



No Slack, Simple & Fast in FTTH Deployment

Installation Manual

Installation
Guide #

IG-HFSOC-SC-PSPL-5000-001

Date of
Enactment

2023-09-21

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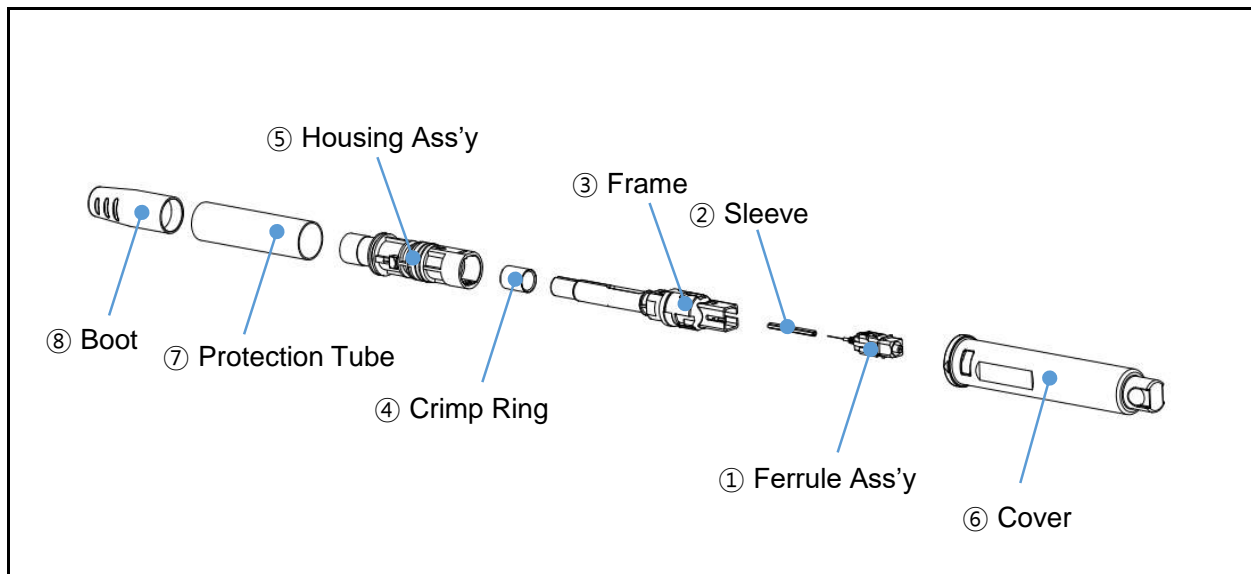
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1. General
2. HFSOC-A2-SC/APC-PSPL-5000 Configuration
3. Assembly Tools
4. KF4A-HDC(Fusion Splicer) Setting
5. Installation

1. General

This installation guide provides procedures for assembling for HFSOC-A2-SC/APC-PSPL-5000 to 5.0mm outdoor cable with KF4A-HDC All-In-One Fusion Splicer. A basic understanding of fiber handling, stripping, cleaning and splicing will be helpful.

2. HFSOC- A2-SC/APC-PSPL-5000 Configuration





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3. Installation Tools

3.1 Tools for Cable Preparation

			
Jacket Stripper (RCS-114)	Fiber Stripper (CFS-3)	Crimper (CRTL-CR-PSPL)	Kevlar Shears (IDEAL 45-344)
			
Ruler	Quick Cooling Spray	Marker	Cleaning Wipes

3.2 Tools for Fusion Splicing (Stripping & Cleaving & Heating)

			
KF4A-HDC	Holder Left (500-900)	Holder Right (HF4-SC/FC)	HDC Heater (HDC-HT)

4. KF4A-HDC Setting

Depending on your cable, choose the appropriate settings for splice mode, stripper mode, and heater mode. When working with the HFSOC-SM-SC/APC-PSPL-5000, you may need to adjust settings depending on the machine's environmental conditions.





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4.1 Splice Mode

- G.657.A2 to G.657.A2 : Setting – 12. G657 A2B2
- G.652.D to G.652.D : Setting – 1. SM ITU-T G652
- G.652.D to G.657.A2 : Setting – 18. G652-G657 A2B2

4.2 Heater Mode for HFSOC with 21mm Sleeve

- Setting – 10. S09-C 22x1.6x2.9
- Detail - Heating Time : 40~60 seconds / Heat Temp. : 180~190 Degree

4.3 Stripper Mode

- Setting – 2. 0.9
- Detail - Stripping Time : 2 seconds / Stripping Temp. : 135 Degree

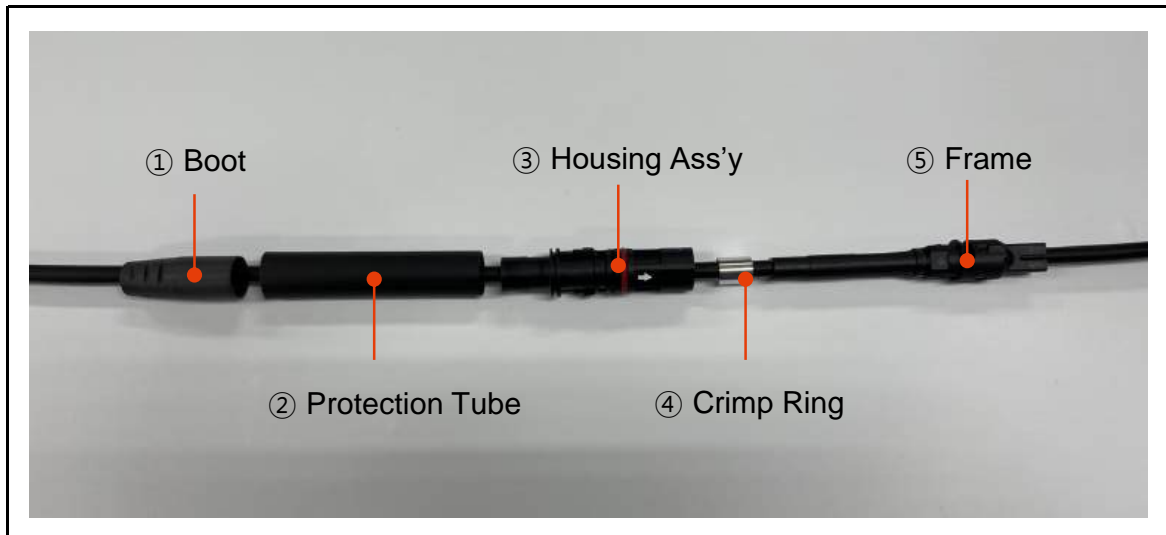
4.4 HDC Heater Mode for 5.0mm Cable with Protection Tube

- Detail - Heat Time : 120 seconds / Heat Temp. : 190 Degree

5. Installation Procedure

5.1 Cable(5.0mm) Preparation.

- 5.1.1 Insert components in order. First slide boot, cable protection tube, housing ass'y, crimp ring and frame.





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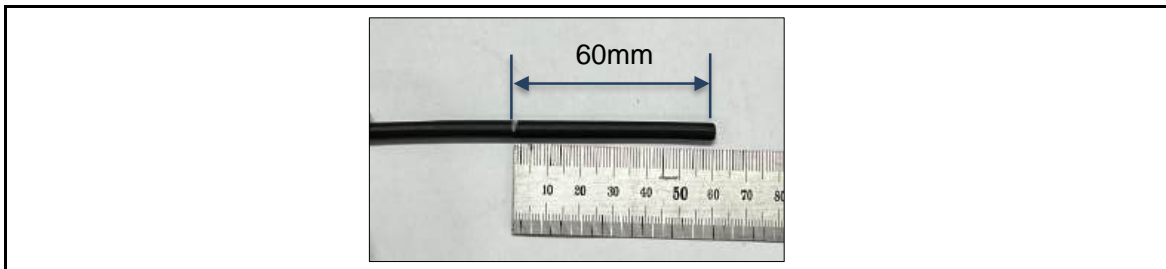
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5.1.2 Place a mark on the cable jacket at 60 mm from the end. (See also in the quick manual)



5.1.3 Using the coaxial cable tool, etch and remove the jacket at the 60 mm mark, exposing the aramid yarn.



5.1.3a



5.1.3b

5.1.4 Remove the aramid thread using Kevlar scissors.



5.1.4a



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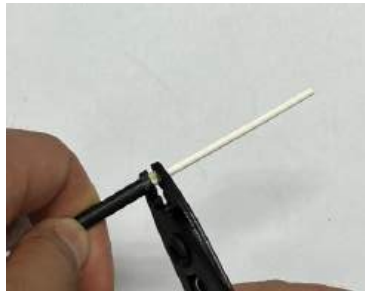
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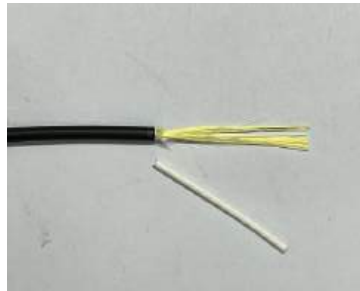
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5.1.5 Using the fiber stripper tool, remove the loose tube at the 60 mm mark, exposing of the aramid yarn. Then remove the aramid yarn using the Kevlar scissors.



5.1.5a



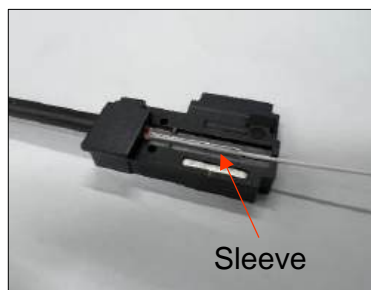
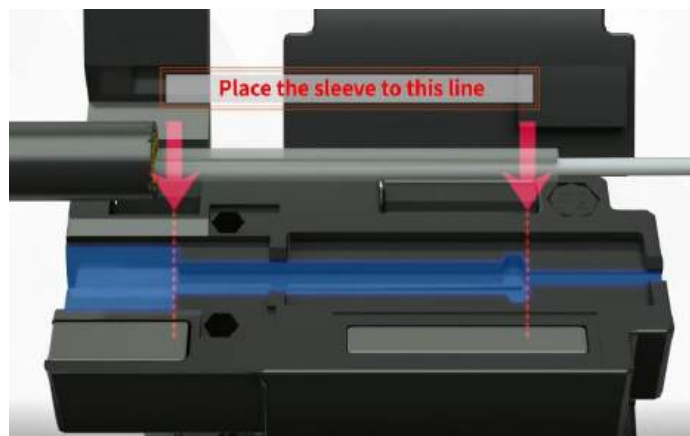
5.1.5b



5.1.5c

5.1.6 Insert the sleeve and place the 0.9mm fiber in the holder (500-900) as follows.

[Caution]



5.1.6a



5.1.6b



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5.2 Fusion Splicing (Include Stripping and Cleaving)

5.2.1 Stripping

- a. Turn on the power of stripper.



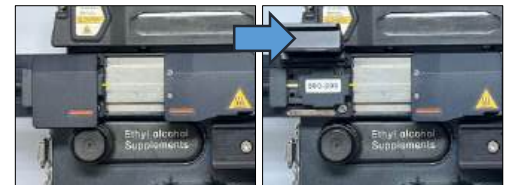
- b. Mount the fiber holder to the auto-stripper. Make sure 0.9mm fiber should be placed on the center of heater.



- c. Close left cover first then right cover. On closing right cover, stripping process is activated automatically.



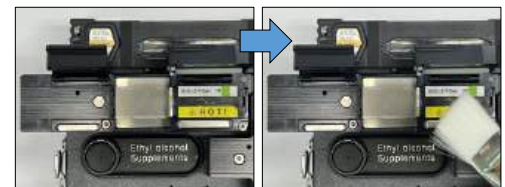
- d. After Stripping is completed, open the left cover.



- e. Remove the holder sliding back not lift it up to avoid damage on the fiber.



- f. When the right cover is opened, the left part returns to its original position. Use a brush to clean the blade and hot plate area.





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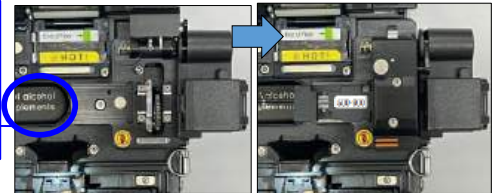
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5.2.2 Cleaving

- a. Clean the optical fiber using an alcohol-soaked fiber wipe. Open the cover of the cleaver and trash bin. Mount the holder on the cleaver slot.



- b. Close the covers and press the actuation button, and carefully remove the holder with sliding it back.



[Caution]

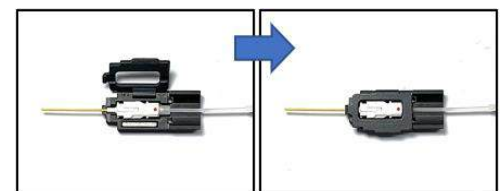
Lifting the holder after cleaving may damage the fiber.



- c. Mount the fiber holder into the splicer. Fiber should be in the v-groove and fix the cable on the cable guide. (Close the left cover)



- d. Please go through the same process for the subassembly. (Stripping to Cleaving)



- e. Mount the subassembly holder into the splicer.





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5.2.3 Splicing

- a. Close the wind cover after ensuring that both holders are in place. When wind cover is closed, the splice will be executed automatically.



- b. Splicer will pause for viewing of the splice parameters.



- c. After successfully splicing, the splicer automatically performs a tensile test when the door of the splicer is opened. Please DO NOT interrupt this test.



- d. Carefully open the holder cover, hold both sides and lift it up carefully.

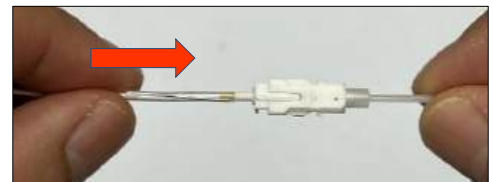


[Tip]

To prevent damage to the spliced fiber, open the left side covers while pressing(holding) the cable, and hold the ferrule cap while opening the right side holder cover.



- e. Slide sleeve over the splice carefully to the end of the subassembly.





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- f. Open the heater cover. Locate the connector and sleeve area and place the sleeve within appropriate heating area. Close the right heater cover first, then the main heater cover.
If the auto heater function is on, it will run automatically. If not, press the heater button to run it.



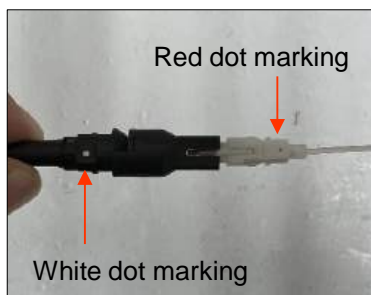
- g. Open the heater cover, hold both ends and lift straight off the heater.



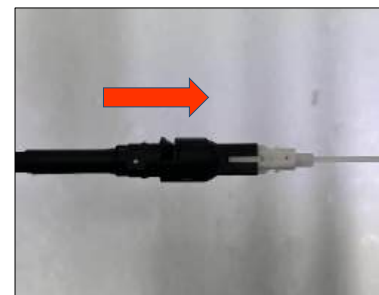
5.3 Assembly with housing kit

5.3.1 Frame Assembly

: As shown below, assemble the frame with the ferrule ass'y.



5.3.1a



5.3.1b

[Caution]

Pay attention to the direction of the assembly.

[Tip]

You may hear "Tick" sound



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5.3.2 Crimp Ring Assembly

: Insert the crimp ring and secure the frame using the crimper. (**2 times**).



5.3.2a



5.3.2b



5.3.2c

[Tip]

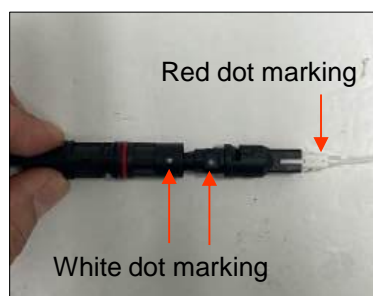
Press the crimp ring once, turn it 90 degrees and press it again.

[Caution]

When using the crimper, make sure the crimp ring does not slip out of place. Squeeze the crimper hand until you hear it click.

5.3.3 Housing Assembly

: Insert the housing ass'y into the in rear of the frame.



5.3.3a



5.3.3b

[Caution]

Pay attention to the direction of the assembly.



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5.3.4 Protection Tube Assembly

: Insert the protection tube.



5.3.4a



5.3.4b

: Fix the cable and housing kit using the HDC heater as follows.



5.3.4c



5.3.4d

: After the heating time has elapsed, open the lid and use quick cooling spray to cool the protection tube quickly.



5.3.4e



5.3.4f



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: Finally, place the boot in full contact with the rear of the housing body and install the cover on the connector.



5.3.4g



5.3.4h



5.3.4i

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