

# INFRARED IC HEATER

**Model: T962**

User Manual



**Puhui Technology (Taian). CO., LTD.**

<http://www.puhuit.com/>

## INFRARED IC HEATER

### 1. Product description

The INFRARED IC HEATER T962 is a micro processor controlled reflow-oven. It can be used for effectively soldering various SMD and BGA components. The whole soldering process can be completed automatically and it is very easy to use. This machine uses a powerful infrared emission and circulation of the hot air flow, so the temperature is being kept very accurate and evenly distributed.

A windowed drawer is designed to hold the work-piece, and allows safe soldering techniques and the manipulation of SMD/BAG and other small electronic parts mounted on a PCB assembly. The T962 may be used to automatically rework solder to correct bad solder joints, remove/replace bad components and complete small engineering models or prototypes.

### 2. Product features

(1). A large infrared soldering area

Effective soldering area: 180×235mm; this increases the usage range of this machine drastically and makes it an economical investment.

(2) Choice of different soldering cycles

Parameters of eight soldering cycles are pre defined and the entire soldering process can be completed automatically from Preheat, Soak and Reflow through to cool down.

(3) Special heat up and temperature equalization with all designs

Uses up to 800 Watts of energy efficient Infrared heating and air circulation to re-flow solder

(4) Ergonomic design, practical and easily operated.

Good build quality but at the same time light weight and a small footprint allows the T962 to be easily bench positioned transported or stored.

(5) Large number of available functions

The T962 can solder most boss-eyed or double-face PCB boards small parts, for example CHIP, SOP, PLCC, QFP, BGA etc. It is the ideal rework solution from single runs to on-demand small batch production

(6) Technical specifications

Maximum soldering area: 180×235 mm

Size: 31×29×17cm

Packing size: 36×23×36 cm

Rated power: 800W

Processing time: 1~8 min

Power supply: AC220V/52HZ

Net weight: 6.2kg

Gross weight: 7.5kg

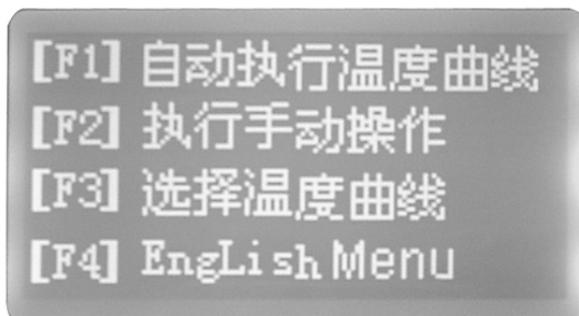
### 3. Select the wave cycle

(1) Installation of the machine

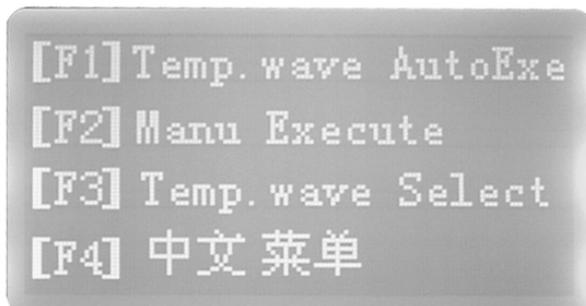
Place this machine on an even surface with good ventilation and no combustible items nearby. Make sure to leave adequate space in front of the machine for opening the drawer. Leave at least 20 mm on either side because the machine will emit heat when in use. Check that the power supply is 220V; connect the machine with the power supply and press the POWER ON button and the LCD panel will light up.



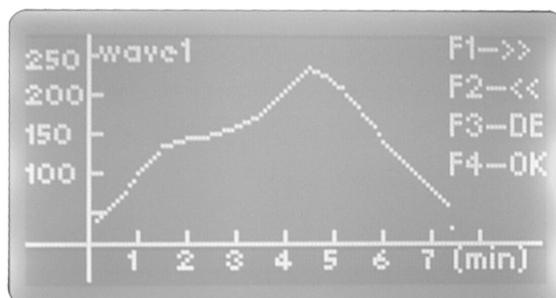
Press the “S” button to go to main menu page.



Press the “F4” button to select English Menu



In the main menu, press the “F3” button to select different temperature waves. This example shows wave one:

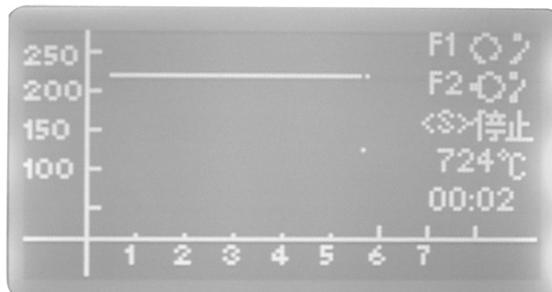


Press the “F3” button again to see the parameters for the chosen wave, for example soldering paste sort, soldering temperature, time etc.



Press the “F4” button to return to the previous page, Press the temperature wave that the “F1” key carries out to make selection automatically, the process will shut down automatically upon completion and a warning buzzer will sound.

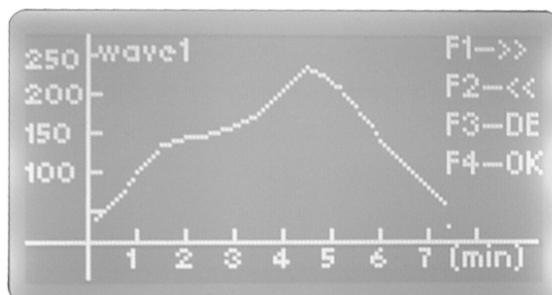
In the main menu page press the “F2” button for manual operation



Press “F1” button to start cooling, Press “F1/S” key again to stop. Press “F2” button to start heat up, press “F2/S” key again to stop.

(2).The wave selection

① Press the “S” button selection operation interface after switching on, press the “F4” button to select the desired language



② Following we provide eight different wave cycles, please choose one according to your request. Press the F1/F2 to choose a different wave, press F3 to look into different wave parameters, press 4 to confirm the wave you chose.

Wave one: use the same with 85Sn/15Pb 70 Sn/30Pb

Wave two: use the same with 63Sn/37Pb 60 Sn/40Pb

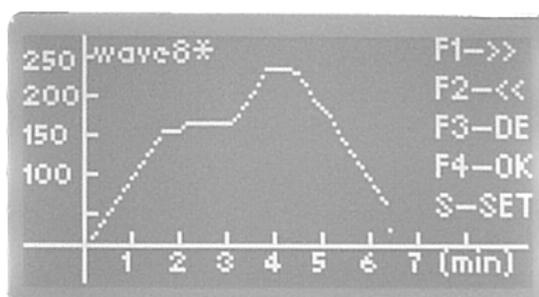
Wave three: use the same with Sn/Ag3.5; Sn/Cu 75 Sn/Ag4.0/Cu.5

Wave four: use the same with Sn/Ag2.5/Cu.8/Sb.5; Sn/Bi3.0/Ag3.0

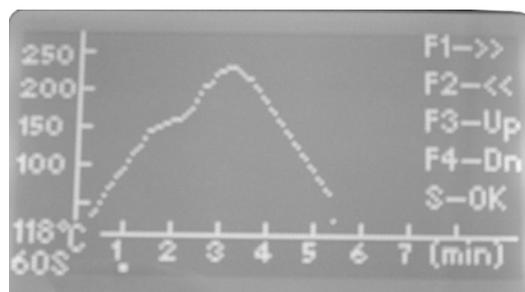
Wave five: use the same with The red gum standard is solid to turn temperature wave, Heraeus PD955M.

Wave six & seven & eight: use the same with The PCB circuit board returns to fix etc.

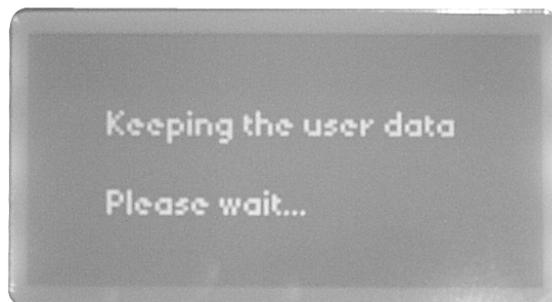
Wave seven & eight: use the same with the wave cycle set-up by yourself.



Press the “S” button to go to the temperature page



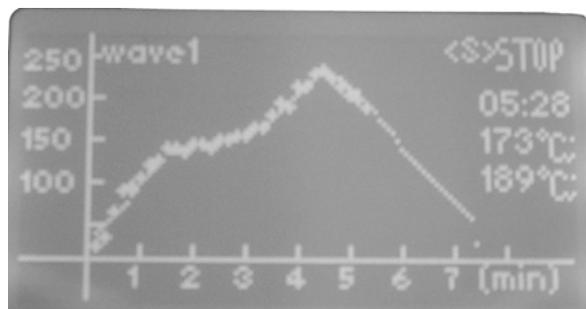
Press the “F1/F2” buttons forward and backward to select different times. Press “F3/F4” buttons up and down to select different temperatures, press “S” button to save.



Once saved, press the “F4” button to select the temperature wave. Press S button for repetition.

#### 4. Operating instructions

(1) Place the product to be worked on in the drawer, close the drawer and press F1 to switch on. The automatic performance makes a selection of heat wave, shows the current performance time, the enactment temperature and measure temperature on the LCD screen, and the automatic formation order form wave.



(2) The whole process is in your supervision and control, you can see the product through the drawer window and you can see the data on the LCD screen. If the wave doesn't achieve your desired result, please modify the data by yourself at any time.

(3) The pre-set up wave cycle is according to the temperature that the different solder paste needs. You can pre-set up other wave cycle according to your needs.

(4) In the process, you can press “S” to force to stop; when finished, the exhaust fan will work automatically to cool; you also can force to turn on the exhaust fan.

(5) Should there be any faults or blemishes after completion of the soldering, you can sold it automatically again, or you can sold it manually.

### **5. Operation suggestions:**

- (1) To satisfy the need of soldering both sides of the PCB, there is a particular designed fan duct in the machine. When the both sides of the PCB are of large difference in temperature, it can sold the patch in one side, and in the same time, it can keep another side of the PCB as well. To satisfy the soldering of a small board, please pre-put a PCB board in the size of 10cm x10cm, when soldering a small board and the solder-ball. It will make the soldering effect very well.
- (2) When using the machine, please pre-heat it if the environment is of low temperature or high humidity. The method: after choosing the wave cycle, run the machine with nothing in the drawer at the first time.
- (3) Attention: This machine can't be used to solder components (like chips with metal encapsulation of strong reflective material) and the "plastic plug in board" which can't be heated up to temperatures of 250 degrees centigrade.
- (4) To measure the temperatures of the machine just use a standard thermometer. Fix the probe on the face of the PCB board (make sure it is the facing the right way), then put the PCB board into the drawer, close the drawer. This way you will get the actual temperature.

### **6. Daily maintenance:**

- (1).Always keep the drawer clean
- (2).Clean the observation window of the drawer periodically.

### **7. Caution!**

- (1) After use, don't switch off the power instantly. Make sure the machine is cooling down sufficiently before switching off. .
- (2) Make sure to place the machine in a very well ventilated area.
- (3) Disconnect the machine from the mains when not in use for long periods.
- (4) Do not open or dismantle the casing of the machine.

### **Warranty statement**

**Reminder: These machines are very heavy, between 8 to 15 kilograms and are not designed to be shipped on airplanes, but in containers that do not move. We are not the shipping company, the airplane crew, the customs agent or the carrier in your country and therefore take no responsibility for damage caused in transit.**

**Corollary: When our machines leave QC, they are tested, 100% new and in perfect condition.**

**These machines consist of modules. Should you receive a faulty or damaged module, we will be happy to replace it. However, we will not replace the complete machine; this is not covered by our warranty.**

**Any of these machines are extremely sensitive to power stability. You need to use professional power source DC benches to plug in these machines. The IRDA heating could burn out or malfunction if you do not have the right power source DC bench machine. DGC is responsible to give proper guidance of the use and installation of the machine; if you don't follow these, it will void the warranty.**