

Pro'sKit[®]



TE-6101F/A series

Fiber Optical Fusion Splicer



User's Manual

1st Edition, 2026

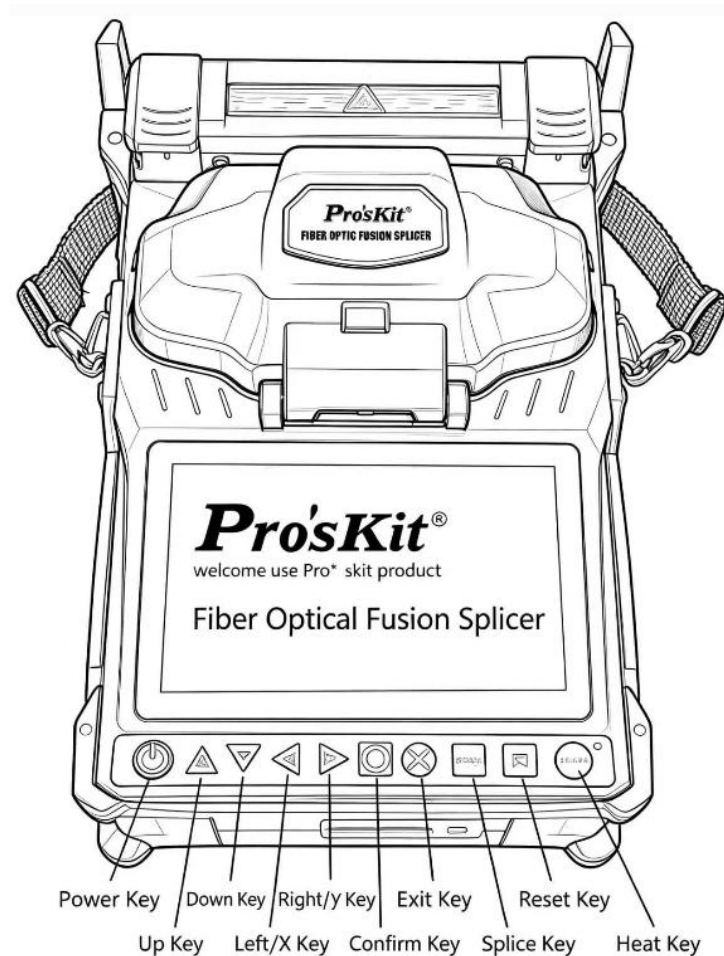
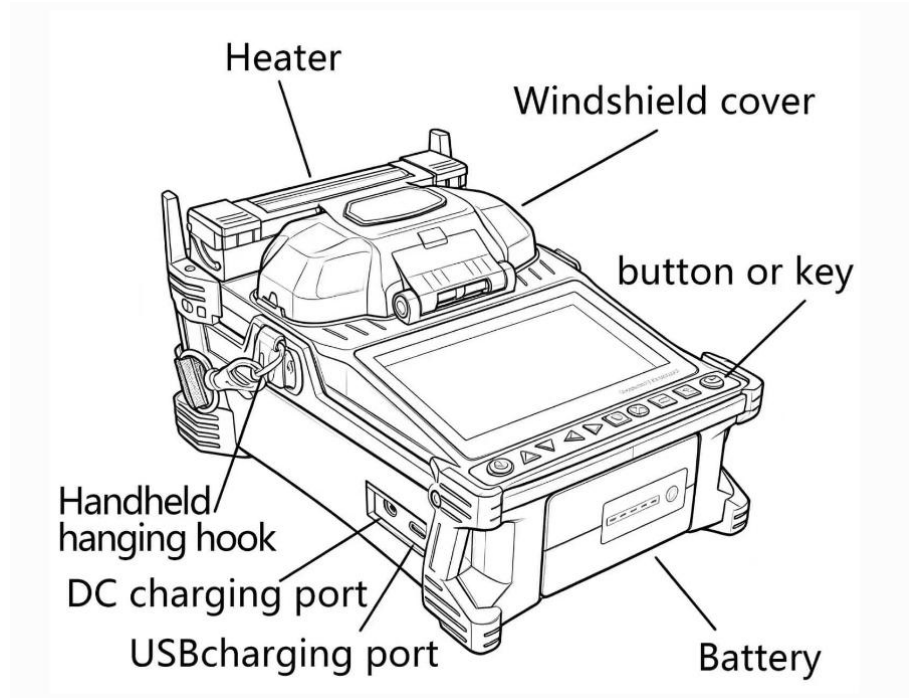
©2026 Copyright by Prokit's Industries Co., Ltd.

Chapter 1 Product Introduction

1.Specifications :

Model no.	TE-6101F/TE-6101A	TE-6101F-W/TE-6101A-W
Operating Language	English, French, Portuguese, Spanish, Russian, Thai, Indonesia	
Applicable fiber	G.651OM1/G.651OM3/G.652D/G.654E/G.655/G.657A1/G.657A2; Pigtail, drop cable series optical fibers, bare fiber, etc.	
Average splice loss	0.02dB(SM), 0.01dB(MM), 0.04dB(NZDS), 0.04dB(ED)	
Splice time	8s (SM)	
Cutting optical fiber length	10~16mm	
Suitable for optical fiber core	Cladding diameter:80-150μm; Coating diameter:100-1000μm	
Return loss	≥60dB	
Fiber alignment	Cladding Alignment	
Fiber identification	(support)	
Intelligent Fusion Splicing	(support)	
Fiber image magnification	280 times for single X or Y view	
Tension test	2.0N(200gf)(standard)	
Splice program	50 groups	
Electrode life	6000 times	
Protection sleeve length	20mm~60mm	
Storage of fusion splice result	10000 groups of splice results	
Storage of fusion splice image	100 groups of splice images	
Monitor	4.3 "high resolution touch colorful LCD	
Communication port	USB Type-C	
Working light	1 LED light	
Power indication	5 LED indication	
Operation condition	Temperature: -20~+50°C	
	Humidity : 0~95%RH	
	altitude : 0~5000m	
Standard plug	F type  A type 	F type  A type 
Power supply	Lithium battery: 10.95V/5.2Ah	
	Adapter: Input AC 100~240 50/60Hz; Output: DC15V/5A	
Dimension(D x W x H)	200x142x104mm	
Weight(approx.)	1.42Kg (include battery), 1.1Kg(not include battery)	
Package	1. Machine x 1pc 2. Fiber Cleaver x 1pc 3. Fiber Stripper x 1pc 4. AC Adaptor x1pc 5. Battery x1pc 6. Spare Electrodesx1set 7. Protection sleeve (60mm) x 25pcs 8. Cooling Tray x 1pc 9.USB cable x1pc 10.Operation Manual x 1pc 11.Carrying Belt x 1pc 12.Carrying Case with Carrying Strap x 1pc	1. Machine x 1pc 2. AC-DC Adaptor x1pc 3. Battery x1pc 4. Spare Electrodes x 1set 5. Protection sleeve(60mm) x 25pcs 6. Cooling Tray x 1pc 7. USB cable x1pc 8. Operation Manual x 1pc 9. Carrying Belt x 1pc 10. Carrying Case with Carrying Strap x 1pc 11. Disk (with communication program, driver and Instructions)

2. Structure Description



3. Button and Interface Description

	ON/OFF		EXIT
	UP		ARC
	DOWN		RETURN
	Left/X		HEATING
	Right/Y		POWER JACK
	CONFIRM		Type-C PORT

Chapter 2 Quick Start

Quick Start

1. Battery Charging

Function Introduction: Safely charges the fusion splicer's lithium battery. Charge once per month when not in use. Operation Steps: Battery Charging

2. Arc Calibration

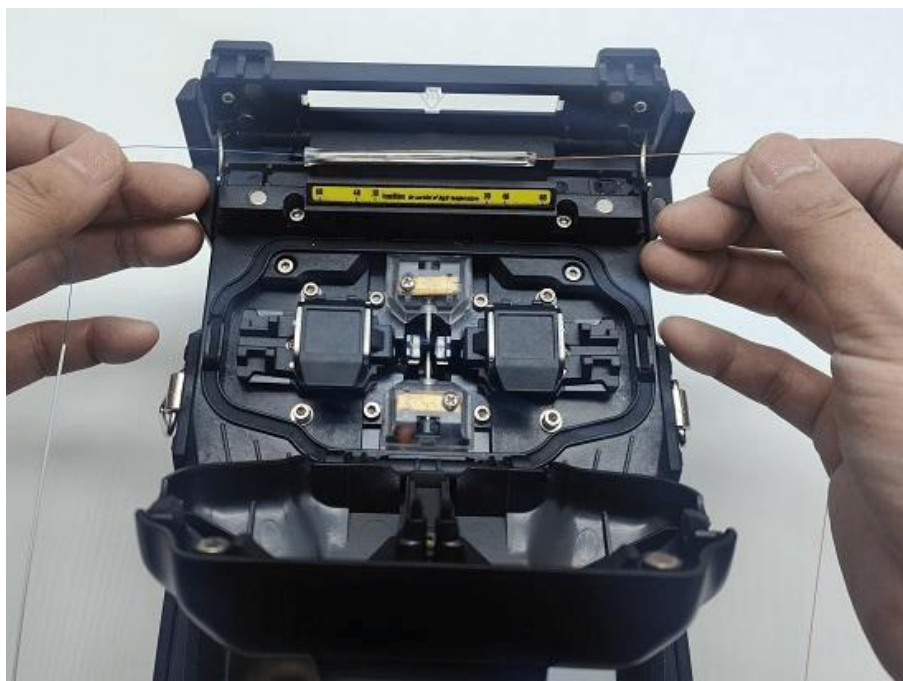
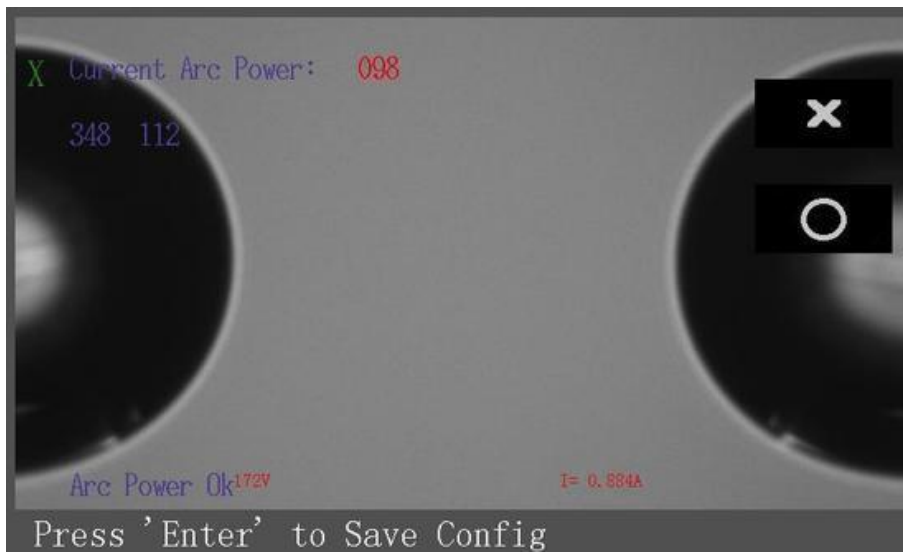
Function Introduction: Perform Arc Calibration when environmental conditions change to ensure stable arc performance.

Operation Steps: Arc Calibration

3. Start Splicing

Function Introduction: Completes the fiber splicing and sleeve shrinking process by following four steps: placing the heat-shrink sleeve, cleaving the fiber, splicing the fiber, and shrinking the sleeve.

Operation Steps: Start Splicing



2.1 Battery Charging

Introduction: The Fusion Splicer battery is a rechargeable lithium-ion battery. Prolonged storage at low charge may damage the battery. Charge it promptly after the device is activated. When not in use, the battery must be charged once per month.

Battery Charging Temperature Range: 0°C–40°C

Steps

1. Visual Inspection

1.1. Check that the battery appearance is intact, with no damage, swelling, or leakage.

2. Check Current Charge Level

2.1. Press the battery indicator button to view the current charge level.

3. Insert the Battery

3.1. Insert the battery into the battery compartment of the fusion splicer.

(In the direction indicated by the arrow in the figure).

4. Connect the Adapter

4.1. Plug the adapter into the Fusion Splicer power port. Check the battery indicator panel to confirm that the indicator lights begin flashing, indicating that charging has started.

(Note: If the battery has been over-discharged due to prolonged storage, the indicator lights will not flash. Normal operation will resume after about one hour of charging.)

5. Confirm Charging Completion

5.1. When charging is complete, all indicator lights will illuminate steadily and stop flashing, then automatically turn off after 5 seconds. Press the power display button; all indicator lights should illuminate, confirming that charging is complete.

6. Complete

Note

1. Removing the Battery

1.1. Lightly press the latch on the back of the machine and pull out the battery.



2.2 Arc Calibration

Introduction: Perform Arc Calibration once per month to maintain the splicer in optimal working condition.

Steps

1. Setup Steps

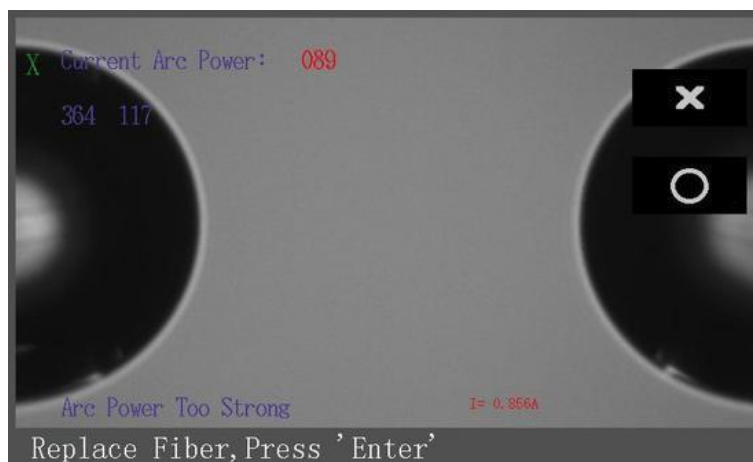
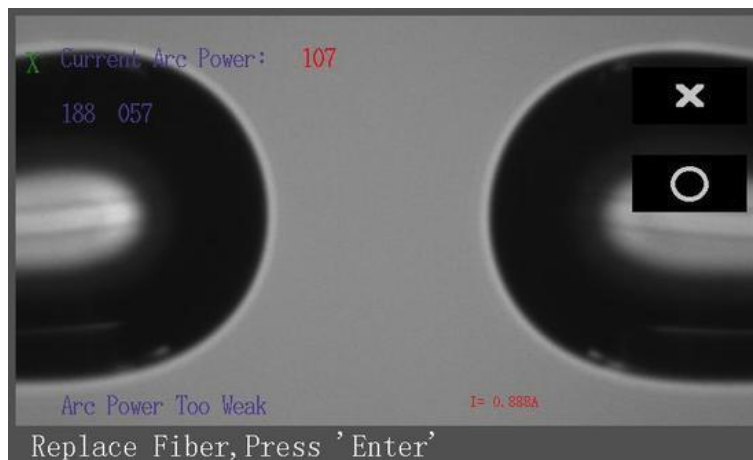
- 1.1. Enter the "Common Function" menu.
- 1.2. Select the "Arc Calibration" item and press "Enter" to enter the menu page.
- 1.3. Press "Enter" to start the Arc Calibration program. The screen will display "Place Fiber, Press 'Enter'".

2. Perform Arc Calibration

- 2.1. Place two cleaved fibers into the splicer. Close the windproof cover and press "Enter". The splicer will automatically perform fiber feeding, alignment, and arcing. If the message "Left/Right Cleave Bad" appears, open the windproof cover, re-cleave the fibers, and repeat step 2.1.
- 2.2. After arcing, the left side of the screen will display the test value and result. If it prompts "Arc Power Too Strong" or "Arc Power Too Weak", open the windproof cover, re-cleave the fibers, and repeat step 2.1.
- 2.3. If it prompts "Arc Power Ok", press "Enter" to save the parameters.

3. Complete





2.3 Start Splicing

Introduction: The four basic steps of fusion splicing: threading the heat-shrink sleeve, cleaving the fiber, splicing the fiber, and shrinking the sleeve.

Steps

1. Thread the Heat-Shrink Sleeve

1.1. Thread the heat-shrink sleeve onto the left-hand fiber for use in the heating step.

2. Fiber Cleaving

2.1. Open the cleaver and return the blade holder forward to its home position.

2.2. Use fiber strippers to grip the fiber end at the 30 mm position and strip off the coating outward.

2.3. Clean the stripped area with alcohol to remove any residual coating.

2.4. Place the fiber into the cleaver, aligning the starting point of the stripped coating with the 15 mm mark.

2.5. Close the cleaver and push the blade holder forward to the end.

2.6. Open the cleaver, then place the fiber into the left clamp of the splicer, with the fiber end face 1 mm to 1.5 mm from the electrodes.

2.7. Repeat steps 2.2–2.5 to cleave the second fiber, then place it into the right clamp of the splicer, with the fiber end face 1 mm to 1.5 mm from the electrodes.

3. Fiber Splicing

3.1. Close the windproof cover; the splicer will automatically perform the splice.

4. Sleeve Shrinking

4.1. Open the heater lid.

4.2. After opening the windproof cover, hold the left-hand fiber and open the left clamp at the same time.

4.3. Move the heat-shrink sleeve to the position of the left clamp.

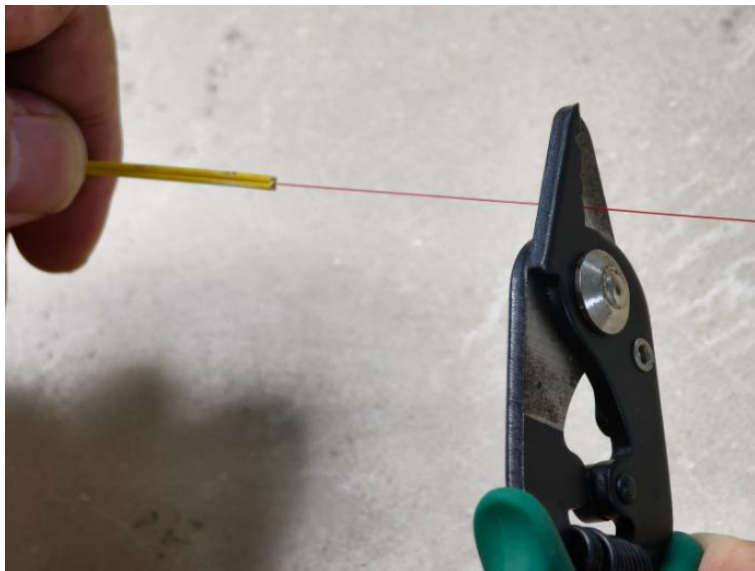
4.4. Hold the right-hand fiber with your right hand, open the right clamp at the same time, and pull the fiber straight.

4.5. Place your right thumb about 20 mm from the splice point, tilt the fiber to the right so that the sleeve slides down to your thumb.

4.6. Straighten the fiber horizontally, place the sleeve into the center of the heater. The heater lid will close automatically under pressure, and heating will start automatically.

4.7. When the heater indicator light turns off (accompanied by a beep), shrinking is complete.

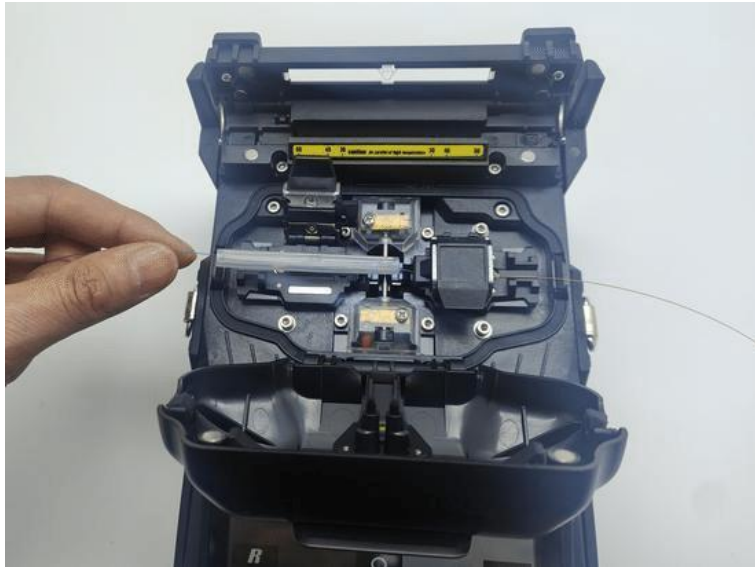
5. Complete

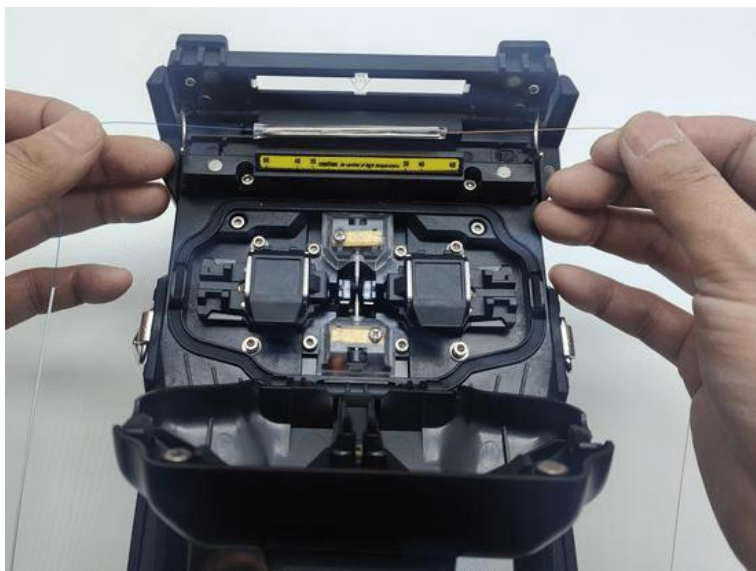
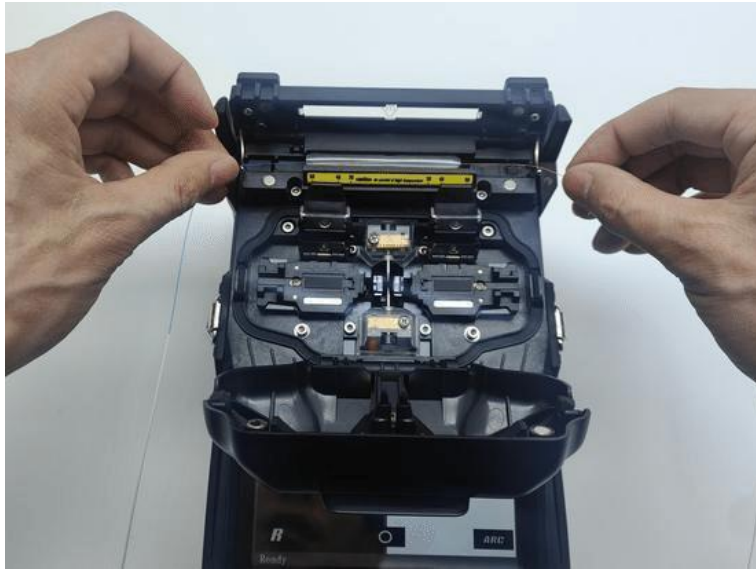












Chapter 3 Warnings and Precautions

1. Warnings

Do not disassemble or modify the splicer, AC adapter, or battery. In particular, do not remove or bridge any internal electronic or mechanical components (such as fuses or safety switches). Any improper repair may damage the splicer and could cause electric shock, fire, personal injury, or death.

1.1. Electrical Safety Warnings

Only use the original battery supplied with the splicer. Using a non-original battery poses safety risks, including but not limited to circuit burnout, battery self-ignition, fire, personal injury, or death.

(Note: If the battery shows signs of leakage or swelling, immediately place it in a fire-resistant and explosion-proof container for disposal.)

Keep the battery away from high temperatures, open flames, and direct sunlight. High temperatures, flames, or sunlight may cause the battery to self-ignite, potentially resulting in fire, personal injury, or death.

Do not use the battery if it has been immersed in water. A water-immersed battery may self-ignite, which could lead to fire, personal injury, or death.

Only use the original adapter supplied with the splicer. Using a non-original adapter poses safety risks, including but not limited to electric shock, circuit burnout, battery self-ignition, fire, personal injury, or death.

The original adapter must be connected to a stable AC power supply with a voltage of 100~240 V and a frequency of 50~60 Hz. Using an unsuitable power source carries safety risks, including but not limited to adapter burnout, electric shock, circuit burnout, battery self-ignition, fire, personal injury, or death.

(Note: Before using an AC generator, verify that its output voltage and frequency meet the above requirements to avoid power-related safety hazards.)

1.2. Operating Environment Safety Warnings

Do not operate the splicer near flammable or explosive materials. The splicing arc can ignite such materials, causing fire or explosion.

Do not operate the splicer in high-dust environments. The splicing arc can ignite combustible dust.

1.3. Operational Safety Warnings

Do not touch the splicer, AC power cord, or AC plug with wet hands. Doing so may cause electric shock.

Do not operate the splicer when moisture is condensing on its surface. This may lead to electric shock or damage to the equipment.

Do not touch the electrodes while the splicer is operating. The high voltage and high temperature generated during arcing can cause severe electric shock and burns.

(Note: Before replacing electrodes, always turn off the splicer power, remove the battery, and unplug the AC power cord.)

Do not short-circuit the positive and negative terminals of the splicer power socket. This can cause circuit burnout and may result in personal injury or death.

Do not short-circuit the positive and negative terminals of the adapter plug. This can cause adapter burnout and may result in personal injury or death.

Do not clean the splicer using compressed or canned gas-based cleaners. The arc produced during splicing can ignite residual flammable substances, leading to personal injury or death.

2. Precautions

Immediately disconnect the power and remove the battery if any of the following abnormalities occur:

Smoke, unusual odor, abnormal sound, or abnormal heating;

Liquid or foreign objects entering the equipment;

The splicer is damaged or has been dropped.

Failure to take prompt action may result in equipment failure, electric shock, fire, personal injury, or death.

Avoid using the splicer in high-temperature environments. High temperatures can shorten service life, damage the equipment, and reduce splicing quality. Extreme temperatures may cause circuit burnout, battery self-ignition, fire, personal injury, or death.

Avoid using the splicer in high-humidity environments. High humidity can shorten service life, damage the equipment, and reduce splicing quality.

Do not use any chemical other than alcohol to clean the equipment. Other chemicals may corrode or damage the device.

Do not use non-original lubricants. These can degrade splicer performance and may damage the equipment.

Avoid strong vibration or impact. The splicer is precisely adjusted and calibrated. Strong vibration or impact may damage the unit. Use the provided carrying case for transport and storage to effectively protect the splicer from severe vibration or shock.

Avoid placing the splicer on unstable or uneven surfaces. This may cause the splicer to fall, resulting in equipment damage and personal injury.

Do not touch the heat-shrink sleeve during heating or immediately after heating is completed. The sleeve surface is extremely hot and can cause burns.

Inspect the shoulder strap and hooks for integrity before using the carrying case shoulder strap. A damaged strap may break or detach, leading to equipment damage or personal injury.

Always use original electrodes and replace them in pairs at regular intervals. Non-original electrodes may reduce splicing quality and damage the equipment circuitry.

The splicer must be serviced only by qualified technicians. Improper repair may cause circuit burnout, battery self-ignition, fire, personal injury, or death. If the splicer malfunctions, please contact an authorized service center.

Chapter 4 Routine Maintenance

1. Equipment Cleaning

Function Introduction: Clean the equipment promptly to keep the fusion splicer in optimal working condition.

Operation Steps: Equipment Cleaning

2. Arc Calibration

Function Introduction: Perform Arc Calibration once a month to keep the fusion splicer in optimal working condition.

Operation Steps: Arc Calibration

3. Electrode Replacement

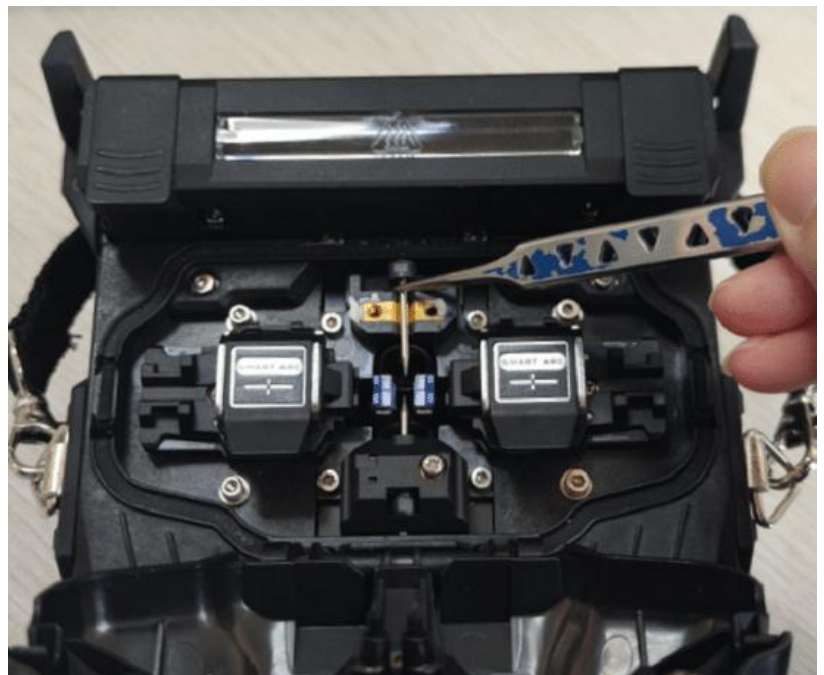
Function Introduction: Replace the electrodes promptly after 6000 discharges to prevent deterioration of splicing quality.

Operation Steps: Electrode Replacement

4. Battery Maintenance

Function Introduction: Perform routine maintenance on the lithium battery. Charge it once a month when not in use to prevent battery damage.

Operation Steps: Battery Maintenance



4.1 Equipment Cleaning

Introduction: Regular cleaning helps maintain the splicer in optimal working condition.

Steps

1. Clean External Dust

1.1. Use a cleaning cloth to remove dust from the outside of the equipment.

2. Clean Inside the Windshield Cover

2.1. Use an alcohol cotton ball to clean the inner side of the windshield cover and the inner panel.

3. Clean the Fiber Clamps

3.1. Use an alcohol cotton ball to clean the fiber clamps.

4. Clean the Microscope

4.1. Use an alcohol cotton swab to clean the microscope lens surface (clean by rotating clockwise).

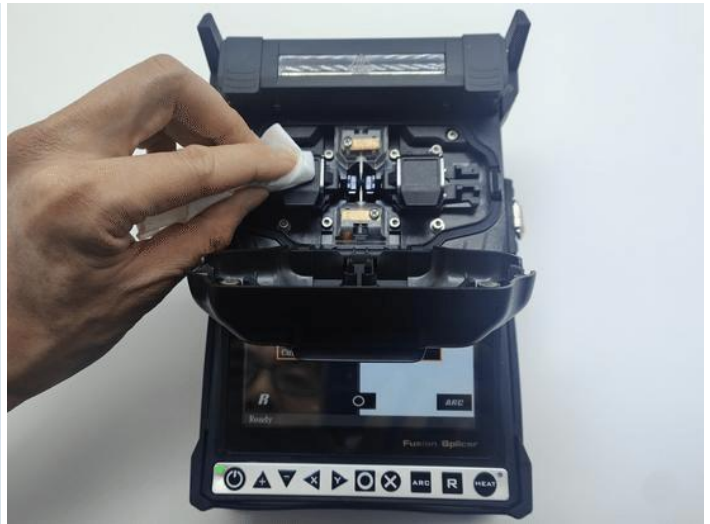
5. Clean the V-Groove

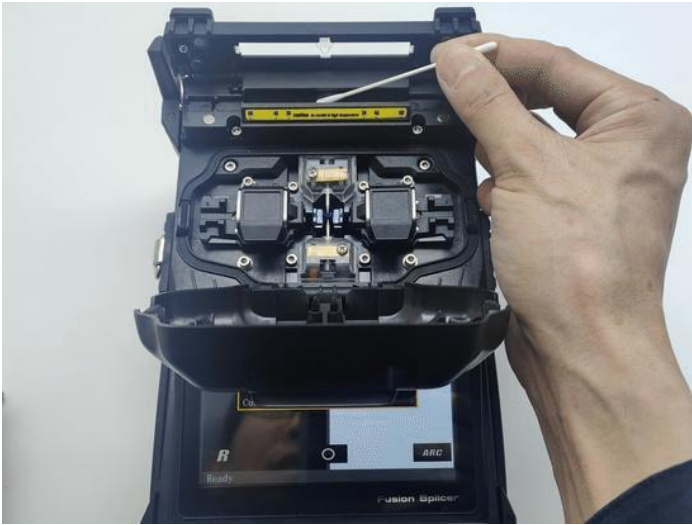
5.1. Use a craft blade to clean the V-groove.

6. Clean the Heater

6.1. Use an alcohol cotton swab to clean the inside of the heater.

7. Complete





4.2 Arc Calibration

Introduction: Perform Arc Calibration once per month to maintain the splicer in optimal working condition.

The operating procedures for the discharge test are the same as those in Section 2.2. Please refer to "2.2 Discharge Test".

4.3 Electrode Replacement

Introduction: Electrodes are consumable parts, should be replaced promptly after 6,000 discharges, in order to keep splicing quality.

Steps

1. Remove the Electrode Cover

- 1.1. Use a cross-head screwdriver (PH1) to remove the screws on the electrode cover.
- 1.2. Pull the electrode cover upward to remove it.

2. Install the New Electrode

3. Install the Electrode Cover

- 3.1. Install the electrode clamp plate (wide side facing up).
- 3.2. Press the electrode cover into place.

4. Repeat Steps 1–3 to replace the electrode on the other side.

5. Reset the Electrode Discharge Count

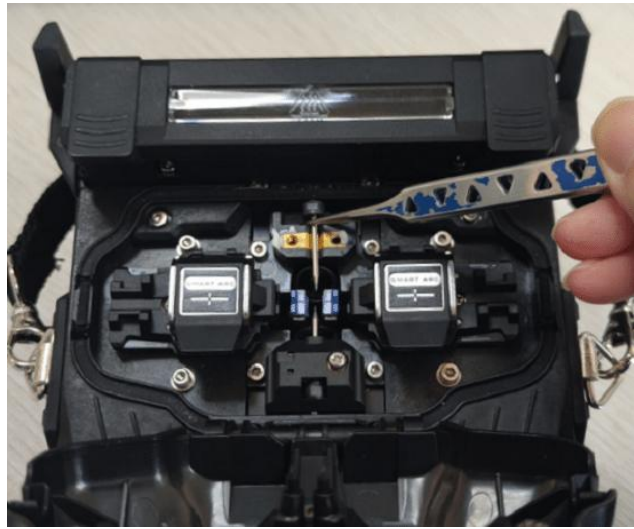
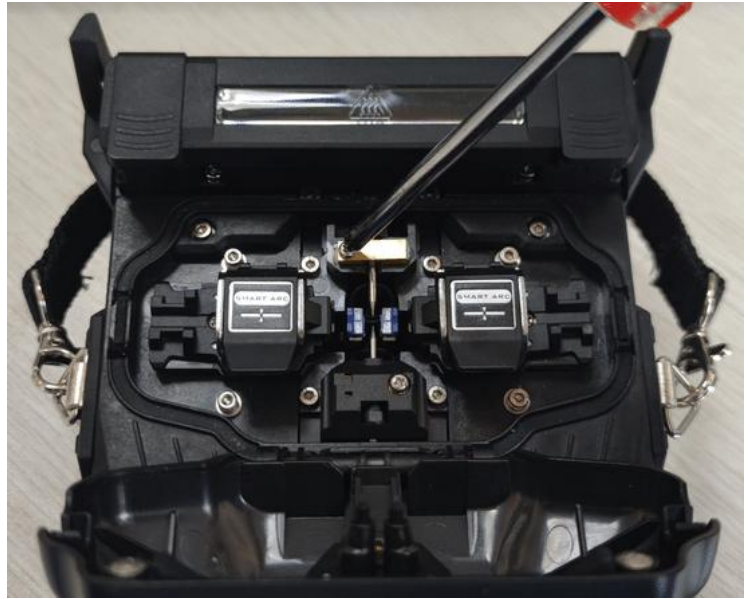
- 5.1. Enter the "Quick Check" menu.
- 5.2. Select the "Quick Optimize" item and press "Enter" to enter the interface, then follow the on-screen instructions to perform Quick Optimize.
- 5.3. Select the "Replace Electrode" item and press "Enter" to reset the Residual Arc Count.

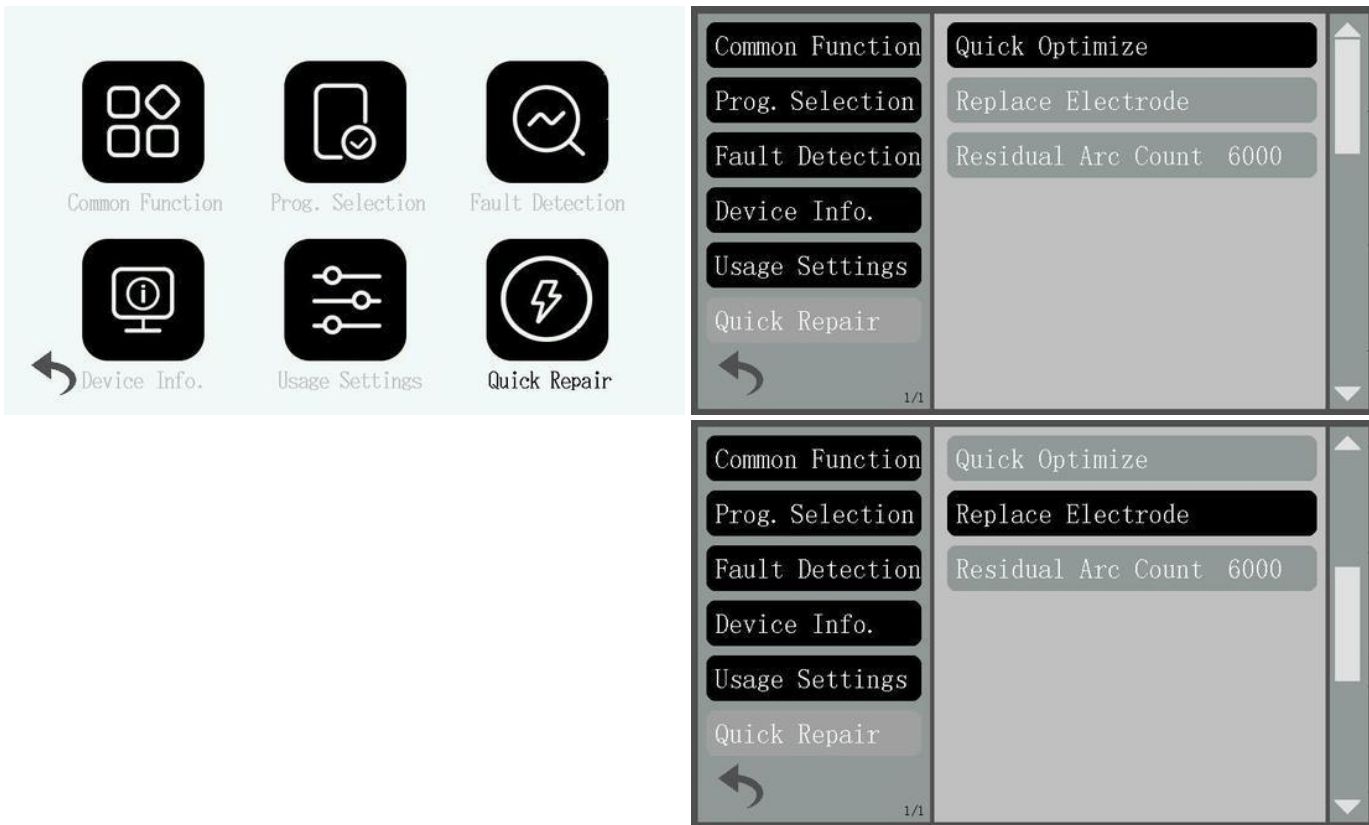
6. Perform Arc Calibration

6.1. Enter the “Common Function” menu.

6.2. Select the “Arc Calibration” item and press “Enter” to enter the menu page, then follow the relevant operation steps for Arc Calibration.

7. Complete





4.4 Battery Maintenance

Introduction: Due to the natural discharge and over-discharge failure characteristics of lithium-ion battery packs, prolonged idle storage can damage the battery. When the battery is not in use, it must be charged once per month.

Battery Operating Temperature Range: -10°C to 50°C

Battery Charging Temperature Range: 0°C to 40°C

Battery Storage Temperature Range: -20°C to 30°C

Steps

1. Visual Inspection

1.1. Check that the battery appearance is intact, with no damage, swelling, or leakage.

2. Check Current Charge Level

2.1. Press the battery indicator button to view the current charge level.

3. Battery Installation and Charging

3.1. Insert the battery into the battery compartment of the fusion splicer, then plug the adapter into the power port. Observe the power display panel and confirm that the indicator lights flash, indicating that the device has entered the charging state. Stop charging when the third indicator light illuminates.

(For long-term storage or transport, it is recommended to keep the battery at a medium-low charge level; if the battery is stored for an extended period, it is recommended to perform a monthly charging maintenance).

4. Complete

Chapter 5 Function Introduction

1. Common Function

Function Introduction: Covers core daily operations such as Arc Calibration, Language, and Arc Force, adapting to various basic splicing scenarios.

Operation Steps: Common Function

2. Prog. Selection

Function Introduction: Configures splicing/heating modes, programs, and related parameters to meet the splicing and shrinking requirements of different fiber types.

Operation Steps: Prog. Selection

3. Fault Detection

Function Introduction: Debugs and calibrates sensors, electrodes, and display parameters; also allows motor testing and factory data reset.

Operation Steps: Fault Detection

4. Device Info.

Function Introduction: Displays the device serial number, version numbers, splice count and records; supports software updates to monitor equipment status.

Operation Steps: Device Info.

5. Usage. Settings

Function Introduction: Includes auxiliary function settings such as Pause, Stretch Test, and Monitor Flip, allowing customization of device operation and display preferences.

Operation Steps: Usage. Settings

6. Quick Repair

Function Introduction: Quickly performs Quick Optimize, resets the electrode life count, and displays the remaining electrode life to ensure splicing quality.

Operation Steps: Quick Repair





5.1 Common Function

1. Arc Calibration

Function Description: Calibrate the splicing strength based on the current splicing environment, fiber material, and electrode condition.

To ensure stable splicing quality, perform Arc Calibration regularly.

Perform Arc Calibration after significant changes in ambient temperature, humidity, or air pressure.

Perform Arc Calibration after replacing electrodes.

Operation Steps: Arc Calibration

2. Language

Function Description: Set the menu language of the splicer.

Operation Steps: Press "Left" or "Right" to switch between language options. After selecting the target language, press "Enter" to confirm.

3. Arc Force

Function Description: Disables "Fiber End-Face Inspection" during splicing.

Off: Performs "Fiber End-Face Quality Inspection" (default).

On: Does not perform "Fiber End-Face Quality Inspection".

Operation Steps: Press "Enter" to toggle the function on/off.

4. Cleave Arc

Function Introduction: Used to melt the fiber end face through arcing. The arc power is adjustable.

5. User Password Setting

Function Description: Set the user password.

Off: No password required on power-up.

On: Password required on power-up.

Change Password: Press "Enter" to enter, select "Password Setting" and press "Enter" again, enter the new password, then select "ENTER" and press "Enter" to save.

6. Aligning Mode

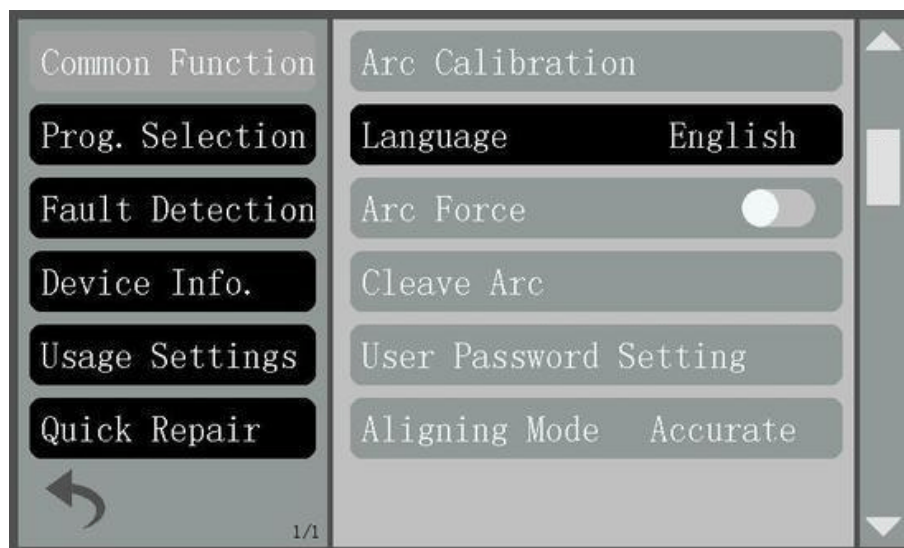
Function Description: Switches the alignment mode to adapt to different splicing scenarios.

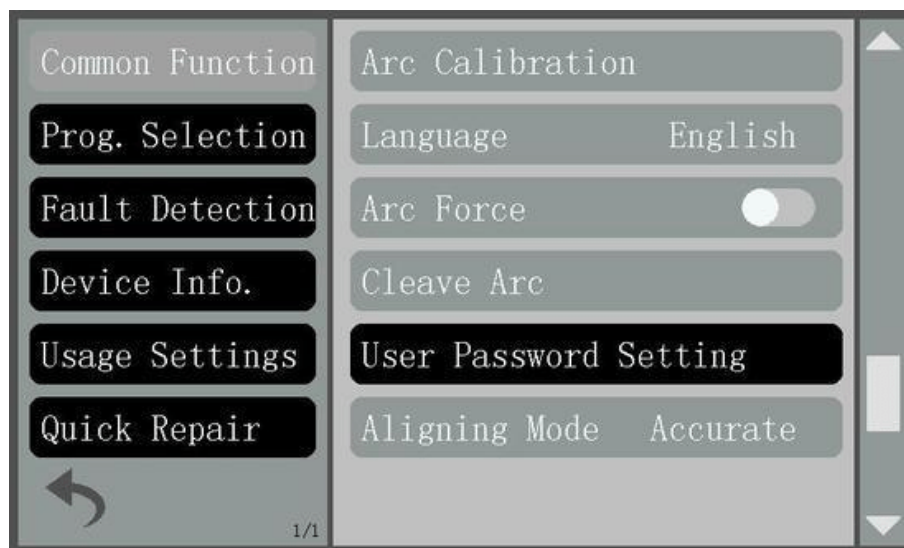
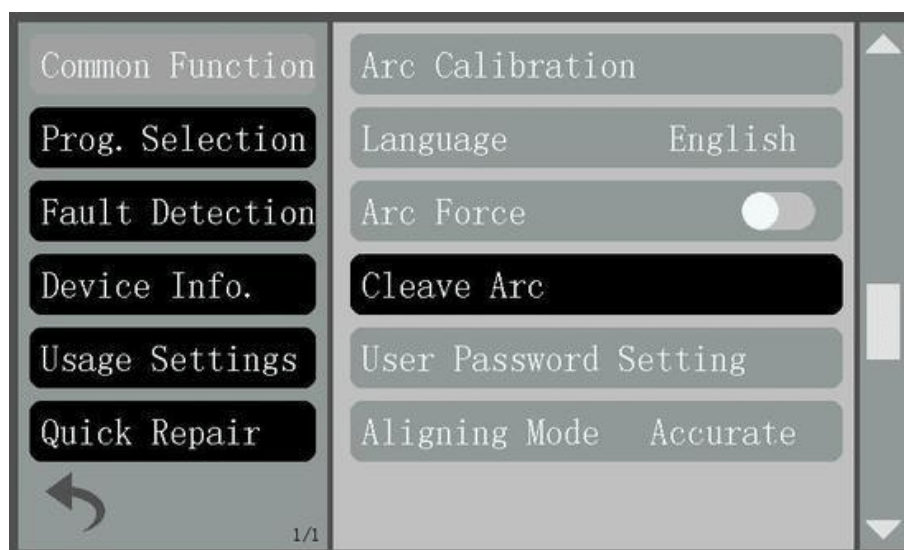
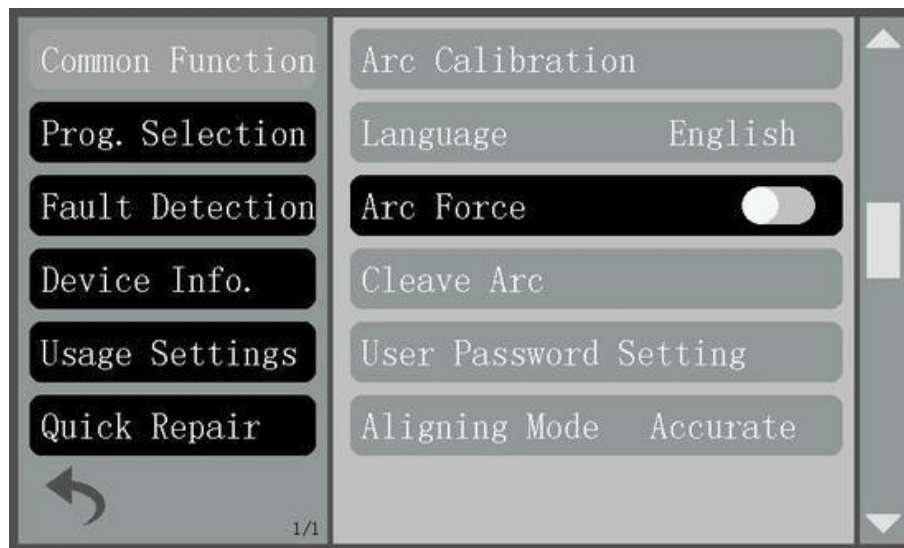
Quick: Fast alignment, suitable for general scenarios.

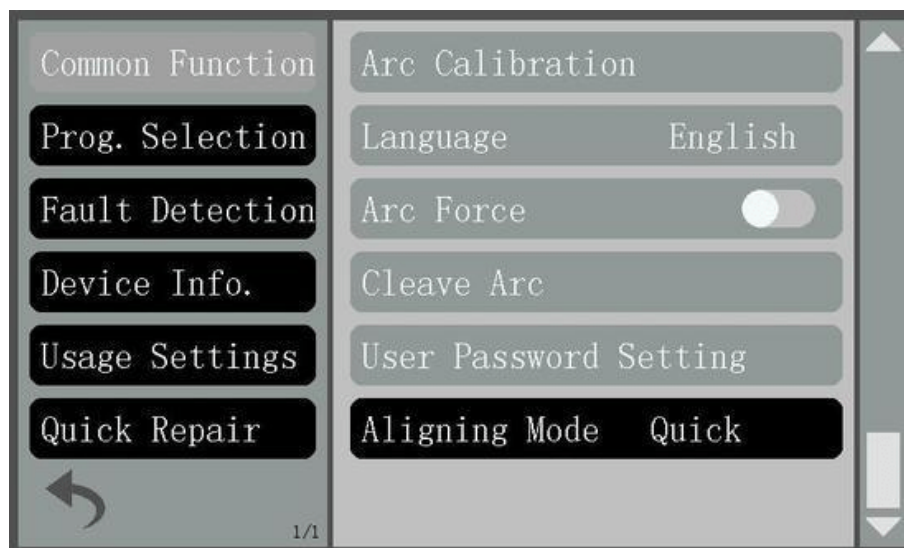
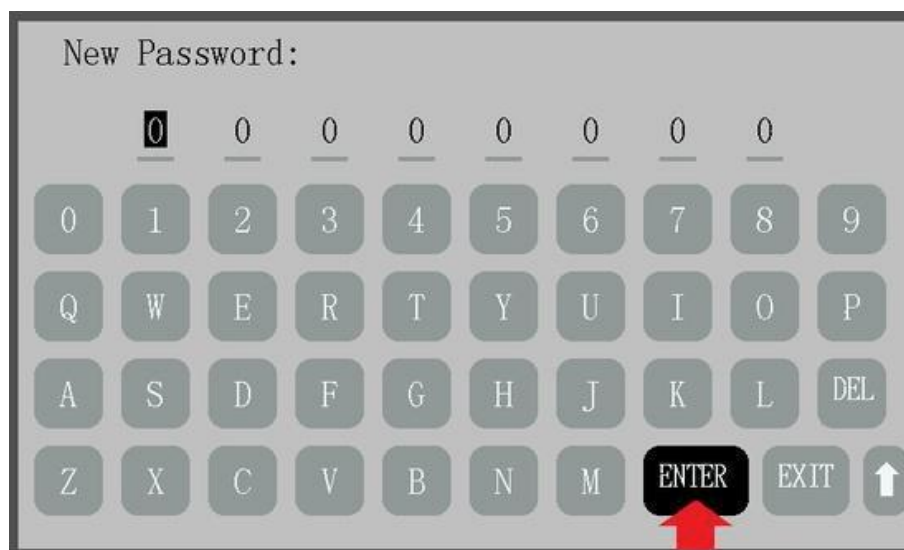
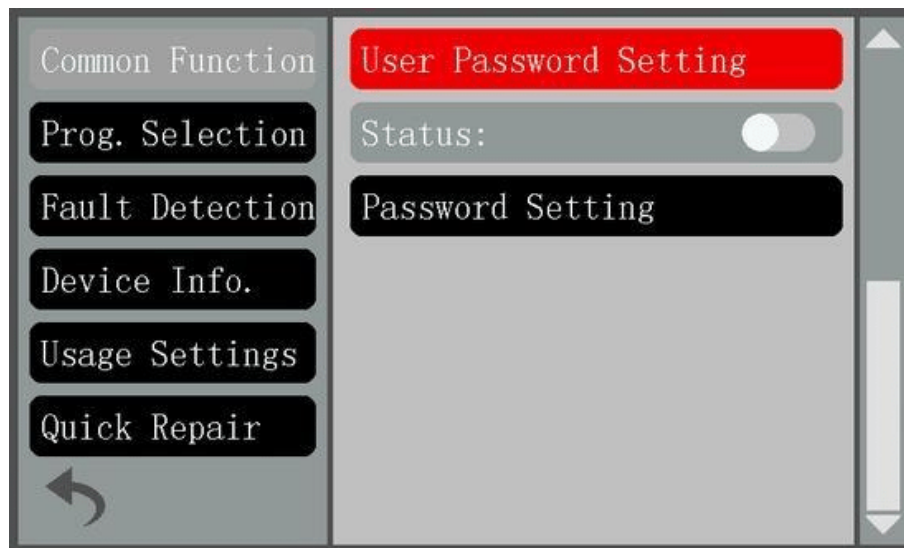
Accurate: Precise calibration, suitable for high-demand scenarios (default).

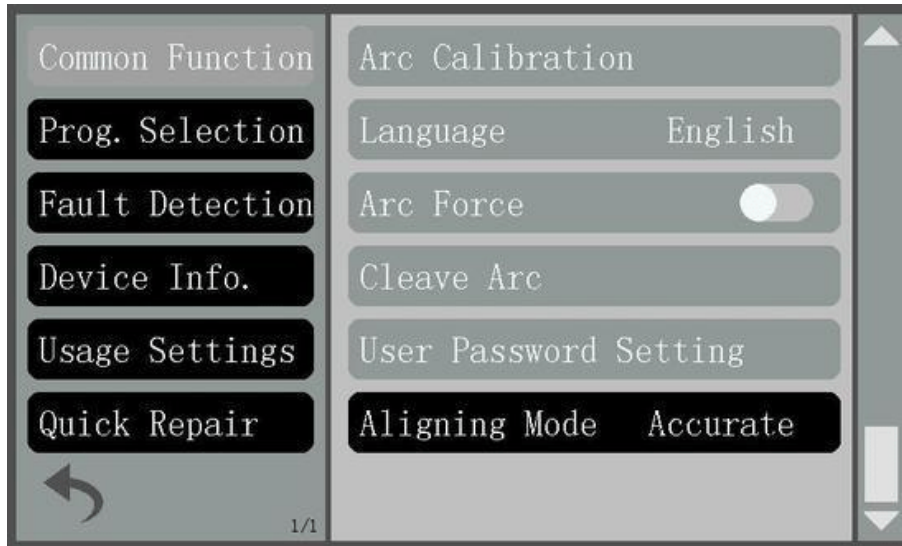
Operation Steps: Press "Enter" to switch the working mode.

7. Complete









5.2 Program Selection

Prog. Selection

1. Work Mode

Function Description: Select the splicing mode.

Operation Steps: Press “Enter” to switch the Work Mode.

Work Mode	Function Description
FULLAUTO	Automatically starts splicing after the windshield cover is closed
AUTO	After closing the windshield cover, press "Arc" to start splicing
MANUAL	Manually operate the mechanism to complete fiber feeding and alignment

2. Splice Program

Function Description: Select splicing programs for different types of optical fibers and other custom heating programs.

Operation Steps: Arc Parameter Setting

3. Arc Parameter

Function Description: Set the parameters of the current splicing program.

Operation Steps: Arc Parameter Setting

4. Heat Mode

Function Description: Select the heating mode.

Operation Steps: Press “Enter” to switch the Heat Mode.

Heat Mode	Function Description
AUTO	Automatically start shrinking after the heater cover is closed.
MANUAL	Press the "HEAT" to start shrinking.

5. Heat Program

Function Description: Select custom heating programs.

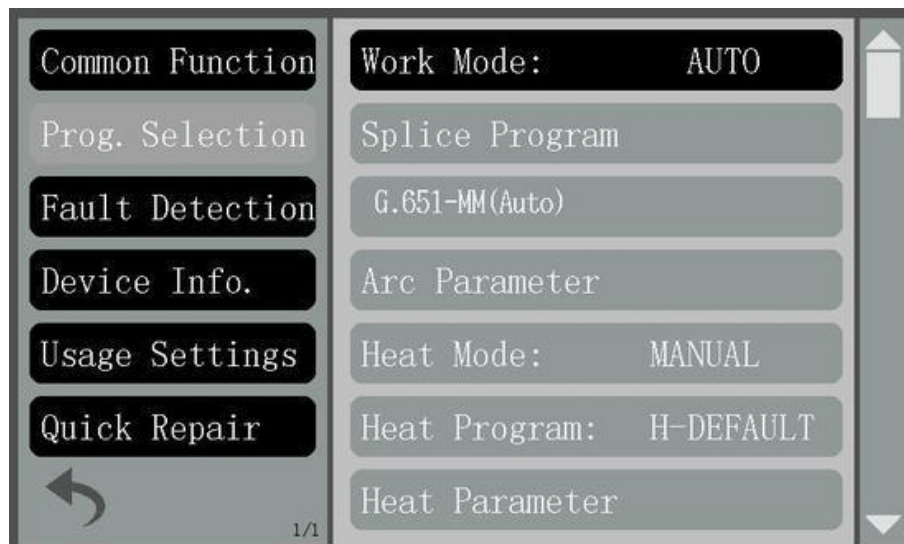
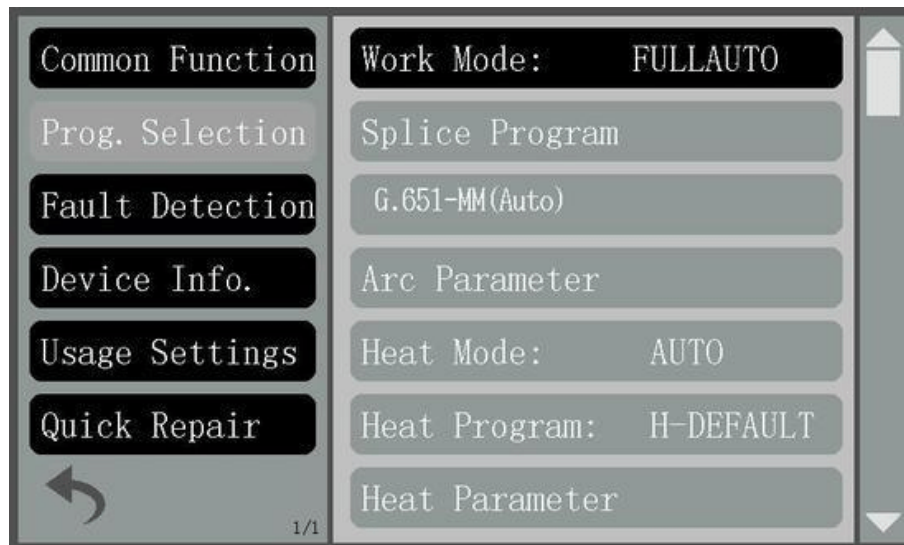
Operation Steps: Heat Parameter Setting

6. Heat Parameter

Function Description: Set the parameters of the current heating program.

Operation Steps: Heat Parameter Setting

7. Complete



Common Function	Work Mode: MANUAL
Prog. Selection	Splice Program
Fault Detection	G.651-MM(Auto)
Device Info.	Arc Parameter
Usage Settings	Heat Mode: MANUAL
Quick Repair	Heat Program: H-DEFAULT
 1/1	Heat Parameter

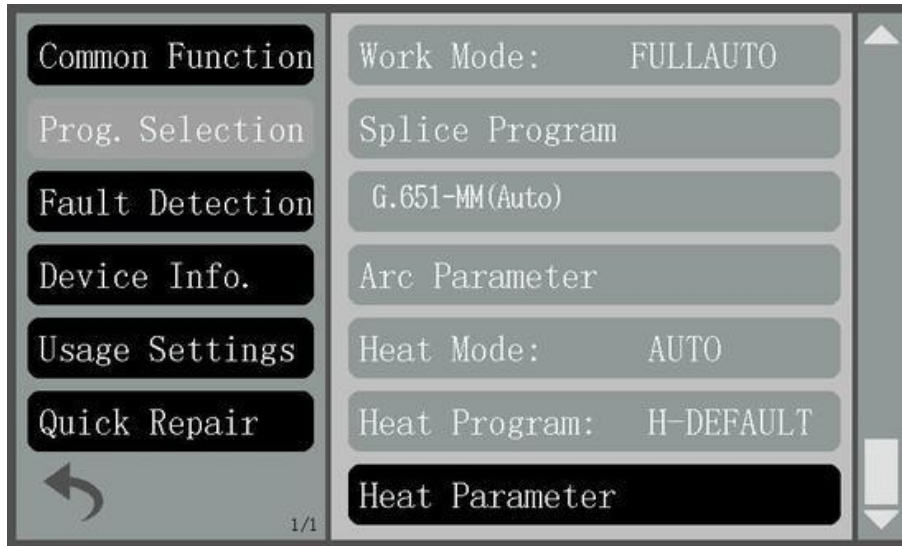
Common Function	Work Mode: FULLAUTO
Prog. Selection	Splice Program
Fault Detection	G.651-MM(Auto)
Device Info.	Arc Parameter
Usage Settings	Heat Mode: AUTO
Quick Repair	Heat Program: H-DEFAULT
 1/1	Heat Parameter

Common Function	Work Mode: FULLAUTO
Prog. Selection	Splice Program
Fault Detection	G.651-MM(Auto)
Device Info.	Arc Parameter
Usage Settings	Heat Mode: AUTO
Quick Repair	Heat Program: H-DEFAULT
 1/1	Heat Parameter

Common Function	Work Mode: FULLAUTO
Prog. Selection	Splice Program
Fault Detection	G.651-MM(Auto)
Device Info.	Arc Parameter
Usage Settings	Heat Mode: AUTO
Quick Repair	Heat Program: H-DEFAULT
 1/1	Heat Parameter

Common Function	Work Mode: FULLAUTO
Prog. Selection	Splice Program
Fault Detection	G.651-MM(Auto)
Device Info.	Arc Parameter
Usage Settings	Heat Mode: MANUAL
Quick Repair	Heat Program: H-DEFAULT
 1/1	Heat Parameter

Common Function	Work Mode: FULLAUTO
Prog. Selection	Splice Program
Fault Detection	G.651-MM(Auto)
Device Info.	Arc Parameter
Usage Settings	Heat Mode: AUTO
Quick Repair	Heat Program: H-DEFAULT
 1/1	Heat Parameter



5.2.1 Arc Parameter Setting

Function Description: Set splicing parameters.

1. Modify Current Splicing Program Parameters

1.1. Enter the "Prog. Selection" menu.

1.2. Select the "Arc Parameter" item and press "Enter" to enter the parameter setup page for the current splicing program.

1.3. Modify each parameter as needed.

(It is recommended to use Arc Calibration to adjust splicing parameters)

1.4. Complete.

2. Select a New Splicing Program and Modify Parameters

2.1. Enter the "Prog. Selection" menu.

2.2. Select the "Splice Program" item and press "Enter" to enter the splicing program selection page.

2.3. According to the fiber type being used, select the corresponding splicing program category, then press "Enter" to enter the sub-page for program selection.

2.4. Select the desired splicing program item and press "Enter" to confirm the selection; the selected program will turn red.

2.5. Press "Arc" to enter the parameter setup page for this splicing program, and modify each parameter as needed.

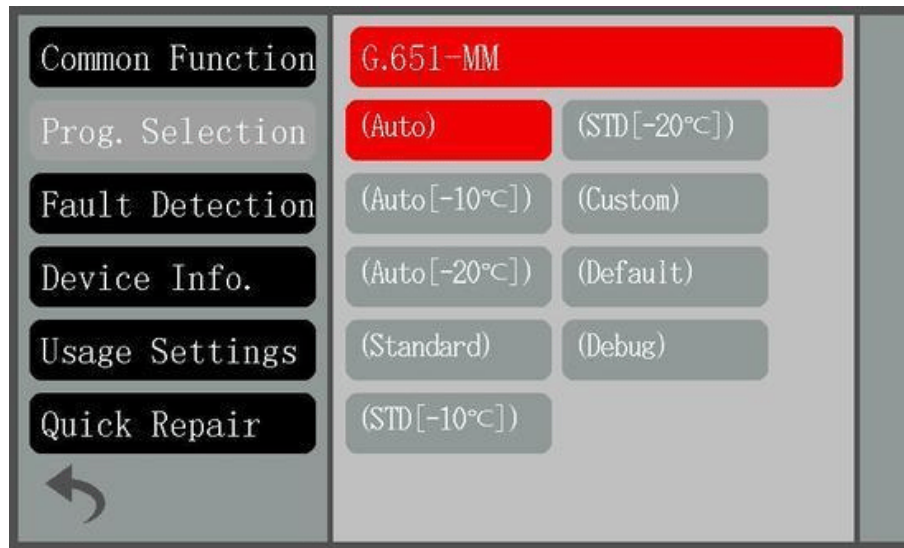
(It is recommended to use Arc Calibration to adjust splicing parameters)

2.6. Complete.

Common Function Prog. Selection Fault Detection Device Info. Usage Settings Quick Repair 	Name:	G.651-MM(Auto)	
	PreArc Time:	◀	020 ▶
	PreArc Power:	◀	084 ▶
	Arc Time:	◀	023 ▶
	Arc Power:	◀	089 ▶
	Forward:	◀	034 ▶
	Forward Speed:	◀	030 ▶
	Cleave Angle:	◀	014 ▶
	Gap:	◀	012 ▶

Common Function Prog. Selection Fault Detection Device Info. Usage Settings Quick Repair 	Name:	G.651-MM(Auto)	
	PreArc Time:	◀	020 ▶
	PreArc Power:	◀	084 ▶
	Arc Time:	◀	023 ▶
	Arc Power:	◀	089 ▶
	Forward:	◀	034 ▶
	Forward Speed:	◀	030 ▶
	Cleave Angle:	◀	014 ▶
	Gap:	◀	012 ▶

Common Function Prog. Selection Fault Detection Device Info. Usage Settings Quick Repair 	Splice Program	
	Reserved	G.655-NZDS
	G.651-MM	G.657A1
	G.652-SM	G.657A2
	G.653-DSF	G.652-G.655
	G.654E-CSF	G.652-G.654



5.2.2 Heat Parameter Setting

Function Description: Set heater parameters.

Parameter Name	Description	Value Range
Heat Time	Sets the heating duration	10~90
Sustained Heat	Enables or disables the continuous 4-minute heating function	On/Off
Temperature(°C)	Sets the heating temperature	100~250
Calibration Value	Result of the temperature sensor calibration.	00
Sensor TRIM	Calibration value of the temperature sensor	15

1. Modify Current Splicing Program Parameters

1.1. Enter the "Prog. Selection" menu.

1.2. Select the "Heat Parameter" item and press "Enter" to enter the parameter setup page for the current heating program.

1.3. Press "Left" or "Right" to modify "Heat Time", "Sustained Heat", "Temperature(°C)", "Calibration Value" or "Sensor TRIM" as needed.

1.4. Complete.

2. Select a New Splicing Program and Modify Parameters

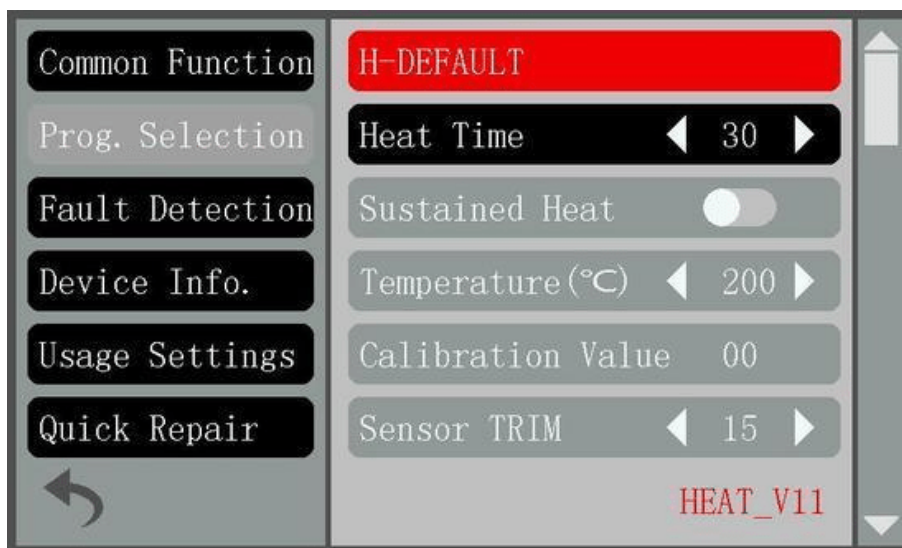
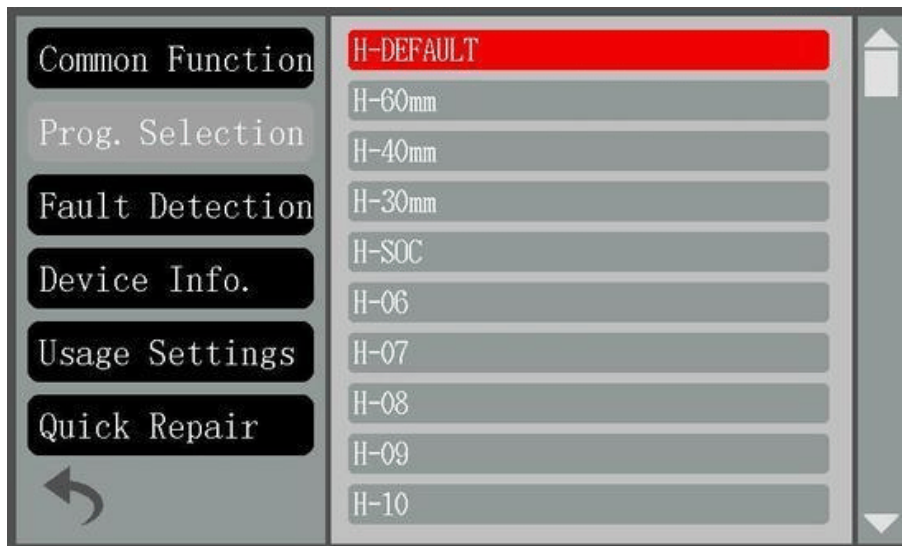
2.1. Enter the "Prog. Selection" menu.

2.2. Select the "Heat Program" item and press "Enter" to enter the heating program selection page.

2.3. Select the heating program item and press "Enter" to confirm the selection; the selected program will turn red.

2.4. Press "Arc" to enter, then press "Left" or "Right"/ modify "Heat Time", "Sustained Heat", "Temperature(°C)", "Calibration Value" or "Sensor TRIM" as needed.

2.5. Complete.



5.3 Fault Detection

1. Sensor Status

Function Description: View the current parameters and status of each sensor in the equipment.

Operation Steps: Sensor Status

2. Stabilize Electrodes

Function Description: Used for visual inspection of the electrode discharge status or activation of new electrodes.

3. Display Config-Auto

Function Description: Automatically complete image parameter calibration.

Operation Steps: Display Config-Auto

4. Display Config-Manual

Function Description: Manually adjust the image position.

Operation Steps: Display Config-Manual

5. Display Config-CCD

Function Description: Manually adjust CCD parameters.

Operation Steps: Display Config-CCD

6. Display Config-LED

Function Description: Manually adjust LED parameters.

Operation Steps: Display Config-LED

7. Dust Check

Function Description: Check for dirt or stains in the display area.

Operation Steps: Dust Check

8. Motor Manual Test

Function Description: Perform manual tests on the feed and alignment motors.

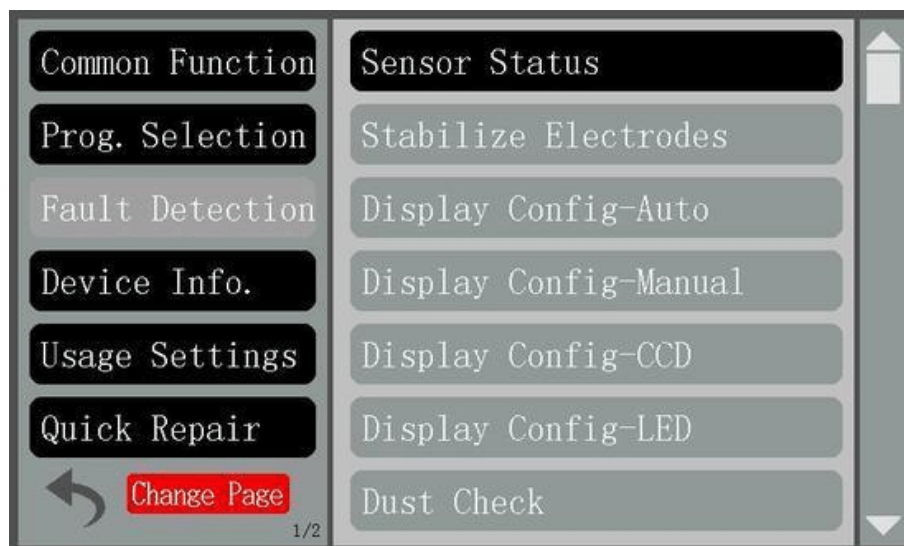
Operation Steps: Motor Manual Test

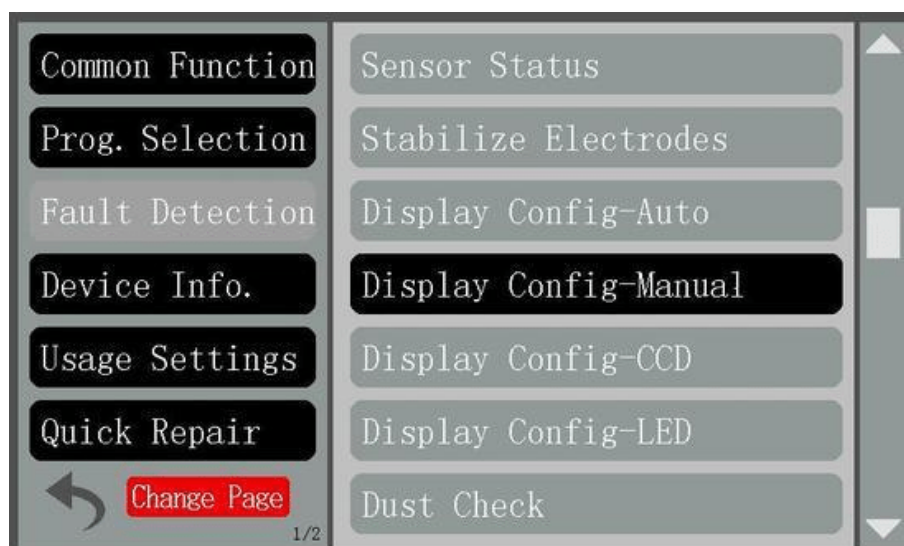
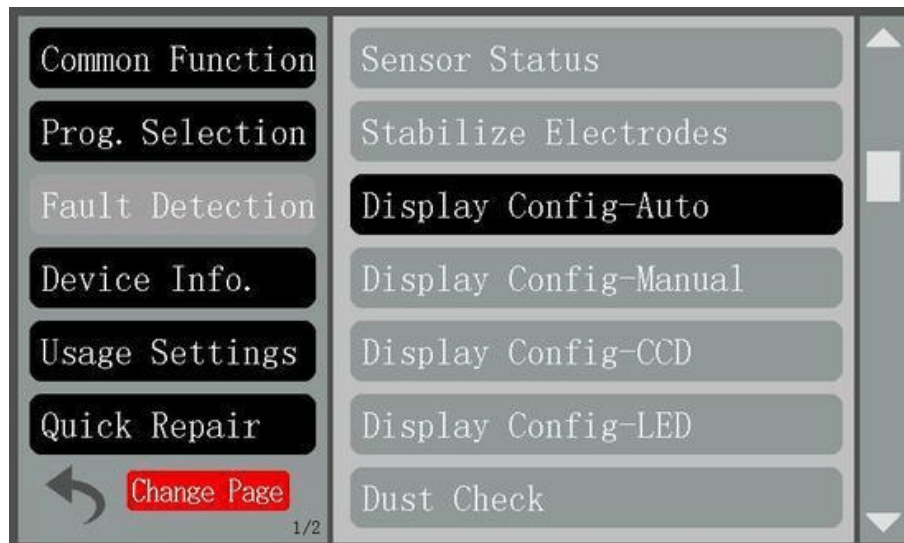
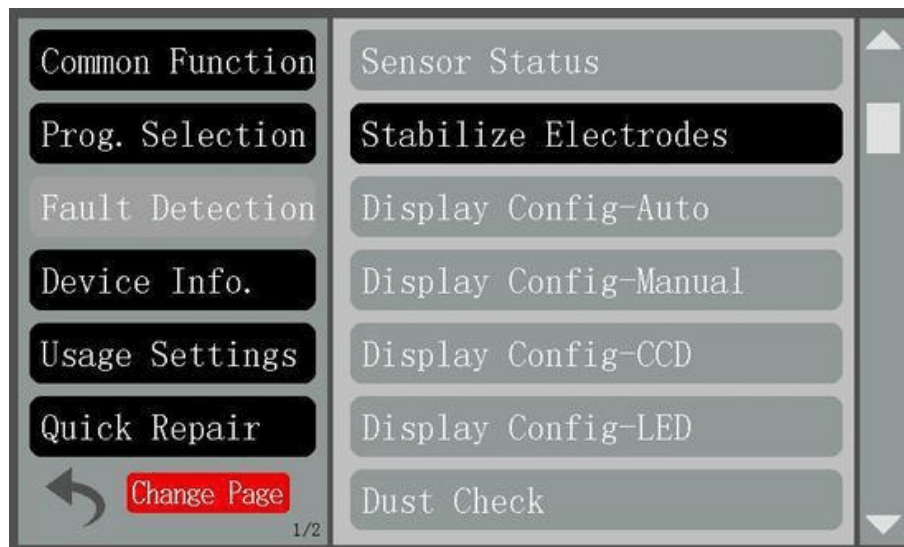
9. Factory Data Reset

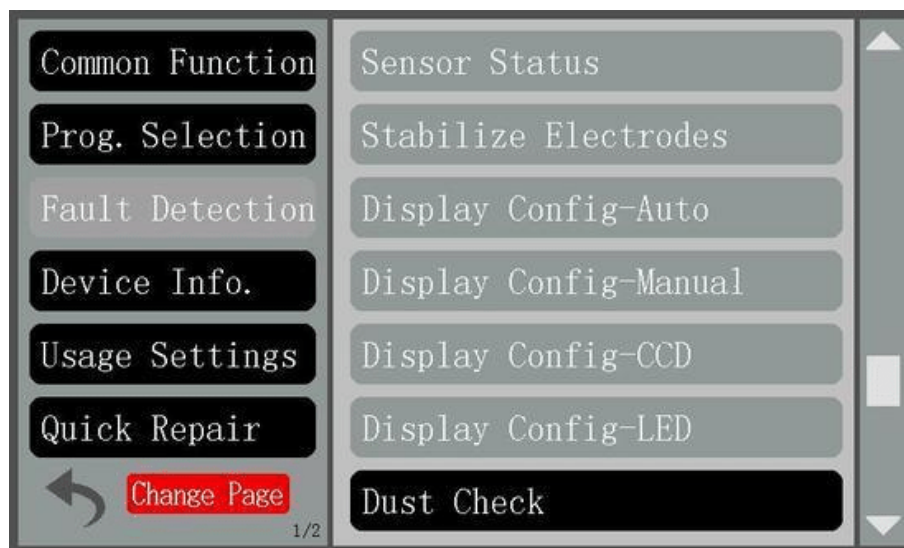
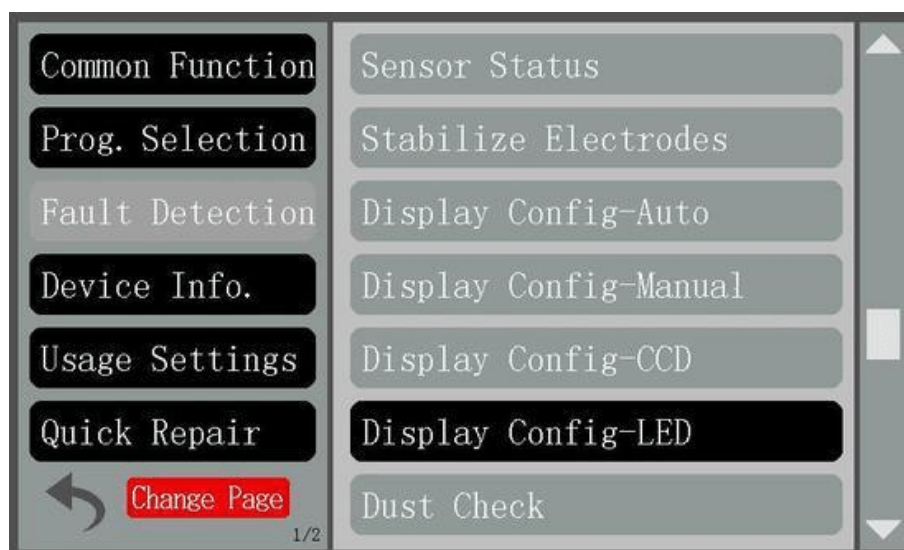
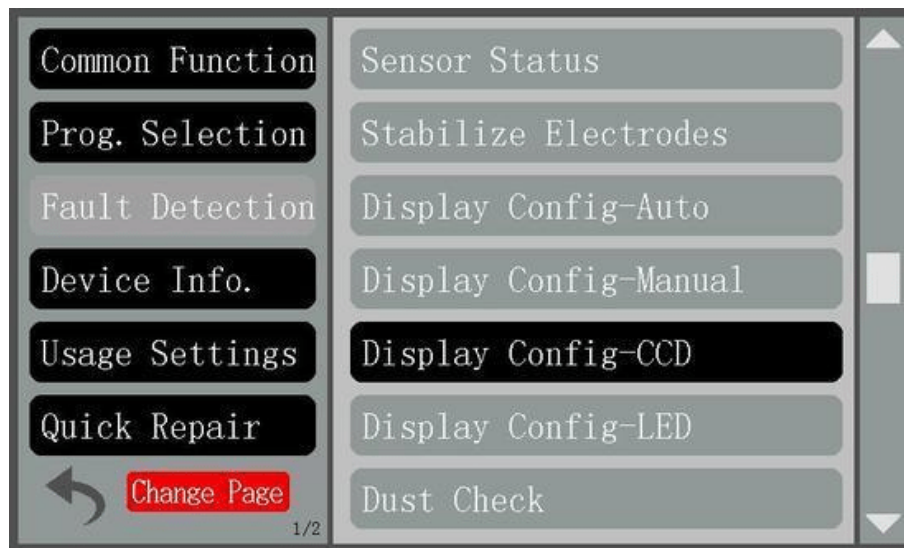
Function Description: Restores the machine to its factory default settings. All parameters, image files, and other data in the splicer will be cleared.

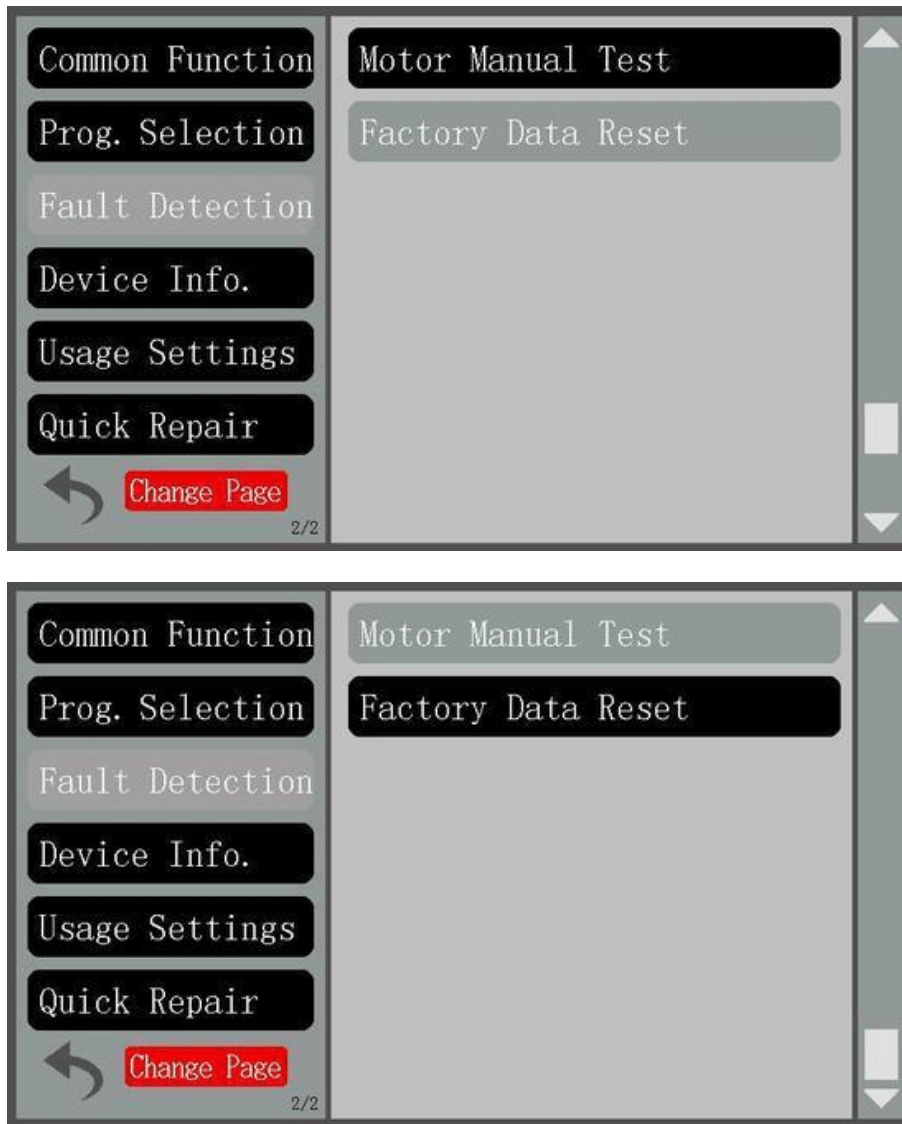
Operation Steps: Factory Data Reset

10. Complete









5.3.1 Sensor Status

Function Description: View the current parameters and status of each sensor in the equipment.

1. Setup Steps

- 1.1. Enter the "Fault Detection" menu.
- 1.2. Select the "Sensor Status" item.
- 1.3. Press "Enter" to enter the sensor status viewing page.

Left limit sensor: Close 0, Open 1

Windshield status: Close 0, Open 1

Right limit sensor: Close 0, Open 1

X image sensor: 2 Normal

Y image sensor: 2 Normal

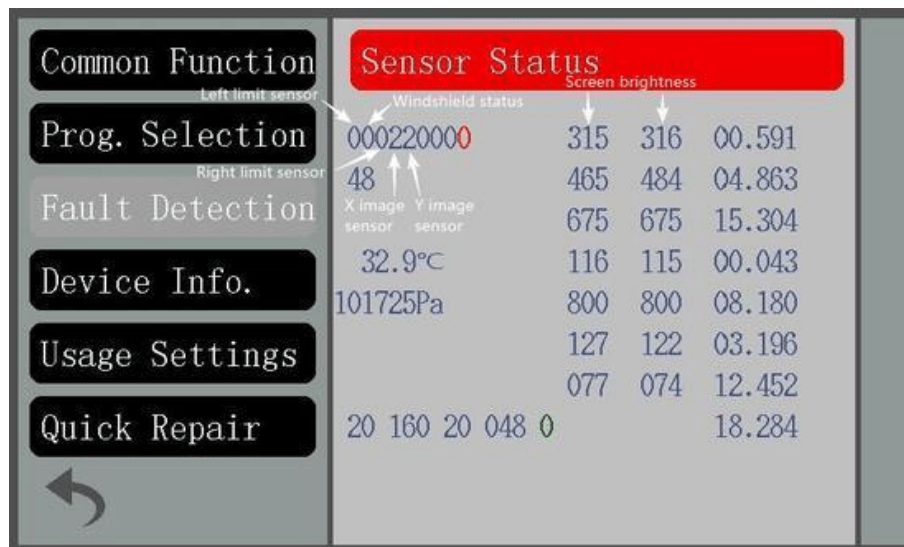
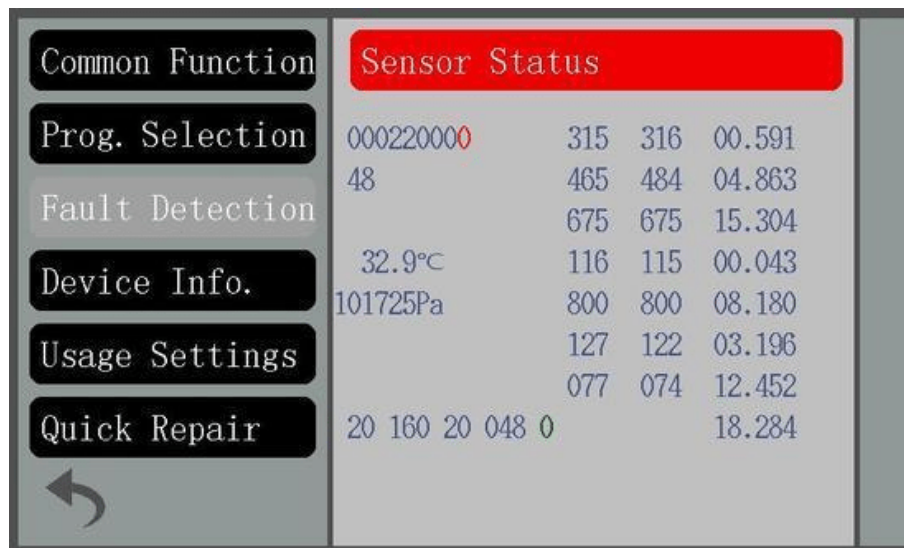
Low-voltage test completed: 1

Heater check passed: 1

High-temperature aging flag: Aged but not qualified 1, Aged and qualified 2, Not aged 0

Touch-screen calibration flag: Not qualified 0, Qualified 1

1.4. Complete.



5.3.2 Display Config-Auto

Function Description: Automatically complete image parameter calibration.

1. Setup Steps

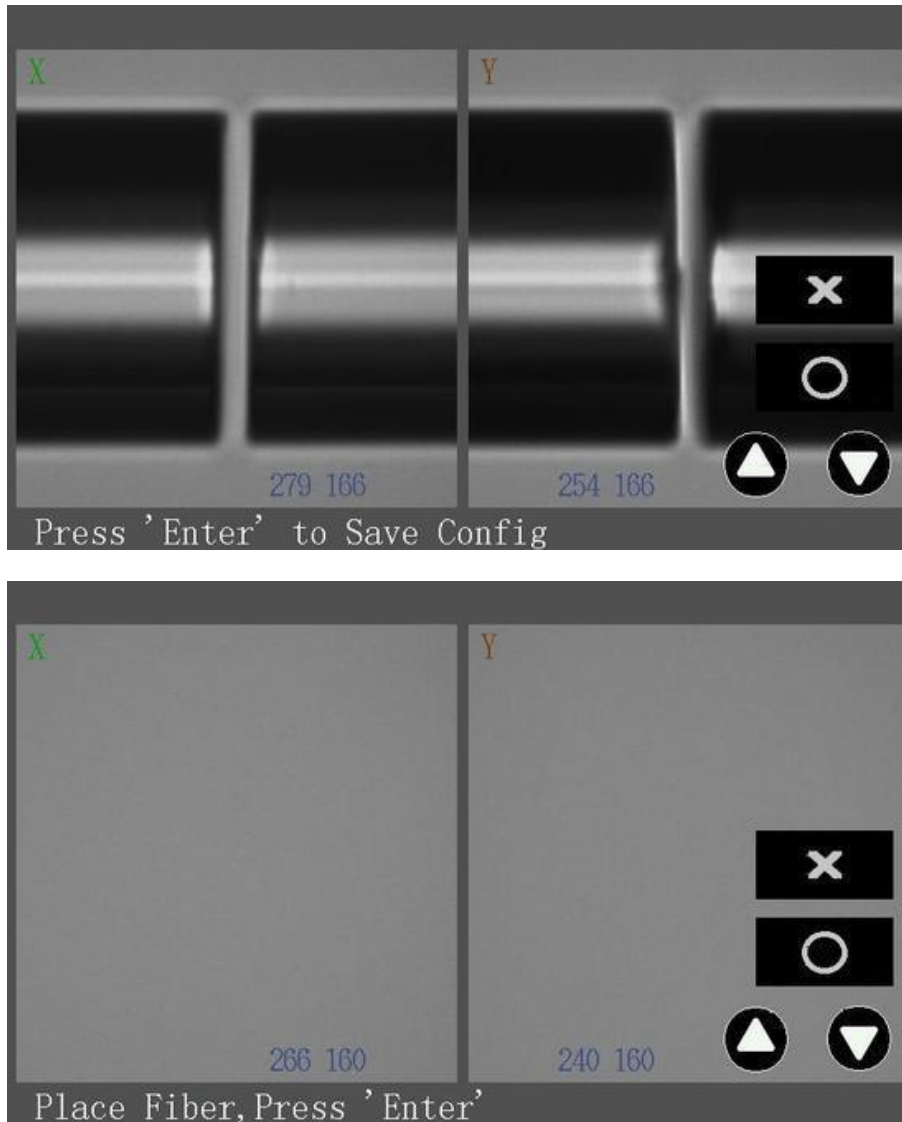
1.1. Enter the "Fault Detection" menu.

1.2. Select the "Display Config-Auto" item and press "Enter" to enter the menu page.

1.3. The prompt "Place Fiber, Press 'Enter'" will appear. After placing the fiber, press "Enter" to continue.

1.4. Press "Enter" to save the current settings.

1.5. Complete.



5.3.3 Display Config-Manual

Function Description: Move the display area so that the discharge position is centered in the display region.

1. Setup Steps (Move Display Area)

1.1. Enter the "Fault Detection" menu.

1.2. Select the "Display Config-Manual" item and press "Enter" to enter the menu page.

1.3. After placing the fiber, press "Enter" to continue.

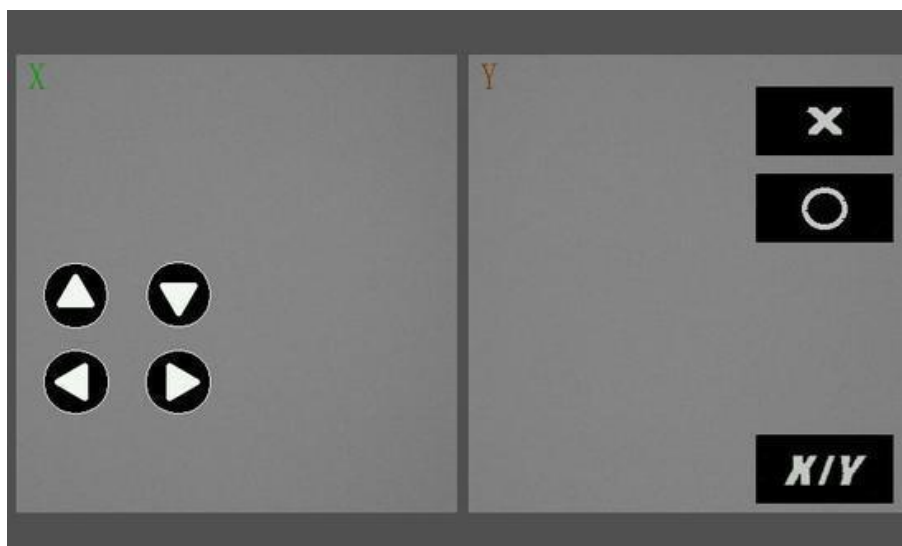
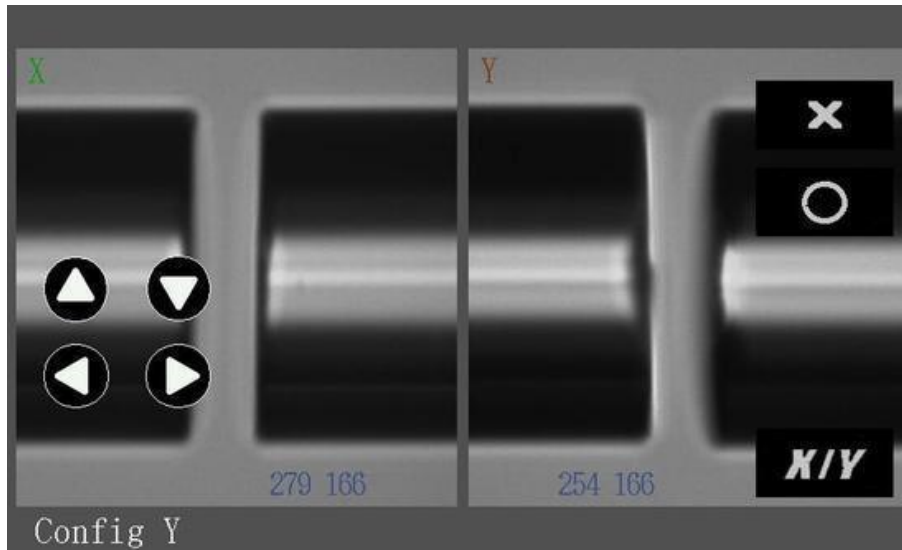
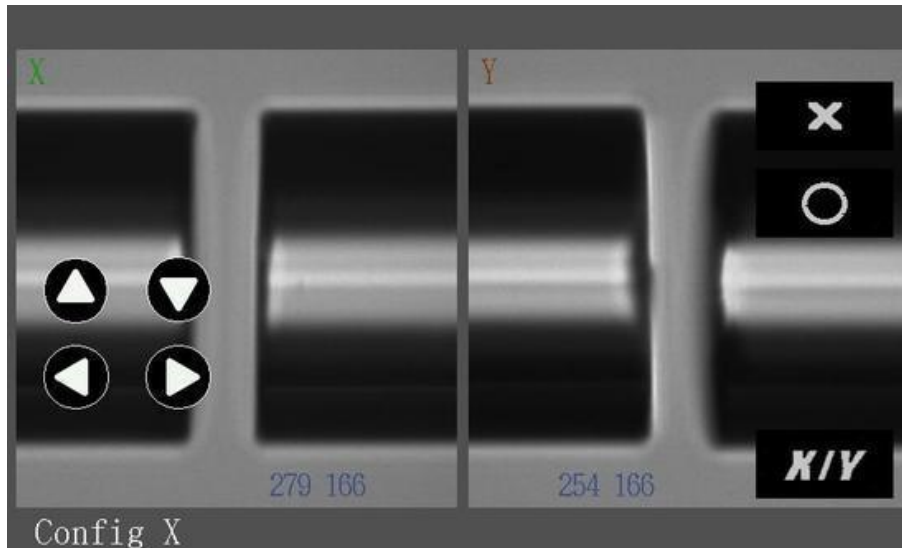
1.4. Config X.

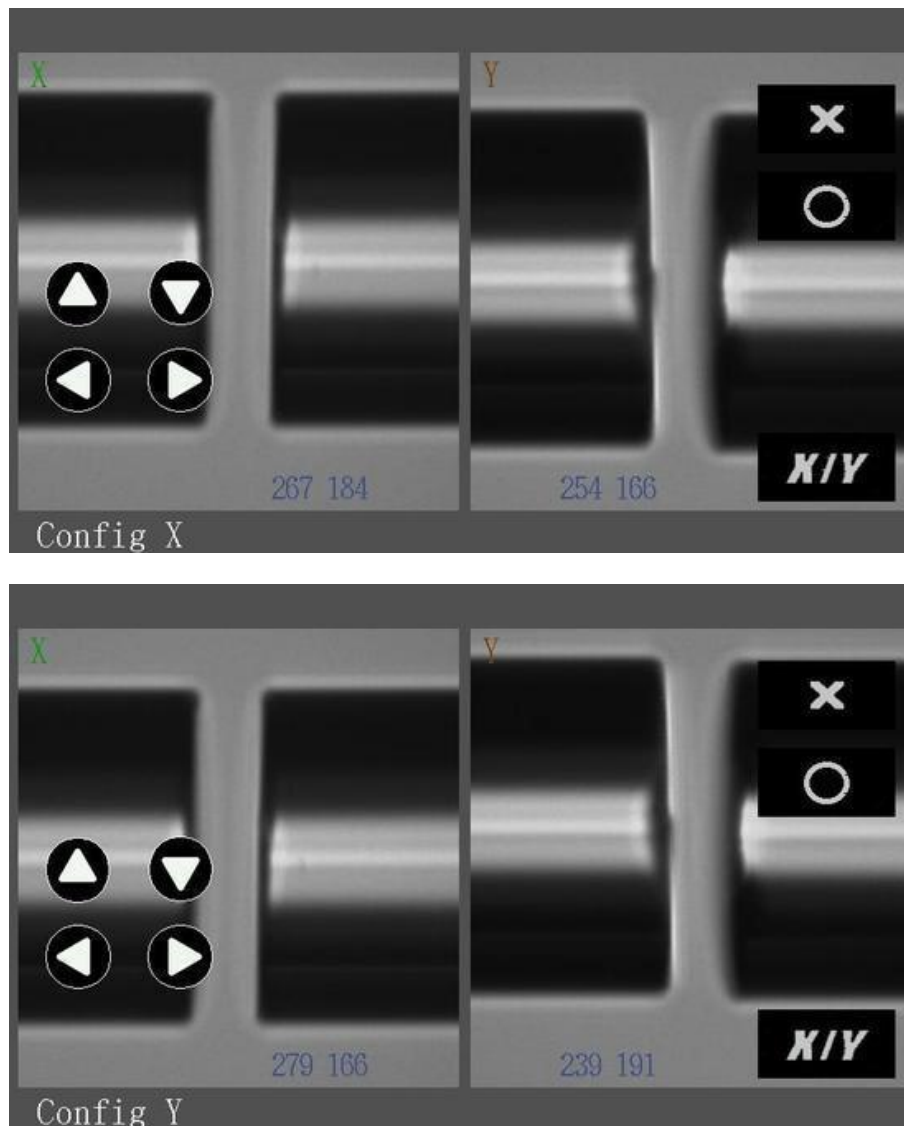
1.5. Press "Up"/"Down" /or "Left"/"Right"/ to manually adjust the fiber position on the X screen.

1.6. Press "Arc" to switch between X/Y views, then select Config Y.

1.7. Press "Up"/"Down"/ or "Left"/"Right"/ to manually adjust the fiber position on the Y screen.

1.8. Complete.



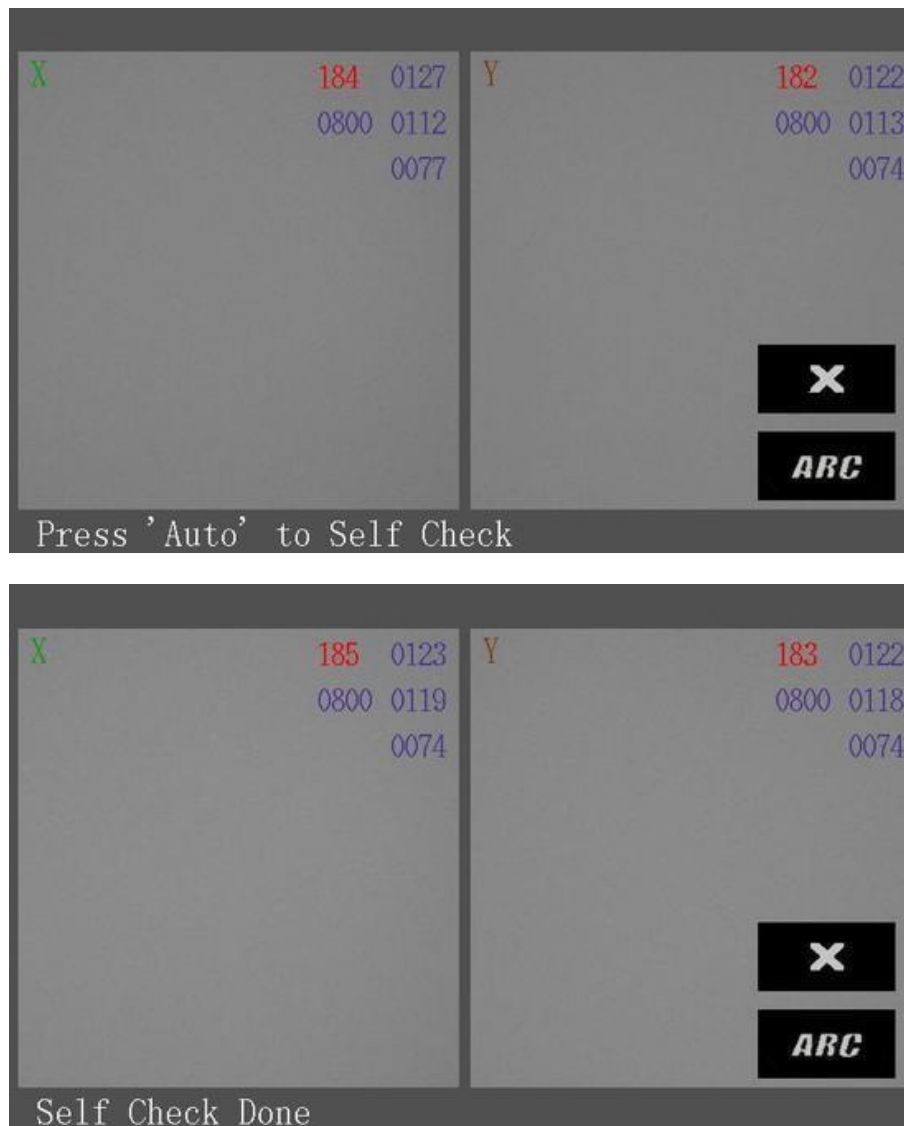


5.3.4 Display Config-CCD

Function Description: Manually adjust CCD parameters.

1. Setup Steps

- 1.1. Enter the "Fault Detection" menu.
- 1.2. Select the "Display Config-CCD" item and press "Enter" to enter the menu page.
- 1.3. When prompted with "Press 'Auto' to Self Check", press "Arc" to continue.
- 1.4. The message "Self Check Done" will be displayed.
- 1.5. Complete.



5.3.5 Display Config-LED

Function Description: Manually adjust LED parameters.

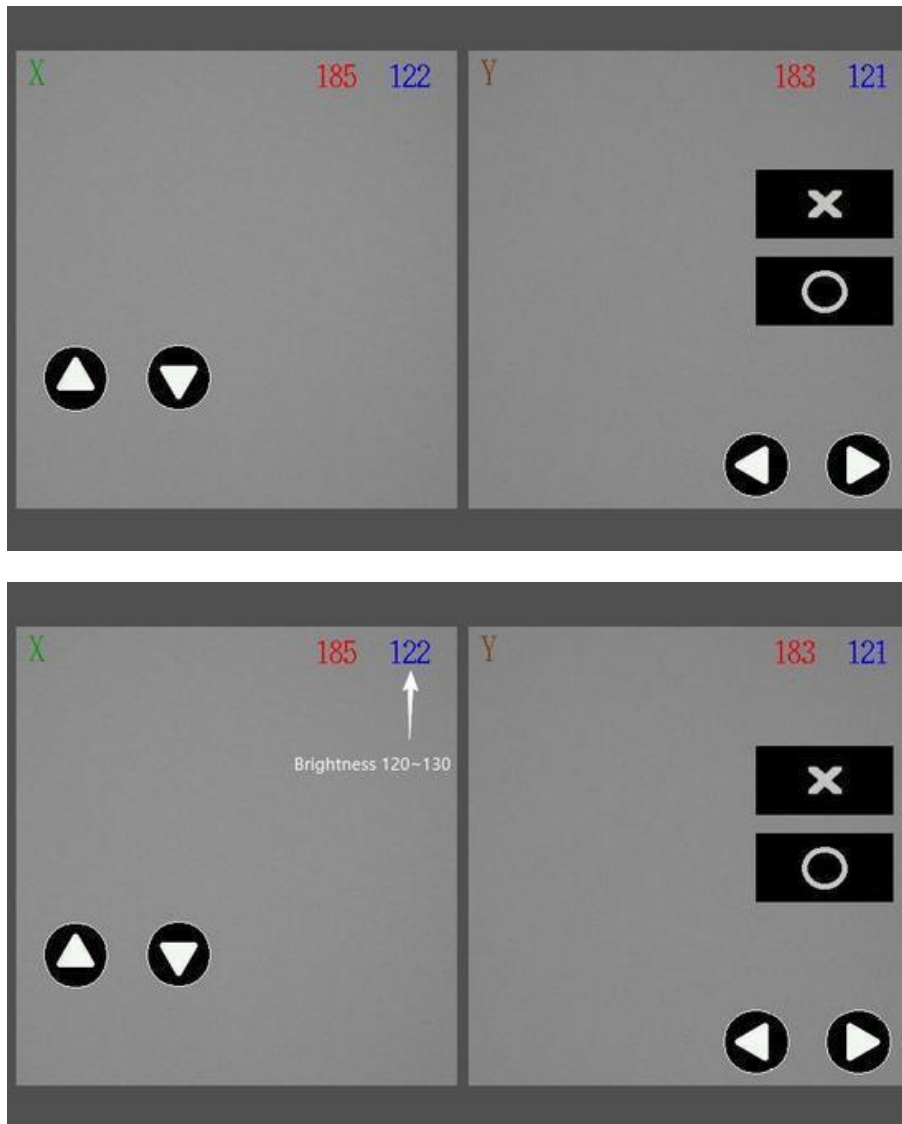
1. Setup Steps

1.1. Enter the "Fault Detection" menu.

1.2. Select the "Display Config-LED" item.

1.3 Press the "Enter" to enter the menu page. On the left X screen, press the "Up/Down" 、 to adjust the brightness; on the right Y screen, press the "Left/Right" 、 to adjust the brightness. Manually adjust the LED brightness parameter to 120~130.

1.4. Complete.



5.3.6 Dust Check

Function Description: Check for dirt or stains in the display area.

1. Setup Steps

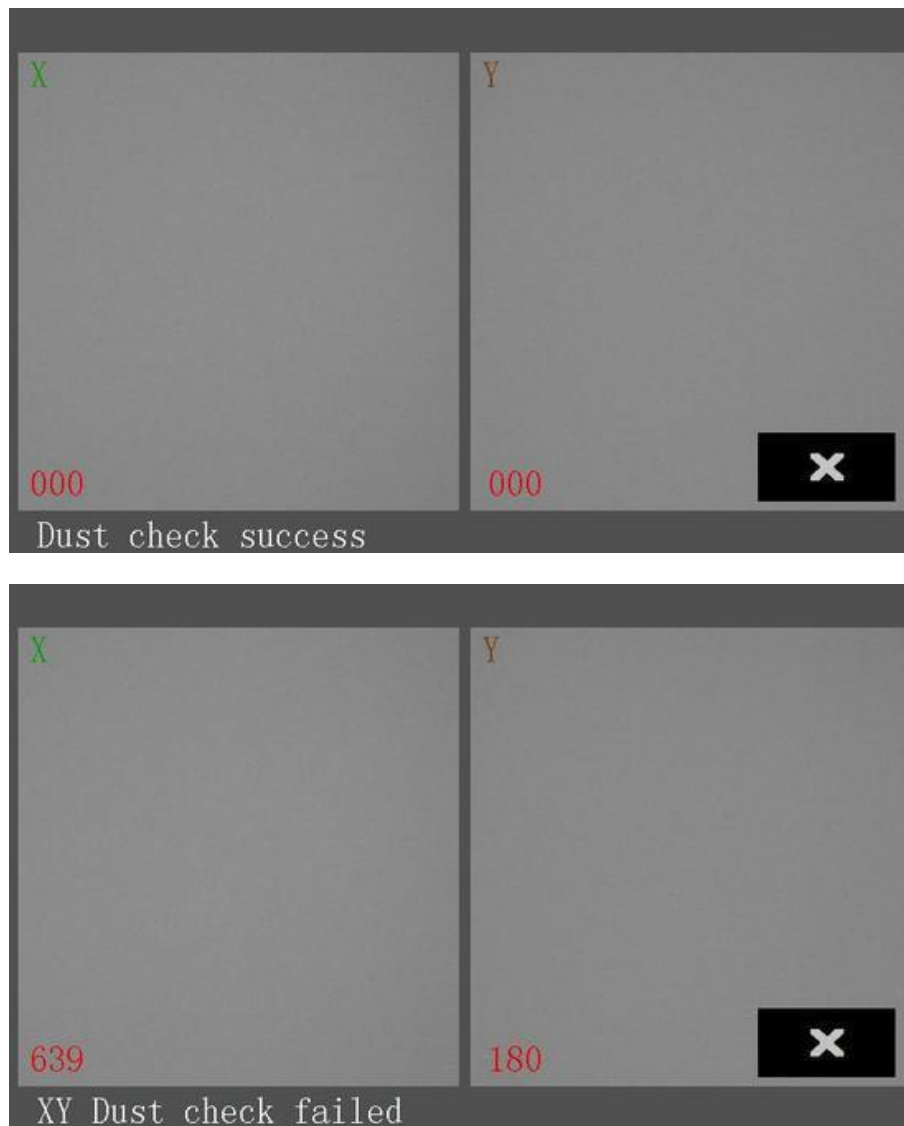
1.1. Enter the "Fault Detection" menu.

1.2. Select the "Dust Check" item.

1.3. Press "Enter" to proceed. The system will check for dirt or stains in the display area. Normally, "Dust check success" will be displayed.

1.4. If "XY Dust check failed" appears, please clean the dust promptly.

1.5. Complete.



5.3.7 Motor Manual Test

Function Description: Perform manual tests on the feed and alignment motors.

1. Setup Steps (X, Y Motor Alignment Test)

1.1. Enter the "Fault Detection" menu.

1.2. Select the "Motor Manual Test" item.

1.3. Press "Enter" to enter the menu, then press "Arc" to switch between the commands to be triggered.

1.4. Complete.



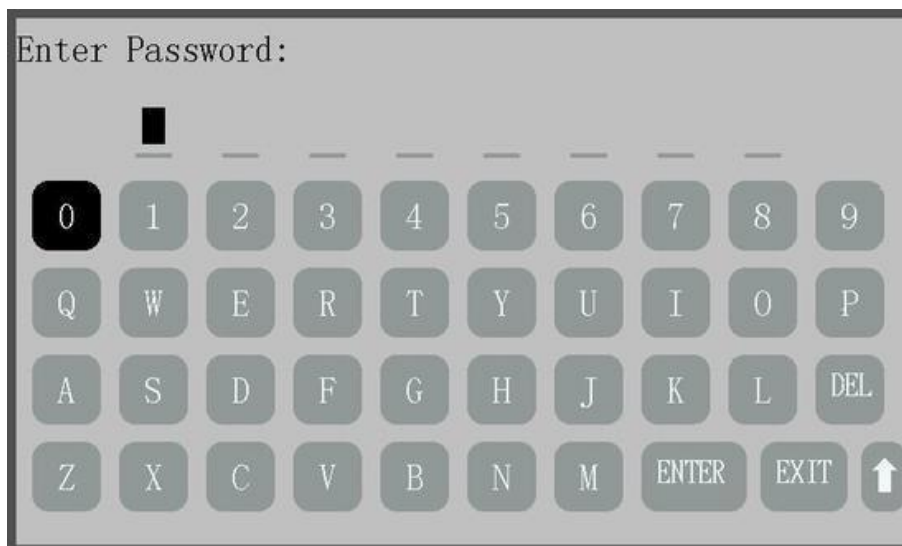
5.3.8 Factory Data Reset

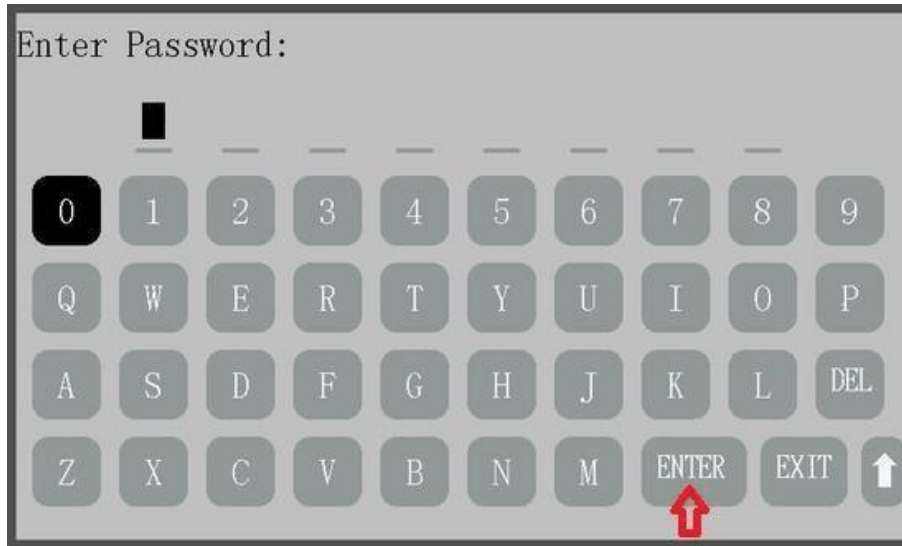
Function Description: Restores the machine to its factory default settings, resulting in the deletion of all parameters and image files stored in the splicer.

(Note: Unless the equipment is malfunctioning, the use of this function is not recommended.)

1. Setup Steps

- 1.1. Enter the "Fault Detection" menu.
- 1.2. Select the "Factory Data Reset" item.
- 1.3. Enter the password, then press ENTER.
- 1.4. Complete.





5.4 Device Information

1. Machine SN

Function Description: Displays the serial number of the current device.

2. Software Ver

Function Description: Displays the current software version of the device.

3. Firmware Ver

Function Description: Displays the current firmware version of the device.

4. Arc Count

Function Description: Displays the total number of splices performed by the current device.

5. Arc Records

Function Description: View detailed records of individual splices.

6. Update Program(USB Ver.2.0)

Function Description: Used to upgrade the device software.

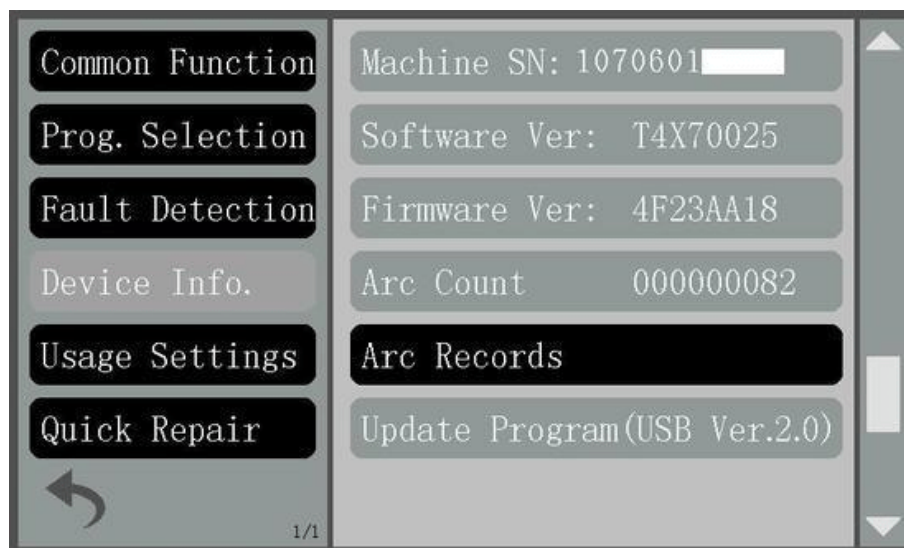
Operation Steps: Update Program(USB Ver.2.0)

7. Complete

Common Function	Machine SN: 1070601
Prog. Selection	Software Ver: T4X70025
Fault Detection	Firmware Ver: 4F23AA18
Device Info.	Arc Count 000000082
Usage Settings	Arc Records
Quick Repair	Update Program(USB Ver.2.0)
	
1/1	

Common Function	Machine SN: 1070601
Prog. Selection	Software Ver: T4X70025
Fault Detection	Firmware Ver: 4F23AA18
Device Info.	Arc Count 000000082
Usage Settings	Arc Records
Quick Repair	Update Program(USB Ver.2.0)
	
1/1	

Common Function	Machine SN: 1070601
Prog. Selection	Software Ver: T4X70025
Fault Detection	Firmware Ver: 4F23AA18
Device Info.	Arc Count 000000082
Usage Settings	Arc Records
Quick Repair	Update Program(USB Ver.2.0)
	
1/1	



5.4.1 View Record

Function Description: View splice records.

1. Setup Steps

1.1. Enter the "Device Info." menu.

1.2. Select the "Arc Records" item and press "Enter" to proceed.

1.3. Select the "View Record" item and press "Enter" to proceed.

1.4. View the records.

1.5. Complete.



5.4.2 Clear All Records

Function Description: Clear splice records.

(Note: Cleared records cannot be recovered. Perform this operation casually.)

1. Setup Steps

1.1. Enter the "Device Info." menu.

1.2. Select the "Arc Records" item and press "Enter" to proceed.

1.3. Select the "Clear All Records" item and press "Enter" to clear the splice records.

(This operation is irreversible; do not perform it casually)

1.4. Complete.



5.4.3 Upload Record

Function Description: Upload splice records.

1. Setup Steps

1.1. Enter the "Device Info." menu.

1.2. Select the "Arc Records" item and press "Enter" to proceed.

1.3. Select the "Upload Record" item, press "Enter" to confirm, and upload the splice records to the computer.

1.4. Complete.



5.4.4 Update Program (USB Ver.2.0)

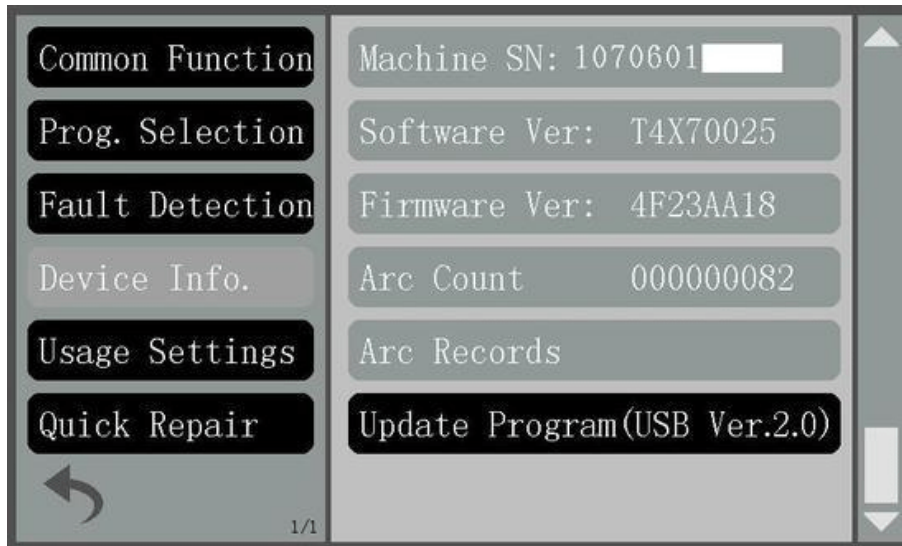
Function Description: Updating the splicer software, as detailed below.

1. Setup Steps

1.1. Enter the "Device Info." menu.

1.2. Select the "Update Program (USB Ver.2.0)" item, press "Enter" to confirm, and proceed to the program update.

1.3. Complete.



5.5 Usage Settings

1. Pause

Function Description: Enable or disable the pause function after splicing alignment is completed. (Default: Off)

2. Stretch Test

Function Description: Enable or disable the stretch test function after splicing is completed. (Default: On)

3. Monitor Flip

Function Description: Enable or disable the screen image flip function. (Default: Off)

4. Buzzer Volume

Function Description: Enable or disable the key-press prompt tone. (Default: On)

5. Touch Switch

Function Description: Set the touch-screen operation function. (Default: On)

6. Auto Focus

Function Description: Enable or disable automatic lens focusing to ensure clear fiber imaging. (Default: Off)

7. Time Set

Function Description: Set the device system time.

8. Function Setting

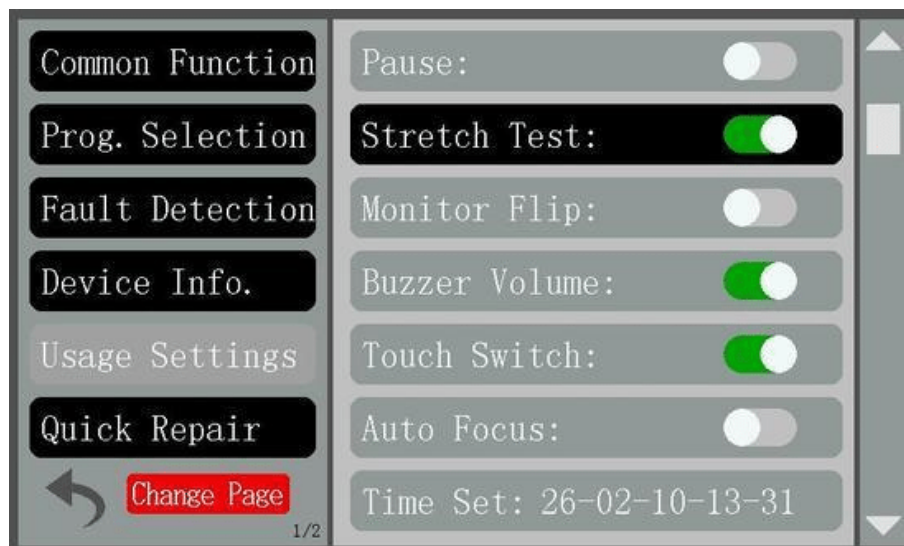
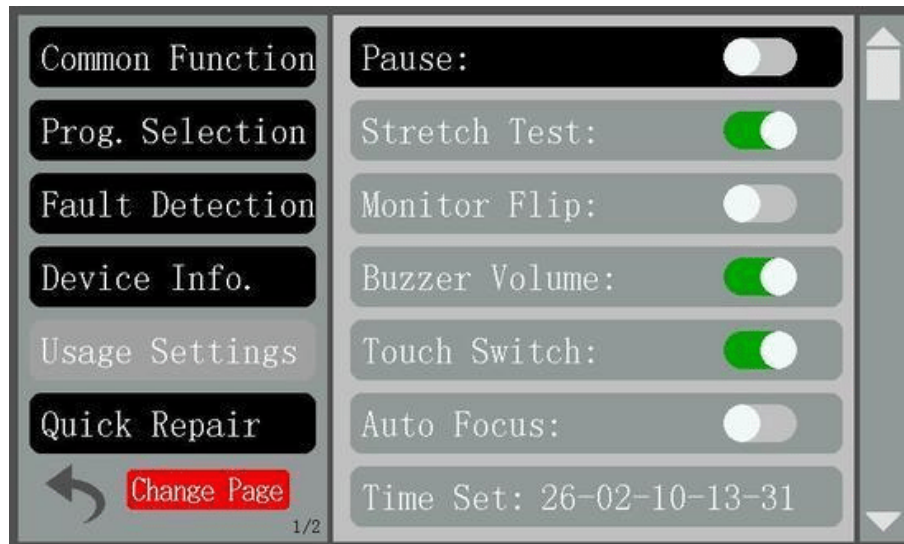
Function Description: Enable or disable the power-saving switch and set the standby time.

Operation Steps: Function Setting

9. Manual Loss

Function Description: Forces an increase in splice loss; higher settings result in greater loss. This function is disabled at setting 0.

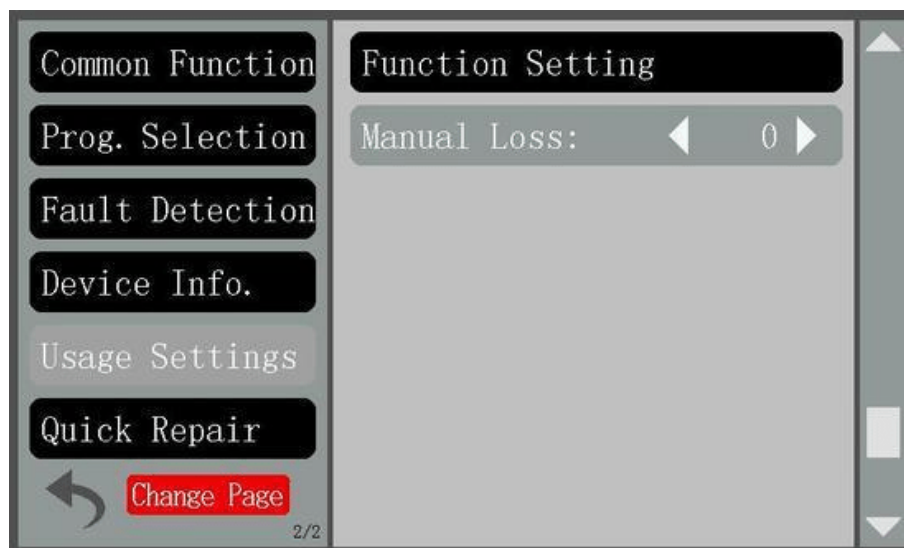
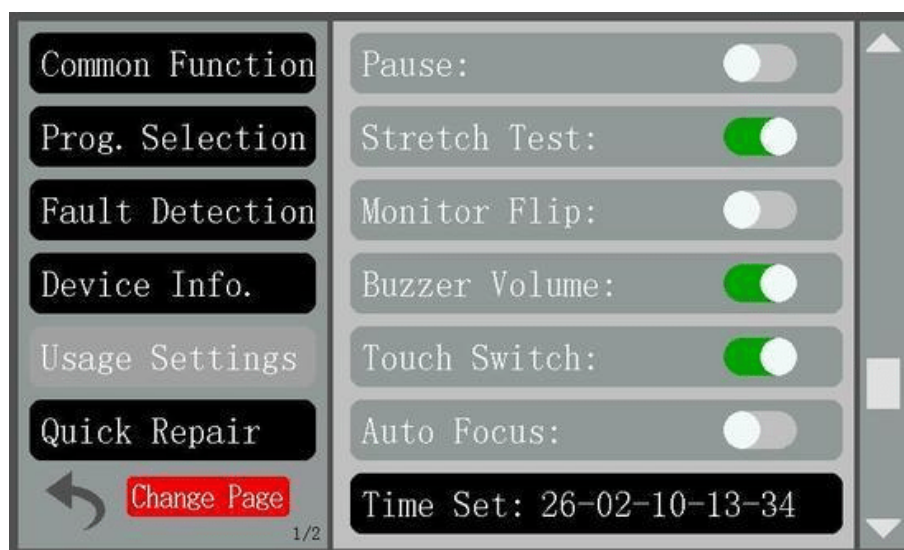
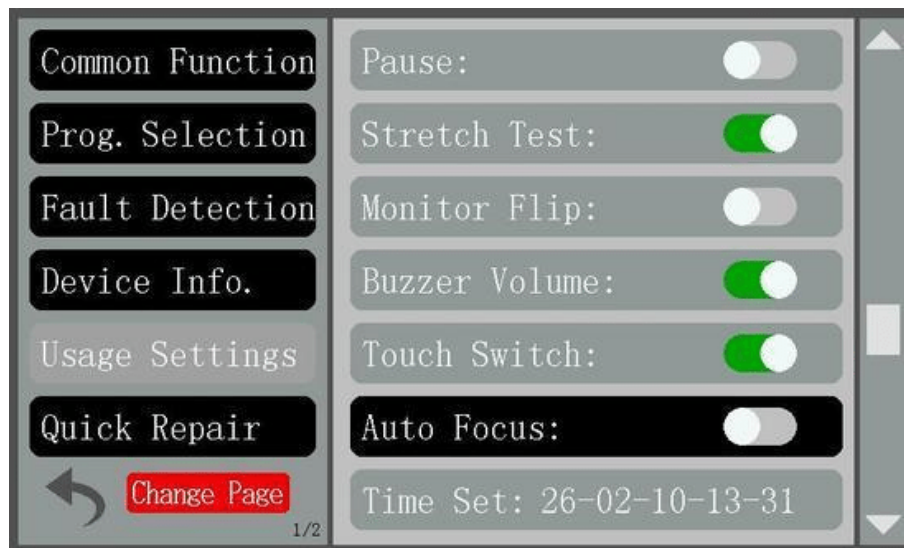
10. Complete

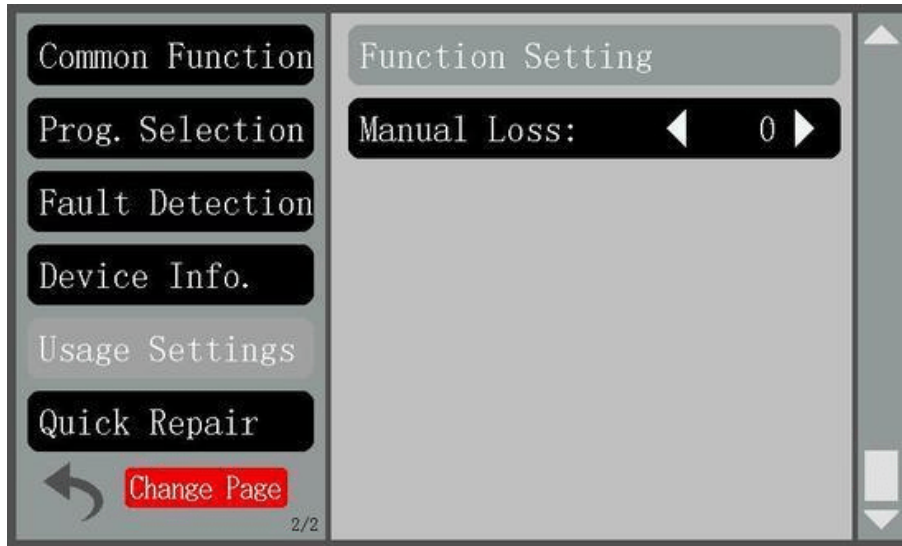


Common Function	Pause:	☐
Prog. Selection	Stretch Test:	☒
Fault Detection	Monitor Flip:	☐
Device Info.	Buzzer Volume:	☒
Usage Settings	Touch Switch:	☒
Quick Repair	Auto Focus:	☐
 Change Page	Time Set: 26-02-10-13-31	
1/2		

Common Function	Pause:	☐
Prog. Selection	Stretch Test:	☒
Fault Detection	Monitor Flip:	☐
Device Info.	Buzzer Volume:	☒
Usage Settings	Touch Switch:	☒
Quick Repair	Auto Focus:	☐
 Change Page	Time Set: 26-02-10-13-31	
1/2		

Common Function	Pause:	☐
Prog. Selection	Stretch Test:	☒
Fault Detection	Monitor Flip:	☐
Device Info.	Buzzer Volume:	☒
Usage Settings	Touch Switch:	☒
Quick Repair	Auto Focus:	☐
 Change Page	Time Set: 26-02-10-13-31	
1/2		





5.5.1 Function Setting

Function Description: Allows control of the Power Save Switch, setting of Stand-by Time, control of the Image Cache Switch, and supports splice image viewing and configuring Fine Threshold parameters.

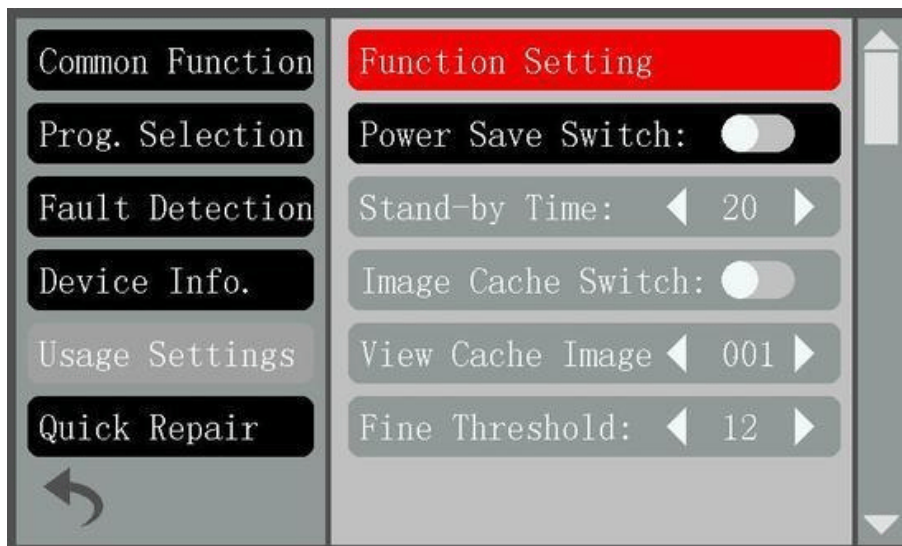
1. Setup Steps

1.1. Enter the "Usage. Settings" menu.

1.2. Select the "Function Setting" item.

1.3. Press "Enter" to enter the Function Setting, which is used to enable or disable the Power Save Switch, adjust the Stand-by Time, control the Image Cache Switch, view splice image, and set the Fine Threshold.

1.4. Complete.



5.6 Quick Repair

1. Quick Optimize

Function Description: Calibrates the discharge parameters to adapt to the environment and electrodes, ensuring splicing quality.

Operation Steps: Quick Optimize

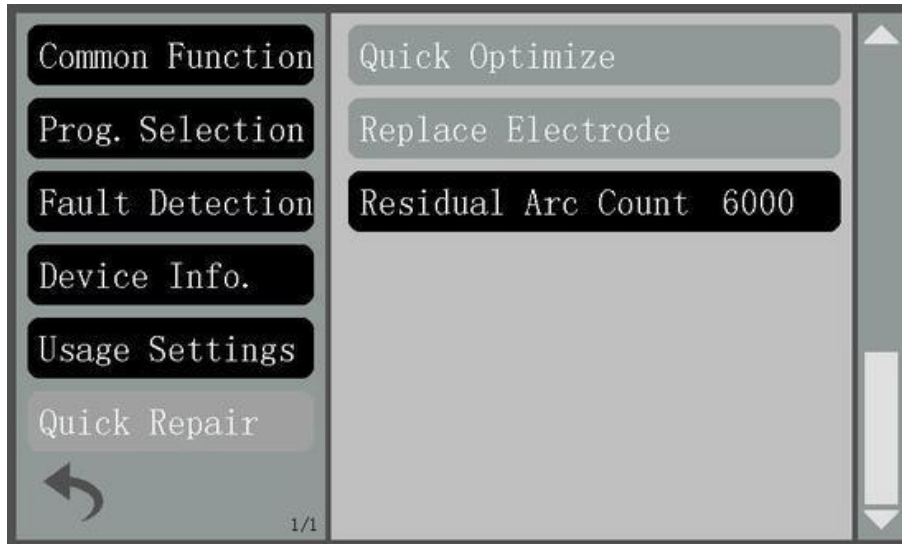
2. Replace Electrode

Function Description: Used to reset the electrode life count.

3. Residual Arc Count

Function Description: Used to view the remaining electrode life (number of discharges).

4. Complete



5.6.1 Quick Optimize

Function Description: Calibrates the discharge parameters to adapt to the environment and electrodes, ensuring splicing quality.

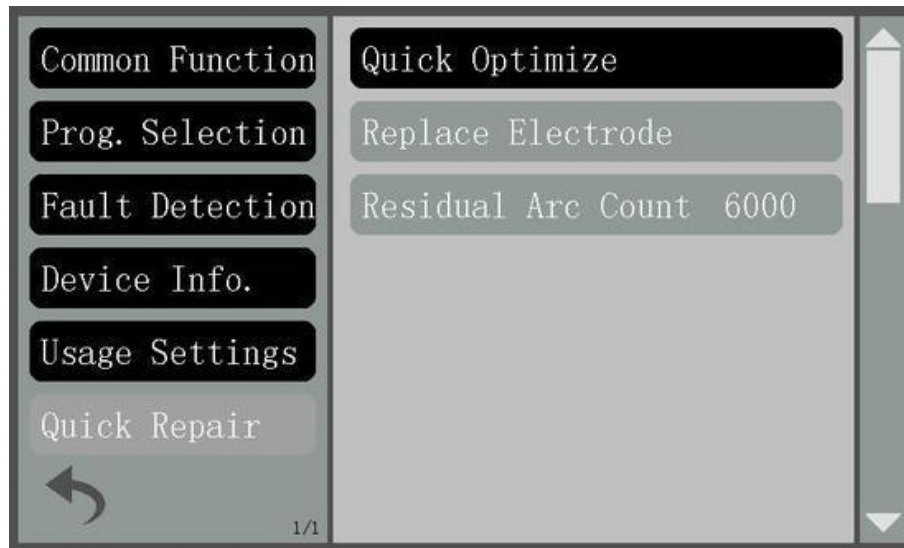
1. Setup Steps

1.1. Enter the "Quick Repair" menu.

1.2. Select the "Quick Optimize" item.

1.3. Press "Enter" to enter. Place two properly cleaved fibers, close the windproof cover, then press "Enter" to start the setting. This is used to calibrate the discharge of energy and adapt to the current conditions.

1.4. Complete



Chapter 6 Troubleshooting

1.Fiber Position Calibration

Function Introduction: Addresses abnormal position issues such as fiber misalignment, collision, or V-groove misalignment through cleaning and parameter calibration.

2. Abnormal Phenomena

- 2.1. Fiber is not centered, prompting "Please Re-place Fiber".
- 2.2. Fiber is not centered and continuously moves up and down.
- 2.3. Fibers collide during feeding.
- 2.4. The V-grooves on both sides are not aligned.

Operation Steps: Fiber Position Calibration

6.1 Fiber Position Calibration

1. Clean the V-Grooves

- 1.1. Use a craft blade to clean the left V-groove.
- 1.2. Use a craft blade to clean the right V-groove.

2. Set Work Mode

- 2.1. Press "Enter" to enter the "Prog. Selection" interface.
- 2.2. Select the "Work Mode" item.
- 2.3. Press "Enter" to change the work mode to "MANUAL".
- 2.4. Press "Exit" to return to the manual mode operation interface.

3. Calibrate Left V-Groove

3.1. Place a fiber in the left V-groove and close the windshield cover. The fiber end face must extend past the electrodes. If the Y-axis fiber is not centered on the screen, repeat step 1.1 to clean the left V-groove.

3.2. View the menu on the right side of the screen, press "Arc" to select the second line "X Motor".

(Note: If the display is abnormal, press "Enter" to show the interface.)

3.3. Press the "Up" or "Down" until the left X fiber moves to the center of the X screen .

(Note: The fiber moves slowly; hold the key down and the buzzer will sound continuously).

3.4. Re-place the left fiber once, ensuring the end face extends past the electrodes. Confirm that the left fiber is centered on the X-axis screen. If not centered, repeat step 3.3.

4. Calibrate Right V-Groove

4.1. Place a fiber in the right V-groove and close the windshield cover. The fiber end face must extend past the electrodes. If the X-axis fiber is not centered on the screen, repeat step 1.2 to clean the right V-groove.

4.2. View the second line of the menu on the right side of the screen, press "Enter" to switch to "Y Motor".

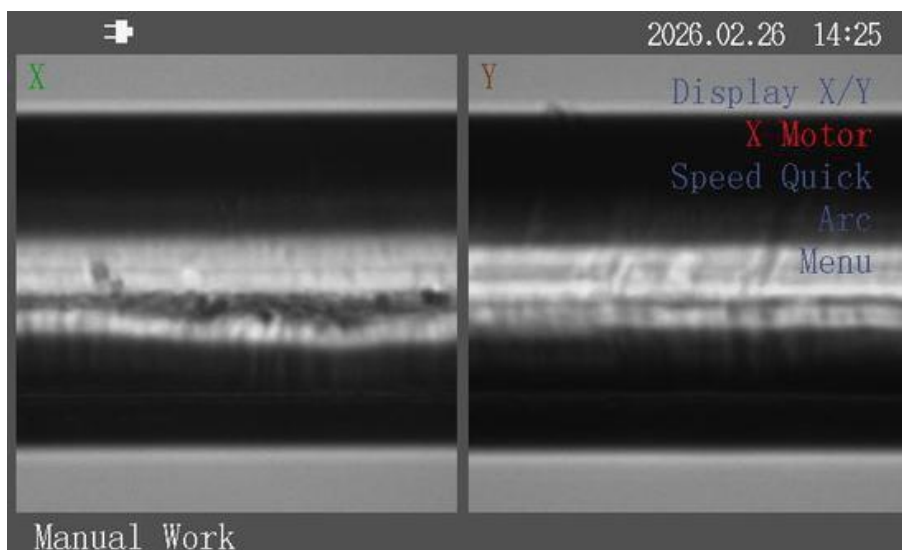
4.3. Press the "Up" or "Down" until the right fiber moves to the center of the Y-axis screen .

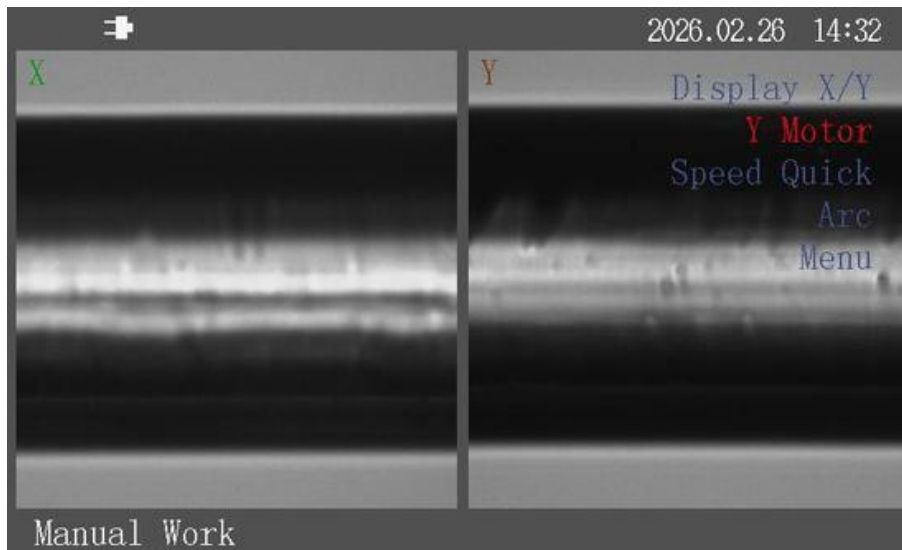
(Note: Fiber movement is slow; keep the key pressed and the buzzer will sound continuously).

4.4. Re-place the right fiber once, ensuring the end face extends past the electrodes. Confirm that the right fiber is centered on the Y-axis screen. If not centered, repeat step 4.3.

5. Complete







Pro'sKit®



寶工實業股份有限公司

PROKIT' S INDUSTRIES CO., LTD

<https://www.proskit.com>

E-mail: pk@mail.prokits.com.tw

©2026 Prokit' s Industries Co., LTD. All rights reserved 2026001(C)