



Scientific technological Center

Via Bovio 6 – 28100 Novara - NO - Italy

Tel +39 0321697200 - Fax +39 0321 688515 - Email: info@etneo.com

www.etneo.com

Lead Free Soldering Pot

INSTRUCTION MANUAL

Q600



1. Safety Instruction

⚠ WARNING: Misuse of the unit may cause bodily harm. Please strictly abide the safety instruction for protecting the people from shocking or firing or bodily harm. A guard is recommended at all times.

- Please read this operation manual in full before operating the unit to avoid any accidents
- The unit must use a 13A supply for good grounding
- Do not use the unit for other tasks except melting solder
- Before removing the pot for maintenance, please unscrew the five screws fixing the soldering pot on the bottom of the unit. The unit must be cold and disconnected
- The maximum set temperature is 450°C, please pull out the power socket when changing some parts of the unit after it has cooled down
- Do not use the unit near the flammable gas and the other flammable materials
- The unit must be put on the flat workbench and not inclined. Make sure the workbench is also heat resistant
- The unit will be very hot during use. Do not touch the metal parts before the unit has cooled down
- When moving the unit, it must be switched off from the power supply and cold
- Please do not make any modifications to the unit
- It is an electro thermal unit with high temperature. When the unit is not being used for a long period of time, it must be switched off from the power supply.



- DO NOT leave the unit unattended when it is still hot whilst other persons are nearby to avoid any accident. Use a guard to cover the pot if required
- DO NOT the unit in damp surroundings
- DO NOT use the unit with a broken power cord
- If used above 300°C, the solder will start to oxidise and shorten the life of the unit. Always use the unit at the lowest temperature as possible
- The solder pot must only be maintained by the supplier or competent person.

2. Features

- Closed-loop sensor controls the temperature and zero triggering without interfering with the voltage
- Digital calibration and temperature adjustment
- Due to the special metal (anti-erosion and heat-resistant) lead free usage is long
- Heating ramp up time is rapid and the temperature is stable and accurate
- 'Usage time' can be pre set. Auto shuts-off when set time elapsed.

3. Specifications

- Power: 600W
- Size of the pot: 98*121*58(H) mm
- Temperature range: 100°C~450°C
- Work time range: 0~999hours
- Temperature stability: $\pm 1^{\circ}\text{C}$
- Weight: No solder 4.35kg(including power cord)
- Dimension: 200(L)*330 (W)*110 (H) mm

4. Parts

Name	Quantity	Order
Unit	1	46657
Slag holder	1	43309
Slag remover	1	43310
Operation manual	1	
Warranty card /pass card	1	

5. Operation

 **Warning: The voltage must be identical with the system voltage (230V)**

- 1) Put the pot on a heat-resistant surface or put a metal plate under the pot.
- 2) Put pellets or solder bar into the pot. The lowest level of the solder must be 20mm and the highest level must be below the pot's top edge by 10mm.
- 3) Connect the mains cable. Turn on the power switch and the unit will begin to warm up. At this time, the LED displays "real temp" and "set temp".
- 4) Press "▲" or "▼" key to adjust the temperature (set temp).
- 5) Please allow some time to fully melt the solder, i.e. ten minutes from 25°C to 300°C. It can be used once when the solder has melted and the LED indicator (a sun mark) stops flashing. If there are some oxides floating on the surface, these must be scraped off to keep the solder surface clean.
- 6) Turn off the power switch to cool the unit after use.
- 7) **Off time setting:** Turn off the power switch. Press and hold "▲" and "▼" keys simultaneously, and then turn on the power supply again and the LED displays "off time" and the current set work time. Pressing "▲" or "▼" key can adjust the usage time. Pressing "*" key, the LED displays the accumulative working time.

6. Temperature calibration

The unit should be recalibrated after changing the pot or replacing the heating element.

- 1) Set the temperature of the unit to 300°C
- 2) When the temperature of the unit stabilizes, dip the outer temperature sensor of a suitable thermometer into the pot and view the value when the temperature of the thermometer has stabilised.
- 3) If the value of the thermometer's temperature is not 300°C, calibrate the temperature as follows. Press "▲", "▼" and "*" keys at the same time to access the calibrating mode. The LED displays "cal temp" and "set temp". Enter the temperature of the thermometer and then press "*".
- 4) If the temperature still has some variation, you can repeat calibration in according to the steps above.

7. Maintenance

 **Note: If the heater or the sensor malfunctions, it must be maintained by a competent person or contact the supplier.**

A. To test if the heater element or the sensor has malfunctioned:

- 1) If the LED displays "S-E" and the unit alarms, it means the sensor or the sensor circuit has malfunctioned. The power to the pot is cut off.
- 2) If the set temperature of the unit is high but the soldering tin's temperature in the pot still is about room temperature after heating for a period of time, then the heater element has malfunctioned.

B. *If the pot is being used frequently for long periods of time, the pot must be checked periodically.*

Suggestion: If using 'leaded' solder, the system should be checked at least once a year (assuming the set temperature is 250°C and the usage is five days each week and eight hours every day). If using 'lead-free' solder, it should be checked at least once every six months (assuming the set temperature is 250°C and the usage time is five days each week and eight hours every day).

C. *Changing the pot*

Turn off the power supply and take out the sensor from the molten solder. Do not take out the pot until the unit has cooled down.

The pot is fixed by the five screws at the back of the unit (as the following picture). Unscrew the five screws and remove the pot from the top side. Replacement of the new pot is a reversal of the above.

