

IE-F3 Automatic Stripping Crimping Machine Operator Manual



A. Safety Regulations

Thank you for purchasing IE-F3 automatic ferrule stripping and crimping machine. The machine operator is responsible for ensuring that every employee who uses the machine has received training in accordance with these operating instructions. We have fully considered the safety factors when designing the machine, but the operator still should read through the manual and understand the content. Special attention should be given during the whole work progress, including use, repair & maintain.

1. Reliable earth wire is required.
2. We suggest to use a voltage stabilizer.
3. Box cover and protection covers are not allowed to be unloaded during the processing. When unload the covers for maintenance, the operator have to switch off the power supply.
4. Users must use, repair, maintain this machine only after fully understanding the contents of this usage manual before using the machine.
5. Wrong operation will result in surprising trouble or shortening the service life of the product, lowering the functions.
6. Please deliver this user manual to the next proprietor, together with the machine, if this machine is transferred to other people.
7. Put this book where it can be reached at any time, in order to use it over a long period of time.

▼ ATTENTION

Cut off power supply before repair & maintenance.

I. Operation

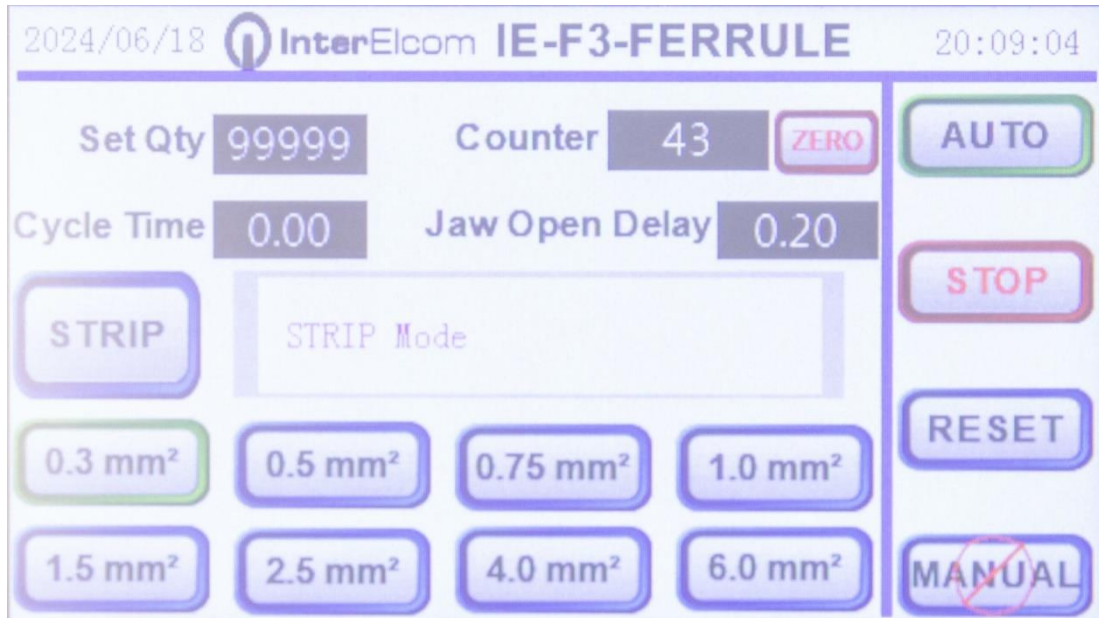


Figure 1

1.1 Set Qty: Set the target production quantity. When 1.2 Finished reaches 1.1, machine stops working.

Counter

ZERO: Reset counter.

1.2 Cycle Time: Working time of each cycle.

1.3 Ferrule SQ: Press buttons to enter setting page

(Reset machine after the setting)

1.4 Mode: Switch working mode between Crimp Strip, and Strip.

1.5 AUTO/INCH: Switch operation mode.

1.6 WORK/STOP...: Show current status.

1.7 RESET: Reset machine.

II. Manual Page

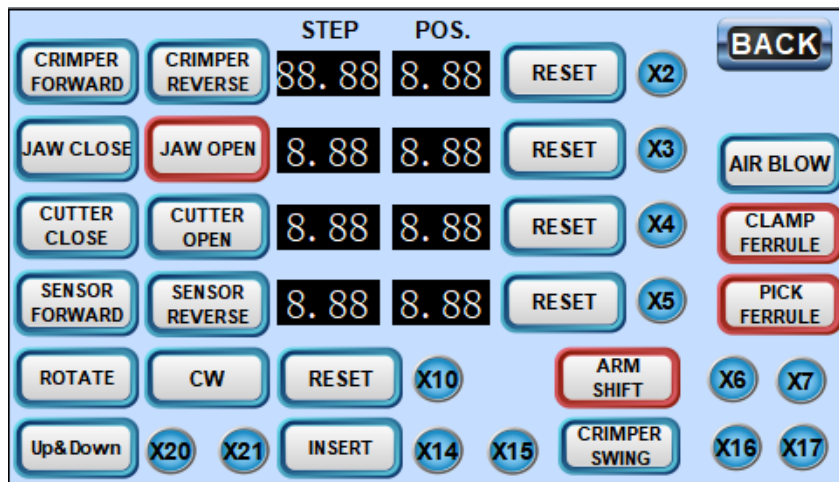


Figure 2

2.1 To test the parts and adjust machine manually.

2.2 STEP: Set the moving distance of each step, it's for faster adjustment. But please avoid input big numbers.

2.3 POS.: Show the current position, it's a real time data.

III Parameter Password 8888

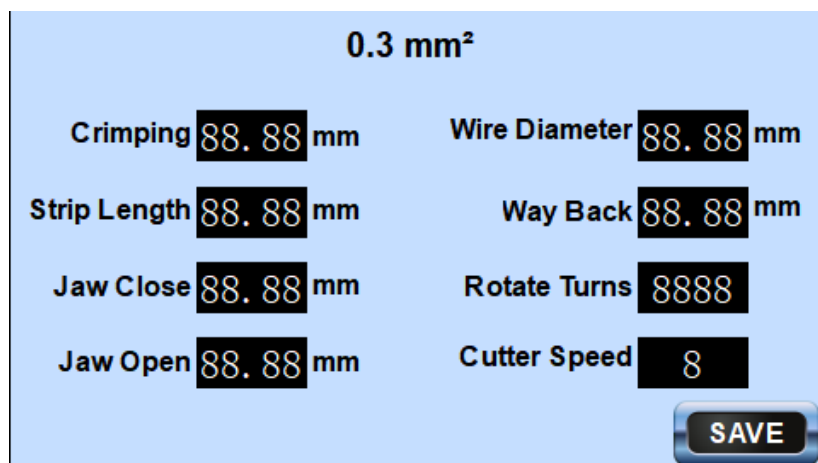


Figure 3

3.1 Crimping: The crimping diameter, number smaller, pressure bigger.

3.2 Wire Diameter: Blade cut depth, number smaller, cutting deeper.

3.3 Strip Length: Insulation pull-off length.

3.4 Way Back: The blade retract distance while pulling off the insulation.

3.5 Jaw Close & Open: The clamping & opening value of the jaws.

3.6 Rotate Turns: Set the rotate cycle numbers.

IV SYSTEM PARAMETER

These data are not supposed to be changed. If got any problem, please contact manufacturer.

HOME PAGE	Crimp Screw Ratio	Crimp Stroke	88.88	Accelerate & Deceleration	888
	8888 / 8888				
SET	Jaw Screw Ratio	Jaw Stroke	88.88	Accelerate & Deceleration	888
	8888 / 8888				
SPEED	Rotate Screw Ratio	Min. Strip Leng.	88.88	Accelerate & Deceleration	888
	8888 / 8888	Trigger Reverse	88.88		
SPEED	Cutter Screw Ratio	Cutter Max. Close	88.88	Accelerate & Deceleration	888
	8888 / 8888	Cutter Max. Open	88.88		
SPEED	Trigger Screw Ratio	Max Value	88.88	Accelerate & Deceleration	888
	8888 / 8888	Max Strip Leng.	88.88		

Figure 4

V FUNCTION

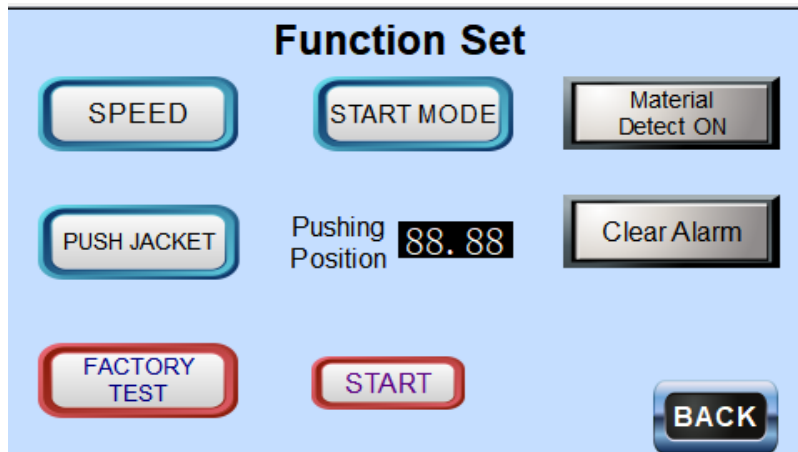


Figure 5

FACTORY TEST: Designed for manufacturer only.

Material Detect: Keep it to ON

VI DEFAULT SPEED

These data are not supposed to be changed. If got any problem, please contact manufacturer.

←	Crimp.Speed Ratio	88888	Pick Ferrule	88.8
	Jaw.Speed Ratio	88888	Clamp Ferrule	88.8
	Swing.Speed Ratio	88888	Air Jet	88.8
	Cutter.Speed Ratio	88888		
	Sensor.Speed Ratio	88888		

Figure 6

VII SPEED SETTING

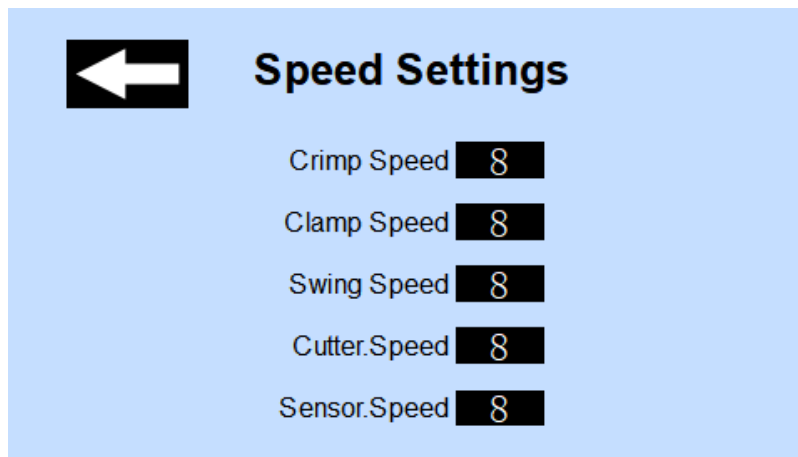
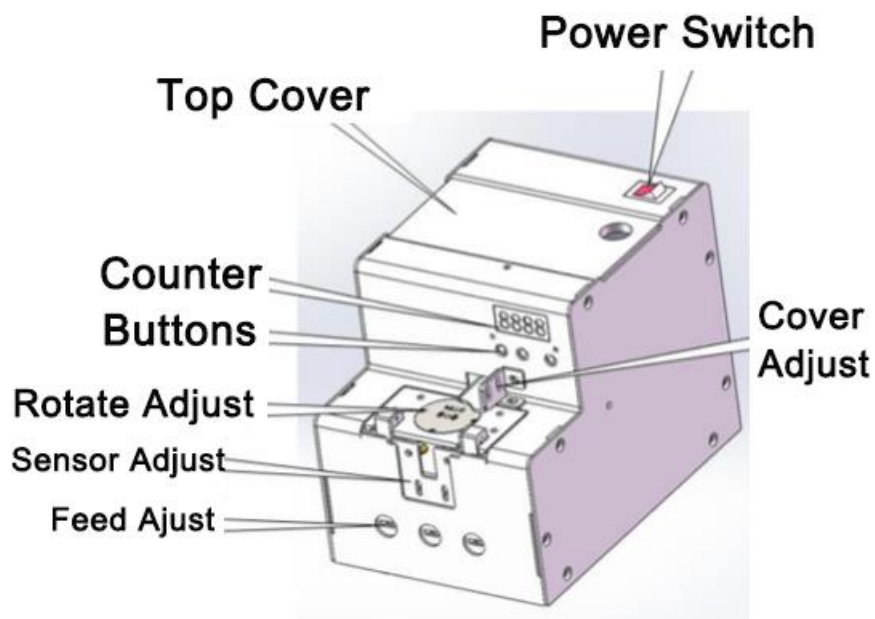
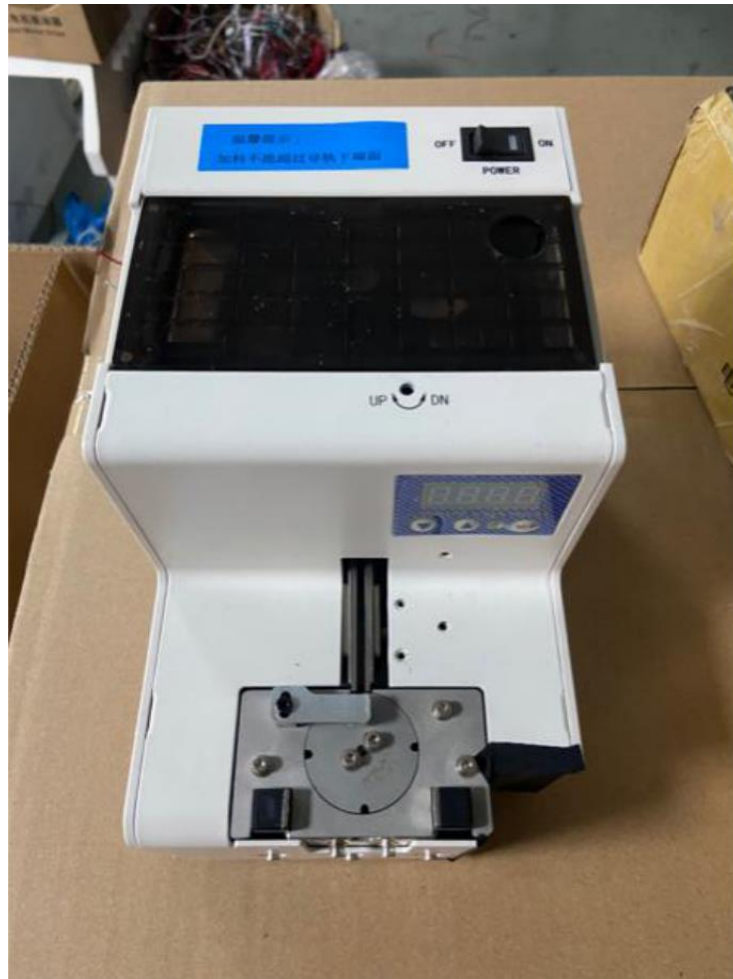


Figure 7

Change Ferrule Feeder





4.1 Each IE-F3 comes with 4 ferrule feeders for different ferrule range:

0.3-0.5mm² ,0.75-1.5mm² ,2.5-4mm² , 6 mm²

Select proper ferrule feeder when changing ferrules.

4.2 Adjustment of the height of the cover and brush

The gap between the cover and the nut is between 0.2 ~ 1.0mm, if there is no gap, the ferrules cannot come out,; if the gap is too large, the ferrules will be stacked together, and it cannot be well loaded;

4.3 Adjustment of brush height

The ideal adjustment result: brush off the horizontal ferrules as appropriate, too high or too low will affect the movement of the ferrules.

4.4 Adjustment of turntables and guides

4.4.1 Make sure that the ferrules match the tracks of the turntable and terminals;

4.4.2 Check whether the opening of the turntable is aligned with the guide rail, if positive, tightening screw. the gap between the turntable and the guide rail should be 0.3~ 0.5mm;

4.4 Fill lubricating oil to the moving part to ensure normal transmission;

4.5 Vibration adjustment

4.5.1 When the ferrule is large, the vibration amplitude of the guide rail should be adjusted to be increased, and when the terminal is small or short, the vibration amplitude of the guide rail should be adjusted to be reduced;

4.5.2 Adjustment method

1). Press the "SET" key for 3 seconds, the buzzer sounds and enters the setting mode, the panel displays the value "1-**", at this time press the "▼", "▲" key can adjust the value, press the "SET" key after the setting is completed, and then enter the parameter adjustment: "1-**, 2-**, 3-**, 4-**, 5-**".

1--**: value range 0-40, the bigger the number, the stronger the vibration

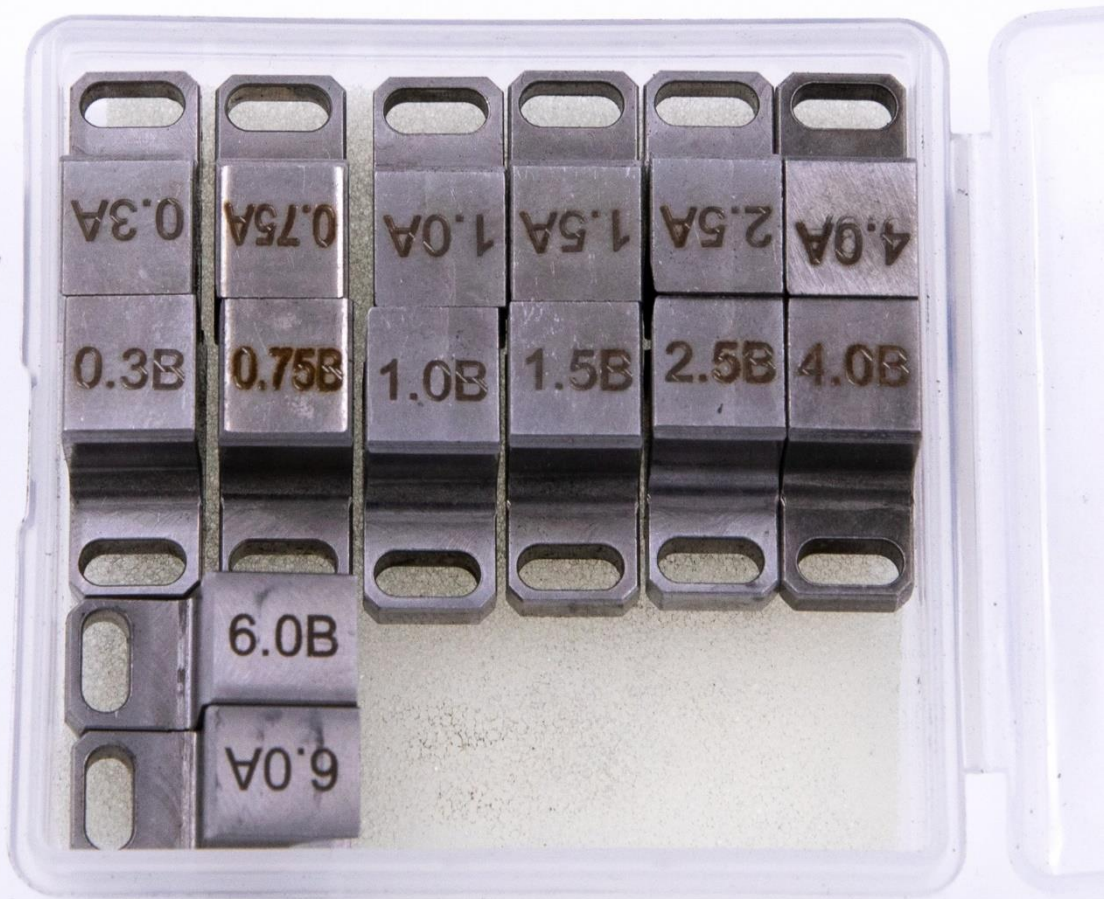
2--**: the vibration stops delay time, value range 0-99, i.e. 0 - 9.9 seconds.

3--**: the brush stops delay time after the vibration stopping, value range 0-99. i.e. 0 - 9.9 seconds.

4--**: the loading delay speed of the rotate plate, value range 1-10. the bigger the number, the slower the speed.

5--**: value range 0-1. 1: count mode, 0: no count.

- 2). After the last parameter is set, press the "SET" key, the buzzer sounds, saves the data and returns to working mode.
- 3) Press the "▼" key to zero the current count value on working mode
- 4) **Buzzer:** When the turntable is idle for 10 turns without ferrules, the buzzer alarms and automatically closes when there are ferrules.



F3, FERRULE GUIDE



F3, 4 Ferrule Prefeeder
0.3 - 0.5, 0.75 - 1.5, 2.5 - 4.0, 6.0



F3 Ferrule Ring



**F3 Crimp Jaw 2 sets
0.3 - 4.0mm², 6.0mm²**

V Tech Parameters

Mode	IE-F3 Ferrule Stripping Crimping Machine
Function	Ferrule, wire stripping, conductor twisting, crimping
Conductor Cross-section	0.3, 0.5, 0.75, 1.0, 1.5, 2.5, 4.0, 6.0 mm ²
Stripping Length	17 mm
Crimping Length	6 - 12 mm
Cycle Time	2 seconds
Air Supply	0.4-0.7MPa (clean and dry compressed air)
Power Supply	AC220V ,50/60HZ
Dimensions (LxWxH)	400x480x 420mm
Weight	38kg

VI Error Message

X0 ERROR: Crimp motor reset error

X1 ERROR: Cable clamp motor reset error

X2 ERROR: Rotate motor reset error

X3 ERROR: Cutter motor reset error

X4 ERROR: Sensor motor reset error

X6 ERROR: Arm shift cylinder not in origin

X7 ERROR: Arm shift cylinder not move to position

X14 ERROR: Ferrule insert cylinder not in origin

X15 ERROR: Ferrule insert cylinder not move to position

X16 ERROR: Crimper swing cylinder not in origin

X17 ERROR: Crimper swing cylinder not move to position

X20 ERROR: Up&down cylinder not in origin

X21 ERROR: Up&down cylinder not move to position

VII Maintenance

- a) **CUT OFF power supply first!**
- b) **It can only be cleaned with a vacuum cleaner or a rag.**
- c) **Forbidden to blow a certain position with an air gun. That may cause a short circuit of the control or damage to the mechanical structure.**
- d) Keep the inside of the machine box dry and clean
- e) Regularly clean and grease the three motor leadscrews (at least every 15 days)
- f) Regularly clean and grease the crimping head of the terminal crimp cylinder (at least every 15 days)
- g) Square and hexagonal crimping mechanism, regularly wipe the terminal crimping interface with a fine cloth or cotton and alcohol (at least once every 15 days).
- h) Regularly clean and lubricat other moving parts (at least once every 30 days)
- i) When adding butter or lubricating oil, pay attention to control the volume.