USERS MANUAL

EasySplicer

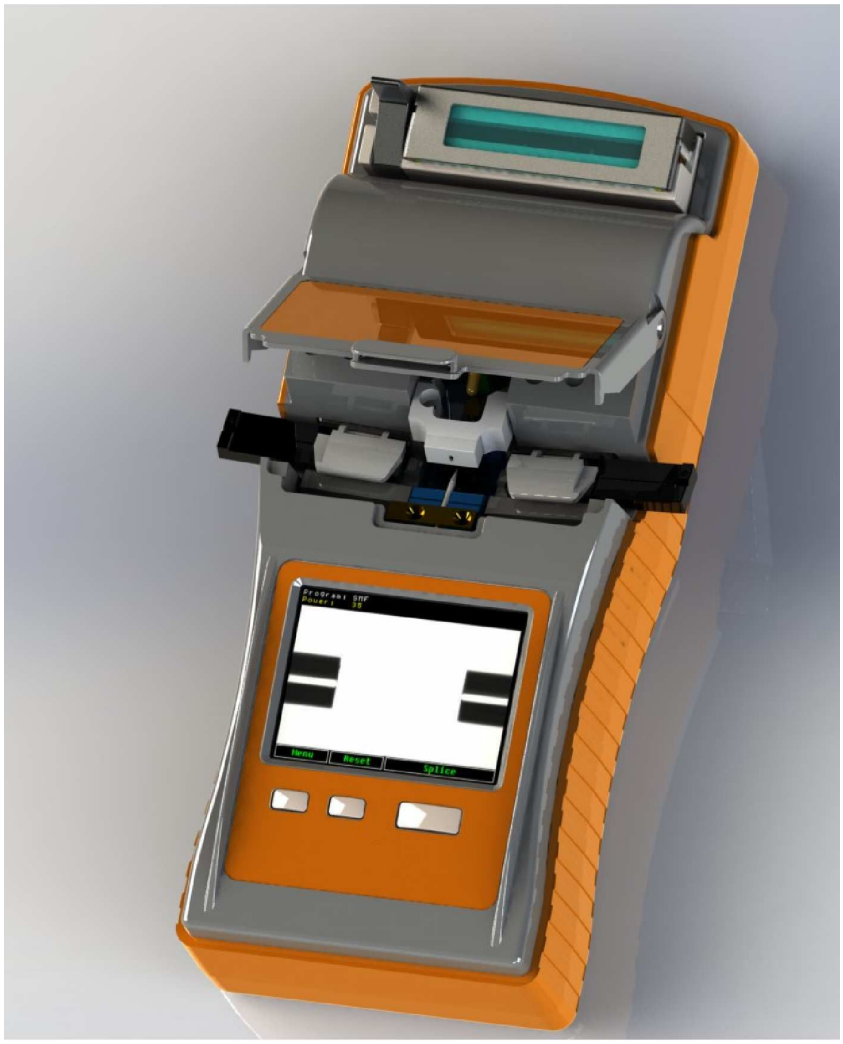


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Introduction

The EasySplicer incorporates all the best a fixed v-groove splicer can offer.

NOTE: EasySplicer is a high precision instrument and should always be handled with care!

Disclaimer

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Application

Splicing and protection of most common types of SMF and MMF.

Fusion splicer components

The following components are included and standard for splicing in the field:

Item	**Description**	**Quantity**
1	EasySplicer	1
2	Power supply	1
3	Fiber cleaver	1
4	Fiber holders 250µm	1 pair
5	Fiber holders 900µm	1 pair
6	Stripper	1
7	Carrying bag	1
8	Users manual on CD	1

Basics

NOTE: The EasySplicer is a rugged field instrument designed to withstand field environment. However, to ensure best performance, it is important to keep maintenance as described later in this manual.

Order of operation

· If available, connect the splicer to a power source.
  – Please watch the attached videos to learn how to operate the EasySplicer in a fast and easy way !
· Turn on the splicer
· Select proper splice program
· Run calibrate process with a piece of fiber.
· Prepare the fibers
· Splice the fibers
· Analyze the splice
· Remove the fiber
· Protect the splice

Connecting the splicer to power

Connect the power supply if power is available. Or use the internal battery.

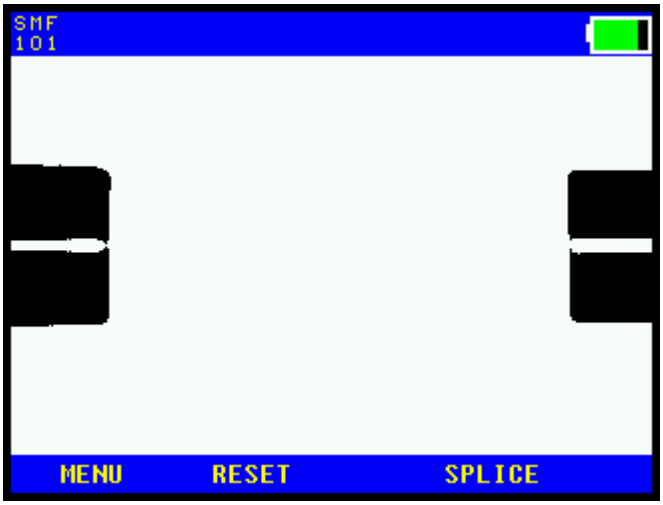
Starting the splicer

Start the splicer by pressing the large button until the splicer starts.

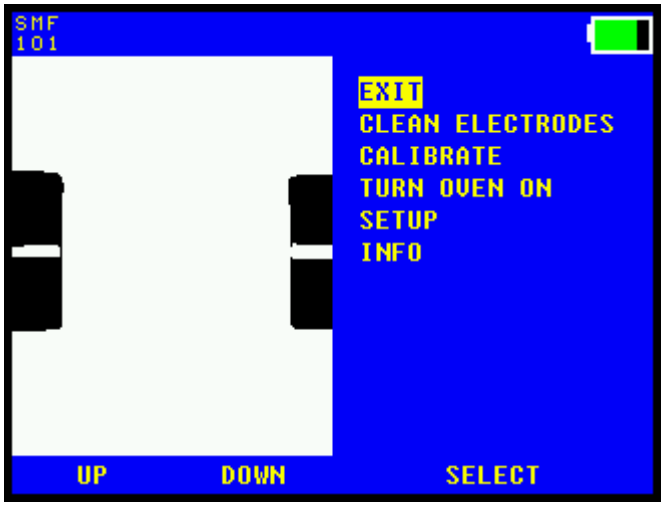
Fusion splicer menus

The basic menu looks like this:

MENU	Enter the menu system described below.
RESET	Reset the alignment motors to start position.
SPLICE	Start splicing.



Main menu



EXIT

Exit menu.

CLEAN ELECTRODES

Run the clean program to remove dirt on electrodes.
This should be done at least every 20th splice.

CALIBRATE

Start automatic environmental compensation.
This should be done every time the environment changes.
The splicer will adjust this calibration a small step every splice but when changing environment this calibration will be needed. To prepare for this calibration strip and clean a piece of fiber and place it all the way through the v-grove and then start the calibration. The PWR value will be updated.

TURN OVEN ON

Manually run the oven program. Normally, when a splice is done next step is to move the fiber with a sleeve to the oven and press the **OVEN** button.

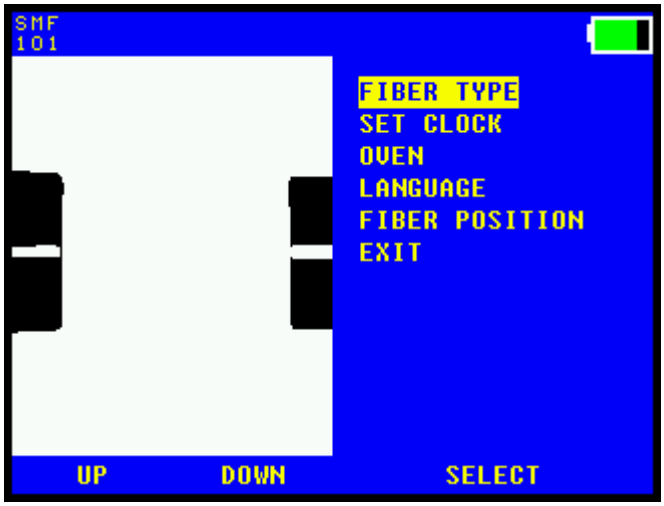
SETUP

Setup various things shown below.

INFO

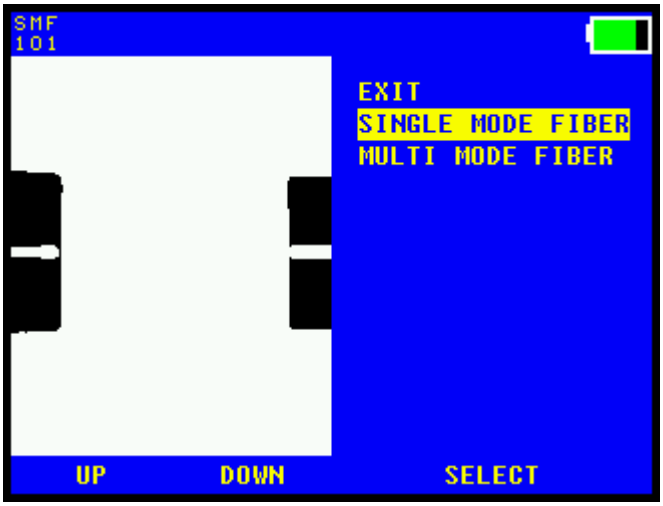
Shows miscellaneous information of the splicer.

Setup menu



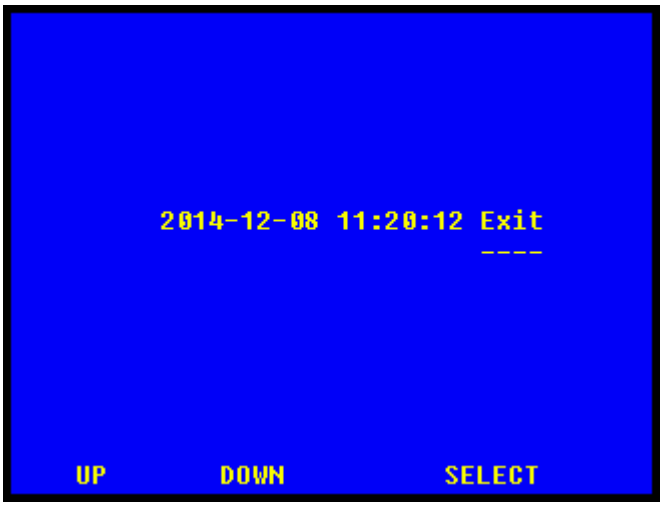
FIBER TYPES
Change the fiber type to splice.
SET CLOCK
Set the internal clock.
OVEN
Set the oven time.
LANGUAGE
Set menu language.
FIBER POSITION
Change fiber position when replacing cleaver.
EXIT
Exit menu.

Fiber type menu



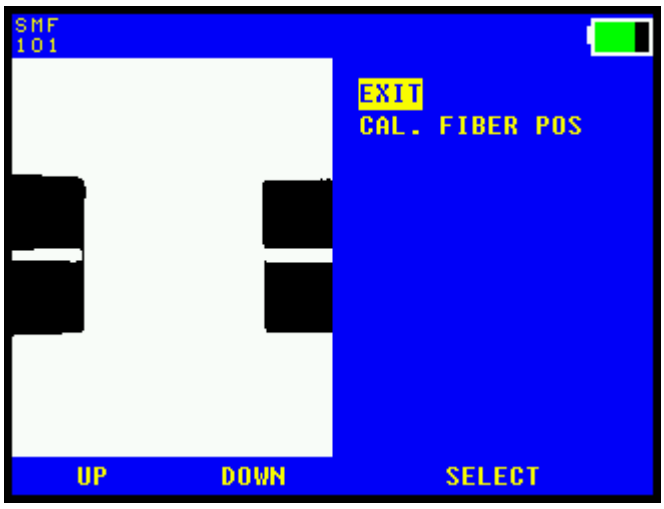
SINGLE MODE FIBER
Setup splicer for splicing SMF.
MULTI MODE FIBER
Setup splicer for splicing MMF.
EXIT
Exit menu.

Set clock menu



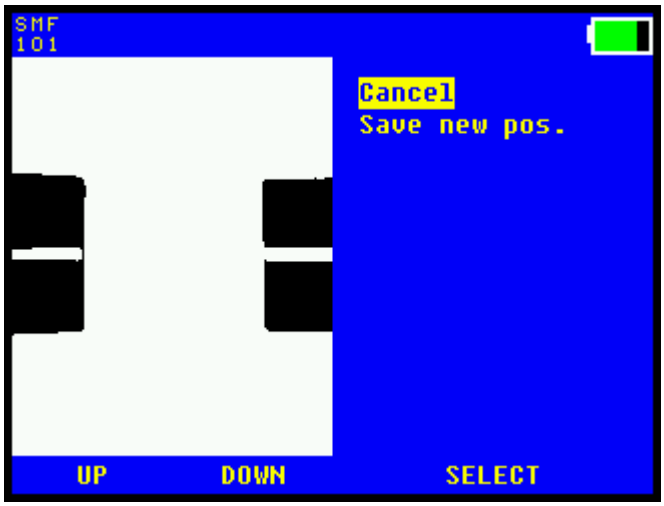
UP
Changes selected items up one step.
DOWN
Changes selected items down one step.
MOVE
Steps to next item.

When **Exit** item is selected, chose Exit button to set the new time.



CAL. FIBER POS

Starts automatic calibration of fiber zero point setting.
Put fibers in their holders and place them in the splicer before starting.



SAVE NEW POS

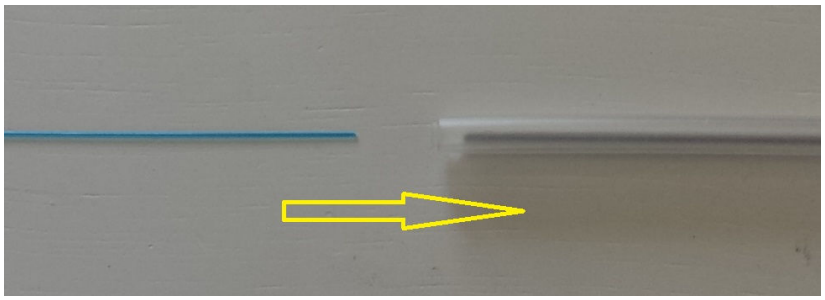
If the fibers are visible and in the correct position like in the picture above the new position can be saved.

Preparing the fiber

Often, incorrect handling or preparation causes splice loss. It is crucial to keep tools and fiber clean; the invested time used in fiber and tool handling is more than compensated for in reduced troubleshooting effort.

Protective sleeve

Before preparing the fiber for splicing, make sure to put the protective sleeve in place.



Stripping the fiber

Hold the stripping tool to the edge of the fiber holder. Press the handles together and pull firmly away from the fiber holder to remove the coating.



Cleaning the fiber

Use a pair of tweezers equipped with cotton buds soaked in alcohol (according to picture) or a similar tool.

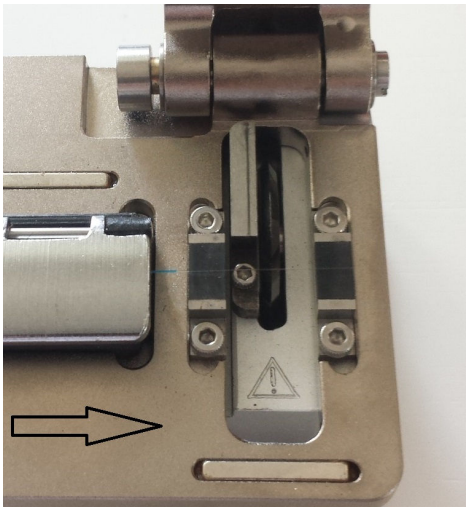
Press the tweezers together and clean the fiber with by moving the tweezers from the fiber holder towards the end of the fiber. Repeat, but rotate the tweezers.

A squeaking sound indicates that the fiber is clean

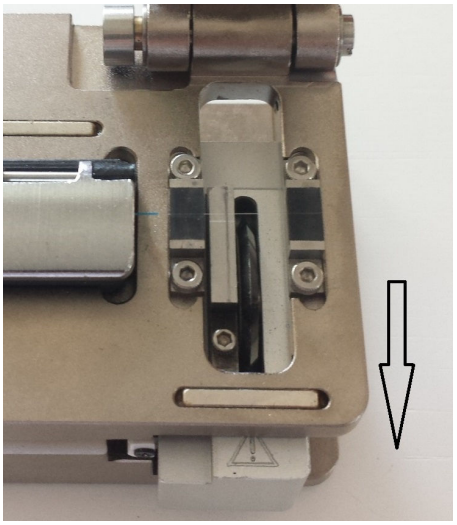


Cleaving the fiber

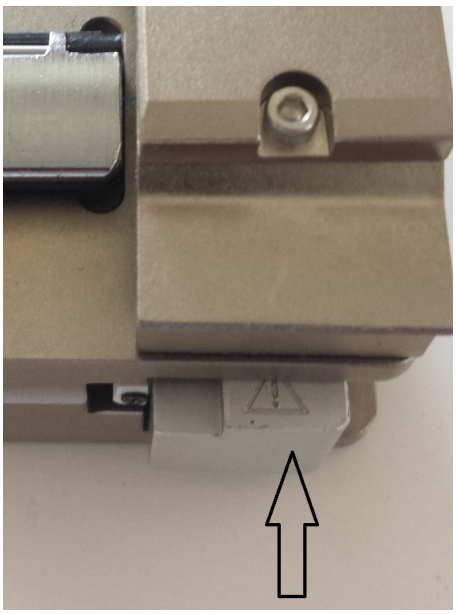
Position the fiber holder in the cleaver. Insert the fiber holder from above, **not** from the side.



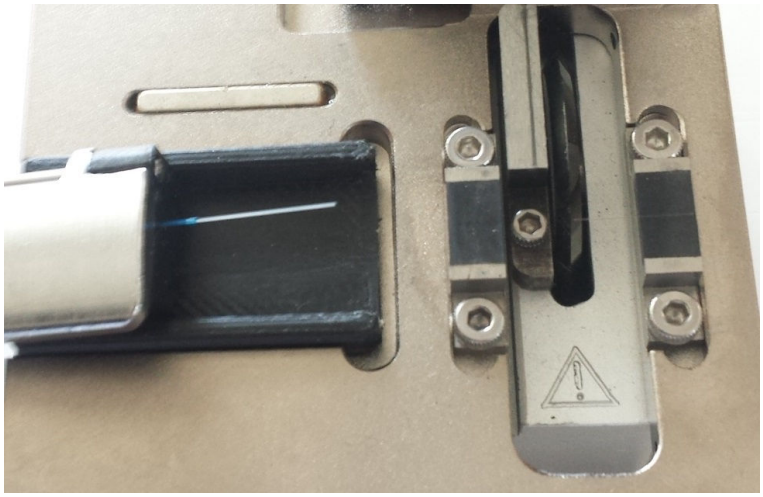
Check that the fiber holder is properly in place and as far to the right as possible.



Move the sliding part of the cleaver towards you.



Close the cleaver lid and push the sliding part away from you.



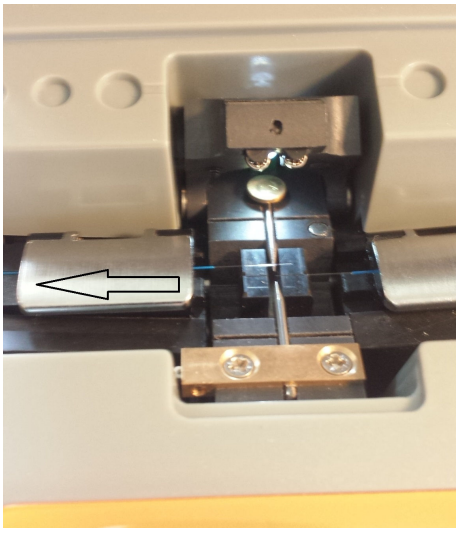
Lift the fiber holder up so that it don't get dirty.

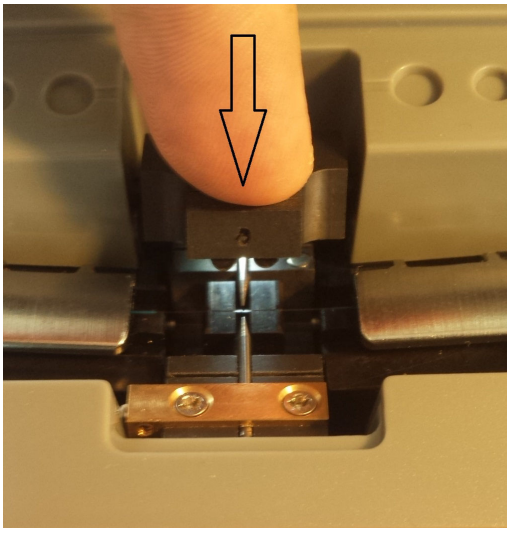
Splicing

Select the proper splice program.
Make sure a reset has been performed since last splice.
Place the fiber holder

Keep the fiber holder at an angle and move it passed its intended resting place.
Fold the fiber holder down until it makes contact with support surface.
Gently pull the fiber holder back until it snaps in place.

Repeat for the other fiber holder





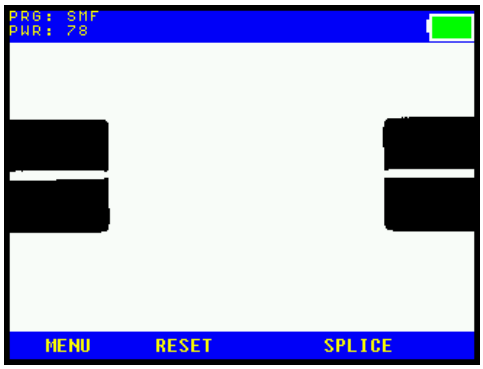
Lower the fiber pressure foot slowly and lock the fibers in position

Close the lid.

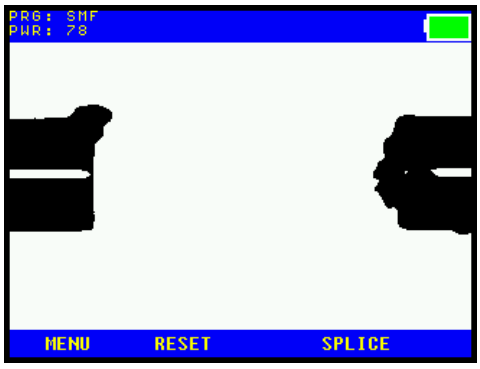
The fiber should now be visible in the monitor like below.



Are the fibers clean?



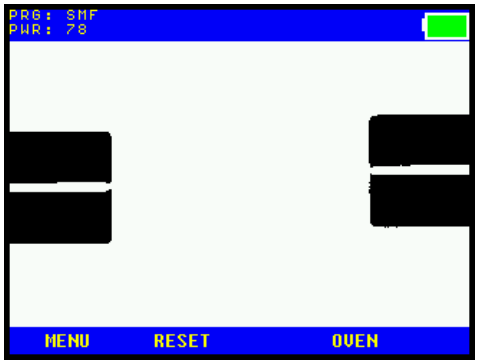
GOOD



VERY BAD

If not, re-do the stripping, cleaning and cleaving procedure.

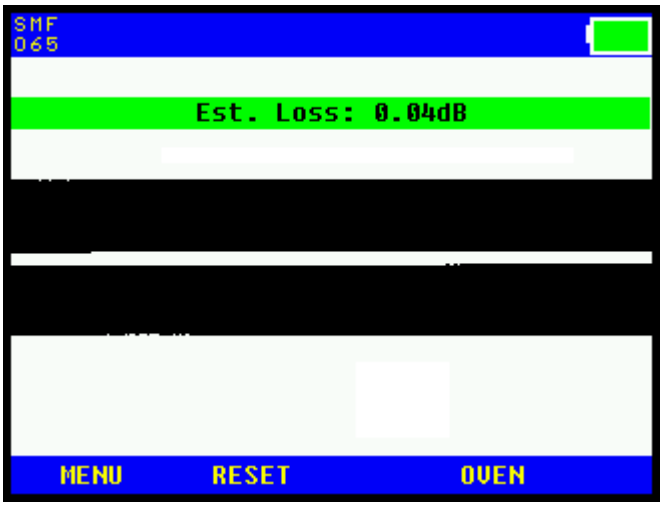
Are the fibers properly aligned?



BAD

If not, make sure the fiber holders are properly snapped into place.
If this does not help, clean the v-groove described below.

Press the SPLICE button.



When the fully automated splicing process is done, the estimated loss is presented.

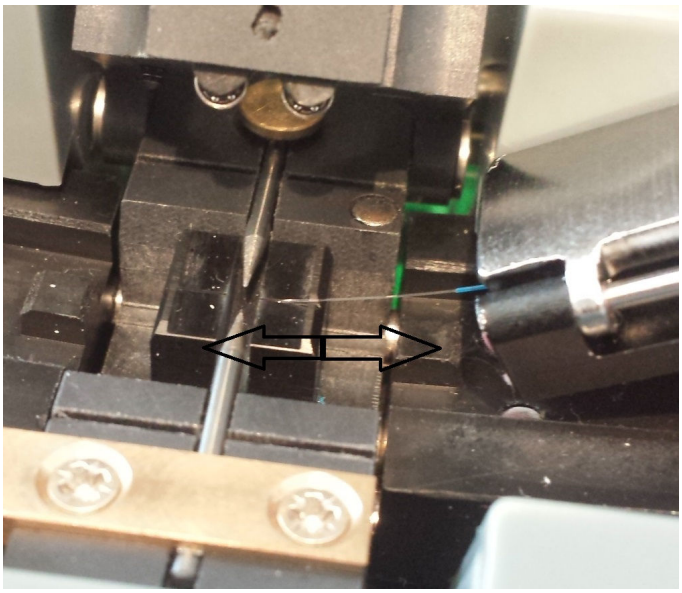
If estimated loss is bigger than 0.1dB the splice is bad and has to be re-spliced.



Cleaning the v-groove of the fusion splicer

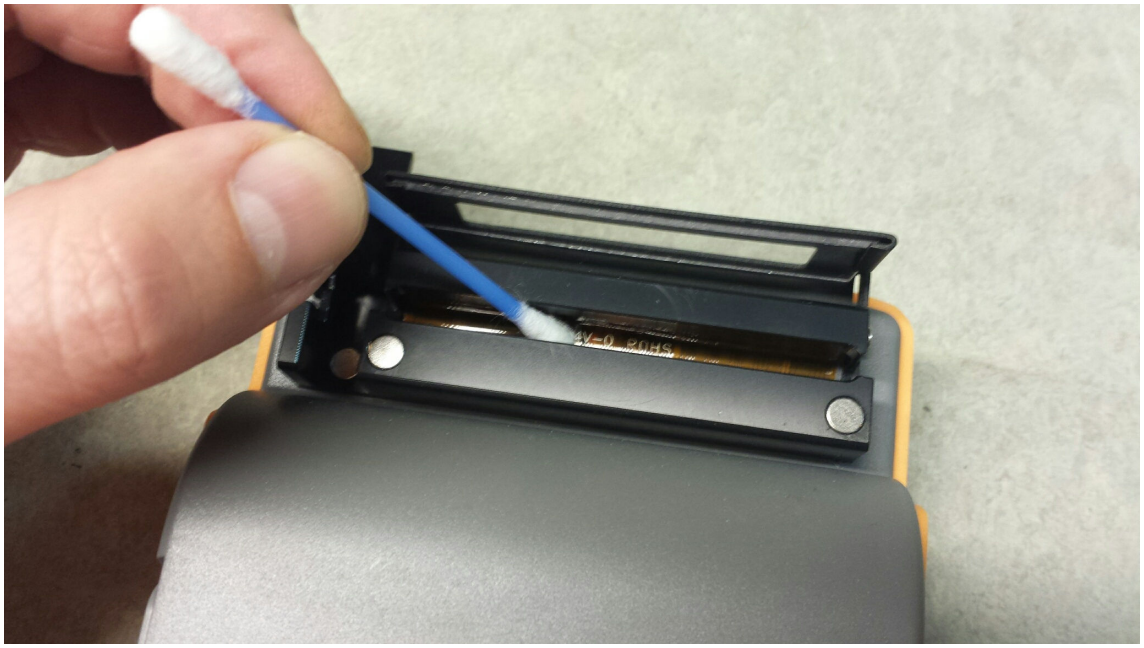
The function of the high precision surface of the v-groove can be influenced by dirt. Whenever there is a consistent problem with fiber offset, try cleaning the surface as follows.

To clean the v-groove proceed as follows:
Put a fiber in a fiber holder, strip clean and cleave it.
Use this fiber to scratch the v-grove at an angle several times back and forth.
Then put the fiber in place (like you would do a splice) and check the removed dirt via the camera. This procedure should be repeated until there is no dirt visible to the camera.



Oven maintenance

The oven needs to be cleaned and greased with regular intervals, to make removal of the shrink sleeves easy. Use silicon grease and apply it to the bottom of the oven with a cotton bud. See below.



Technical data

Weight:	800g
Dimensions:	230x98x53 mm
Alignment:	Axial: Automatic Radial: Fixed v-groove
Fusion technique:	Arc fusion
Process:	Automatic
Typical Loss:	SMF 0.03dB MMF 0.01dB
Splice Programs:	2 factory defined
Display:	2.8” Color TFT
Power source:	Battery: 7.4V/2200mAh Built in.
Power supply:	100-240V AC / 6V DC / 1.25A
Operating environment:	Temperature 0˚C to 45˚C Humidity max 95% RH, **non-condensing**
Storage environment:	Temperature -20˚C to 60˚C Humidity max 98% RH, **non-condensing**
Heat oven:	Built in.