

INFRARED IC HEATER and REFLOW OVEN



Model: T962

User Manual

CONTENTS

T962 Description	3
Features.....	4
Technical Parameter.....	4
Parts Inventory.....	5
Front Panel.....	6
Rear Panel.....	7
T962 Initial Set-Up and adjustments.....	8
Wave Cycle Select.....	9
Operating instructions	10
Operation Suggestions.....	11
Maintenance.....	11
Warnings.....	11

T962
INFRARED IC HEATER
and
REFLOW OVEN

T962 Description:

The T962 is a micro-processor controlled reflow oven. The device is powered by standard 110VAC 50/60HZ (220VAC Model is available). User interface is implemented by way of T962 input keys and an LCD display. Pre-Set heating Modes are selected by user interaction with thermal cycle progress observed on LCD display.

This self-contained reflow station 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 “re-flow” solder to correct bad solder joints, remove/replace bad components and complete small engineering models or prototypes.

A windowed drawer is designed to hold the work-piece. Thermal cycle accuracy is maintained by closed loop micro-computer control with infrared heaters, thermocouple and circulating air.

The T962 is simple to use, the soldering process is completely automatic defined by pre-defined thermal cycles,

FEATURES

- The T962 is a self-contained Micro-Processor controlled IC Heater and solder rework station.
- Uses up to 800 watts of energy efficient Infrared heating and air circulation to re-flow solder in a large $180 \times 235 \text{mm}$ area.
- Parameters of Eight (8) Soldering cycles are Pre-Defined
- Soldering cycles are keypad selected and progress displayed on the T962 LCD.
- A single windowed drawer holds assemblies within the heating chamber,
- The T962 design is ergonomic, practical and easily operated.
- The entire soldering process is completes automatically from *Preheat*, *Soak* and *Reflow* through *cool-down*.
- The T962 design is ergonomic, practical and easily operated.
- The T962 is an economical rework solution from single runs to on-demand small batch production.
- Light weight and a small footprint allows the T962 to be easily bench positioned transported or stored.
- The T962 can solder most bosseyed or double-face PCB boards' small parts, ie.: CHIP、SOP、PLCC、QFP、BGA etc; Can be used to the gum of the product solid, turning the circuit board hot aging, maintaining the PCB board and so on. Be satisfied to the needs of "academe", "smallorder run" and "extensively development of enterprise & company"

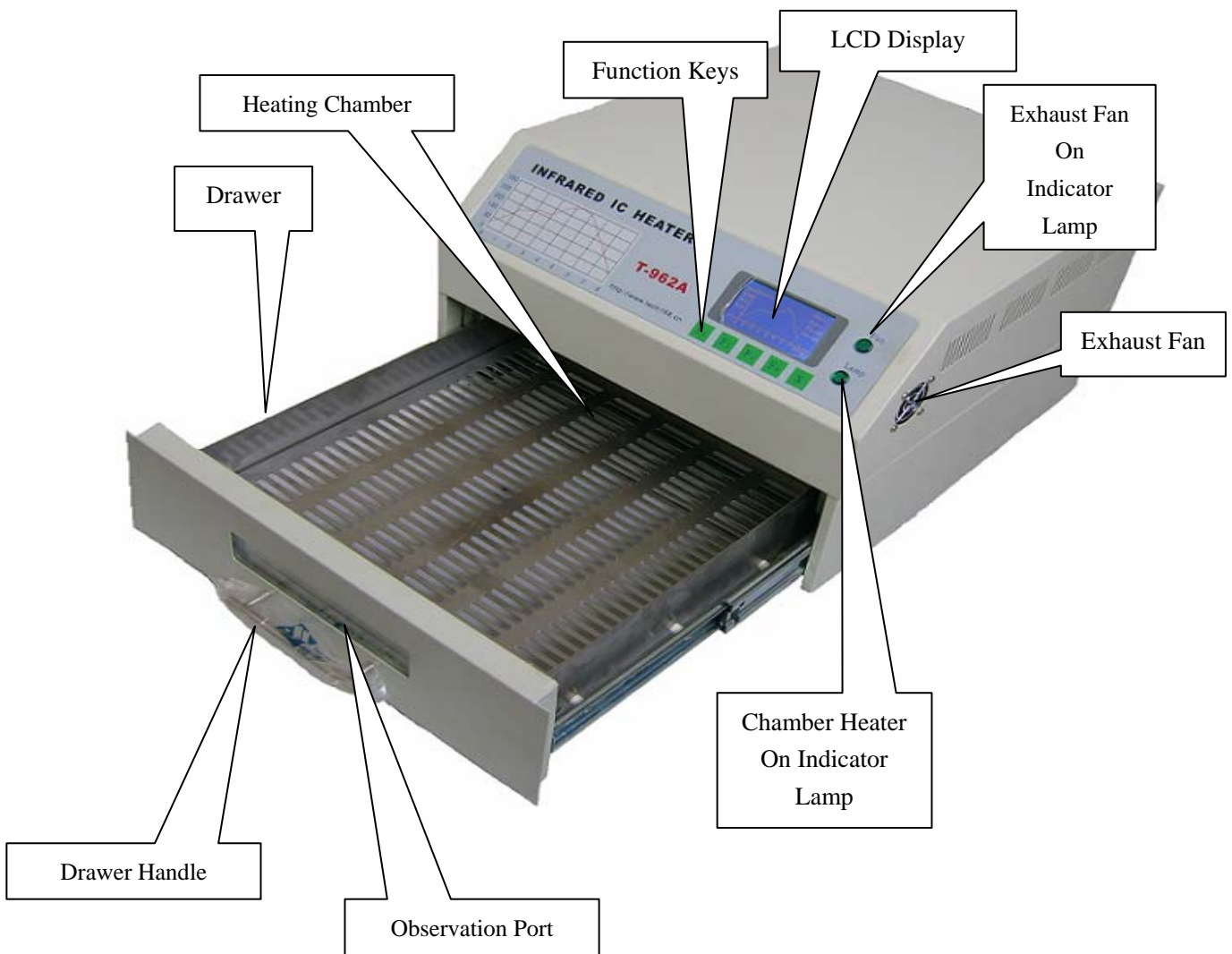
Technical Parameter

Supply Voltage	AC110V/ 50Hz AC220V /52Hz
Putout Power	800W
Maximum Soldering Area	180×235 mm
Temperature Range	100°C-350°C
Cycle Time	1~8 min

Parts Inventory

Description	Quantity	Illustration
T962 Main Assembly	1	
Power Cable 110VAC or 200VAC	1	
5mm Fuse, 10A 250VAC Fast Blow (Spare)	1	
This Manual on CD	1	

Front Panel



Rear Panel

The Jack for the
Power Cable

Main power
Switch

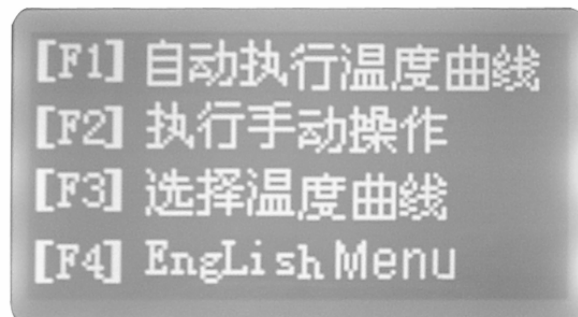


T962 Initial Set-Up and adjustments

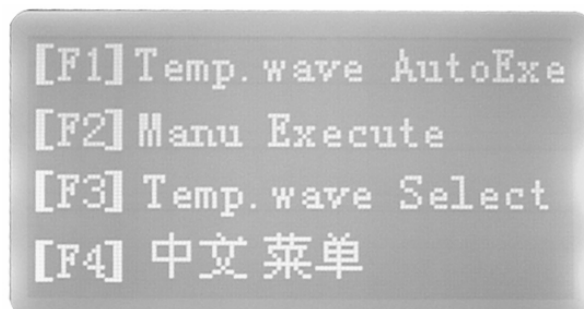
1. Place the T962 on an appropriate level, insulated work area.
2. Make Sure the work space is well ventilated (exhaust fans may be necessary),
3. Allow at least 20mm between the T962 and its surroundings for heat protection.
4. Confirm the Work drawer opens and closes smoothly and without obstruction
5. Locate supplied universal power cord and connect same from rear apron to AC power.
6. Locate and press the power on button, the LCD will light, the T962 will log on,.



Press "s" button, the main menu will appear on LCD.

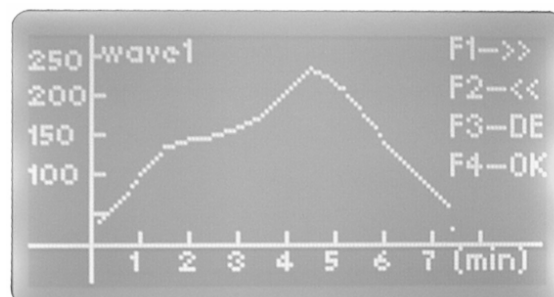


Press "F4" to Select English Menu



In the main menu

Press "F3" button selection different temperature wave. Example select wave1



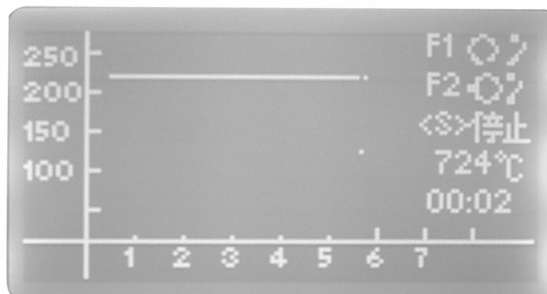
Press "F3" button again, can see parameter about you choose the temperature wave:

Select: soldering paste sort, soldering temperature, time etc. example:



When selections are complete, then Press "F4" button to return previous page. Press the temperature wave that the "F1" key carries out to make selection automatically. When it is ending, the work will shut down automatically, and the warning buzzer is working.

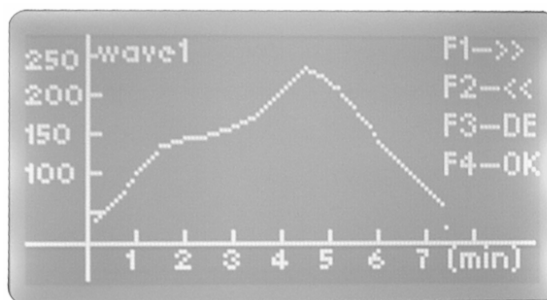
In the main menu page, press " F2"button by handcraft operation



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.

Wave Cycle Select

① Press the "S" button to select operational interface after switch on, press the "F4" to select a different language category.



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

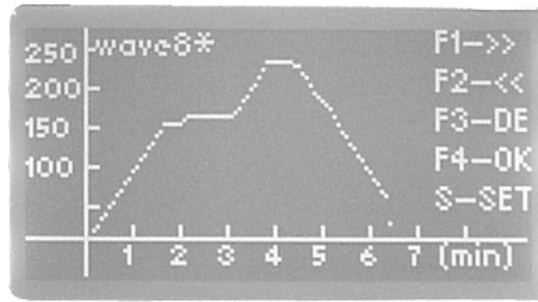
Wave three, use the same with Sn/Ag3.5; Sn/Cu 75 Sn/Ag4.0/Cu.5

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

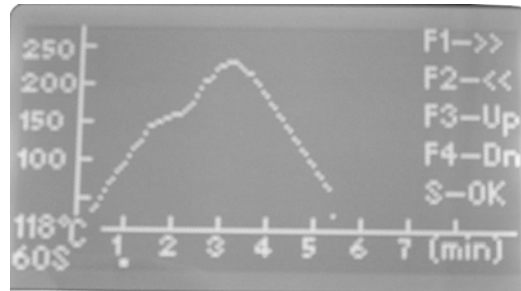
Wave five, use the same with The red gum standard is solid to turn temperature wave, Heraeus PD955M.

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,



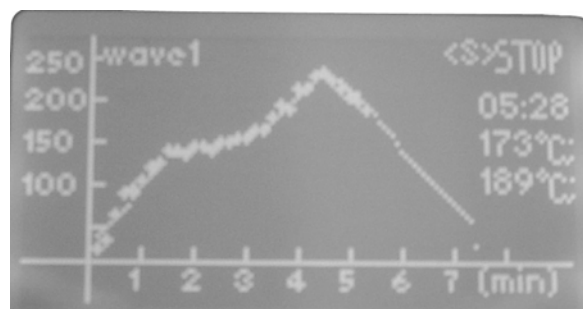
Press F1/F2 button, ahead/ backwards select different time. Press F3/F4 button ,up/down to select different temperature, Press “s” button to save.



When save finish, press “F4” button to select the temperature wave. Press “S” button to **repetition**.

Operating instructions

(1) Lightly puts the product which will be processed in the drawer of the oven on the stage , Close drawer, Press F1 to switch on, The automatic performance make selection of heat wave, Show current performance time, the enactment temperature and temperature on the LCD screen, and automatically note the formed wave of the temperature.



(2) The whole process is in your supervision, you may see it by the window of the drawer, and you may see the data from the LCD screen. If the wave doesn't achieve your request, please modify the data by

yourself.

(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) Complete the soldering, if somewhere is faulty, you can sold it automatically again, or you can sold it manual.

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 the small board, please pre-put a PCB board in the size of 10cm*10cm, when soldering the small board and the solder-ball. It will make the soldering effect very well.

(2) When use the machine, please pre-heat it if the environment is of low temperature, too humidity. The method: after choosing the wave cycle, run the machine with nothing in the drawer at the first time.

(3) Attention: The machine can't be used to soldering the chips(the chips which with metal encapsulation are of strong glisten), and the “plastic plug in board” which can't be able to bear the temperature of 250degree centigrade.

(4) About the method to measure the temperature of the machine: Use the standard weatherglass. Fix the probe on the face of the PCB board(make sure it is the face), then put the PCB board into the drawer, close the drawer. And then you will get the actual temperature.

Maintenance

a. Keep the inside of the machine clear. Please do as follows:

When used the machine several times, please turn on the “heat-up” and the “exhaust fan” two or three minutes handly, to make the flux remained in the machine volatilization. It will keep the inside of the machine cleanness, and make the function of the machine stabilization.

b. Clean the drawer observation glass as necessary.

Warning !

a. Make sure the power supply is connect with earth.

b. Do not turn off the switch at once after using, make sure the machine is cooling, and then turn off the switch and cut the power supply.

c. There isn't any way to do smoke evacuation, please put the machine in a ventilated condition to avoid poisoning(when the solder paste volatilization).

d. The insulations in the machine had been treated strictly. Do not take apart the machine until there is any safety precautions.