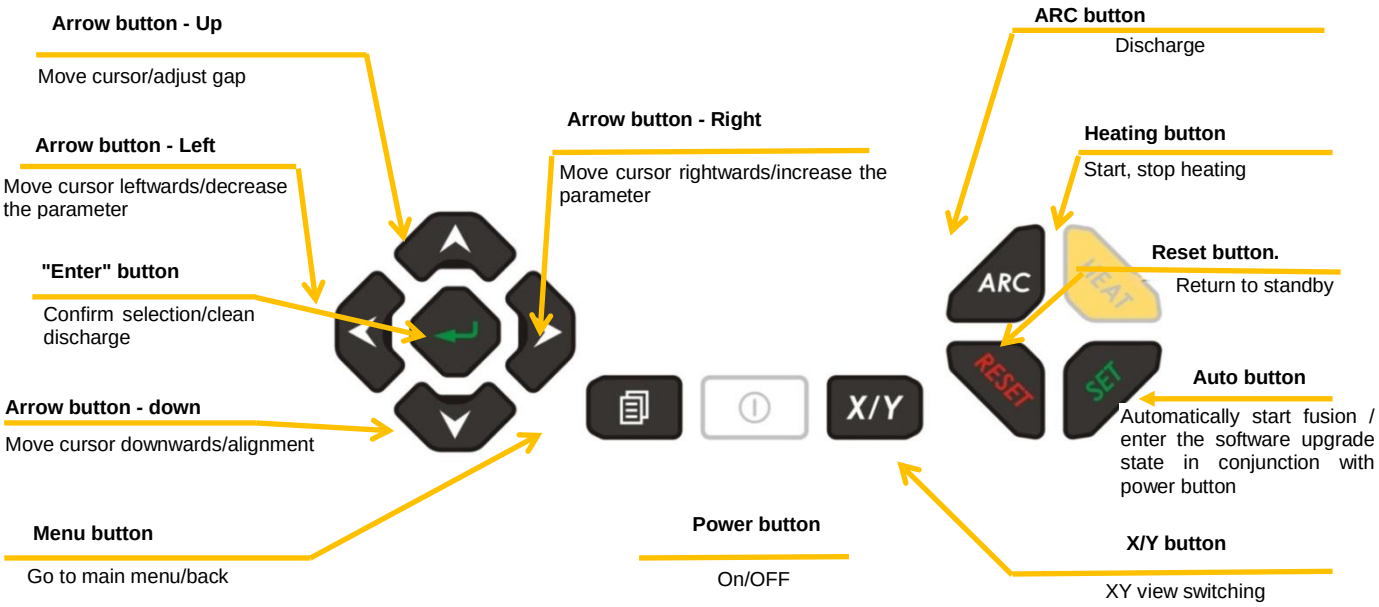
6481 Series Optical Fiber Fusion Splicer
Quick Guide

This carry-around Quick Guide briefly introduces the basic functions and operating methods of the instrument. For detailed instructions, please read the User Manual.

Before using this product, be sure to read this guide carefully, and remember to keep this guide properly while carrying it around, so as to use and maintain this product properly by reading the guide at any time.

Description of Buttons



Discharge Correction

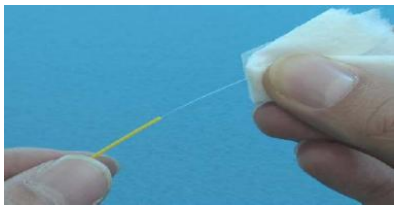
If the altitude is higher or the temperature changes a lot, the discharge correction shall be performed before fusion. Discharge correction is used to optimize the discharge arc position and current size according to the following steps:

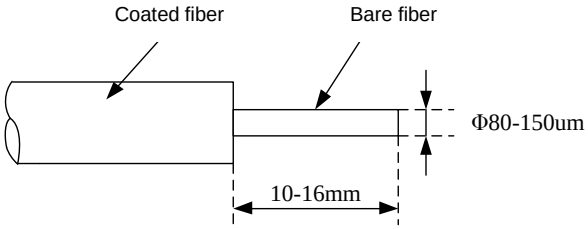
1. Place a standard single-mode fiber with well-prepared cross-section into the fusion splicer.
2. In the menu, select [Maintenance] → [Discharge] → [Discharge Correction] and press [Enter] button to start the discharge correction.
3. Fusion splicer automatically discharge, correct the arc position and adjust current size. If the calibration is not successful, replace the two test fibers with the well-finished cross-sections according to the instructions, and perform another discharge arc calibration.

Fusion Operation

- **Preparation of Fiber**

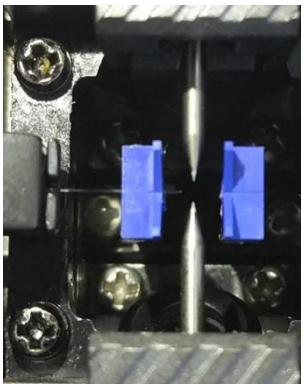
1. First fit the fiber into the heat-shrink tube.
2. Strip off the fiber and make sure that the coating residue on the stripped fiber has been removed.
3. Clean the fiber with anhydrous ethanol at a concentration of 99% or more.
4. Cut the fiber at the correct cutting length.

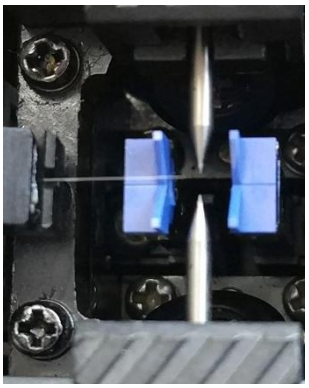




- **Fusion fiber**

1. Place the fiber on the fusion splicer and make sure that the fiber is on the bottom of V-groove and the fiber end is placed between the edge of V-groove and the center of electrode.
2. Check the fusion and heating modes. In case of the fusion for the standard single-mode fiber (ITU-T G.652), "SM-SM" mode shall be selected.
3. Close the windshield and start fusion.
4. Observe the fusion process through the monitor.





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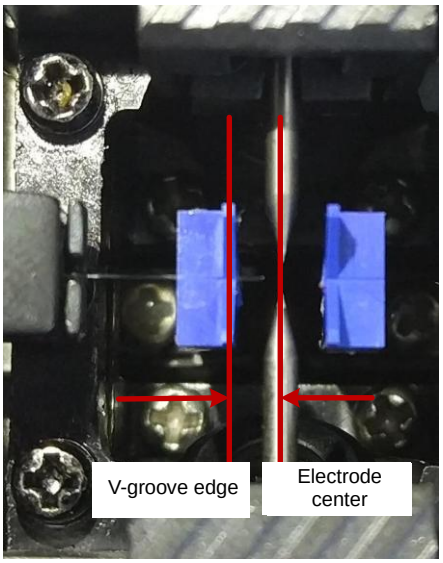
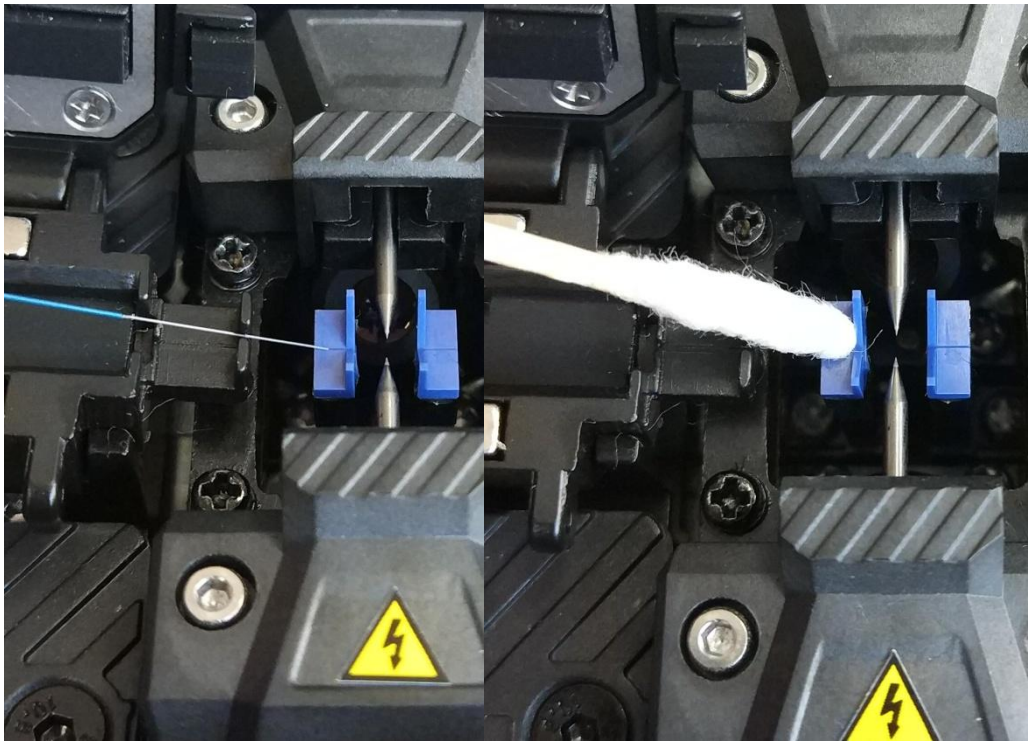
- **Heat-shrink protection**

1. Take out the finished fiber.
2. Place the heat-shrink tube at the middle of heater and move the fiber so that the fusion point is at the center of heat-shrink tube.
3. Close the heater cover and start heating.
4. After heat shrink is completed, take out the heat-shrink tube. If the heat-shrink effect is poor, the heating time may be modified accordingly (in the heating mode menu).



Cleaning and Maintenance



- Cleaning of V-groove

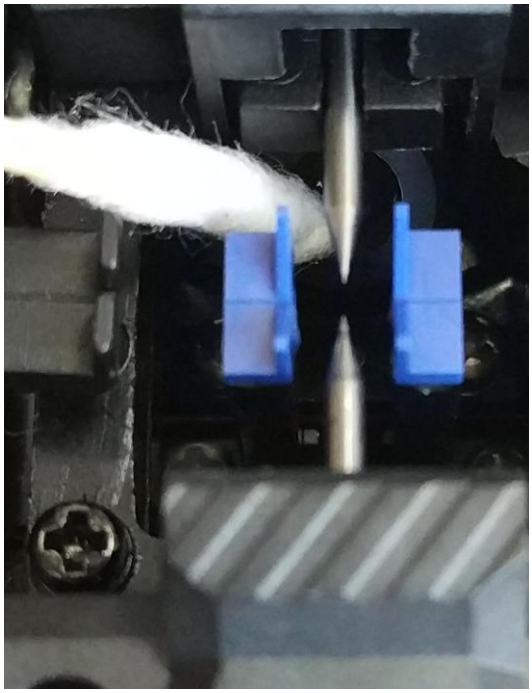
The dirt on V-groove or fiber fixture may cause the fibers to deflect, resulting in larger fusion loss.

1. Prepare a fiber and cut about 10mm from the bottom.
2. Keep the fiber at a 45° angle.
3. Clean the contaminants in V-groove by pushing it with the end of a well-cut fiber along the one direction.
4. If V-groove is too dirty, clean the contents in V-groove with a pointed cotton swab, and clean the bottom of V-groove along one direction with a fine cotton swab moistened with absolute alcohol.

Note: If the left and right images are significantly misaligned after the fiber propulsion, V-groove must be cleaned.

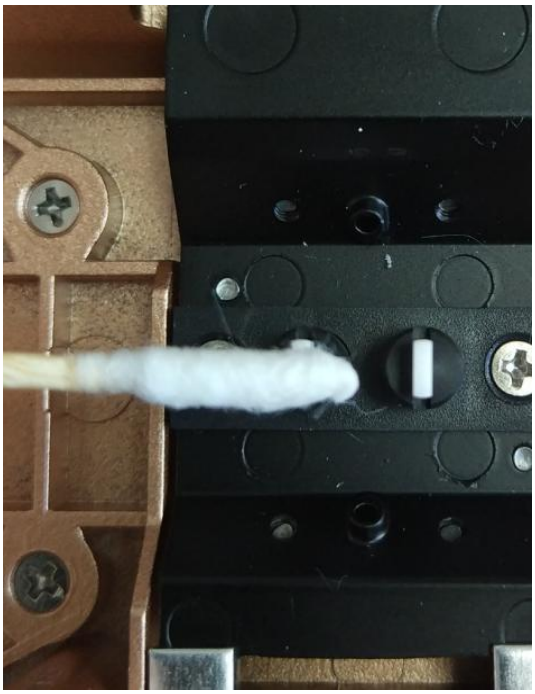
- **Cleaning of objective lens**

1. Lenses that are contaminated or damaged may result in high fusion loss or poor connections. Therefore, both objective lenses shall be cleaned regularly. Otherwise dust will accumulate and eventually cannot be removed.
2. Before cleaning the objective lens, first turn off the power.
3. Clean the objective lens with a fine cotton swab moistened with absolute alcohol. Wipe the lens with a cotton swab from the middle of lens and along the circular trajectory until the edge of lens is wiped. Do not touch V-groove.
4. Then wipe off the remaining alcohol with a clean, dry cotton swab.



- **Cleaning of fiber presser**

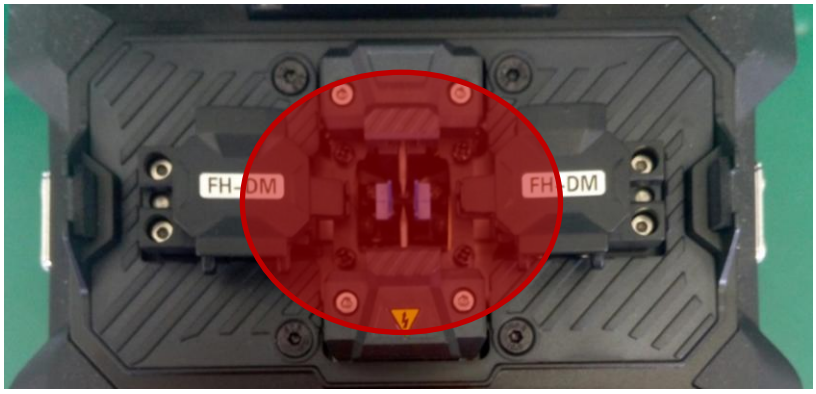
1. Windshield is equipped with two fiber pressers that hold the fiber against V-groove and shall be kept clean.
2. Open the windshield and clean the fiber presser with a cotton swab moistened with absolute alcohol.



Precautions

- **Prevent the debris from falling into the instrument**

  Debris falling inside the fusion splicer may cause malfunction, and the debris shall be prevented from falling into the red area in the figure below.



- **Monitor cover**

  Monitor cover protects the monitor during the daily operation of fusion splicer. If it is necessary to remove or install the cover, please proceed as shown below.

The polished frame of monitor cover is narrow upper and wide lower. Pay attention to the correct direction during installation.

Open from the left when removing the cover.

- **Maintenance of lithium battery**

1. Battery shall be charged once every three months during the long-term storage.
2. The temperature range for the long-term storage of battery (storage time over 6 months) is: 0 °C ~ 40 °C. The temperature range for the short-term storage of battery is: -20°C to 60°C.