Q. Which settings do I use to splice FiberExpress (FX) Fusion Splice-On Connectors?
A. When using FX Fusion Splice-On Connectors, the splice mode should be set to “MM Quick” for multimode-grade fiber and connectors, such as OM1, OM3 and OM4. The “SM Quick” mode should be selected when splicing singlemode fiber and connectors, such as OS2-grade fiber. For the heater mode, the splicer is pre-programmed with both “FX Fusion LC” and “FX Fusion SC” modes for the proper heater temperature and shrinkage time.

Q. When should an arc calibration be completed on the splicer?
A. An arc calibration should be completed:
1. Prior to the first use of a new splicer
2. After every 250-300 arcs
3. When new electrodes are installed
4. When changing splicing environments (altitude, atmospheric pressure, temperature, etc.)
5. If receiving multiple and repeated splicing errors, such as bubbles, fiber thickness or high loss values

Note: Arc calibrations must be completed using singlemode fiber only. Every arc calibration will use 15 arcs to complete and will decrease the remaining life of the electrodes. Please refer to the owner’s manual for instructions on completing an arc calibration.

Q. How long will a set of electrodes last?
A. For optimal performance, it is recommended that a set of electrodes is changed after 3,000 arcs. The splicer’s “Electrode Caution” setting can be manually adjusted to the user’s preference. Note: Calibration arcs are not counted in the electrode arc cycle counter stored by the splicer. If you calibrate frequently, consider adjusting the caution number.

Q. How often should the splicer be cleaned?
A. For optimal performance, regular inspection and cleaning by the user are required. Please refer to Section 5 of the user manual for complete cleaning recommendations and instructions. If repeat alignment issues are observed, such as fiber dust, cleave limit, LED failure or check motor errors, then cleaning procedures outlined in the user manual should be followed for resolution.

Note: Compressed air should never be used during the cleaning process. When cleaning, always be sure to wipe in the direction away from the electrodes and lens so that containments are not spread into the splicing area.

Q. How can I adjust the automated splice and heater optional settings?
A. Please refer to section 6.4.1 in the user manual for complete details on how to configure the automated settings. The default settings are as follows:

- Auto – ON (Splice automatically starts after closure of wind cover)
- Pause 1 – ON (Pauses after first alignment to check cleaved ends)
- Pause 2 – OFF
- Auto Heat - OFF
- Auto Heat 2 - OFF

Q. Which settings should be used when splicing FX Pigtails?
A. Similar splice settings should be used when splicing FX Pigtails. The splice mode should be set to “MM Quick” for multimode-grade fiber and pigtails, such as OM1, OM3 and OM4. The “SM Quick” mode should be selected when splicing singlemode fiber and pigtails, such as OS2-grade fiber.

The heater setting will depend on the heat shrink splice protection sleeve being used for the pigtail. Please refer to the table below for the correct heater setting based on the shrink sleeve being used.

<table>
<thead>
<tr>
<th>Heat Shrink Sleeve</th>
<th>Heater Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>900 µm – 900 µm – 60 mm</td>
<td>60 mm Type 1</td>
</tr>
<tr>
<td>900 µm – 250 µm – 40 mm</td>
<td>40 mm Type 1</td>
</tr>
<tr>
<td>250 µm – 250 µm – 40 mm</td>
<td>40 mm Type 1</td>
</tr>
</tbody>
</table>

Q. Are there any steps I can take to prevent or correct splicing errors?
A. Yes. Routine arc calibration and splicer cleaning will help prevent and correct most splicing errors. Please read and follow the calibration and cleaning guidelines in this guide and in the user manual. For more troubleshooting, please refer to section 7 in the manual.

Q. Can I use FX Fusion Splice-On Connectors with a splicer I already own?
A. Belden offers multiple splice holders that are designed to hold and accurately align FX Fusion Splice-On Connectors during splicing in other common splicers. For a complete list of compatible holders and splicer settings, please refer to the Installation Tools Reference Guide found at www.belden.com/splice-on.
Additional Tips and Recommendations

Loading the splicer:

- The vacuum-sealed package should only be opened just before installing the connectors. The pre-stripped stub could absorb moisture and become fragile if exposed to humidity.
- Be sure to remove the fiber stub from the clamshell before removing the other components. Special care should be given to remove it from the packaging; it could damage the cleaved end face.
- Always remove the holder from the splicer before loading the fiber stub into the holder. Always make sure the fiber stub is properly seated in the holder before placing it in the splicer. Do not move the fiber stub in the holder once it is placed in the splicer. This will prevent damage to the stub end face.
- When placing the holder back in the splicer, align the holder with the guide pins prior to the fiber making contact with the splicer V-groove. This will prevent damage to the fiber stub.
- The end faces of both cleaved fibers should be in the space between the electrodes and the edge of the blue V-grooves on the splicer. Please refer to the installation guide for further details.

Connector assembly:

- For LC connectors: If the sleeve does not slide with gravity, use a surface to assist in supporting the splice while pushing the sleeve toward the ferrule holder.
- For LC 2 mm connectors: During final assembly, use a table surface to lay the connector on before sliding the boot assembly. This will assist in making sure that the Kevlar is completely straight during the operation. Straightness of the Kevlar is key to successful mechanical performance of the connector. While threading the boot to the boot ring, exert some pressure toward the boot ring. You can also hold the tube with your pinky finger to make sure it doesn’t rotate with the boot.
- When using the FX Fusion Splicer, an image of the splice may be saved by pressing the key after the splice is completed and before the wind cover is opened.
- When using the cable slitter for 2 mm cables, the 1.5-1.8 mm groove may be used due to differences in cable-diameter tolerances.