INFRARED IC HEATER
User Manual
Model: T962/T962A/T962C
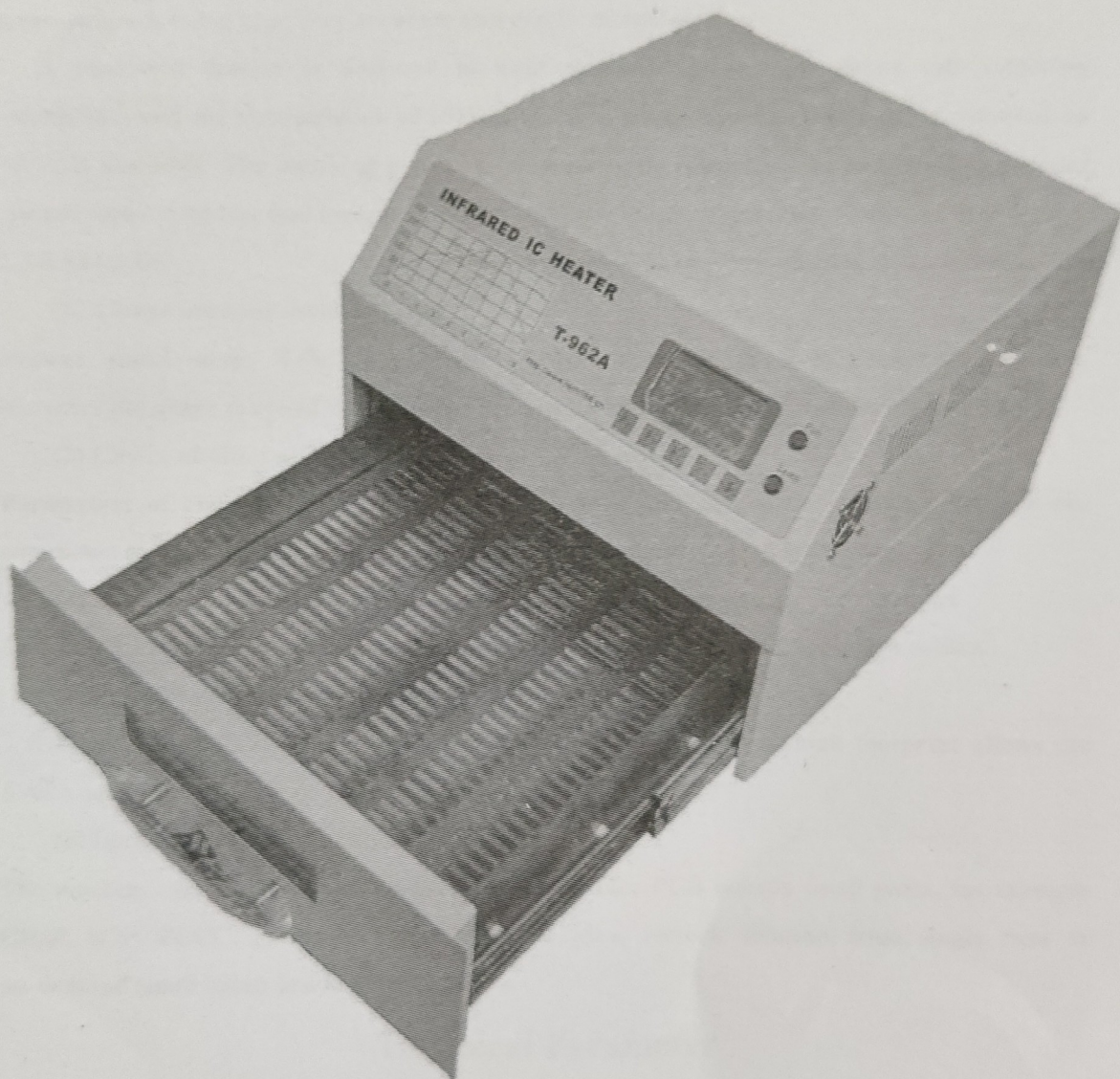
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INFRARED IC HEATER

1. T962/T962A/T962C Description:

The INFRARED IC HEATER T 9 6 2 / T962A / T 9 6 2 C 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 machine is used to automatically rework solder to correct bad solder joints, remove/replace bad components and complete small engineering models or prototypes.

2. FEATURES

(1) A large infrared soldering area

Drawer panel area: T-962:180x235mm; T-962A:300x320mm; T-962C:600x400mm, 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 predefined and the entire soldering process can completed automatically from Preheat, Soak and Reflow through to cool down.

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

Uses high power energy efficient Infrared heating and air circulation to re-flow solder.

(4) Ergonomic design, practical and easily operated

① Good build quality but at the same time light weight and a small footprint allows the T962A to be easily bench positioned transported or stored.

(5) Large number of available functions

The machine 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.

Technical Parameter

|	T-962	T-962A	T-962C
Power supply	AC110V/ 50Hz		AC220V /60Hz
Rated power	800W	1500W	2900W
Drawer panel area	180x235 mm	300x320mm	600x400mm
Temperature Range	0℃-280℃		
Cycle Time	1～8 min		

3. Select the wave cycle

(1) Exhaust pipe installation（This operation is applicable to the upgraded model）

① Loosen the screw on the fastening clamp of the exhaust pipe(Φ110mmX1500mm).
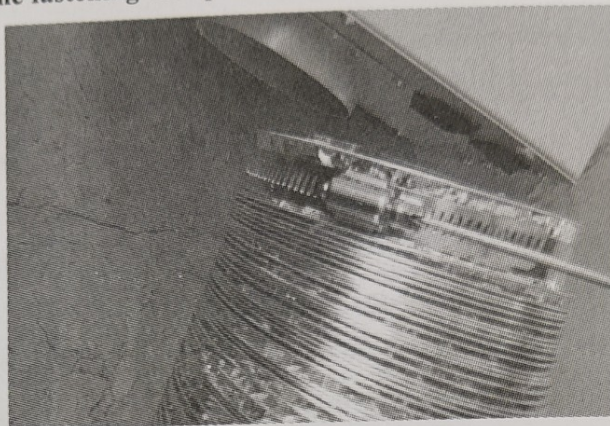
② Put the exhaust pipe on the product interface,tighten the fastening screws with a screwdriver, and place the exhaust pipe outdoors.
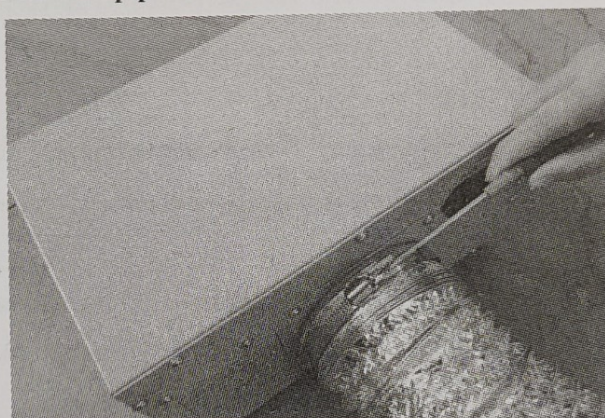
(2) Installation of the machine

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 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 or 110V; connect the machine with power supply and press the POWEW ON button and the LCD will light up.
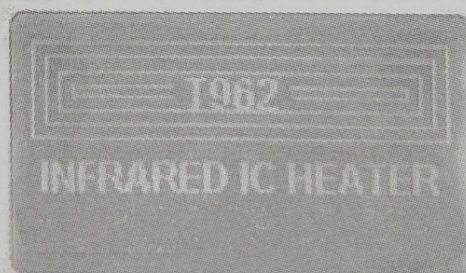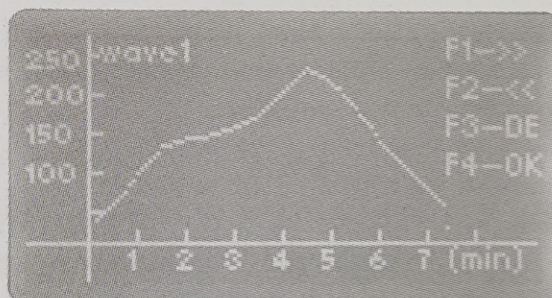

Press "s" button to go to the main menu page.

```
[F1] 自动执行温度曲线
[F2] 执行手动操作
[F3] 选择温度曲线
[F4] EngLish Menu
```

Press "F4" to Select English Menu

```
[F1] Temp.wave AutoExe
[F2] Manu Execute
[F3] Temp.wave Select
[F4] 中文 菜单
```

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

```
250 wave1                F1->>
200                      F2-<<
150                      F3-DE
100                      F4-OK

     1  2  3  4  5  6  7 (min)
```

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

```
<<WAVE1>>
Suitble:85Sn/15Pb 70Sn/30Pb
Solding Temp: 237C 10s
Total Time: 440s

F1->>>  F2-<<<  F3-DE  F4-OK
```

Press the "F4" button to return 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.
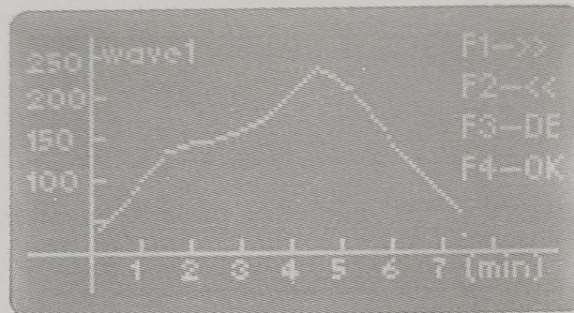
In the main menu page, press "F2" button for manual operation
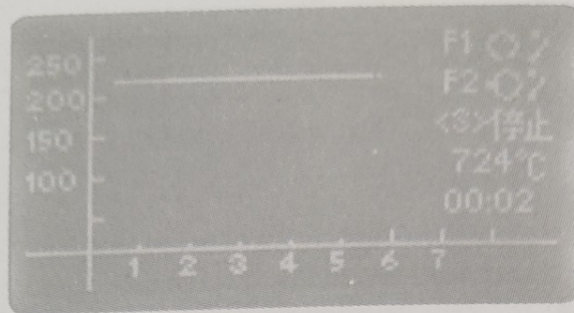
Press "F1" button to start cooling, Press F1/S key again to stop. Press "F2" button to start heat up, Press F2/S key again to stop.

(3) Wave Cycle Select
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 waves, please choose one according to your request. Press the F1/F2 to choose different wave, press F3 to look into different wave parameter, 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
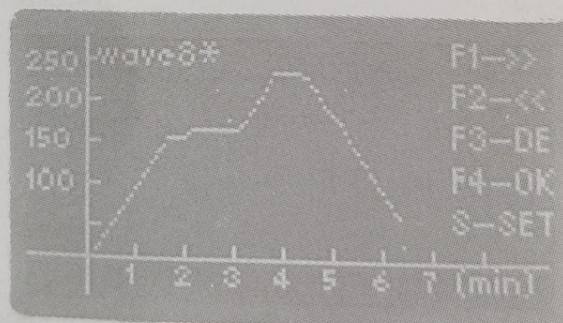Wave three, use the same with Sn/Ag3.5; Sn/Cu 75   Sn/Ag4.0/Cu.5
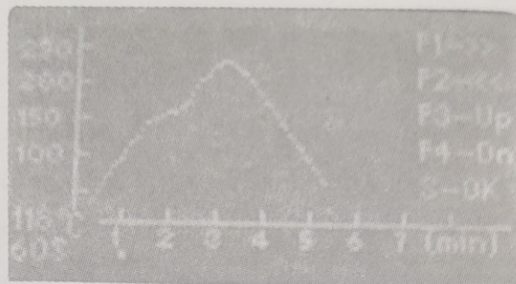Wave four, use the same with Sn/Ag2.5/Cu.8/Sb.5;   Sn/Bi3.0/Ag3.0
Wave five, use the same with The red gum standard is solid to turn temperature wave, Heraeus PD955M.
Wave six & seven & egiht, use the same with The PCB circuit board returns to fix etc.
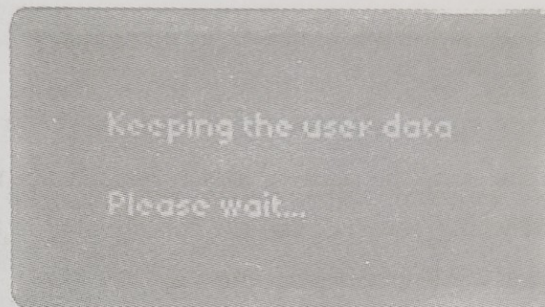Wave seven & egiht, use the same with the wave cycle set-up by yourself.

Press "s" button to the temperature page,

4

Press "F1/F2" button, forward and backward to select different time. Press F3/F4 button up and down to select different temperature, Press "s" button to save.

Keeping the user data

Please wait...

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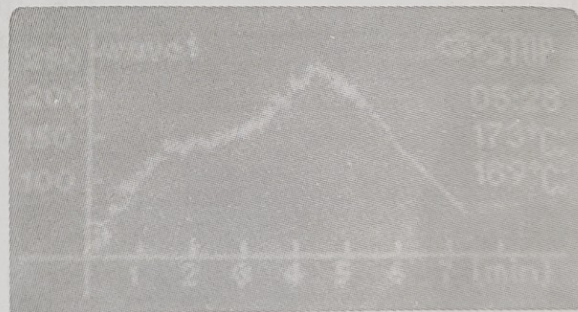
(2) The whole process is in your supervision and control, you can see the product through the drawer window and you can see the data on the LCD screen. If the wave doesn't achieve your desired result, please modify the data by yourself at any time.

(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 keeps 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.