



# User Manual

Code: AI-8C  
OPTICAL FIBER FUSION SPLICER AI-8C

## Warning!

Please read the user manual included in this work as it contains important information related with safety of installation and use of the device.

Only persons who read the user manual may use the device.

The user manual must be kept because it may be required in the future. The device is to be used exclusively for purposes specified in this user manual.

The device must be unpacked prior to starting-up. After removing the packaging make sure the device is in working order.

If the product has defects, it should not be used until it is repaired.

The product is intended for use at home and commercial use and may not be used for other than intended use.

The manufacturer is not liable for damages resulting from not adhering to the rules contained in the user manual, therefore, we recommend to follow the aforementioned safety rules for operation and maintenance of the device. In this way you will ensure yourself safety and avoid causing damage to the device.

The manufacturer and the supplier are not liable for losses or damages arising out of the product, including financial or intangible losses, loss of profits, income, data, pleasure from use of the product or other products related with it - indirect, incidental or consequential loss or damage. The above provisions apply whether the loss or damage concerns:

1. Deterioration of quality or the lack of operation of the products or products related with it due to damage as well as the lack of access to the product when it is undergoing repair, which results in stoppage the loss of user's time or a break in business activity;
2. Improper results of operation of the product or products related with it;
3. It applies to losses and damages according to any legal category, including negligence and other losses, termination of a contract, expressed or implied guarantee and strict liability (even if the manufacturer or the supplier was notified about the possibility of occurrence of such damages).

### Safety measures:

Particular attention at designing was directed to quality standards of the device where ensuring safety of operation is the most important factor.

The device must be secured against contact with caustic, staining and viscous fluids.

The device was designed in such a way that it restarts operation when power supply is restored after a break.

**Attention! We recommend using protections to further protect the device from possible overvoltages in installations. Surge protectors are effective protection against accidental pass to the device voltages higher than the rated. Damages caused by pass the voltages higher than specified in manual, are not under warranty.**

Turn off the device before transporting it.

Prior to connecting the device to a power source check whether the supplied voltage is consistent with rated voltage specified in the user manual.

### Proper product disposal:

A marking of a crossed out waste bin indicates that the product may not be disposed together with other household waste in the entire EU. To avoid possible damage to the natural environment of health due to uncontrolled waste disposal, therefore, it should be handed over for recycling, propagating in this way sustainable use of natural resources.

To return a worn-out product, use a collection and disposal system of this type of equipment or contact a seller from whom it was purchased. He will then be recycled in an environmentally-friendly way.

The Signal Fire AI-8C optical fiber fusion splicer is the successor to the AI-8 model. The manufacturer slightly changed the design and housing of the device, and redesigned the power and charging system, further increasing its reliability. The number of splices that can be made per battery charge cycle has increased to 240. The AI-8C optical fiber fusion splicer uses the high-speed image process technology and special exact orientation technology, so that the whole process of fiber's fusion can be finished in 10 seconds automatically.

**Attention!** By default, the device is configured in auto mode. In most cases, any adjustments of the default settings are not required. No calibration is required - it must be done only in case of problems with obtaining the correct splice. Available in the [Google Play](#) and [AppStore](#) application is required, for example, to change the default splicing program or calibration due to extremely changing environmental conditions. Changing the parameters and configuration of the splicer is possible only through the Bluetooth interface with dedicated applications on Android / iPhone.



Fiber optic type:	<ul style="list-style-type: none"> <li>• Multi-Mode (MM) - G.651,</li> <li>• Single-Mode (SM) - G.652 &amp; G.657,</li> <li>• Single-Mode (DS / NZDS) Non-Zero Dispersion Shifted Fiber (G.655)</li> </ul>
Cladding diameter:	80 ... 150 $\mu$ m
Outer coating diameter:	0.1 ... 1 mm
Fiber cleaved length:	16 mm
Orientation technology:	core alignment, cladding alignment
Display:	5.1 " LCD, 800 x 480 px Image: display X and Y axis simultaneously
Average fusion loss:	0.01 dB (MM) 0.025 dB (SM) 0.04 dB DS / NZDS
Average fusion time:	6 s
Average heat time:	15 s
Fusion programs:	(factory applications) + (user applications)
Internal light:	✓
Internal heater:	✓

Set fusions parameters:	<ul style="list-style-type: none"> <li>• Surface angle test</li> <li>• fiber forward</li> <li>• prefuse power</li> <li>• prefuse time</li> <li>• arc power</li> <li>• arc time, etc</li> </ul>
Fusion storage:	✓
Mechanical strength test:	2 N
Computer interface:	USB 2.0 - Possibility to charge smartphones
Power supply:	13.5 V DC / 4 A (power adapter included)
Battery power supply:	11 V DC Li-Ion battery, 7800 mAh
Electrodes lifetime:	~ 3000 fusions
Operation temp:	-15 °C ... 50 °C
Permissible relative humidity:	< 95 % (non-condensing)
Weight:	2.1 kg
Dimensions:	<ul style="list-style-type: none"> <li>• 130 x 122 x 148 mm - splicer</li> <li>• 270 x 237 x 293 mm - toolbox for tools and splicing machine</li> </ul>
Guarantee:	<b>3 years</b>

Top view:



Operation elements of the splicer:







The device has the ability to remove the battery, which is recommended when the device is not used for a long time:



Side view:



Fiber cleaver tool:



In the kit:



The kit includes a practical box housing a fusion splicer, the necessary tools and a small table and stool:







## PACKAGE

Dimensions (L x W x H): 0x0x0 mm	Gross Weight: 0 kg
----------------------------------	--------------------