ÇÖZÜMARGE
Bilişim Hizmetleri

AI-9

OPTICAL FIBER FUSION SPLICER

PRODUCT MANUAL
SIGNAL FIRE TECHNOLOGY CO., LTD.

AI-9

Ai-9 is a six-motor, fiber core alignment automatic fiber welding machine, with optical power, red light detection function. Industrial quad-core CPU, fast running speed, 5 seconds fast welding, 15 seconds fast heating, 5 inches high resolution LCD screen, 300 times magnification; The working efficiency is 50% higher than that of ordinary welding machine. Large-capacity lithium battery can be heated by fusion of about 260 cores, high altitude, desert, extremely cold and other harsh environment performance is still outstanding.

OPTICAL FIBER FUSION SPLICER

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6 motors   Fiber core alignment

OPTICAL FIBER FUSION SPLICER

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PRODUCT INTRODUCE

5s
splicing

15s
heating

300X
focus magnification

Industrial CPU, fast response,
It is one of the fastest optical fiber welding machines on the market
Use 5-inch 800X480 high-resolution screen, simple and intuitive operation graphics
Up to 300x focusing magnification makes it easy to observe the core with the naked eye

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3 in 1 fiber holder

Six motors Core alignment

15 seconds fast heating

5 inch display Simultaneously
align fibers Loss display

5 seconds fast
splicing

The charging interface

Press to popup the
battery

7800mAh large
capacity battery

Protective case

OPTICAL FIBER FUSION SPLICER

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Within VFL and OPM function

VFL

OPM

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

OPM

Switch between six states

Wavelength: 850nm; 1300nm, 1310nm, 1490nm, 1550nm, 1625nm
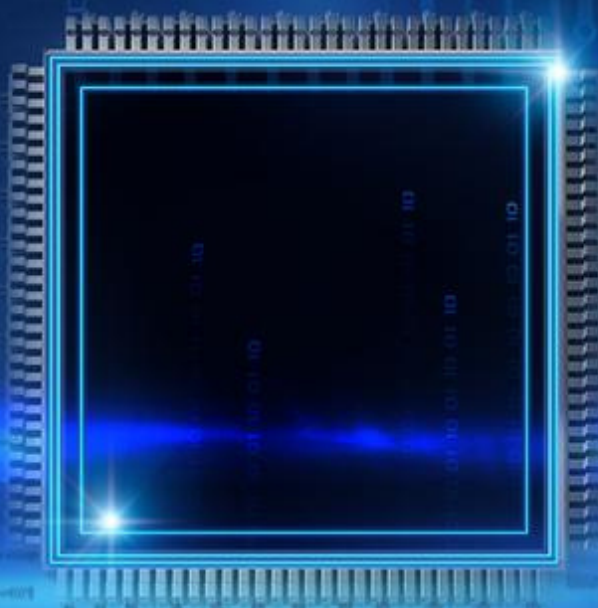
VFL

Switch between three states

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

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Industrial quad-core chip CPU

1 second startup will enter the working state
without waiting

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MASTERPIECE
HIGH-END LUXURY

LARGE CAPACITY
7800mAh lithium battery

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

Press to remove battery

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3-IN-1
UNIVERSAL FIXTURE

Jumper (pigtail)

leather

bare fiber

10 LANGUAGES AVAILABLE

Multilingual Settings, covering the global market

Chinese	English	French	Russian	Italian

Portuguese	Polish	Spanish	Thai	Arabic

CHARGE PHONE

Avoid outdoor construction mobile phone power trouble

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EXTERNAL LED LIGHT CAN BE CONNECTED

Easy for working at night

OPTICAL FIBER FUSION SPLICER

THE TOOLBOX

comes with a stool to facilitate the construction workers

Stool can bear：100KG

Two layers

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

OPTICAL FIBER FUSION SPLICER

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RANDOM CONFIGURATION

TOOLCASE

electrode

belt

Alcohol pump

fusion splicer

cleaver

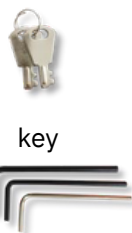4 IN 1 Opical Fiber Stripper

Toolbox strap

brush

Charging adapter box

power supply

key

inner hexagon

LED light

Warranty card certificate
Instruction list list
Distribution correction

OPTICAL FIBER FUSION SPLICER

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122mm

135mm 198mm

Welding machine weight

2.08kg (including batteries)

1.60kg (excluding batteries)

Tool box weight

7.10kg

(including machine and accessories)

293mm

270mm 237mm

370mm

Carton weight

8.40kg

330mm 310mm

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BASIC PARAMETER
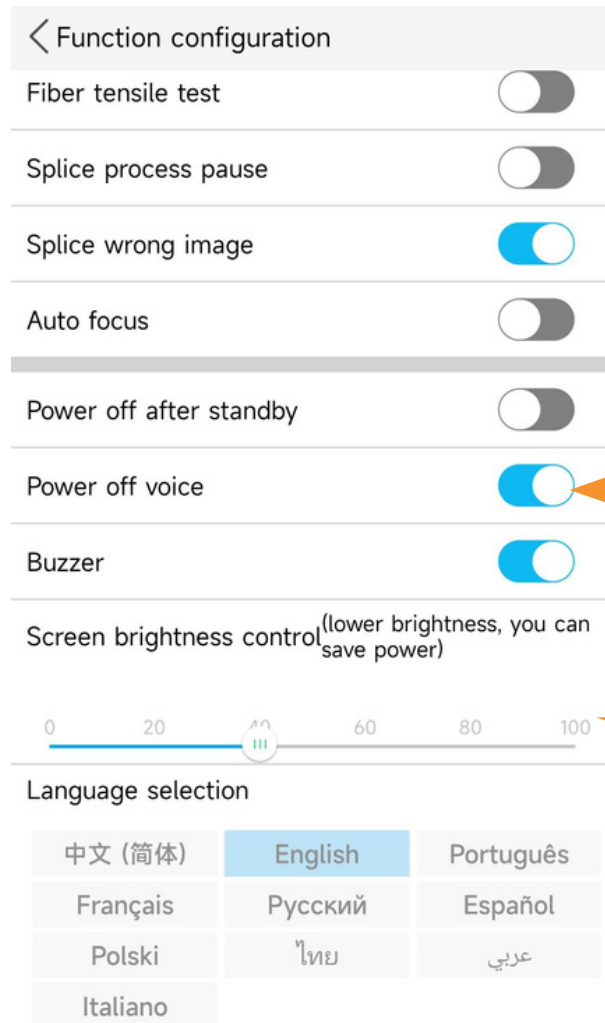
Parameter	Specification
Fiber alignment	Core/cladding
Motor number	6 motors
Optical fiber cutting	Automatic cutting, welding machine has its own optical fiber cutting function
Fiber into the slot	Automatic slot, cut optical fiber automatically into the V slot
Windproof cover open/close	The windproof cover closes automatically before welding and opens automatically after welding
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, skin fiber, jumper, invisible fiber fusion;
The cladding diameter	80-150μm
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, leather cable
VFL	The machine comes with: power: 15mW, 2Hz flashing and steady on mode
OPM	Wavelength: 850nm; 1300nm, 1310nm, 1490nm, 1550nm, 1625nm/Measurement range: -70~+6dBm 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	300 (X or Y), 150 (X or Y)
Fiber diameter	Coating diameter: 80-150μm/Coating diameter: 100-1000μm
Cutting length	Coating layer 250μm below: 8-16mm/coating layer 250-1000μm: 16mm
	60mm、50mm、40mm、25mm
Heat shrink tube	standard 2N
Tensile	5 inch TFT color display screen
testing	USB port can be connected with EXTERNAL LED light, convenient for night construction
Display / External lighting	The USB port can charge mobile devices such as mobile phones
Charge mobile device	1s, boot can enter the working mode
Boot time	Unlimited, machine storage 1000 groups, the excess part can be stored in the server, can export data.
Data is stored	Based on bluetooth 4.2 protocol standard, the working band is 2.4GHz, the maximum transmission range is 60m
Wireless communication	Mobile phone APP Internet update, enable Bluetooth synchronization upgrade machine software
Software upgrade	USB2.0 (Type A) can be used to connect external LED lights and charge mobile devices
interface	Better than 60 db
Return loss	Waterproof, dustproof and fall proof
Product protection	Input AC100-240V 50/60Hz, output DC13.5V/10A, the current power mode can be identified, real-time monitoring of the current battery level
Power supply	Temperature: -15 ~ +50℃, humidity: <95%RH (no condensation), working altitude: 0 ~ 5000m, maximum wind speed: ≤15m/s
The work environment	

OPTICAL FIBER FUSION SPLICER

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;

OPTICAL FIBER FUSION SPLICER

Function configuration

Fiber tensile test	⬤ off
Splice process pause	⬤ off
Splice wrong image	⬤ on
Auto focus	⬤ off
Power off after standby	⬤ off
Power off voice	⬤ on
Buzzer	⬤ on

Screen brightness control (lower brightness, you can save power)

0   20   40   60   80   100

Language selection

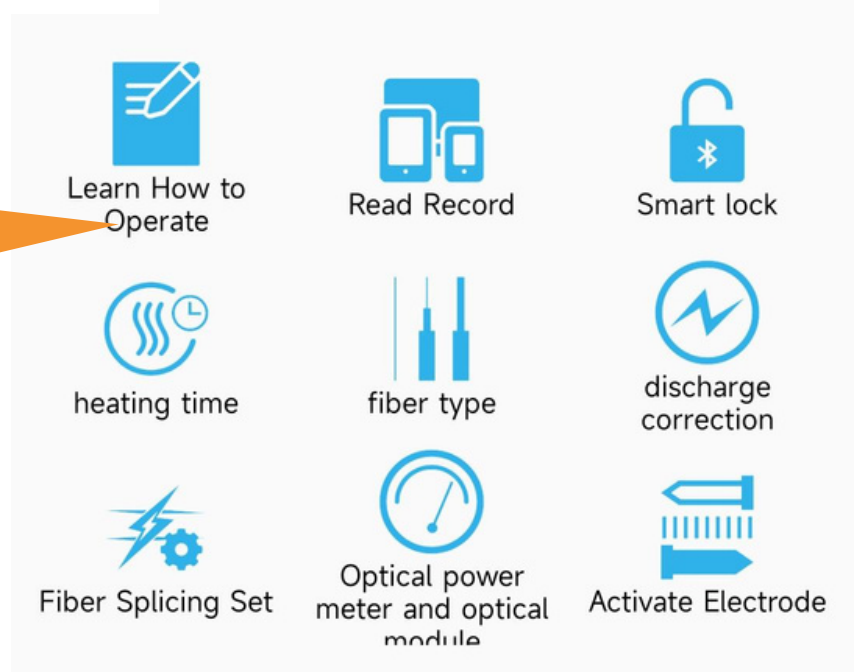| 中文 (简体)	English	Português
Français	Русский	Español
Polski	ไทย	عربي
Italiano		

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 informed.

Adapt to bright light, dark and other different outdoor environment.

Major global languages available

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

Learn How to Operate

Read Record

Smart lock

heating time

fiber type

discharge correction

Fiber Splicing Set

Optical power meter and optical module

Activate Electrode

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< heating time

Pre-heat model

Choose shrinkable tube   Customize >

Set heating time   10   S

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.

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

< Smart lock

🔓

Splicer smart lock
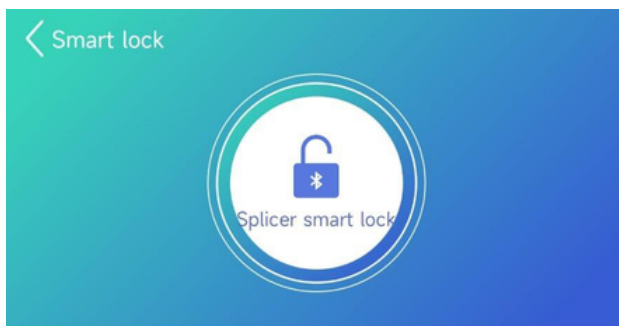
The machine has bound the current account.

📱 ✳ 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 contr the device.

About smart locks?

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Splicing record   ↻ Export EXCEL

Machine number: Total splicing: 6957

AI-9:V03B20090244   Export latest number

2020-02-10   —   2022-02-10

Mode/ Number	Splicing loss	Time	Pictures
1	0.99	2021-10-07 10:46:16	
2	0.99	2021-10-06 15:21:50	
3	0.01	2021-10-05 13:20:47	
4	0.00	2021-10-05 13:19:04	
5	0.00	2021-10-05 13:04:43	
6	0.01	2021-10-05 13:02:22	
7	0.01	2021-10-05 12:50:01	
8	0.01	2021-10-05 12:49:14	
9	0.02	2021-10-05 12:47:26	

It can be downloaded and exported

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

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INTELLIGENT INTERACTION
AVOID TEDIOUS

‹ Software update

Signalfire2

CHECK APP VERSION

Check firmware version

About software

Firmware is latest update

Open the phone software will auto connect
splice machine automatically
1. Spliced data is uploaded to the server
automatically and view in the software。
2. You can set the parameter settings, ARC
calibration in the software to update the machine
synchronously
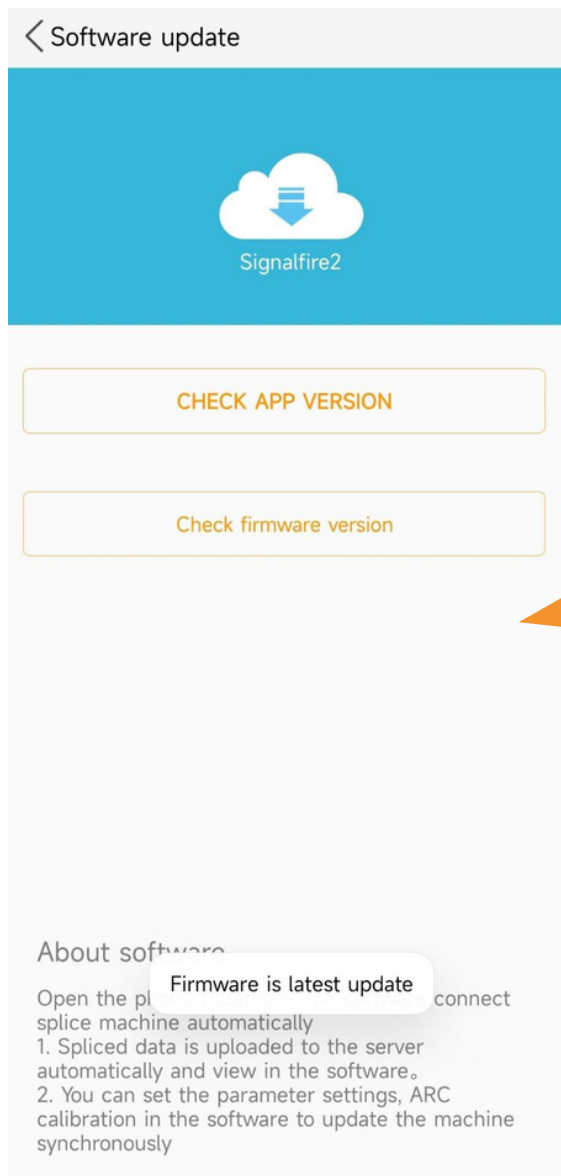
Mobile phone firmware upgrade, and then transmitted to the welding machine through Bluetooth, no data line, U disk
Make your welding machine software system never obsolete!