



AI-8C PRODUCT MANUAL

50KM trunk line fusion splicer

OPTICAL FIBER FUSION SPLICER



SIX MOTORS



**FIBER CORE
ALIGNMENT**



6S SPLICING



15S HEATING

Accurate of fiber alignment: 0.15 μ m

Industrial CPU, fast response

It is one of the fastest optical fiber fusion splicer on the market

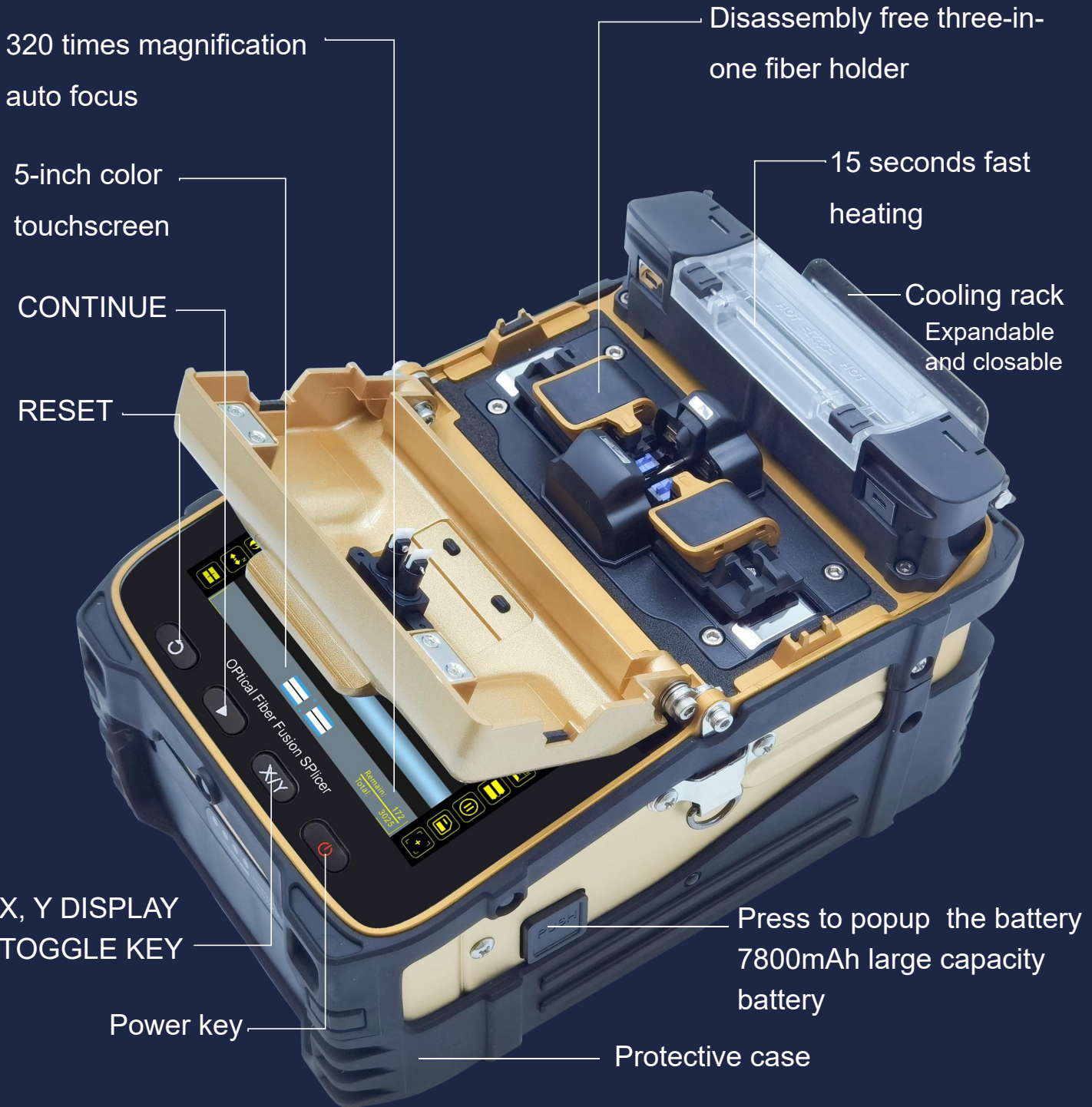
Use 5-inch color touchscreen, simple and intuitive operation graphics

Up to 320x focusing magnification makes it easy to observe the core with the naked eye



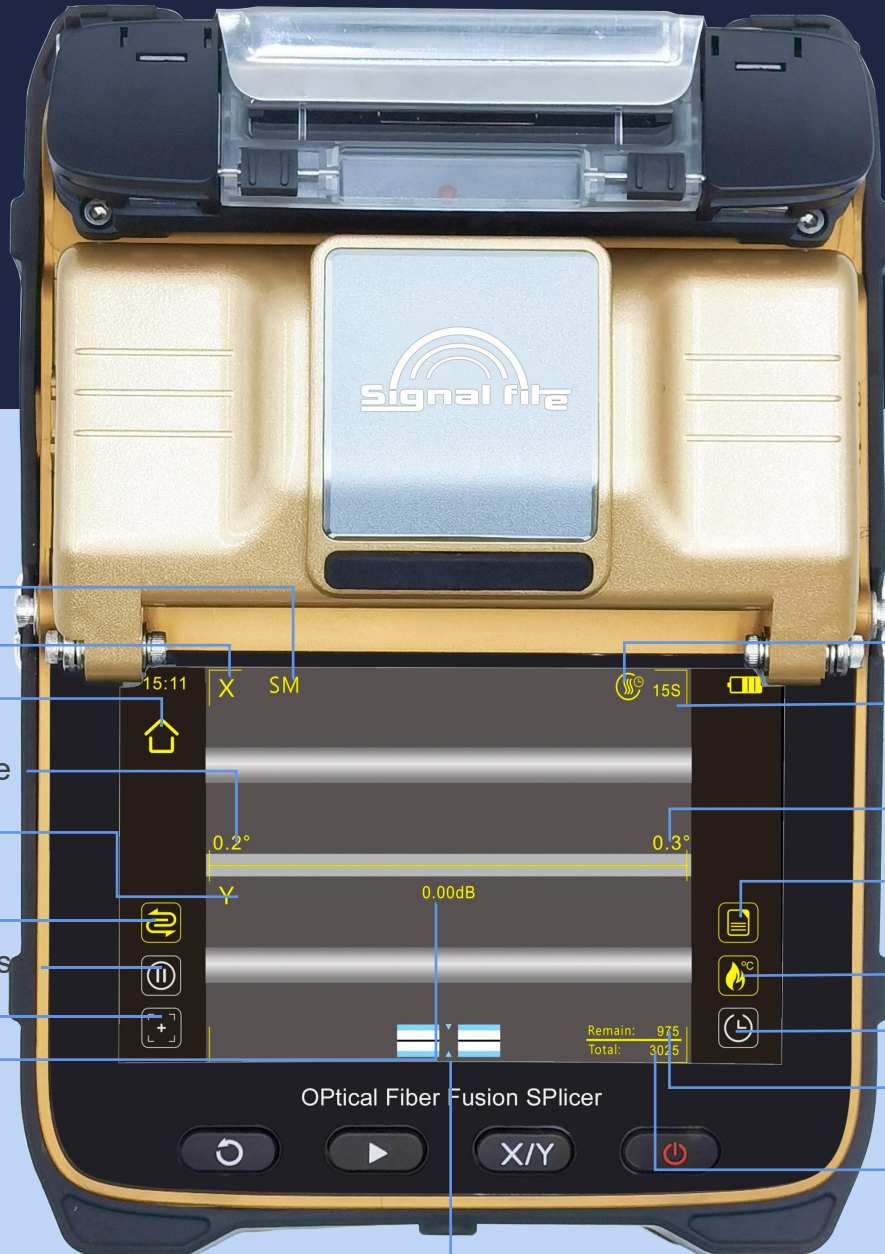
MASTERPIECE

HIGH-END LUXURY



METAL BODY

AESTHETIC DETAILS



- Fiber mode
- X screen display
- Home
- Left end face angle
- Y screen display
- Working mode
- Fiber Splicing Pause
- Auto Focus
- Splicing loss
- Preheating
- Heating time
- Right end face angle
- Fusion Splicing Record
- Preheating
- Timed shutdown
- Number of electrodes remain
- Total splicing
- Fiber status remind



MACHINE METAL CORE

ELIMINATE SHODDY WORK AND INFERIOR MATERIALS

TEMPERATURE AND COLD RESISTANT

MAKING SPLICING MORE RELIABLE



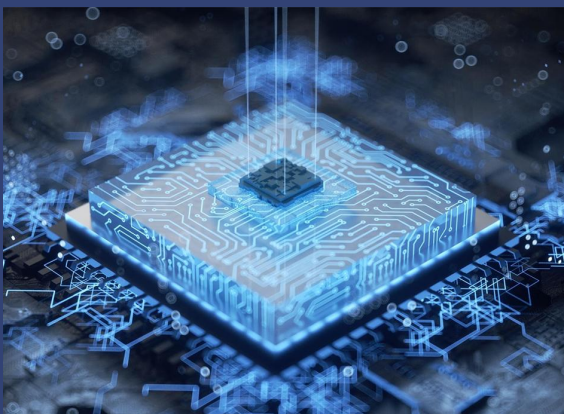
2.06kg

Machine weight



5-INCH COLOR TOUCHSCREEN

Intuitive operation, easily accessible with just one touch



Industrial-grade CPU

1 second startup


Sensitive response/Smooth experience

TOUCH SCREEN MENU


Language/Configuration/Calibration/Records



11 languages to switch freely

 language

<input type="checkbox"/> 中文	<input checked="" type="checkbox"/> English	<input type="checkbox"/> Português
<input type="checkbox"/> Français	<input type="checkbox"/> Русский	<input type="checkbox"/> Español
<input type="checkbox"/> Polski	<input type="checkbox"/> ภาษาไทย	<input type="checkbox"/> عربي
<input type="checkbox"/> Italiano	<input type="checkbox"/> українська	





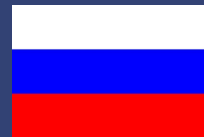
Chinese



English



French



Russian



Italian



Ukrainian



Portuguese



Polish



Spanish



Thai



Arabic



Configuration

Fiber type

SM MM AUTO G654E
 BIF 80um NZ DS

Auto power off 15min

Heating time 15S

Heater Pre-heating

Pause splicing process

Auto-focus

Activate battery

Self test

Angle check 3.0°

Endface check

Basic Standard Precision

Tensile test

Factory restoration

Cleaver adjustment

Replace blade assembly

Screen brightness 10

Help

Whatsapp:+86 191**** *****
 Skype: live:.cid.2*****
 Email:technicalsupport@*****

This account only for after sales, technical support and Using guide.
 Refuse any questions about the selling, if you wanna buy machine,
 please ask your machine provider.

For more support:
 Go to Google Play or App Store and search for "SignalFire2", download Phone
 App.

Firmware version: Main:v12 Fpga:V12 Ctrl:V12



Records

No	Time	loss
000007	2025-11-10 14:26	0.00 dB
000006	2025-11-10 14:25	0.01 dB
000005	2025-11-10 14:24	0.01 dB
000004	2025-11-10 14:22	0.00 dB
000003	2025-11-10 14:22	0.02 dB
000002	2025-11-10 14:21	0.01 dB
000001	2025-11-10 14:20	0.00 dB





7800mAh lithium battery

Battery charging "New upgrade"

Dual charging path

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



Built-in USB port

It can charge mobile phones and other mobile devices

Charging channel ①

Charging channel ②

The battery can be removed and charged separately

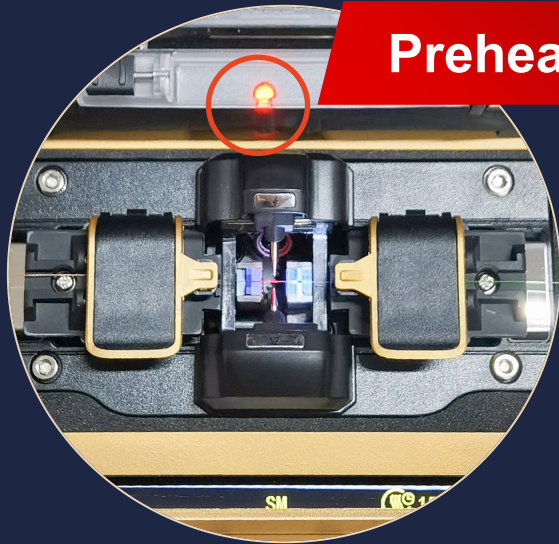


- Charging time ≤ 3.5 hours;
- In full state, 260 cores can be continuously fused and heated



15S AUTOMATIC HEATING

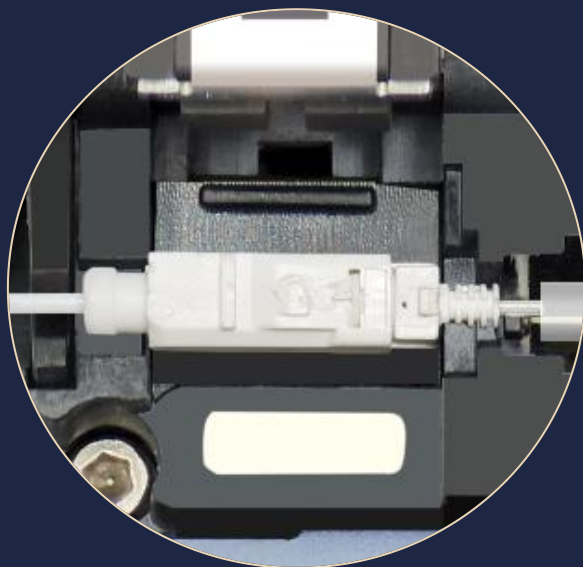
comes with a stool to facilitate the construction workers



Preheating

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

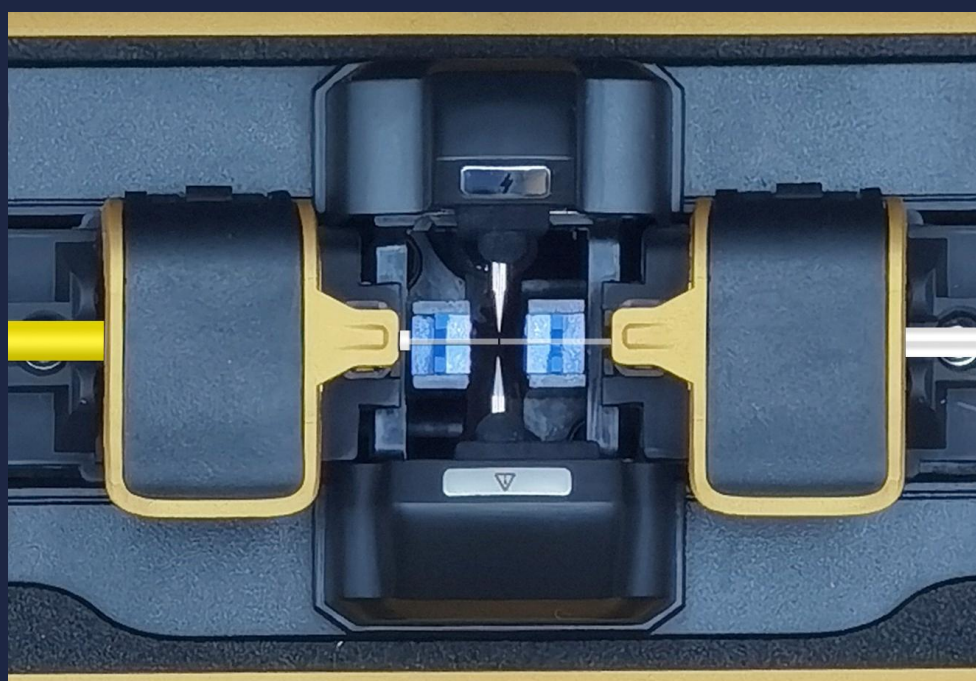
Ordinary fiber: Push down

COOLING RACK

Expandable and closable



3 IN 1 FIBER HOLDER





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!



OPTICAL FIBER FUSION SPLICER

OPERATOR WINNING BID BRAND



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





THE TOOLBOX

comes with a stool to facilitate the construction workers

PATENT NO.ZL 2016 3 0402585.X



Stool can bear: 100KG

Do not need to take out the splicer machine from the toolbox while working

Two layers

BASIC PARAMETER

Fiber alignment	Core/cladding
Motor number	6 motors (accurate of fiber alignment: 0.15μm)
Splicing time	6s
Heating mode	15s, can be customized according to the external environment
Fiber type	Single-mode fiber (SMF/G.652), multimode fiber (MMF/G.651), dispersion-shifted fiber (DSF/G.653), G.654 fiber, non-zero dispersion-shifted fiber (NZ-DSF/G.655), and bend-insensitive fiber (BIF/G.657); suitable for splicing bare fiber, pigtail, drop fiber, patch cord, and invisible fiber.
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
Fusion splicer languages	11 languages (chinese, Russian, english, French, Italian, Ukrainian, Thai, Portuguese, Spanish, Arabic, polish)
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 color touchscreen
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

5G FTTH Drop cable

Caliber: 2mm x 1.6mm

Both regular FTTH Drop cable

Caliber: 3mmx2mm

Rotary ruler

FTTH Drop cable steel wire pliers

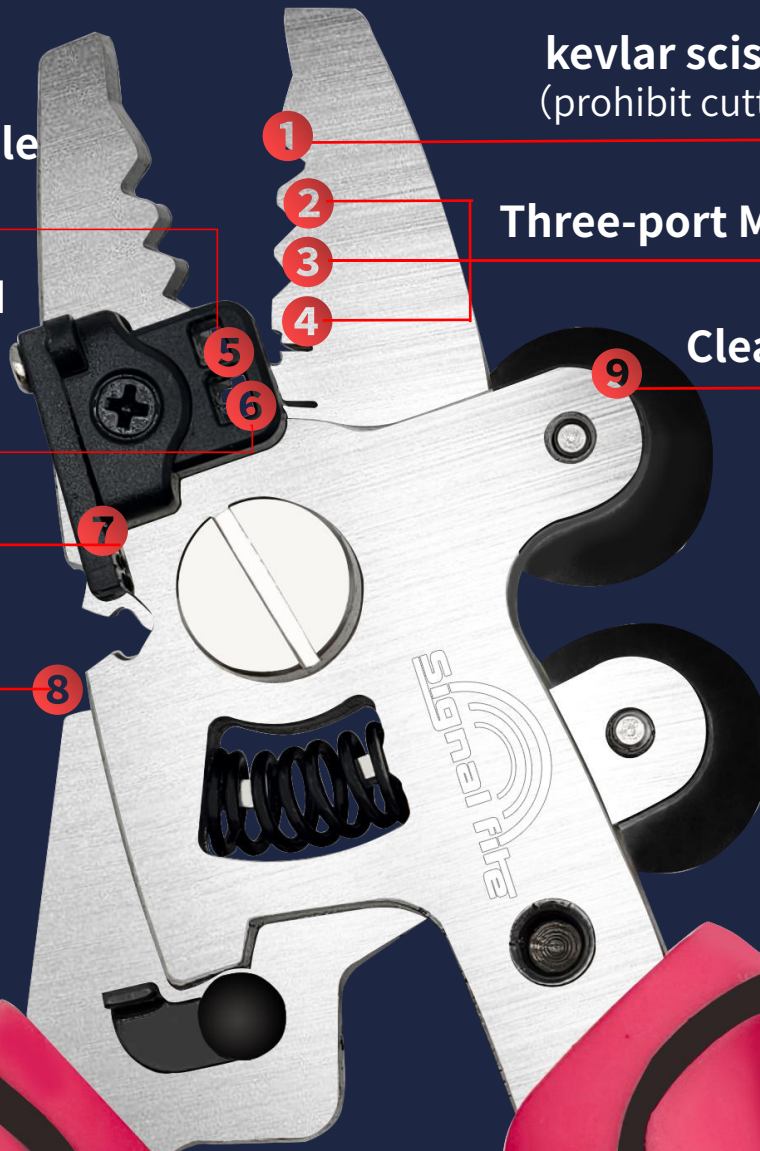
Can not cut FRP steel wire/else steel wire
Blade maybe will scratch and have trace,
It' s normal and will not influence you to use
it If you are care about this, Then please buy
with cautions.

kevlar scissors

(prohibit cutting steel wires)

Three-port Miller stripper

Cleaning cotton



STANDARD CONFIGURATION



TOOLCASE



Fusion splicer



Electrode



S10 one-step fiber cleaver



signal fire stripper Including a bag of cleaning cotton



Power supply



Belt



key



brush



Inner hexagon



Alcohol pump



**Quality Certificate
Packing List
Calibration Fiber
Service Commitment
Manual book**



Machine weight
2.06kg (with battery)
1.68kg (without battery)



Toolbox weight
6.95kg (including
machine and
accessories)

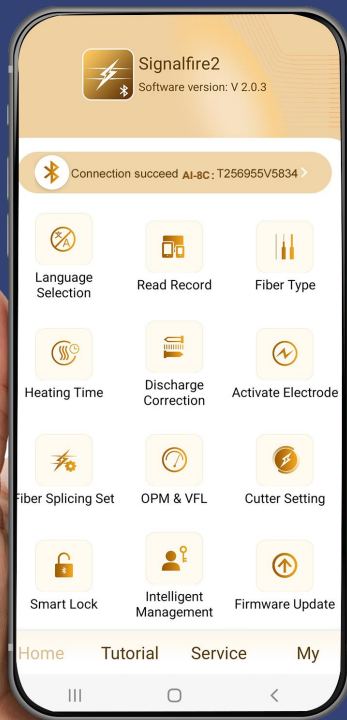


Total weight
8.20kg



Support bluetooth Bluetooth connection

Intelligent interaction, avoid tedious



Bluetooth™

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;

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.





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.



OPTICAL FIBER FUSION SPLICER





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.





Exhibition photos





Product testing certificate

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.

CERTIFICATE

CERTIFICATE
Of Conformity
Directive 2014/53/EU
On The Radio Equipment Directive

Certificate No.: AT18220WC202819
Certificate Holder: SIGNAL FIRE TECHNOLOGY CO., LTD.
Address: Building 18, Chengdu Hi-Tech International Enterprise Park, Liando U Valley, 1111 Changsheng Bridge, Pidu District, Chengdu China
Manufacturer: SIGNAL FIRE TECHNOLOGY CO., LTD.
Address: Building 18, Chengdu Hi-Tech International Enterprise Park, Liando U Valley, 1111 Changsheng Bridge, Pidu District, Chengdu China
Product Name: OPTICAL FIBER FUSION SPLICER
Model No.: AI-9, AI-6C, AI-6V, AI-7C, AI-8C, AI-8X, AI-7V, AI-X, S9
Trade Mark: Signal fire
Rating: Input: 13.5V/4.8A DC (with DC 11V, 7800mAh Battery inside)

The radio equipment meets the following essential requirements	Complied
Article 3(1)(a) ■ Safety	EN IEC 62368-1:2020/A11:2020 Yes
Article 3(1)(a) ■ Health	EN 50683:2017; EN 62479:2010 Yes
Article 3(1)(b) ■ EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.2.4 (2020-09) Yes
Article 3(2) ■ Radio	ETSI EN 300 328 V2.2.2 (2019-07) Yes

Note: The attached Annex forms part of this certificate which consists of 2 pages.

Certified by

Kingkong Jin

Jan. 03, 2023
Date

The CE Marking may only be used if all relevant and effective EU Directives are complied with

Shenzhen Anbotek Compliance Laboratory Limited
1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangsheng Street, Bao'an District, Shenzhen, Guangdong, China. 518128
Tel: (86)755-2606440 Fax: (86)755-2601472
Http://www.anbotek.com Email: service@anbotek.com

CE

CERTIFICATE

CERTIFICATE
Of Conformity
Radio Equipment Regulations 2017
(SI 2017 No. 1206)

Certificate No.: AT18220WC202820
Certificate Holder: SIGNAL FIRE TECHNOLOGY CO., LTD.
Address: Building 18, Chengdu Hi-Tech International Enterprise Park, Liando U Valley, 1111 Changsheng Bridge, Pidu District, Chengdu China
Manufacturer: SIGNAL FIRE TECHNOLOGY CO., LTD.
Address: Building 18, Chengdu Hi-Tech International Enterprise Park, Liando U Valley, 1111 Changsheng Bridge, Pidu District, Chengdu China
Product Name: OPTICAL FIBER FUSION SPLICER
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CHAPTER 1 General (1)(b) ■ EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.2.4 (2020-09) Yes
CHAPTER 1 General (2) ■ Radio	ETSI EN 300 328 V2.2.2 (2019-07) Yes

Note: The attached Annex forms part of this certificate which consists of 2 pages.

Certified by

Kingkong Jin

Jan. 03, 2023
Date

The UKCA Marking may only be used if all relevant and effective UK Regulations are complied with

Shenzhen Anbotek Compliance Laboratory Limited
1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangsheng Street, Bao'an District, Shenzhen, Guangdong, China. 518128
Tel: (86)755-2606440 Fax: (86)755-2601472
Http://www.anbotek.com Email: service@anbotek.com

UKCA

TCB

GRANT OF EQUIPMENT AUTHORIZATION

Certification

Issued Under the Authority of the Federal Communications Commission

By:

LGAI Technological Center S.A. (APPLUS)
Ronda de la Font del Carme, s/n -CR-P.O.
Box 08193,
Barcelona,
Spain

Date of Grant: 01/17/2024
Application Date: 01/17/2024

Signal Fire Technology Co., Ltd.
No.8-6 Qingyang Zone, Jiaolong Industrial Park
Qingyang District, Chengdu, China
Chengdu,
China

Attention: Jason Yang

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: 2AB9B-AI-10A
Name of Grantee: Signal Fire Technology Co., Ltd.
Equipment Class: Digital Transmission System
Notes: OPTICAL FIBER FUSION SPLICER

FCC Rule Parts	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission Designator
15C	2402.0 - 2480.0	0.06193		

Output power listed is conducted. The antenna(s) used for the transmission must be installed to provide a separation distance of at least 20cm from all persons. End-users must be provided with operating procedures for satisfying RF exposure compliance.

TCB

FCC

QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificate No.: 11423Q45347R2M

This is to certify that the Quality Management System of

SIGNAL FIRE TECHNOLOGY CO., LTD.

Unified Social Credit Code: 91510100072411028D

Registered Address: No.1111 Changsheng Bridge, Hongqiang Town, Small and Micro Enterprise Innovation Park, North Area of Chengdu Modern Industrial Port, Pidu District, Chengdu

Production Office Address: Building 18, Chengdu High-tech International Enterprise Park, Liando U Valley, No.1111 Changsheng Bridge Road, Pidu District, Chengdu City, Sichuan Province, China

Has been audited to conform to the following Quality Management System standard

GB/T19001-2016/ISO9001:2015

The Applicable Scope

The production of optical fiber fusion splicer

Date of initial issuance: Aug. 22, 2017
Date of issuance: Jul. 11, 2023
Date of expiry: Jul. 31, 2026

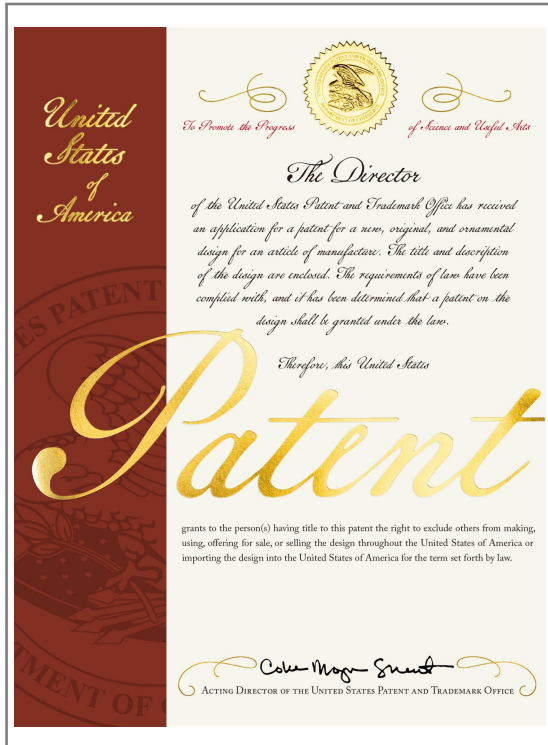
Issued by: Beijing East Allreach Certification Center Co., Ltd.

The certificate will remain valid only if the certified organization accepts surveillance visits at regular intervals and is audited in the periodic. The statements of this certificate is available at EACC website (www.eacc.com.cn) and CNCA's official website (www.cnca.gov.cn), and it's also available by scanning the QR Code in the lower right corner.

Address: 1st Floor, No. 123 Building, No. 11, Shengping Street, Shuangou Science & Technology Industrial Base, Tangshan Park of Chengde Science & Technology Zone, Tangshan District, Heilongjiang Province

ISO9001

International Patent



US Design Patent Certificate



European PCT Patent



European Unified Patent




EU design patent



International trademark

United States of America
United States Patent and Trademark Office



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 arc cutting apparatus; Electric arc welding apparatus; Electric scissors; Electric shearing machines; Electric welding machines; Electrodes 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 "gnal f".

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



Katherine Kelly Vidal
Director of the United States
Patent and Trademark Office



U.S. Trademark

Registered / Eingetragen 04/12/2023
No 016880238



The Executive Director / Der
Exekutivdirektor
Jobo Negro



EU IPO
EUROPEAN UNION INTELLECTUAL PROPERTY
OFFICE

CERTIFICATE OF REGISTRATION

This Certificate of Registration is hereby issued for the European Union trade mark identified below. The corresponding information is entered in the Register of European Union trade marks.

AMT DER EUROPÄISCHEN UNION FÜR GEISTIGES
EIGENTUM
EINTRAGUNGSSURKUNDE

Diese Eintragungsurkunde wird für die unten angegebene Marke ausgestellt. Die entsprechenden Angaben sind in das Register der Unionseinheiten eingetragen worden.



www.euiipo.europa.eu

EU trademark


Australian Government
IP Australia

**CERTIFICATE OF REGISTRATION
TRADE MARK**

Trade mark number: 2341304

The Registrar of Trade Marks has registered the trade mark represented on this certificate on 23 October 2023 and certifies that the following particulars have been entered in the Register of Trade Marks.

Name and address of owner(s):
Signal Fire Technology Co., Ltd. of No. 1111, Changsheng Bridge, Hongguang Town, Small and Micro Enterprise Innovation Park, Pidu Dist., Chengdu, Sichuan, 611730 China

The trade mark is registered in the following class(es):
7

Date of filing: 13 March 2023
Registered from: 13 March 2023
Registration expires on*: 13 March 2033

Representation:



Goods and/or services, and other information relating to the registration of this trade mark are listed on the following pages.



Dated this 23rd day of October 2023
Registrar of Trade Marks

TRADE MARKS ACT 1995
The Australian Trade Marks Register is the official record and should be referred to for the full details pertaining to this IP Right

Australian trademark

РОССИЙСКАЯ ФЕДЕРАЦИЯ



СВИДЕТЕЛЬСТВО
на товарный знак (знак обслуживания)
№ 991737



Правообладатель: **Сигнал Файер Текнолоджи Ко. Лтд., №1111, Чангшэн Бридж, Хонгуанг Таун, Малый и Микро Инновационный Парк, Пиду Дистрикт, Чэнду, Сычуань, Китай (СН)**

Заявка № 2023720455
Приоритет товарного знака 16 марта 2023 г.
Зарегистрировано в Государственном реестре товарных знаков и знаков обслуживания Российской Федерации 11 января 2024 г.
Срок действия регистрации истекает 16 марта 2033 г.

Руководитель Федеральной службы по интеллектуальной собственности
Ю. С. Зубов

Russian trademark

