VECTECH963A1 Self-Feeder

Instruction Manual

Thank you for purchasing a Self-Feeder. Please read this manual before operating the unit. Store this manual in a safe, easily accessible place for future reference.

Part No.	Part Name	Description
47024	Pedal Switch	
47436-0.6	Feeder tube assembly (0.8m) Ø0.6mm	
47436-0.8	Feeder tube assembly (0.8m) Ø0.8mm	
47436-1.0	Feeder tube assembly (0.8m) ø1.0mm	
47436-1.2	Feeder tube assembly (0.8m) ø1.2mm	
47436-1.4	Feeder tube assembly (0.8m) ø1.4mm	
47436-1.6	Feeder tube assembly (0.8m) ø1.6mm	
47022-0.6	Guide tube assembly Ø0.6mm	Using on the top of Tip
47022-0.8	Guide tube assembly Ø0.8mm	Using on the top of Tip
47022-1.0	Guide tube assembly ø1.0mm	Using on the top of Tip
47022-1.2	Guide tube assembly ø1.2mm	Using on the top of Tip
47022-1.4	Guide tube assembly ø1.4mm	Using on the top of Tip
47022-1.6	Guide tube assembly ø1.6mm	Using on the top of Tip
47478-0.6	Guide tube assembly Ø0.6mm	Using on the bottom of Tip
47478-0.8	Guide tube assembly Ø0.8mm	Using on the bottom of Tip
47478-1.0	Guide tube assembly ø1.0mm	Using on the bottom of Tip
47478-1.2	Guide tube assembly ø1.2mm	Using on the bottom of Tip
47478-1.4	Guide tube assembly ø1.4mm	Using on the bottom of Tip
47478-1.6	Guide tube assembly ø1.6mm	Using on the bottom of Tip
47478-0.6	Feeder tube (0.8m) Ø0.6mm	
47478-0.8	Feeder tube (0.8m) Ø0.8mm	
47478-1.0	Feeder tube (0.8m) ø1.0mm	
47478-1.2	Feeder tube (0.8m) ø1.2mm	
47478-1.4	Feeder tube (0.8m) ø1.4mm	
47478-1.6	Feeder tube (0.8m) ø1.6mm	

SECTION 1 Summary

The unit is an device automatic self-feeder. It is suitable for variety of soldering stations and soldering irons. One hand operation, and easy to operate. Adopt step motor , feeding precise and the precision is controlled optionally. Feeding speed and length, returning time and feeding interval time are all adjustable and steady, perfect soldering effect and high efficiency.

SECTION 2 Specification

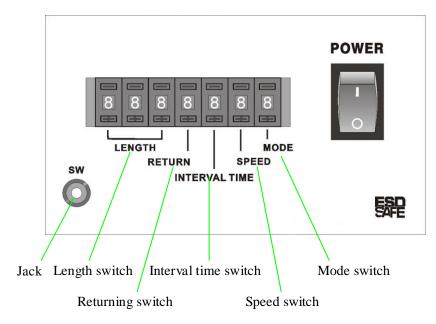
Power Consumption	10W
Motor	Step Motor
Feeding Speed	About 2.7mm/s~27mm/s (36°/s~360°/s)
Feeding Length	0~150mm
Feeding Interval Time	0~2.7s
Returning Time	0~0.9s (About 0~25mm, Speed: 360 °/s)
Feeding Mode	auto (1~9) / manual (0)
Dia. of the solder wire	0.5,0.6,0.8,1.0,1.2,1.4,1.6 (mm)
Weight of solder wire usable	≤ 1 Kg (roll)

SECTION 3 Characteristics

- * Automatic self-feeder and match a variety of soldering stations and soldering irons.
- * Auto and manual controlled feeding optional. One hand operates the device which is easy to operate.
- * Feeding speed, length and interval time are adjustable, further more it is designed with returning function to reduce solder wire consumption.
- * Both of Pedal switch and Manual switch can be used.
- * ESD safe by design to avoid damaging the sensible electronic element because

of the static.

SECTION 4 Panel Picture



SECTION 5 Combination

- * Self-feeder device
- * Soldering station and Soldering iron. (purchase)
- * Please choose wire diameter ring in accordance with wire diameter.
- * Please choose guide tube set in accordance with wire diameter and soldering station type.
- * Please choose feeder in accordance with wire diameter and soldering station type.
- NOTE: In order to choose feeder tube assembly and wire diameter ring exactly,

pressure, you can adjust Pressure Adjusting Screw on top of unit to increase feeding pressure clockwise. Solder wire is twisted because of too strong feeding pressure, you can adjust it anticlockwise.

SECTION 8 Operation

Do corresponding operations in accordance with the chosen Feeding Mode.

Manual: (The Mode switch is set as 0)

Turn on power switch. Step on Pedal Switch or press the red Touch Switch, and the unit works. After loosing it, returning once and then stop working. Feeding Length and Feeding Interval and Feeding Mode are all useless when the Feeding Mode is set as manual.

Auto:

Turn on Power Switch. The unit will work according to setting parameters when stepping on pedal switch or pressing Touch Switch once. All functions are useful

SECTION 9 Replaceable parts



Feeder Tube Assembly



Guide tube assembly (Using for top Feeding)



Feeder Tube



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Example: When the digit is set as 1, the interval time is 0.3 second. When it is set as 2, the interval is 0.6 second. When it is set as 9, the time is longest with 2.7 seconds.

Press the Interval Time Switch to choose the digit. The range is 0 second to 2.7 seconds.

4. Feeding Mode setting

Press the Feeding Mode Switch to choose suitable digit.

Feeding Mode is designed with one digit and the setting method is the same as above. The digital match function as follow:

- 0: Manual Feeding1: Auto Feeding once2: Auto Feeding twice3: Auto Feeding three times4: Auto Feeding four times5: Auto Feeding five times6: Auto Feeding six times7: Auto Feeding seven times8: Auto Feeding eight times9: Auto Feeding nine timesAfter each feeding, it has returning.
- **5.** Returning Time setting

Press Returning Switch to set the match digit in accordance with working demand. Returning Time is designed with one digit. 0 to 9 denotes 0 second to 0.9 second. The resolution is 0.1 second, namely, each digit denotes 0.1 second. The returning speed is fixed with 360° /s.

Example: When the digit is set as 1, the returning time is 0.1 second and the returning length is 2.8mm. The digit is set as 2, the returning time is 0.2 second and the returning length is 5.6mm. When the digit is set as 9, the returning time is 0.9 second and the returning length is 25mm.

The range is from 0 to 0.9s (about 0 to 25mm).

6. Feeding Pressure setting

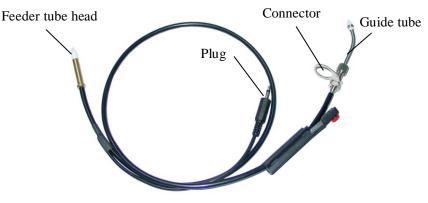
The solder wire isn't sent out automatically because of inadequate feeding

please fix on the soldering iron type and wire diameter when purchasing the self-feeder.

SECTION 6 Installation

Before installation, please check the parts and make sure whether the power supply voltage accords with the nameplate.

1.Install feeder tube assembly



Feeder tube assembly

Unscrew the fixed screw on the top cover of unit, insert feeder tube head of feeder tube assembly into feeder guide tube, and then tighten the screw. Insert plug into "SW" jack. If you use Pedal switch and inset the plug of Pedal switch.

2.Install solder wire

- a. Pull the solder wire axis across the framework of solder wire and place it to the solder wire holder back of unit. Make the notch on each side of solder wire axis lock into solder wire holder.
- b. Pull the solder wire head and insert it into wire guide tube behind the top, push Handspike to widen the gap between two running gear wheels, so it can

cross the feeder tube easily.

c. Set the Feeding Mode as "MANU", insert power plug and turn on power switch "POWER". Make the feeder tube as straight as possibly, step on Pedal Switch or press down the red Touch Switch until the solder wire is sent out. Turn off power switch.

3. Install Soldering Iron

Screw off the black nipple of handle assembly, set the handle into the connector and screw on the black nipple again. Turn the connector can adjust the combined location of between Guide tube and soldering tip, and last connect the soldering iron to soldering station.

<u>∧</u>Note:

- * Please be careful not to break heating element when screw off black nipple to install connector
- * If step on Pedal switch or press down the red Touch Switch, the solder wire can't be sent out automatically. It needs to adjust the feeding pressure pressure adjusting screw. Refer to parameter setting.
- * The Feeder tube can't be bended overly because the Solder Wire will be blocked.
- * When the unit is working, the soldering tip's temperature is very high, please be careful, in order not to be scalded.
- * Make sure the power voltage in according with the working voltage of the unit.

SECTION 7 Set Parameter

1. Feeding Speed setting

Feeding speed is set with digital switch. Press "+" button on the digital switch and

the match digit will increase by one step. Similarly, press "-" button, and the match digit will decrease by one step.

Feeding speed is designed with one digit. 0~9 denotes the feeding speed is about 2.7m/s~27m/s (Angle: $36^{\circ}/s~360^{\circ}/s$).The resolution is 2.7mm/s, namely, each digit denotes feeding speed is 2.7m/s. ($36^{\circ}/s$)

Example: When the digit is set as 0, the speed is slowest with 2.7 mm/s. When it is set as 1, the speed is 5.4 mm/s. When it is set as 9, the speed is fastest with 27 mm/s(360° /s).

Press the speed switch to set the suitable digit in accordance with working demand. The range is about 2.7mm/s to 27mm/s.

2. Feeding Length setting

Feeding Length is designed with angle system, namely, with angle what the motor turned denotes Feeding Length.

Feeding Length is designed with three digits. 001 to 999 denotes feeding length is from 0.15mm to 150mm. The resolution is 0.15mm, namely, each digit denotes 0.15mm (1.8 degree). The setting method is the same as feeding speed.

Example: When the digit is set as 001, the angle is 1.8 degree and the Speed Length is 0.15mm. When the digit is set as 002, the angle is 3.6 degree and the Speed Length is 0.3mm. When the digit is set as 999, the Speed Length is longest with 150mm, and the angle is 1798.2 degree.

Press the Length Switch to set the suitable digit in accordance with working demand. The range is about 0.15mm to 150mm.

3. Feeding Interval Time setting

Feeding Interval Time means the interval time between every feeding when the automatic feeding is over two times. Feeding Interval Time is designed with one digit. 0 to 9 denotes the interval time is 0 second to 2.7seconds. The resolution is 0.3 second, namely, each digit denotes 0.3 second. The setting method is the same as Feeding Speed.