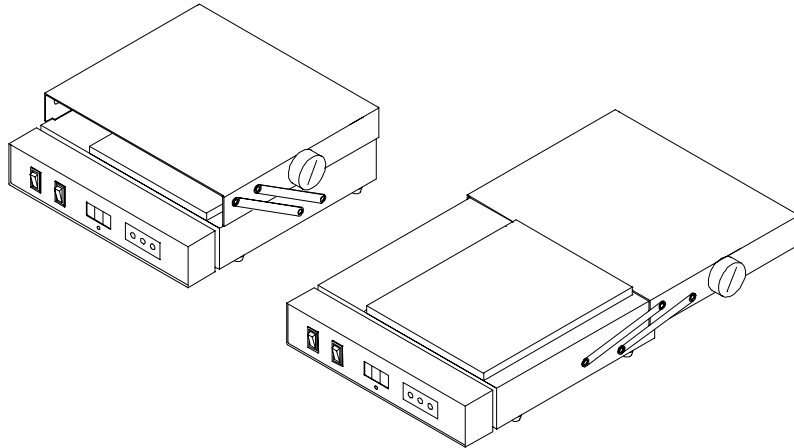


# MADELL QK870

## PRE-HEAT/REFLOW HOT PLATE



### 1. Specification:

Heating Power: 800W

Plate Area: 180mmx200mm

Plate Material: AL

Temperature Sensor: K Type Thermocouple

Temperature: 50°C ~ 300°C

Ambient Temperature: 0~40°C

Temperature Stability:  $\pm 2^{\circ}\text{C}$

Outer Dimension: 280 (W) x 290 (L) x 100 (H) mm

Weight: 5kg

### 2. Features:

- Even temperature distribution.
- CPU closed loop temperature control, digital display, zero Voltage heater switching.
- Dedicated power and heating switches.
- ESD safe.
- External temperature calibration.
- Hinged hood creates an oven like environment for reflow.
- Two heating states optional (Pre-heating & reflow).

### 3. Operation:

- Plug the power cable.
- Turn on the power switch.
- Pre-heat plate temperature will be displayed after the set temperature is displayed for 2 seconds.
- Adjust the up or down arrow keys to change the set temperature (see temperature adjustment).
- Turn on the heating switch, the unit starts heating. It will reach the set temperature in a few minutes.
- The unit may be used as a pre-heat plate when the cover is moved back or as a mini reflow oven when the cover is over the plate.
- Turn off the heating switch after a circuit board is done.
- Turn off the power switch at the end of the work.

Note: Be aware of the high temperature on the plate and its surrounding areas.

### 4. Temperature Setting and Adjustment

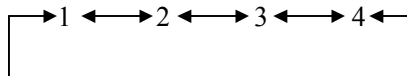
Temperature can be set in two ways:

(a). Regular setting:

Turn the heating switch off.

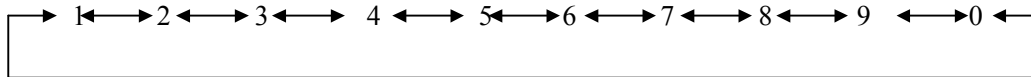
Press the '\*' key for at least 1 second.

- 1) The 100<sup>th</sup> digit flashes. It indicates that the unit has entered into temperature setting mode. The 100<sup>th</sup> digit may be changed.
- 2) Use the '▲' or '▼' keys to go through the valid numbers as shown below:



While the desired number is displayed, press the '\*' key to enter it and switch to the 10<sup>th</sup> digit position. The 10<sup>th</sup> digit flashes.

- 3) Use the '▲' or '▼' keys to cycle through the valid numbers as shown below:



Press the '\*' key to enter the desired number and switch to the 1<sup>th</sup> digit position.

- 4) Change to the desired number as show in (3).

At the '\*' key is pressed at the 1<sup>th</sup> digit,

- a) The selected temperature is saved;
- b) It is displayed.
- c) It is applied to the heating element.

**Notes: if power is off during temperature setting, the new temperature will not be saved.**

- If the “\*” key is pressed less than 1 second, the set temperature will be displayed for 2 seconds. Display will be automatically switched back to pre-heat plate temperature.
- After the ‘\*’ is pressed, power supply to heating elements will be out off.
- If an invalid temperature is entered, the 100<sup>th</sup> digit will flash, indicating a valid temperature is needed.

**(b). Temperature Setting during Heating**

If it is necessary to change plate temperature quickly while power supply to heat element is still maintained, the following procedure can be followed:

Raising the temperature:

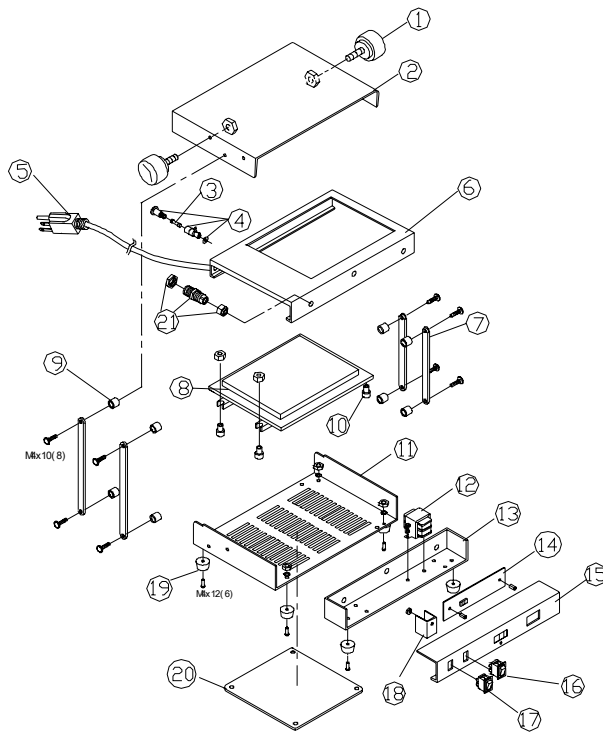
Press the ‘▲’ key directly without pressing the “\*” key. Doing so will raise the set temperature 1°C. If the ‘▲’ key is released, it will not respond to new input within 2 seconds. Press the ‘▲’ key again after two seconds will raise the temperature another 1°C.

If the ‘▲’ key is pressed for least 1 second, the set temperature will be incremented automatically until the ‘▲’ key is released.

Lowering the temperature:

Similar to above, the ‘▼’ key is used instead.

## 5. Parts list:



Item No.	Part No.	Part Name
1	42059	Handle of screw nut
2	43052	Reflow cover
3		Fuse/10A 125V
		Fuse/5A 250V
4	12013	Grounding
5	11008	Power cord
6	43053	Top cover
7	44158	Support column
8	47118	Heating accessories
9	44159	Pad loop
10	44160	Screw nut
11	43054	Bottom holder
12	18046	Transformer 110V-13V
	18045	Transformer 120V-13V
	18044	Transformer 220V-13V
13	44161	Power socket
14	47119	P.W.B
15	44162	Power cover
16	12017	Switch (black)
17	12021	Switch (red)
18	44163	Temperature extrude plate
19	45030	Rubber pad
20	43055	Bottom plate
21	25027	Waterproof connector