



OPTICAL FIBER FUSION SPLICER

FOR TRUNK LINE CONSTRUCTION, FTTH PROJECT, SECURITY MONITORING ETC.



PRODUCT INTRODUCE



AI-9 is a fully automatic, mainline fiber optical fusion splicer with six motors and fiber core alignment, capable of welding long-distance fiber optic lines. Also within VFL and OPM function. Adopting industrial grade CPU, with fast running speed, 5-second rapid fusion welding, 15-second rapid heating, 5-inch high-resolution LCD screen, 320x magnification; The work efficiency is increased by 50% compared to ordinary welding machines; Large-capacity lithium battery can be heated by fusion about 260 cores, outstanding performance in harsh environments such as high altitudes, deserts, and extreme cold.



PRODUCT INTRODUCE





6 motors



Fiber core alignment



PRODUCT INTRODUCE

5s splicing

15s heating

320X
focus
magnification



Industrial CPU, fast response,
It is one of the fastest optical fiber welding
machines on the market
Use 5-inch high-resolution screen, simple and
intuitive operation graphics
Up to 320x focusing magnification makes it

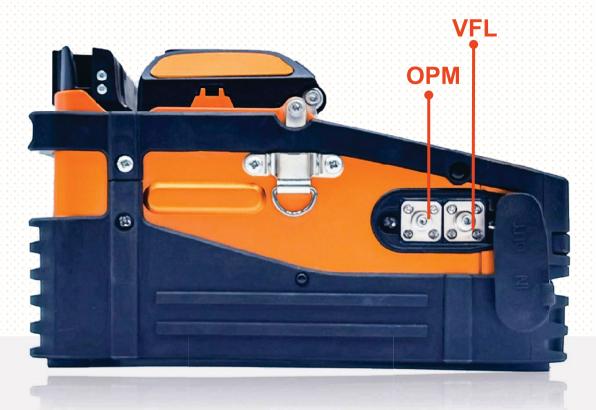
easy to observe the core with the naked eye







Within VFL and OPM function



Effectively measure connection losses, verify continuity, and help evaluate fiber link transmission quality



Switch between ten states

Wavelength: 850nm、1300nm、1310nm 1490nm、1550nm、1625nm、980nm 1270nm、1577nm、1650nm

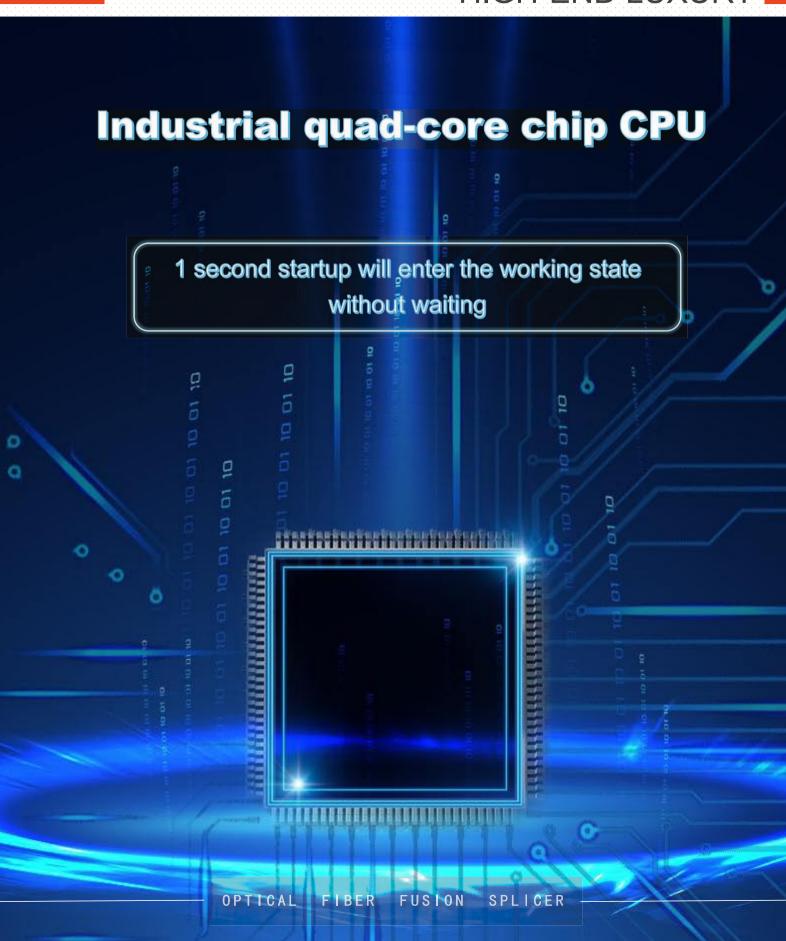


Switch between three states

power: 15mW, 2Hz flashing and steady

on mode

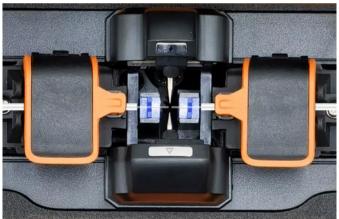




3-IN-1UNIVERSAL FIXTURE



Jumper fiber (pigtail)









7800mAh lithium battery

Battery charging "New upgrade"

Dual charging

Even if a fault occurs, another channel can be used for charging



- Charging time ≤3.5 hours;
- In full state, 260 cores can be continuously fused and heated



Charging method III

The battery can be removed and charged separately









10 LANGUAGES AVAILABLE

Multilingual Settings, covering the global market



15s automatic heating



Successful fiber melting. When opening the windproof cover to take out the fiber, the machine turns on pre heating for up to 8 seconds

Heating part automatic lid closing





Heating part compatible with SC fiber

SC Fiber: Push up

Ordinary fiber: Push down

COOLING RACK

Expandable and closable









Closed status



DUST PREVENTION FALL PREVENTION SHOCK PREVENTION



Don't be afraid to knock! Touch! Fall!

Outstanding quality without fear of challenges

Adapt to harsh environments such as deserts, snow, high altitude, and high temperatures







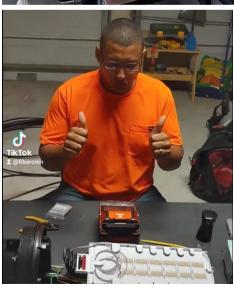


Exported to nearly 100 countries and regions worldwide

Get unanimous praise from customers!













THE TOOLBOX

comes with a stool to facilitate the construction workers

Patent no.ZL 2016 3 0402585.X





BASIC PARAMETER

Fiber alignment	Core/cladding			
Motor number	6 motors (accurate of fiber alignment: 0.1µm)			
Splicing time	5s			
Heating mode	15s, can be customized according to the external environment			
Fiber type	Single-mode fiber (SMF/G.652), BIF/G.657); Suitable for single mode, multi-mode, bare fiber, tail fiber, drop cable, jumper, invisible fiber fusion;			
The cladding diameter	80-150 μm			
Splicing loss	0.02dB (SM) 、0.01dB (MM) 0.04dB (DS/NZDS)			
Splicing mode	Automatic focusing core alignment, conventional/high precision welding			
Splicing way	Automatic, semi-automatic			
Fiber holder	Three in one fixture, no need to change, suitable for single/multi-mode, multi-core cable/bare fiber, tail fiber, jumper fiber,drop cable			
VFL	The machine comes with: power: 15mW, 2Hz flashing and steady on mode			
OPM	Wavelength: 850nm、1300nm、1310nm、1490nm、1550nm、1625nm、980nm、1270nm、1577nm、1650nm/Measurement range: -50+26dbm Absolute error: <0.3dB (-50dbm ~+3dBm range)			
Battery capacity	7800mAh large capacity lithium battery charging time ≤3.5; It can continuously weld and heat about 260 cores			
Magnification	320x (X or Y axis single display), 200x (x and Y axis dual display)			
Fiber diameter	Coating diameter: 80-150μm/Coating diameter: 100-1000μm			
Cutting length	Coating layer 250µm below: 8-16mm/coating layer 250-1000µm: 16mm			
Heat shrink tube	60mm、50mm、40mm、25mm			
Tensile testing	standard 2N			
display	5 inch TFT color display screen			
Boot time	1s, boot can enter the working mode			
Data is stored	Unlimited, machine storage 1000 groups, the excess part can be stored in the server, can export data.			
Wireless communication	Based on bluetooth 4.2 protocol standard, the working band is 2.4GHz, the maximum transmission range is 60m			
Software upgrade	Mobile phone APP Internet update, enable Bluetooth synchronization upgrade machine software			
Management function	The equipment owner can be bound as the highest authority, and can remotely view the welding records welding time, loss, etc. through the mobile phone APP. The number of welding times or working time of the equipment can be set. The manager can effectively manage a single or multiple equipment.			
Return loss	Better than 60 db			
Product protection	Waterproof, dustproof and fall proof			
Power supply	Input AC100-240V 50/60Hz, output DC13.5V/4.8A, the current power mode can be identified, real-time monitoring of the current battery level			
The work environment	Temperature: -15 ~ +50°C, humidity: < 95%RH (no condensation), working altitude: 0 ~ 5000m, maximum wind speed: ≤15m/s			

SIGNAL FIRE STRIPPER







- 1 main engine
- 2 Toolcase
- 3 Spare electrode
- 4 S09 Fiber Cleaver

- **5** Signal fire stripper (Including a bag of cleaning cotton)
- 6 Alcohol Bottle
- **7** Brush
- 8 Toolbox strap

- 9 Belt
- Power Adapter
- 11 key
- 12 Inner hexagon
- 13 User's manual / Quality Certificate / Warranty Card / Fiber for ARC

MASTERPIECE HIGH-END LUXURY



Machine weight

2.10kg (with battery)

1.68kg (without battery)

Toolbox weight

6.95kg

(including machine and accessories)





Total weight

8.20kg



Intelligent interaction, avoid tedious

Scan the QR code of the welding machine startup screen to download the Mobile APP

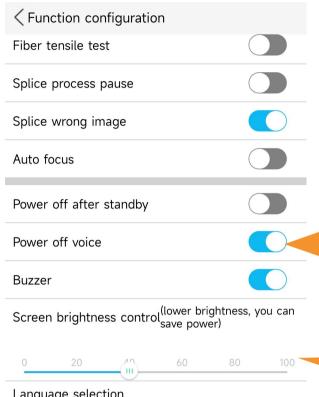
The phone connects to the splicer via Bluetooth





- Welding record can be read through mobile phone, and the data can be exported;
- You can set the parameters of the welding machine, such as selecting the machine language, changing the heating time, selecting the fiber optic alignment mode, etc;
- You can manage the welding machine, such as setting the use time of the machine, welding times, etc;
- Upgrade the phone APP, bluetooth connected to the machine to upgrade the machine software;





After it is opened, there will be voice prompt in the whole process from fiber laying, fiber matching, welding and loss value. In case of unqualified items, it will be directly

Adapt to bright light, dark and other different outdoor environment

Language selection

中文 (简体)	English	Português
Français	Русский	Español
Polski	ไทย	عربي
Italiano		

Major global languages available

Learning operation: from cutting fiber, stripping fiber to welding machine operation have detailed tutorials









fiber type

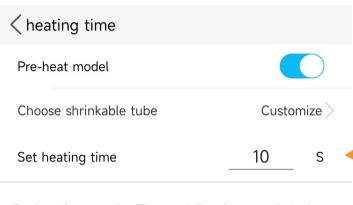






ШШШ Activate Electrode





Heating time can be customized, extremely cold weather and hot summer can be appropriately extended or shortened

Preheating mode: The welding is completed. When the windshield is opened, the heater is heated in advance for 6 seconds. Turning on the preheating mode can appropriately reduce the heating time of the heat shrinkable tube to improve efficiency.

Note: In winter or low temperature, heating is not ideal, and the heating time can be extended appropriately.



The machine has bound the current account.

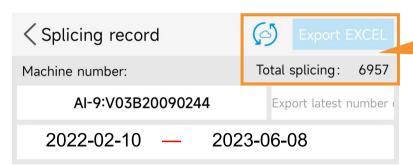
* AI-9:V03B20091192
No lock time is currently set

SMART LOCK MANAGEMENT

Rent mode: you can set the use time or welding times of the machine, the machine stops working when the expiry date expires, after the new machine is received, bind your mobile phone number and set as the highest management authority, you can control the device.

About smart locks?



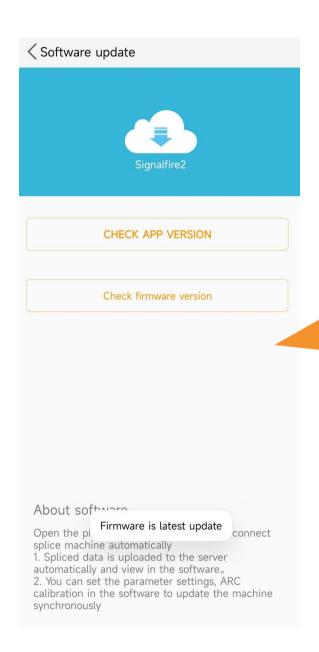


It can be downloaded and exported

Mode/ Number	Splicing loss	Time	Pictures
1	0.01	2023-06-08 10:46:16	
2	0.01	2023-06-08 15:21:50	
3	0.01	2023-06-08 13:20:47	
4	0.00	2023-06-08 13:19:04	
5	0.00	2023-06-08 13:04:43	
6	0.01	2023-06-08 13:02:22	
7	0.01	2023-06-08 12:50:01	
8	0.01	2023-06-08 12:49:14	
9	0.02	2023-06-08 12:47:26	

Unlimited storage of welding records, can be synchronized to the mobile terminal view





Mobile phone firmware upgrade, and then transmitted to the welding machine through Bluetooth, no data line, U disk Make your welding machine software system never obsolete!



SERVICE COMMITMENT

Five years warranty, but these circumstances are not within the scope of this provision.

01.Except for the cleaver, miller clamp, stripping pliers, fiber holders and other tools whose life depends on the frequency of use and the use of the environment. Also electrodes are consumption material which are not in the warranty.

02.Battery and power adapter are warranty for one year, it is in free warranty where it is damaged or can not be charged in one year.



Signal Fire Technology Co., Ltd. is a high-tech joint-stock enterprise specializing in the research and development, production, and sales of communication equipment, with a registered capital of 10 million. It is a national high-tech enterprise. Our main products include fiber optic fusion splicers, electric fiber cleaver, OTDR (Optical Time Domain Reflectometer), and 9-in-1 optical fiber stripper. They are widely used in the construction, maintenance, emergency repair, security monitoring, and research and teaching of optical cable lines in telecommunications, mobile, China Unicom, radio and television operators, post and telecommunications, railway, engineering companies, and public institutions.

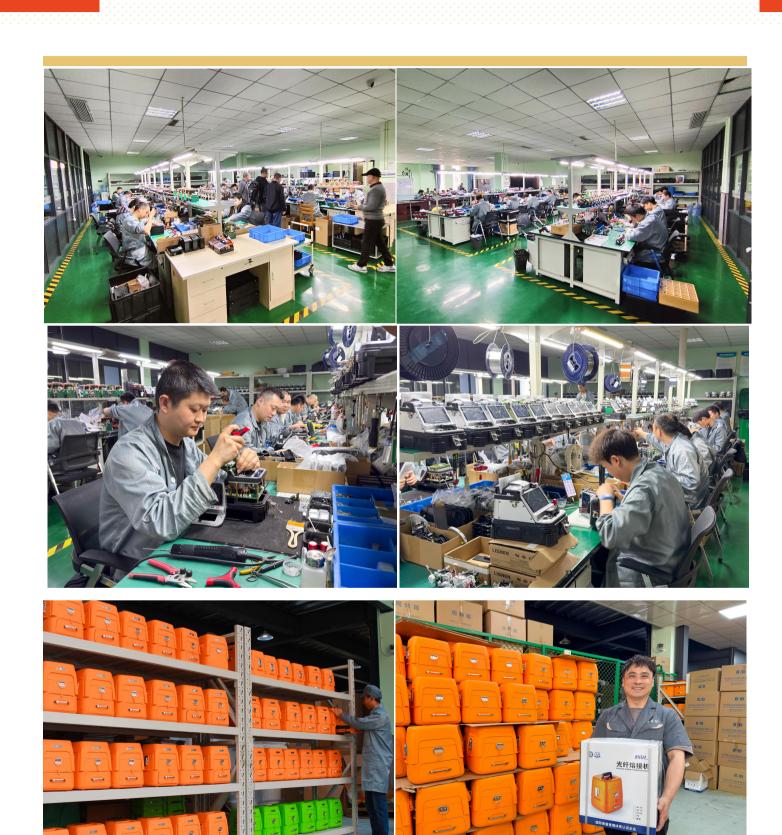


OPTICAL FIBER FUSION SPLICER



The factory is located in Chengdu High tech International Enterprise Port, with a modern production factory and standardized office buildings. We have passed the ISO9001 international quality management system certification, and our products have passed the EU CE, ROHS.International certifications such as FCC in the United States and UKCA in the United Kingdom have been passed by the National Institute of Quality Supervision and Inspection, China Academy of Information and Communications Technology.







The qualified testing of Taier Laboratory has obtained nearly a hundred domestic and international patents at the same time. The "Signal Fire" series products have been sold to over 100 countries and regions including North America, South America, Europe, Africa, and Asia, and have received unanimous praise from customers.











Operator winning bid brand







Telecom installation and maintenance skills competition, Signal fire fusion splicer excellent performance, won the group first prize







Exhibition photos

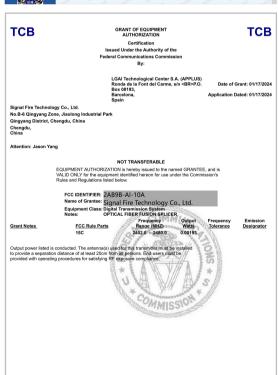




INTELLECTUAL PROPERTY INSPECTION AND CERTIFICATION

Signal Fire Technology Co., Ltd. has passed the ISO9001 international quality management system certification. The product has passed international certifications such as the CE, RoHS, the United States FCC, and UKCA in the United Kingdom, and passed the qualified test through National Quality Supervision Institute, China Xintong Institute, and Tel Laboratory. At the same time, we obtained nearly 100 patents.











INTELLECTUAL PROPERTY INSPECTION AND CERTIFICATION





Reg. No. 7,197,549 Registered Oct. 17, 2023

Int. Cl.: 7

Trademark

Principal Register

Signal Fire Technology Co.,Ltd. (CHINA limited company (ltd.)) No.1111,Changsheng Bridge,Hongguang Town Small and Micro Enterprise Innovation Park,Pidu Dist,Chengdu, CHINA 611730

CLASS 7: Cutting machines; Electric are cutting apparatus; Electric are welding apparatus; Electric scissors; Electric shearing machines; Electric welding machines; Electrods for welding machines; Gear cutting and finishing machines; Knives, electric; Soldering apparatus; electric

FIRST USE 6-15-2014; IN COMMERCE 6-15-2014

The mark consists of the stylized wording "Signal fire" with a rainbow bridge above the stylized letters "ignal fir".

SER. NO. 97-339,851, FILED 03-31-2022



KAHNEVING Kelly Vidal

Director of the United States
Patent and Trademark Office











INTELLECTUAL PROPERTY **INSPECTION AND CERTIFICATION**







Proprietor Signal Fire Technology Co., Ltd.

European Patent Office 80298 MUNICH GERMANY

Questions about this communication? Contact Customer Services at www.epo.org/o

03.09.2024

Application No./Patent No. 19945932.2 / 4024101

Communication of the date of registration of unitary effect pursuant to Rule 7(1) UPR

The request for unitary effect received at the EPO on 21.08.24 meets the requirements of Rules 5(2) and 6 LIPR

Reference P9499EUEP

Territorial scope
Pursuant to Article 18(2) Regulation (EU) No 1257/2012, by way of derogation from Articles 3(1), 3(2) and
4(1), a European patent for which unitary effect is registered has unitary effect only in those participating
Member States in which the Unified Patent Court has exclusive jurisdiction with regard to European
patents with unitary effect at the clade of registration. For the above European patent with unitary effect, the clade of registration. For the above European patent with unitary effect,
the participating Member States at the date of registration are.

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT RO SE SI

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The registration will be published in the European Patent Bulletin under Section IV.2(1).



NOTES RELATING TO THE REGISTRATION OF UNITARY EFFECT

1. Unitary Patent Guide

This guide – available on the EPO website – provides useful information on European patents with unitary effect

2.3 Moreover under Rule 13(6) UPR, a renewal fee for a European patent with unitary effect which would have fallen due under Rule 13(2) UPR in the period starting on the date of publication of the mention of the grant of the European patent in the European Patent Bulletin up to and including the date of the solitication of the communication reterred to in Rule 7(1) UPR is due on that latter date. This fee may still be paid within three monthis of that latter date without the additional fee referred to in Rule 13(3) UPR.

For further details you are recommended to consult the above-mentioned Unitary Patent Guide

3. Effect of revocation or limitation of the European patent

Under Article 3(3) Regulation (EU) No 1257/2012, the unitary effect of a European patent is deemed not to have arisen to the extent that the European patent has been revoked or limited.

EPO Form 7030 01.22

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