



AI-9

OPTICAL FIBER FUSION SPLICER

Product Manual

Suitable for medium to long-distance trunk fiber optic cable fusion projects

6 motors

Fiber core alignment



✓ **5s splicing/15s heating**

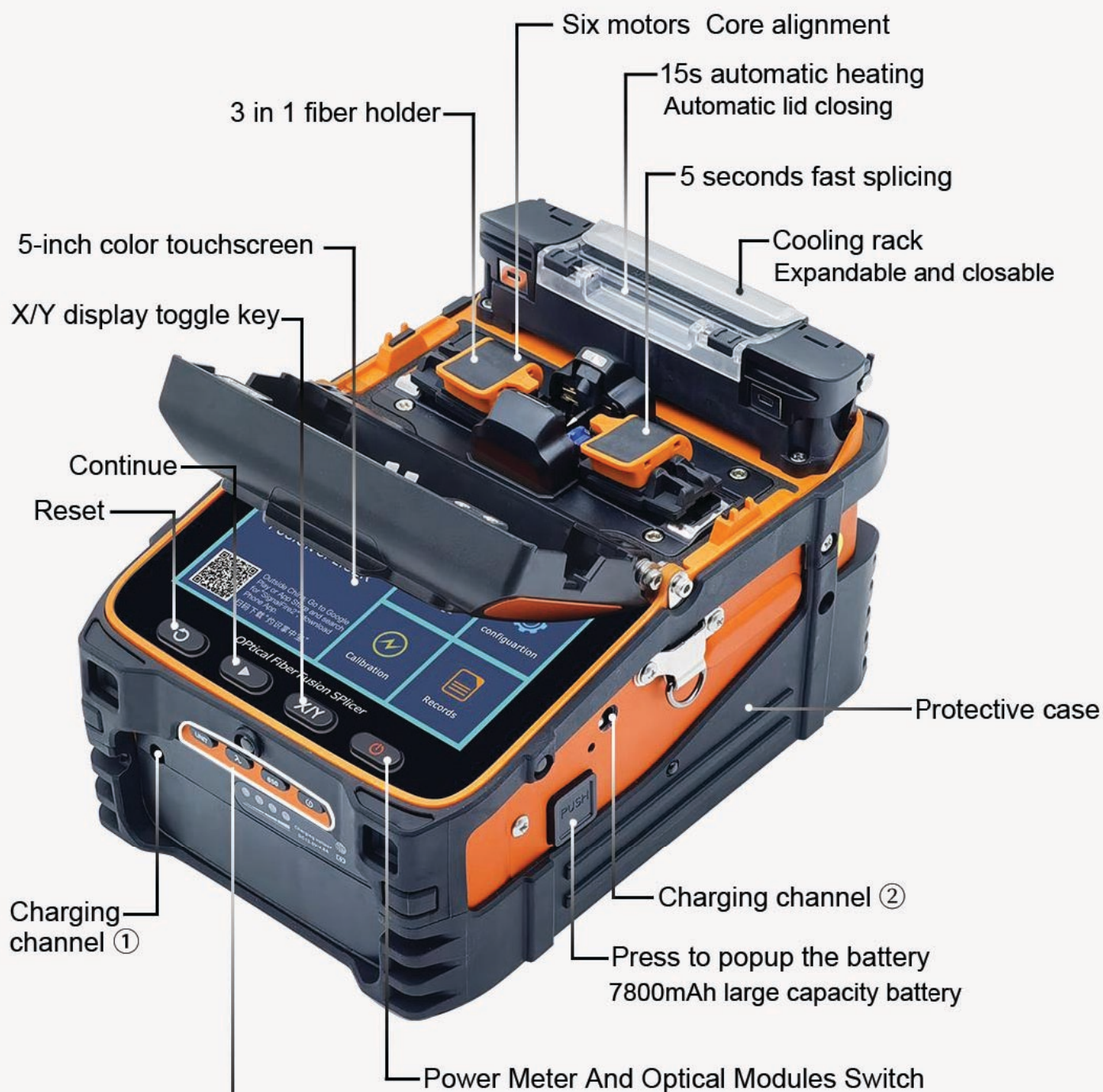
✓ **Built-in OPM&VFL**

0.1 μm

Fiber alignment
accuracy

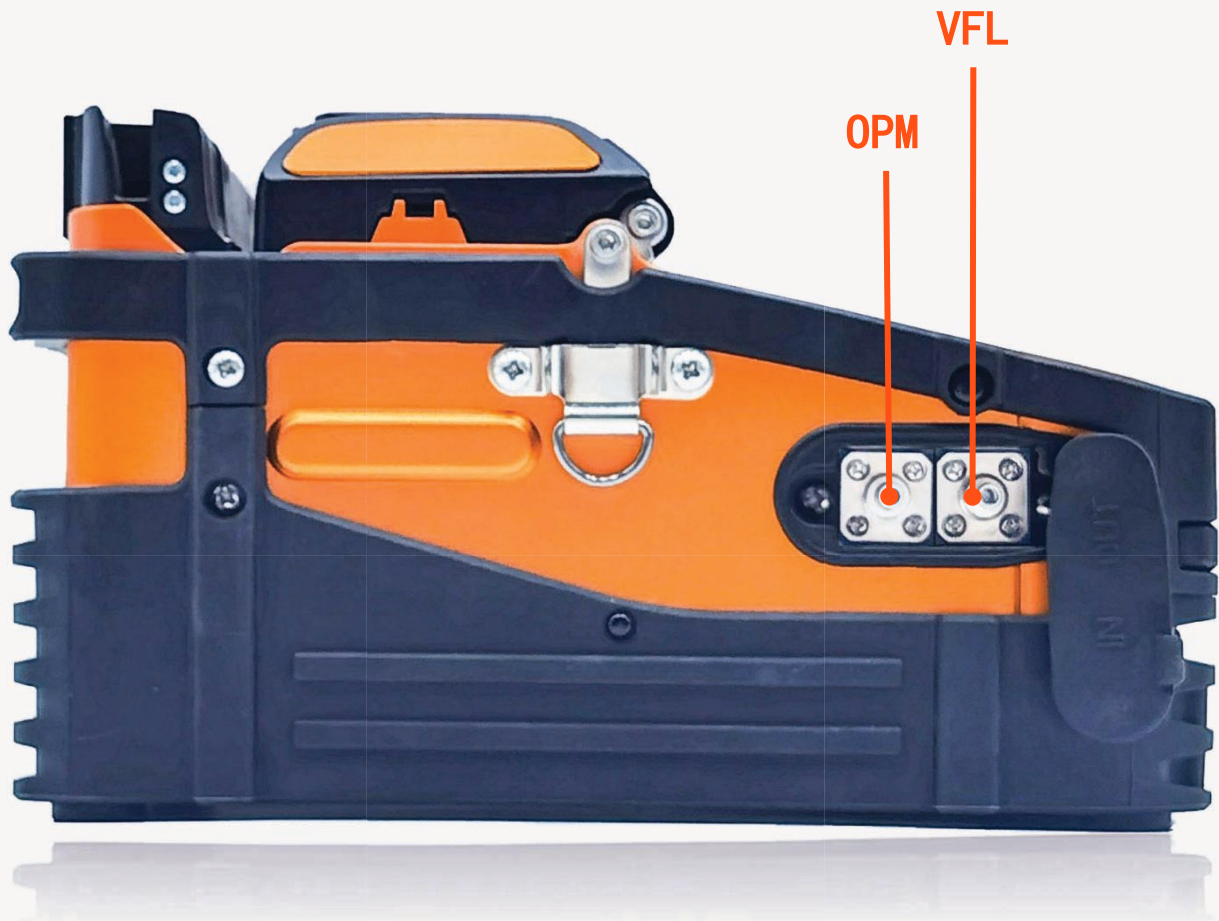


AI-9 is a fully automatic, mainline fiber optical fusion splicer with six motors and fiber core alignment, capable of welding long-distance fiber optic lines. Also within VFL and OPM function. Adopting industrial grade CPU, with fast running speed, 5S rapid fusion welding, 15S rapid heating, 5-inch color touchscreen, 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.



Key for OPM & VFL

Within VFL and OPM function



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

OPM

Switch between ten states

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

VFL

Switch between three states

power: 15mW, 2Hz flashing and steady on mode

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



11 languages to switch freely

 language		
☐ 中文	☒ English	☐ Português
☐ Français	☐ Русский	☐ Español
☐ Polski	☐ ภาษาไทย	☐ عربي
☐ Italiano	☐ українська	



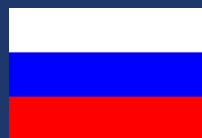
Chinese



English



French



Russian



Italian



Ukrainian



Portuguese



Polish



Spanish



Thai



Arabic



Configuration

Fiber type

☒ SM ☐ MM ☒ AUTO ☐ G654E

☐ BIF ☐ 80um ☐ NZ ☐ DS

Auto power off ☒

Heating time ☒

Heater Pre-heating ☒

Pause splicing process ☒

Auto-focus ☒

Activate battery

Self test

Angle check ☒

Endface check ☒

☐ Basic ☐ Standard ☒ Precision

Tensile test ☒

Factory restoration

Cleaver adjustment

Replace blade assembly

Screen brightness ☒

Help

1/5

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



1/5



7800mAh lithium battery

Dual charging channel

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

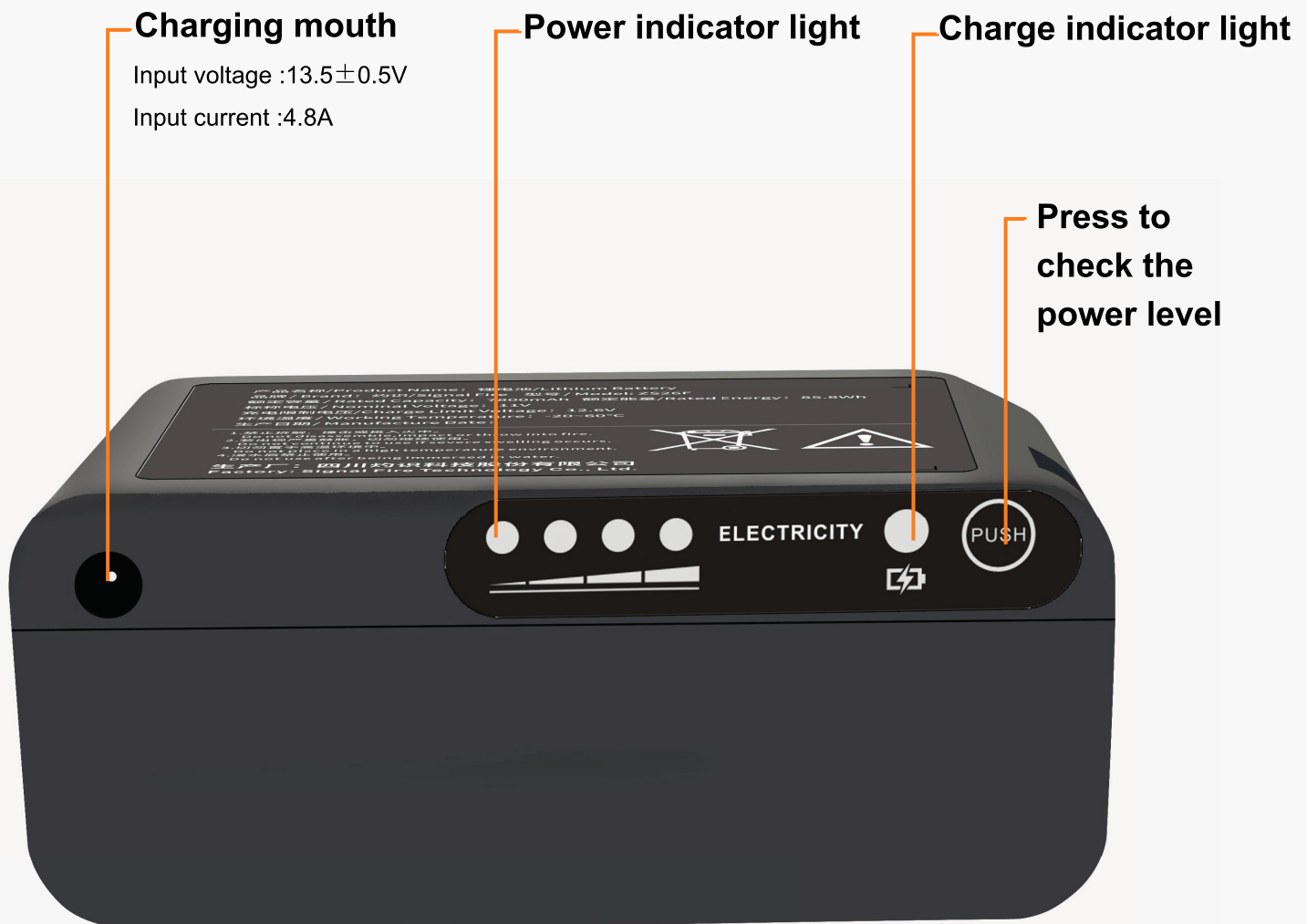


Charging channel ①

The battery can be removed and charged separately

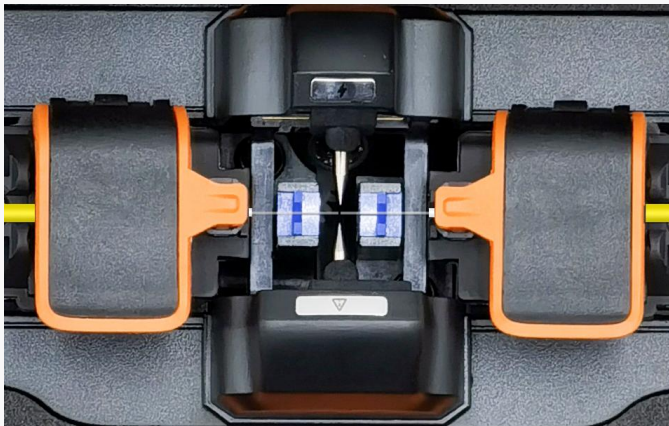
Charging time ≤ 3.5 hours

In full state, 260 cores can be continuously fused and heated

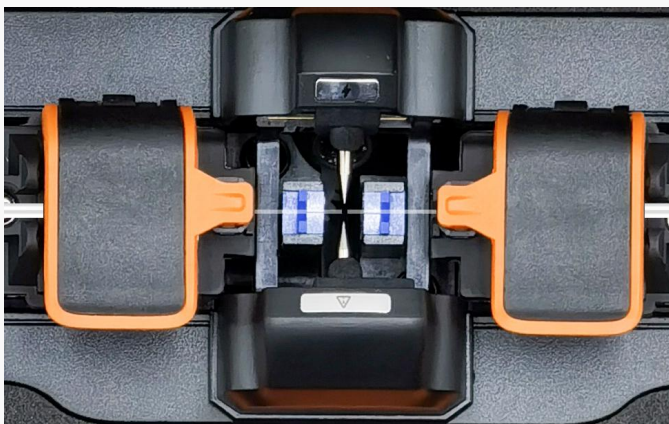


3-in-1 universal fixture

SM, MM, bare fiber, pigtail, Drop cable , multi fiber cable



Jumper
fiber
(pigtail)



Drop cable



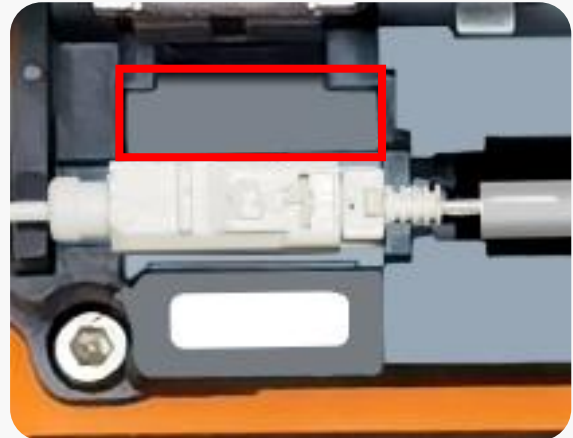
Bare fiber

- **Activate preheating function in winter**



The fiber fusion is successful. At the same time as opening the windproof cover, the heating tank automatically starts preheating for 6 seconds.

- **Heating part compatible with SC fiber**



SC Fiber: Push up
Ordinary fiber: Push down

- **Heating part automatic lid closing**



- **Cooling rack Expandable and closable**



- **Dust prevention/fall prevention/shock prevention**



- **Metal machine body movement quality guaranteed**



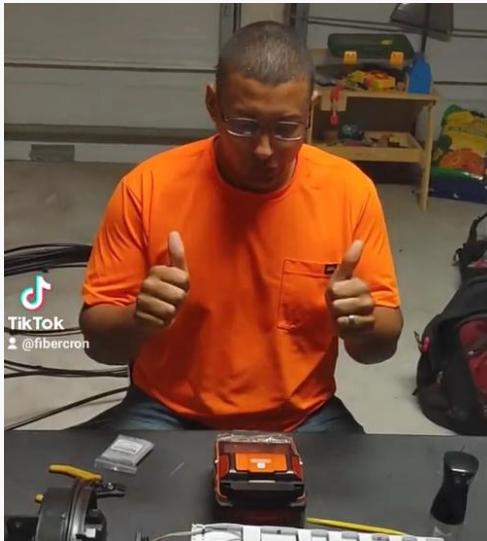
Outstanding quality without fear of challenges

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



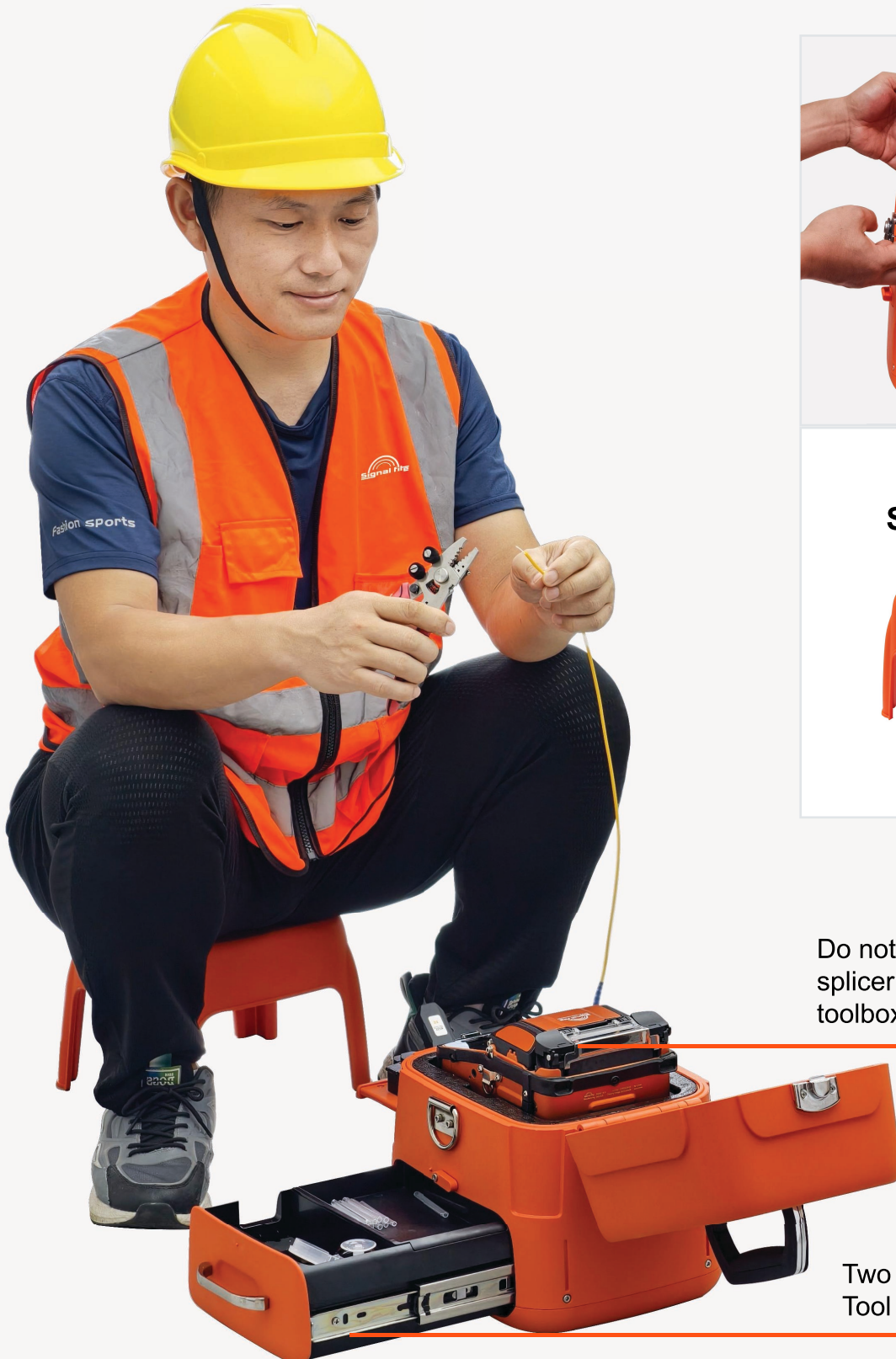
Exported to over 100 countries and regions worldwide

Get unanimous praise from customers!



Toolbox with stool

comes with a stool to facilitate the construction workers



100KG
Stool can bear



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

Two layers:
Tool layer&Accessory layer

Size and weight



Machine weight

2.10kg (with battery)

1.68kg (without battery)



Toolbox weight

6.95kg

(including machine and accessories)



Total weight

8.20kg

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), 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
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 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

Standard Configuration



- ① Fusion Splicer ② Toolcase ③ Spare electrode ④ S12 Fiber Cleaver
- ⑤ Signal fire stripper
(Including a bag of cleaning cotton) ⑥ Alcohol Bottle ⑦ Brush ⑧ Toolbox strap
- ⑨ Belt ⑩ Power Adapter ⑪ key ⑫ Inner hexagon
- ⑬ User's manual / Quality Certificate / Fiber for ARC calibration / Warranty Card

Signal fire stripper

kevlar scissors

(prohibit cutting steel wires)

5G FTTH Drop cable

Caliber: 2mm x 1.6mm

Both regular FTTH Drop cable

Caliber: 3mmx2mm

Three-port Miller stripper

Cleaning cotton

Rotary ruler

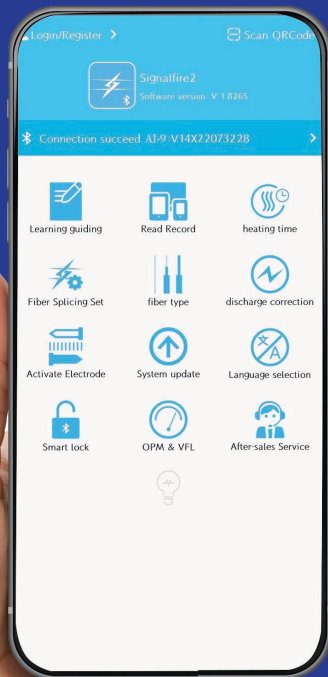
FTTH Drop cable steel wire pliers

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.



Support bluetooth Bluetooth connection

Intelligent interaction, avoid tedious

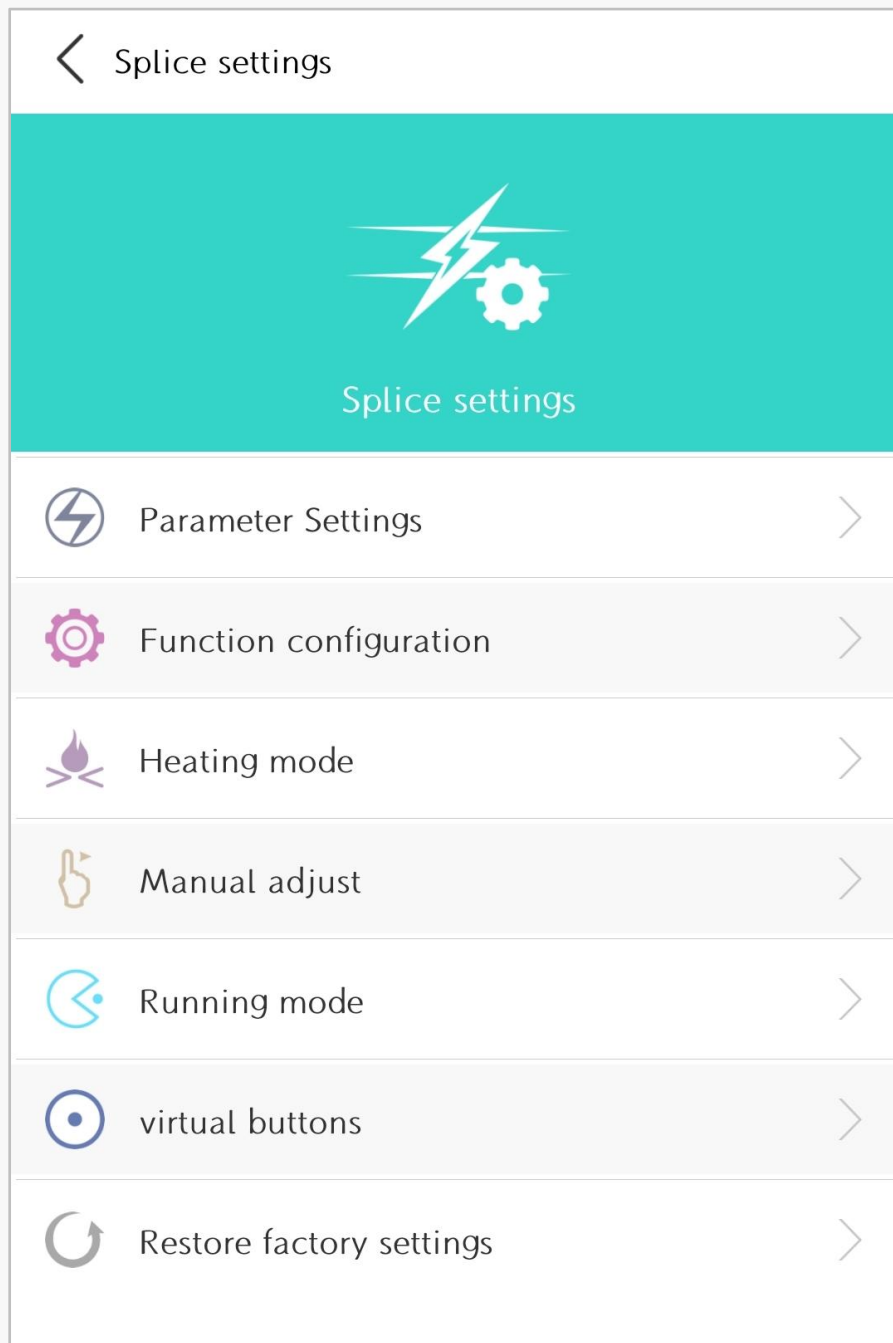


Bluetooth™

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;



Most of the menu settings for the fusion splicer can be operated through touch screen on the device Okay, but the mobile app has more comprehensive applications. Please download it!

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.