DESK TOP WAVE SOLDERING MACHINE

PS-120

專業製造 Professional Machinery
電子零件成型設備Manufacturer for Electronic factory
PCB 剪腳機

睿城工業股份有限公司 **Ren Thang Co., Ltd.**
新北市新莊區民安東路 139 巷 17 號 **www.renthang.com**
No.17, Lane 139 Ming An E. Rd. Xinzhuang Dist., 24266, New Taipei City, Taiwan R.O.C.
Fax: +886-2-2203 9391 Tel:(02) 8201-1187 2202-1205, 2204-2067 E-mail: renthang@renthang.com

1. Production : Desk Top Wave Soldering Machine
2. Item No. PS-120
3. Power: 220V / 1 Phase / 1.2KW / 15 Amp.
4. Soldering Volume: 20Kgs.
5. Operation Temperature.: 0 ~ 399 Degree C.
6. Size of the machine: L480 x W350 x H200 mm
7. Control Construction: a. Durable power switch.
   b. Solder flow automatic or control by foot pedal
   c. Japanese micro temperature controller. set up easy and shown by number. Temperature tolerance under 2 degree C.
   d. Solder Flow Time under control from 0 ~180 seconds switch more convenient and accurate.
   e. Heater with power 1.2W. The temperature going up to 250 degree C. only 40 minutes.
   f. Cooler fan start when power turn on. Keep the control system will not be damaged by high temperature.
8. Mechanism: a. Cover with 2mm metal plate. Solder bath and control system divided in to 2 parts by thermo proof board.
   b. With stainless steel plate surface of the operation plate anti static green cover. Keep labor will not hurt by heat.
   c. 2 pcs rail to set up the point soldering process. Suitable for bigger PCB soldering operation.
   d. Nozzle changeable. Length 5 ~ 180mm width 5 ~ 80mm available. 5 seconds could change the different size nozzle by pliers.
   e. Soldering high 0 ~ 8mm adjustable.
   f. Solder bath made by stainless steel plate. Life time longer than normal material.
9. Specification.: a. Multi function.
   b. Easy operation.
   c. Mini size. Save space. Easy change location.
   d. Nozzle changeable. Available for different PCB operation and soldering type.

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A. Caution before operation.

1. Open package box and move the machine to the suitable location. Should be flat table.(Pay attention to the leg of the table is stable and loading at least 80 Kgs weight on the table.)
2. Check machine if any part was damaged by transportation? Wire connect is O.K. or not?. Wire of motor and power code are normal or not? Should repair damage parts before operation machine.
3. If the products are big quantity or long time operation. Should add cooler fan on the top of soldering bath.
4. Take out nozzle and foot pedal. Inset the plug of foot pedal in to socket (K) on the back of control box.
5. Connect power. Set temperature controller (G) to around 30 degree. Turn on switch (A) Meanwhile the power light (B) turn on.. Temperature control light turn on first and the finish light turn on when going up to operation temperature.
6. Turn on the soldering switch (C). Than turn on the automatic switch (D) Try to turn around the speed knob (E). The pump of the solder bath will turn around faster which means the motor function is normal.
7. Close automatic switch (D). Set the time controller to 10 sec. position. Step the pedal (M) one time and check the pump will stop within 10 sec. or not. If yes. Which means the foot pedal and time controller function is normal.

B. Soldering (in two method.)

1. Prepare a big stove. Put on the heater (gas stove) put solder stick or piece in the stove. Until the Solder melt like liquid situation.. Open the surface plate of the machine. Take out the soldering with spoon into the solder bath of the machine. Turn on the power and set the temperature controller (G) to 250 degree C. Until the solder volume to the level of 1 cm below the depth of the solder bath. It is the right volume of operation.
2. If without big stove nor heater (gas stove). Could use another method as below. Open the surface plate of the machine. Turn on the power and set temperature control (G) to 250 degree C. The heater tube will getting red and heat. Put the solder stick to touch the heater tube and move around one by one. Until the solder liquid cover the heater tube. Then put the solder piece into the bath until the solder liquid level go 1 cm below the depth of the solder bath. (Pay attention do not let the heater tube turn pick color from red color during this operation. The tube may damage by over heat.)
3. CAUTION TO OPERATION ABOVE PROCESS. Prevent to be hurt by high temperature.

C. Operation instruction.

1. Turn on power. Open power switch (A) set up temperature controller. Waiting for melt the soldering. Around 40 minutes. (Now have to check the automatic switch (D) should be turn off. To avoid the motor will be damaged by high temperature.)
2. When soldering melt completely. The temperature controller will jump to stable situation. This is the right time to turn on the automatic switch (D).
3. Choice the correct size of the nozzle. With long nose pliers and fix the nozzle with the seat (8) should push to the bottom should not move after fixed.
4. If wish to change the component of PCB. Could fasten plate (5) and use the four edge screw of

The operation plate to change the height of the operation distance. No need to fixed the rail. (6).

5. If need to soldering all the PCB by moving. Could take off the plate and fixed the rail. The screw (7) and rail seat (7) could adjust the width and depth of the PCB.
6. The soldering flow height should be over nozzle 0 ~3 mm and could find some soldering going out of the edge of the nozzle. This is the best situation of the soldering height.
7. For the PCB not suitable for long time operation. Could turn automatic switch (D) to the down side Use foot pedal (M) step and set up the soldering time. This way could be control operation by pedal According to the set up time to operation soldering process.
8. If wish to obtain the perfect soldering situation. Should cover flux before soldering.
9. If need soldering whole PCB. The flux should not be too wet. The PCB need to be a little dry by heat before soldering process.
10. If the nozzle loose after long time operation. Just need to modify the bottom part of the nozzle a little narrow by pliers.

C. Maintenance:

1. Clean the solder dross every day after working.
2. Clean the solder bath and pump. Clean the tube of the pump and stirred the solder bath with small spoon to clean the solder dross every month.
3. To separate pump need use cross screw driver take off the net cover of belt. And could see the 2 fixed screw on the center of the belt seat. Take off the screw with 5mm hex key wrench the pump can be taken out.

CAUTION:

- Make sure before install controller the power and input signal out put system is correct or not.
- Connect wire and cable should make sure to match the electric circle drawing.
- For avoid the disturb by other signal. The wire or cable should away from the power source or cable.
- After connecting wire or cable. The power switch should keep in off position so that will not shock by electric current.
- Operation circumstance: 0 ~ 55 degree C, 45 ~ 48% RH.
- Do not separate this machine individually.
- If prolong the wire should have to use same spec. wire material.

Power : AC85-265V 50/60Hz
Input : K.J.T.R.RTD. Linear
Output : RELAY. DC24V. 4 ~20mA.
Control: PID. PI. PD. P. ON/OFF (P=0)