FiberMASTER

FUSION SPLICER SERIES

QUICK REFERENCE GUIDE

TREND NETWORKS

Depend On Us

Splicing Preparation Tools

OR

FiberMASTER S40 FiberMASTER S60

Fiber Cleaver

Fiber Stripper

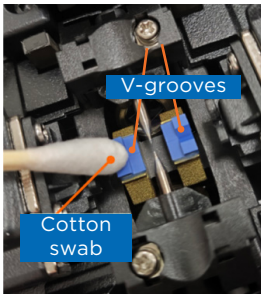
Fiber protection sleeves

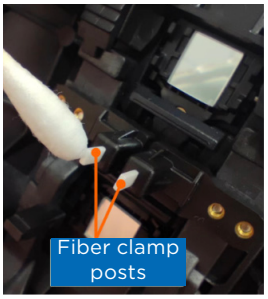
Metal Protection Crimp*

*In some Countries a Crimp Protection is used and the process varies.

Cleaning Before Splicing

1 Clean both V-grooves and camera lenses with a cotton swab and alcohol. Remove excess alcohol with dry swab. If there is debris in the V-groove carefully remove it with a blade or scrap fiber piece.





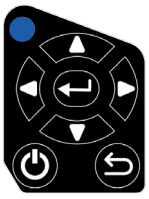
Notes:
Do not touch electrode tip. Use new cotton swabs for each cleaning.
Use only ≥99% isopropyl alcohol.

Preperation Before Splicing

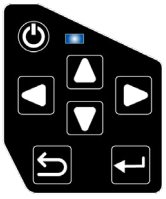
2 Install battery or connect to power adapter

3 Turn splicer ON. Press power button. Blue LED indicator will light up.

S40:



S60:



4 Select fusion mode and parameters

S40:	1	AUTO SM	Automatically detects any single-mode fiber.
S40:	2	AUTO MM	Automatically detects any multimode fiber.
S60:	01	AUTO	Fully automatic multimode or single-mode detection.

Note: The default parameters have been tested and modification is not recommended. If a non-AUTO fusion mode is selected, then run “Quick optimization” in the Maintenance screen before splicing.

5 Confirm heating mode

S40/60: Select the **Heating** menu and choose the parameter according to the length of the fiber sleeves. (i.e. “25mm” refers to a sleeve length of 25mm.)

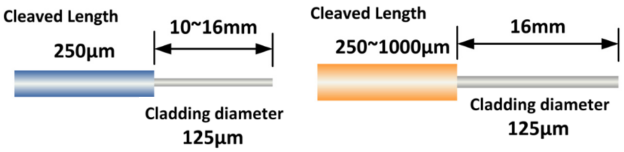
Splicing Operation

6 Place protection sleeve over one of the fibers. Strip buffer and coating on fibers.

7 Clean both fibers with ≥99% isopropyl alcohol.

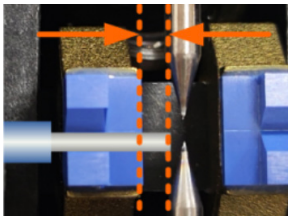
8 Cleave fibers or put the fiber into the relevant removable holders* to cleave the fiber (bare fiber R301-250UM, pig tail R301-900UM, 2-3mm R301-23MM) and make sure the stripped part of fiber is outside of the holder edge as followed.

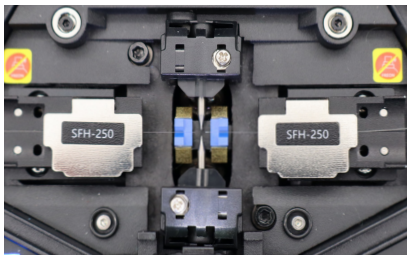
*The supplied metal clip of the standard cleaver is required for **Removable Holder** cleaving.



9 **Fixed Holder**
Load fibers into splicer.
Make sure that the cleaved fiber ends do not touch anything as they may become contaminated. Position the fiber ends between the edge of the V-groove and the center of the electrodes.

Removable Holder
Take out the holder from the cleaver and place into the splicer’s holder position (make sure the fixed holders are removed from the splicer before.)





10 Close the cover. Splicing will start automatically if the pause settings for alignment and focus are disabled (default setting). Otherwise, press Set to start splicing.

11 Confirm splicing is complete with an acceptable loss estimate.

12 Lift spliced fiber from the machine.

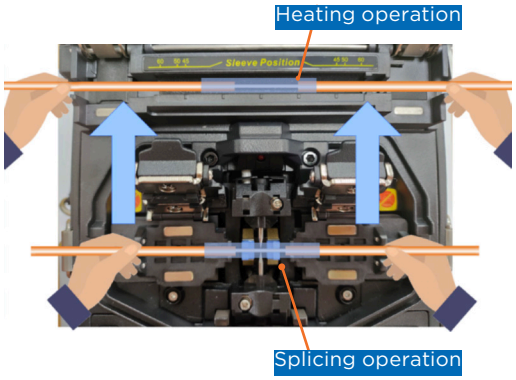
13 **Using Shrink Sleeve**
Center protection sleeve over the splice area and avoid bending the fiber to prevent the splice from breaking.

Using Metal Crimp
Put V shape crimp into the crimp tool, place the spliced area fiber into the centre of the V shape crimp in the press tool with a straight fiber line.

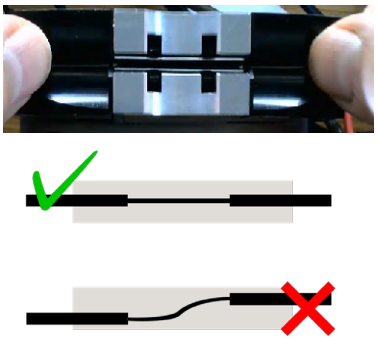
14 Place the fiber in the heating oven with the splice in the center. Apply downward pressure on the right side of the fiber to press the latch and close the lid.

Press both side top of the crimp tool to compress the crimp and then release.

16 Ensure the sleeve completely shrunk and repeat the heating cycle if necessary. Splicing is complete.



Take out the crimped fiber and ensure the crimp covers the whole splice area.



Common Issues and Solutions

Error Message	Reason	Solution
Check fiber!	The fiber is not fully inserted.	Ensure the fibers are inserted completely. The ends should be placed between the blue v-groove and electrode.
Reload fiber.	The fiber is inserted too far, past the center-line of the electrodes.	Reload the fiber(s). The ends should be placed between the blue v-groove and electrode.
Fusion failed.	The fusion point of the fiber appears faulty, i.e., disconnection, black spot, fiber sag, burn-through, etc.	Check: fibers are the same type, alignment in fiber clamps, cleave angle, fusion parameters.
Close cover.	The cover is not closed or the magnetic sensor on the cover is faulty.	Check that nothing is blocking the cover from closing completely.
Bad L/R end face.	The fiber end face angle exceeds the limit for splicing.	Re-cleave the fiber(s).
X/Y Image Light Error.	The camera is obscured or the internal LED is malfunctioning.	Clean the camera lenses or check the internal LED.

TREND NETWORKS

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