QUICK 855T
AUTO-HOT PLATE

Instruction Manual

Thank you for purchasing the auto hot plate. Please read the manual carefully before operation and after reading it, Store this manual in a safe, easily accessible place for future reference.

SAFETY INSTRUCTION

Warning:

1. Before operation, make sure that input voltage of product is according with the power supply.
2. Put the product on a safe workbench, with a fireproof and heat resistant rubber pad.
3. When using the unit, keep it away from the flammable substance, such as alcohol, plastic, paper and wood etc.
4. During work, the temperatures of the preheating area and around it are very high. Please operate carefully to avoiding scald. Wear gloves and use heat resistant equipment to deal with PCB.
5. The unit is operated with high temperature, so keep it in a safe place where is away from the children.
6. Replace the heat element assembly, examine and repair the unit after the heat element assembly is completely cool down.
7. Only can be used for preheating of PCB, desoldering IC or BGA etc.
8. No operate the product when user is not familiar with the unit, to avoid danger to the operator and damage to the unit.
9. When the unit isn't in use for long time, please remove the power plug from it.

Caution the electric shock

1. To avoid creepage, make sure the power supply is well grounded.
2. To avoid electric shock, make sure the power cored is not covered with anything for protecting it from breakage.
3. No strike the heater area or let the liquid (such as water or alcohol etc.) leakage into the heater for protecting the heater from chap and result in electric shock or fire.
4. Before checking or repairing, please turn off the power supply and remove the power plug of the unit.

1. Specifications

Power	800W
Heating area:	135mmx250mm
Moving arm's range:	0~70mm
Heater material:	Ceramic
Sensor:	K-type thermocouple
Range of heating temperature:	50℃～350℃
Temperature stability	±1℃
Ambient temperature:	0～40℃
Temperature range:	Room temperature～600℃
Accurate:	+/-8℃
Weight:	9.8kg

2. Features

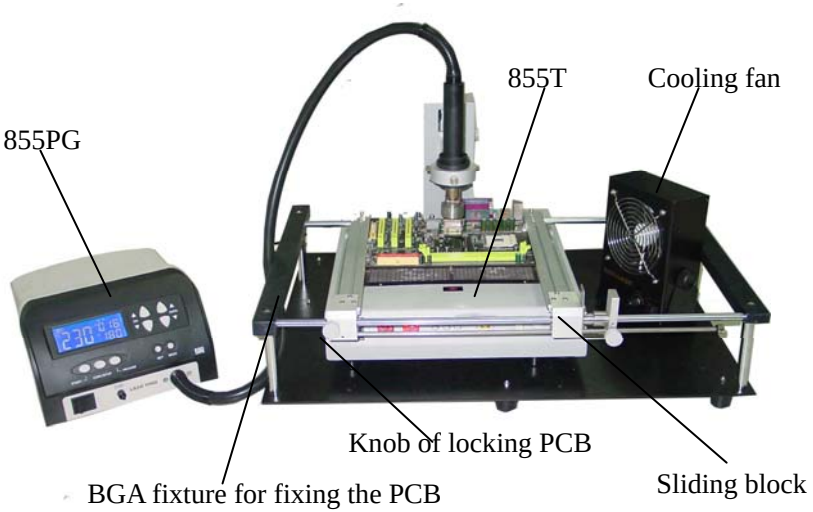
1. With long life infrared ceramic heater, rapid heating and high efficiency.
2. K-type thermocouple test the adjustable temperature, closed loop with zero voltage springs, digital display and easy to operate.
3. The arm can be moved easily with wide range adjusting and inching adjusting, and can work with the SMD rework system (855PG) together.
4. The preheated PCB can be placed on the stainless steel net or the fixture.
5. Power supply and heating is controlled separately with two different switches. And can read the preheating temperature easily when un-heating.
6. Internal thermometer, convenient to test the temperature of PCB.
7. It is suitable for preheating the PCB and desoldering IC or BGA, and other elements on the PCB.

6. Information instruction about malfunction

1. The temperature display window（THERMOMETER）shows "---", means:
   a) The thermometer (K-type sensor) is not connected.
   b) The sensor circuit is an open circuit.
   c) The testing temperature is over 600℃.
2. The temperature display window（TEMP）shows "S - E" means: There is something wrong with the sensor of the heater, and need to check and replace a new sensor.
3. During heating, the temperature showing is less than 50℃ and does not increasing, means: There is something wrong with the heater, and need to check or replace a new heater.
4. Last radix point of temperature display window（TEMP）indicates the heating condition: Light of the point is on means not reaching the setting temperature, if not means exceeding the setting temperature, if flashing, means reaching the setting temperature.

locking knobs after adjusting position.

7. The following picture is the unit working with the 855PG. It can also control the units working together by the SMD rework system.



Note: the 855PG, BGA fixture and cooling fan above picture are option and need to purchase.

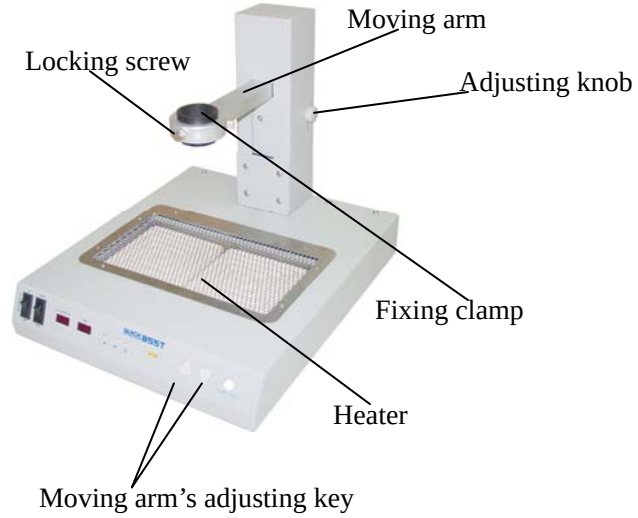
For example:

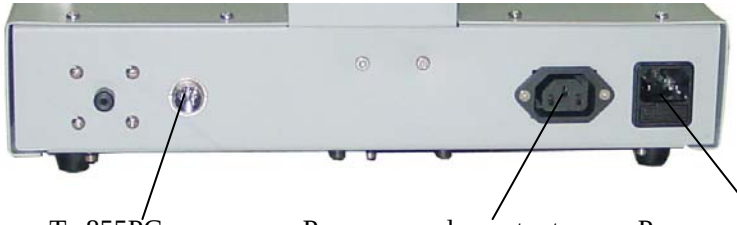
1) Click “START” key of the 855PG and then the moving arm comes to move downwards. When moving to one position, the 855PG comes to work as the selecting channel.
2) If clicking “STOP” key of the 855PG, the moving arm comes to move upwards. And the 855PG comes into the cooling zone (the sixth zone) to blow cold air.
3) And then, if clicking again the “STOP” key of the 855PG, the moving arm moves to top. The 855PG SMD rework system will stop work and come to the sleeping state.

3. Parts

NAME/MODEL	QUANTITY
855T main unit	1
855T simple fixation	1
Fixation	1
Cooling fan	1
Screws for simple fixation	4
Connection cord	1
Power cord	2
Instruction manual	1
Warranty card	1

4. Illustrate Instructions





To 855PG　　Power supply output (to 855F)　　Power supply input

Controlling switch about the temperature:	Controlling the temperature of the heater
Adjusting keys of the moving arm:	Make the moving arm do wide range adjustment or inching adjustment
Adjusting knob:	Controlling the nozzle's position
START/STOP key:	Make the moving arm comes to work and reset
Fixing clamp:	Fixing the nozzle
Locking screw:	Locking the clamp
Power supply input:	Provide power supply for 855T
Power supply output:	Provide power supply for the cooling fan
Socket with six pins:	Connect with 855PG

5. Operation instruction

5.1 heating function of 855T

1. Place the preheater and PCB fixture according to the required.
2. Connect well the power cord. Insert the plug into the socket (power output).
3. Turn on the power switch.

5.5 855T works with SMD rework system

一、 One end of the socket with six pins connects with the 855T, and the other end connects with the SMD rework system. Connect well the power cord and switch on the power supply, and then the moving arm will move upwards and reposition.

二、Unscrew the three locking screws and place handle of the SMD rework system into the fixing clamp of 855T. Adjust well the position of the handle and then screw the three locking screws to fix the handle.

三、Adjust well the chip's position on the PCB and the nozzle's position. Set the preheating temperature of the PCB (refer to the 5.2) and set the soldering or desoldering temperature (hot air) of the SMD rework system (refer to the SMD rework system's instruction manual).

四、It can adjust the nozzle's position by adjusting the "adjusting knob".

五、855T works with the SMD rework system:

1. Click "START/STOP" key and then the moving arm comes to move downwards. The SMD rework system will come to work when the moving-arm downwards moves to one position. the "△"or "▽" can adjust the arm's position accurately.
2. During the soldering or desoldering, click the "START/STOP" key, the moving arm will move upwards about 5~10mm and then the SMD rework system will run into the cooling zone and blow cold air.
3. And then click again the "START/STOP" key, the moving arm moves to top. The SMD rework system will stop work and come to the sleeping state.

六、**BGA fixture (option)**

1. Movable PCB fixture is able to fix PCB with different size. The Locking Knobs lock PCB Fixed Bar to fix PCB.
2. Unscrew PCB Locking Knobs and push sliding blocks by hand to open PCB fixed bars, make the distance between PCB fixed bars accord with PCB size. Fix PCB between them and screw down PCB

5.3 Comparison of Setting Temperature and Preheating Temperature of PCB

It is suitable for desoldering IC or BGA, and other elements on the PCB which must be preheated. But different elements must preheat with different temperatures, and before applying to practice, test the temperature according to the characters of elements and write down the testing record.

No.	Temperature of Display Window	Temperature of PCB placing on the steel net (10mm above the heater)	Temperature of PCB placing on the fixation (30mm above the heater)
1	50℃	43℃	32℃
2	100℃	73℃	53℃
3	150℃	113℃	76℃
4	200℃	158℃	103℃
5	250℃	200℃	131℃
6	300℃	250℃	159℃
7	350℃	298℃	192℃

Note: the above data are tested when the room temperature is 24℃ and only as a reference. Suggest the user make a test record before using the unit.

5.4 Moving Arm's Adjustment

2. If the moving arm's position is above the adjusting knob: the moving arm can move upwards or downwards quicker when pressing "△" or "▽" key.
   If the moving arm's position is below the adjusting knob: click "△" or "▽" key and then loosely it, the moving arm can do inching movement (one point). if pressing "△" or "▽" key and then not loosely it, the moving arm can move slowly, and loose the key when reaching the needed position.
4. The unit (TEMP) will display the heater's temperature after 2 seconds displaying the setting temperature. the adjusting temperature range is 50℃～350℃.
5. click the "▲" or "▼" key of the TEMP window if need to change the setting temperature (*refer to 5.2 temperature adjustment*). Switch the "WARM/COOL" key to the WARM position and it will up to the setting temperature several minutes later.
6. When the temperature is stable, place the PCB on the stainless steel net or fixture above the heater.
7. After finishing the heating work, turn off the "WARM /COOL" switch to the COOL position.
8. Turn off the power switch when finishing working, and remove the power plug if the unit is not used for a long time.
9. If use internal thermometer to test temperature (such as the temperature of PCB), connect preheater with K type thermocouple 15 minutes before testing.

Note:

1. K-type thermocouple has the positive or negative polarity, be careful not to connect oppositely. When testing, if the display figure doesn't increase, please check whether the K-type thermocouple is connected oppositely.
2. Insert the K-type thermocouple to the end and connect well.

Warning:

1. During work, the temperatures of the preheating area and around it are very high. Please operate carefully to avoiding scald.
2. Avoid small things dropping into the unit's inside. If some thing has dropped into the unit, taking out the thing after switching off the power supply.

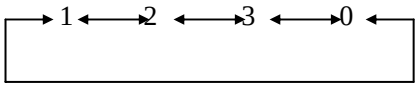
5.2 Temperature Setting

There are two methods to setting the temperature: regular setting and real-time setting.

5.2.1 Regular Setting

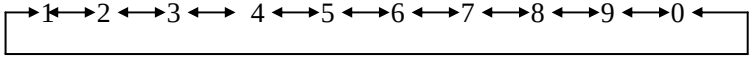
Press "*" key and not loose it at least one second.

1. First, display the presetting temperature, and then the hundreds-digit position will flash. It indicates that it has been in the setting mode of temperature. The hundreds-digit can be adjusted.
2. Press "▲" or "▼" key to adjust the hundreds-digit, the digital changing order is as the following:



When displaying the needed digit, press "*" key at once, and then the middle digit (tens-digit) will flash. It indicates that the tens-digit can be adjusted.

3. Choose the needed digit to replace the former tens-digit. Press "▲" or "▼" key to adjust the tens-digit, the tens-digit changing order is as the following.



When displaying the needed digit, press "*" key at once, and then the first digit (one-digit) will flash. It indicates that the one-digit can be adjusted.

4. Choose the needed digit to replace the one-digit. Press "▲" or "▼" key to adjust the one-digit, the one-digit changing order is same with the tens digit order.
5. After changing the temperature, press "*" key.
   1) Input the set temperature into the unit's memory.
   2) Display the set temperature.
   3) The heater comes to control the temperature.

Note:

1. **If power supply is cut off when setting temperature, the set temperature will not be memorized.**
2. **If the pressed time of "*"key is less than one second, the present set temperature will display about two seconds. Then display the temperature of Pre-heat plate. When press "*" key, the power supply of heating elements will be out off.**
3. **When the temperature is over the scope, the hundreds-digit will flash again. If the condition happens, please input the correct temperature value once again.**

5.2.2 Real-Time Setting the Temperature

If it is necessary to set temperature quickly when not cutting off the power supply, it can choose this way.

Temperature rising: click "▲**"** key directly, the setting temperature will raise 1℃ and the display window (TEMP) will show the set temperature. When loosing the "▲**"** key, the set temperature will delay about two seconds. Within two seconds, if click "▲**"** key and not loose at least one second, the set temperature will raise rapidly. Till reaching the needed temperature, and then loose the "▲**"**key.

Temperature dropping: click "▼" key directly, the setting temperature will drop 1℃ and the display window (TEMP) will show the set temperature. When loosing the "▼" key, the set temperature will delay about two seconds. Within two seconds, if click "▼" key and not loose at least one second, the set temperature will drop rapidly. Till reaching the needed temperature, and then loose the "▼" key.