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Lead-Free Reflow Oven User Manual

—— T-937 Series

Shandong Puhui Electric Technology Co., Ltd

Http://www.te168.com

User Manual

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1. Parameters

Para.		T937	T937M
Drawer area		306 mm×322mm	350mm×400mm
Soldering area	Lead_Free Welding	260mm×260mm	290×375mm
	Lead Welding	300mm×310mm	315mm×375mm
Dimension		404mm×372mm×280mm	473mm×466mm×290mm
N. Weight		15.5kg	20.7kg
Voltage/Frequency		AC220～230V/50Hz	AC220～230V/50Hz
		AC110V/60Hz	AC110V/60Hz
Power rating		2300W	3300W
Cycle time		2～16 min	2～16 min
Temp rage		Room temp～350℃	Room temp～350℃

2. Configuration

Name	T937	T937M
Reflow oven	√	√
Power line	√	×
Fuse	√（15A）	√（20A）
	√（25A）/110V	√（32A）/110V
CD	√	√
COM communication line	√	√

3. Main parts

220V

①Operation panel ②Drawer ③Switch ④Plug base

110V

Operation panel ②Drawer ③Plug base

Operation Panel

①Indicator light ②Display ③Key

Others

T937

①Exhaust ②COM

T937M

①Exhaust ② Switch ③Power line

4. Installation

i. Please put this reflow oven on the flat tabletop.

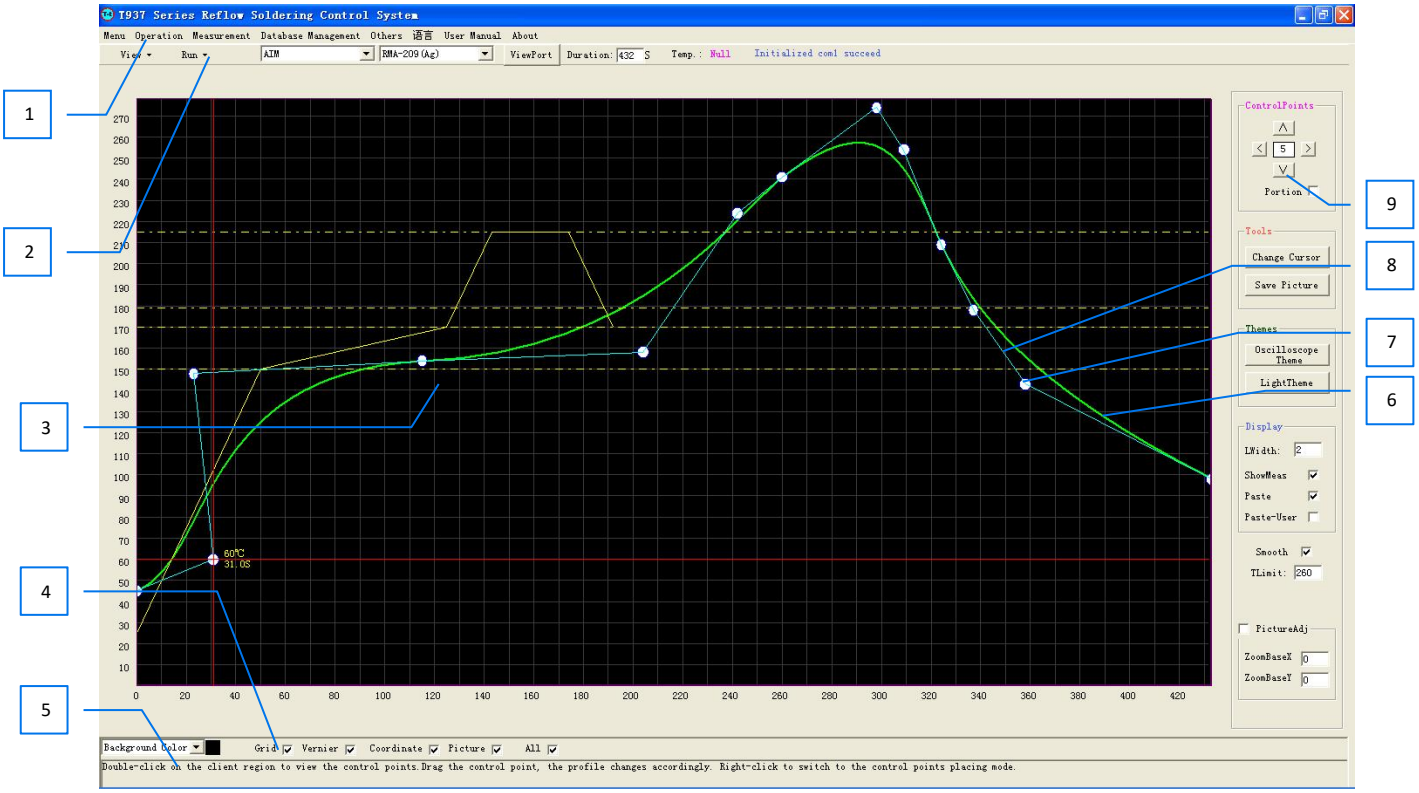
ii. Please put this reflow oven in safe environment, not flammable or combustible.

iii. Please leave 20mm around the machine, for heat dissipation.

iv. The machine must be connected with Earth wire.

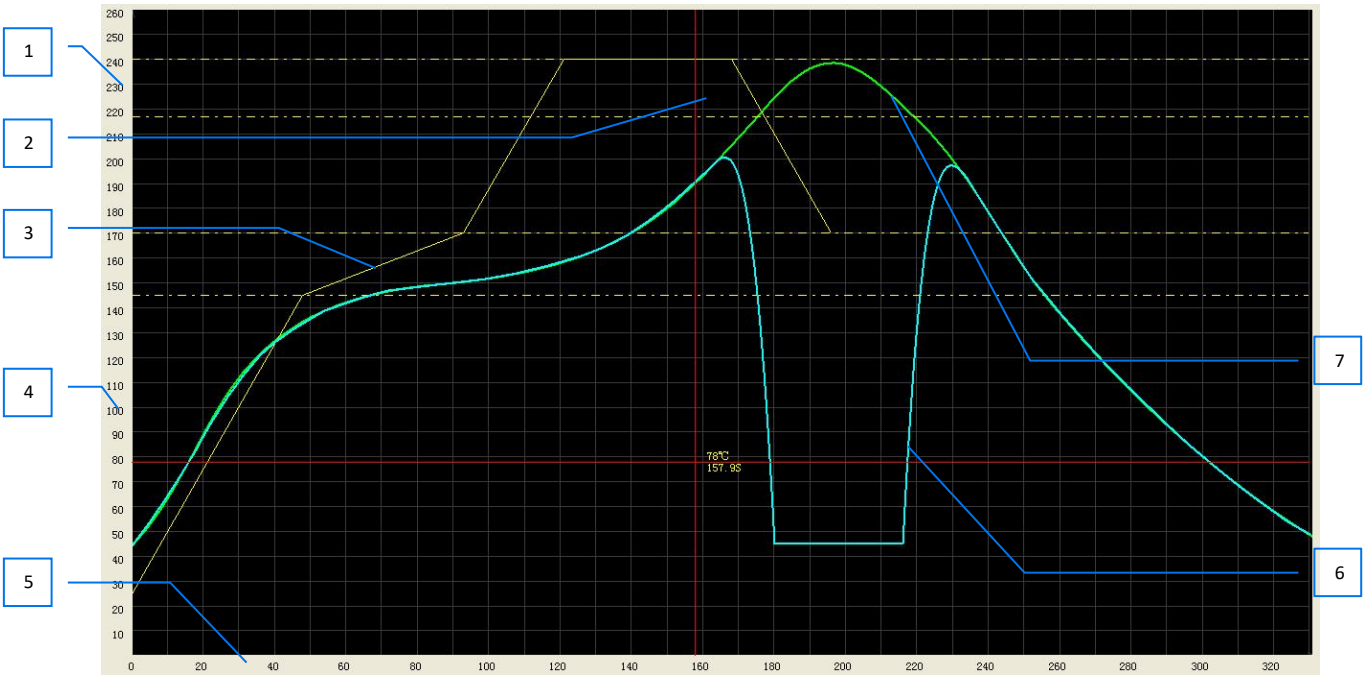
5. Software Interface

Main Interface



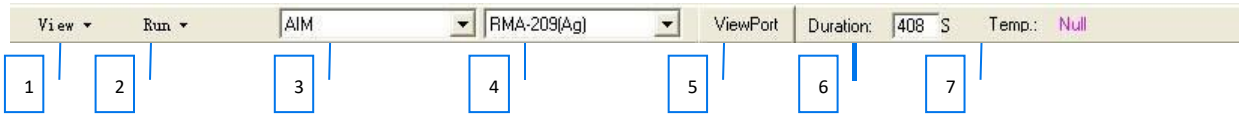
1：Menu bar 2：Shortcut bar 3：client drawing area 4：display setting area 5：operation tip area 6：T-t data wave 7：control point 8：control point line 9：toolbar

The client drawing area



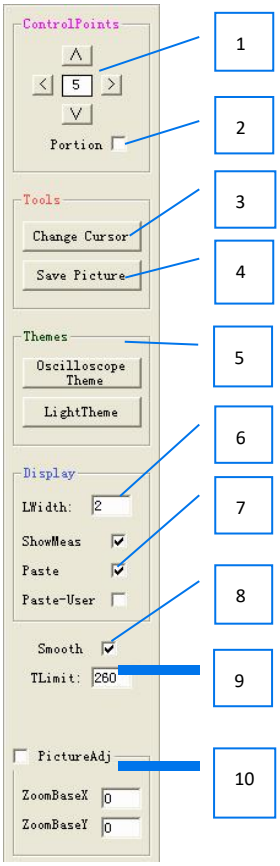
1：temp axis 2：cursor 3：solder paste character wave 4：coordinate display 5：time axis 6：effected wave7：wave graph

Shortcut bar



1：check machine memory wave 2：run the machine memory wave 3：solder paste brand 4：solder paste model 5：re-set viewport 6：set cycle time 7：current oven temp

Display setting area



1：control points moving direction

2：partially/completely move the control point

3：change to set control point cursor

4：save pic in client drawing area

5：show topics

6：wave line width

7: paste

8：smooth wave

9：temp setting range

10：Picture Adjusting

6. Manual Instruction

i. Install RS232 driver

Please see the CD-“usb driverV3.1”

ii. Install the software

Open the CD, find the “T937Setup.exe”, double-click, start to install.

iii. Software Operation

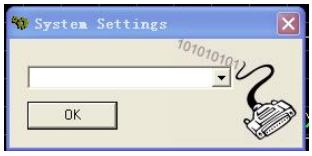
1) Viewport setting

After open the software, you will see the ”viewport setting”, in order to get good visual effect, please set the time parameter of viewport to ”reflow target time +10S”, set the temp parameter to “target peak temp+20℃, press “confirm”

2) Operation with PC

Please use the communication line to connect with computer.

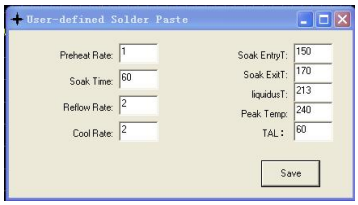
Open T-937 software, press menu bar-other function-system parameter, open the setting window.



Select “USB-SERIAL CH340 (COM**)”, press “confirm” and return to main interface, you will see like this 初始化 USB-SERIAL CH340 (COM10) 成功 in the shortcut bar, then press F2 on the reflow oven, T-937 reflow oven LCD displayer will show “connected with PC”, also you will see 联机成功 in the software, connect successfully.

3) Make the wave

① Set the solder paste character



click “Display setting area -7 paste”, the wave will display in the client drawing area. Click “display setting area – paste user”, it will show the user-defined paste character, or the the paste character from the paste database.

a) Use the paste database from software

Select the paste model from the shortcut bar, the paste wave will display in client drawing area.

b) User define paste data

Click “others” –“ user defined solder paste”, it will show “user defined paste window”, fill in the paste parameters you use, click “save”. This wave will display in the client draw area.

②Set up the wave

a) open the wave from machine memory

Click “menu” – “open recipe”, select the wave you want to use.

Tips： this machine is with 8 waves inside, if these 8 waves can not match your solder paste, please adjust the wave in order to match with your solder paste, get good reflow effect.

b) Set up wave

Under “place control points state”, the mouse cursor will change to （click the right mouse button to switch “place/check control points state”）, then click in the client draw area, place the control point, set up new wave.

③ Adjust the wave

a) Under “check control points state”, double click the client draw area, it will show many control points on the wave, use the mouse to move the control points, the wave will change.

b) also you can use to adjust the wave in different direction, it can change the wave fastly.

Tips： the paste character wave show the theoretical wave, in fact, due to the influence of various factors such as heat conduction rate, so please adjust the wave according to the actually reflow effect, in order to get perfect soldering effect.

④ Preview the wave

Please click “operation” – “profile preview” to check the wave which the user made if it meets request, if the temps are over the “T Limit” (in the display setting area, No.9) , this software will set these temps to 45℃ automatically.

⑤Set the wave heating time

Please set the heating time in the shortcut bar – Duration: 600 S

⑥Save the wave

Click “menu”-“save recipe”, fill in the wave name, press “save”.

⑦Manager the wave

Click “database management”–“recipe management” , will display the wave management window.

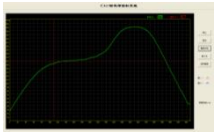
4) Send the wave to T-937 reflow oven

T-937reflow oven has 8 file areas for saving the waves, if not connect with PC, T-937 reflow oven can perform the wave independently.

After making the wave in the computer side, click “operation” –“send to device” , select the profile No. to send.

5) View the waves in machine

Click the “view” , select the profile No, this wave will display in the client drawing area, then you can adjust the wave here, and save it.



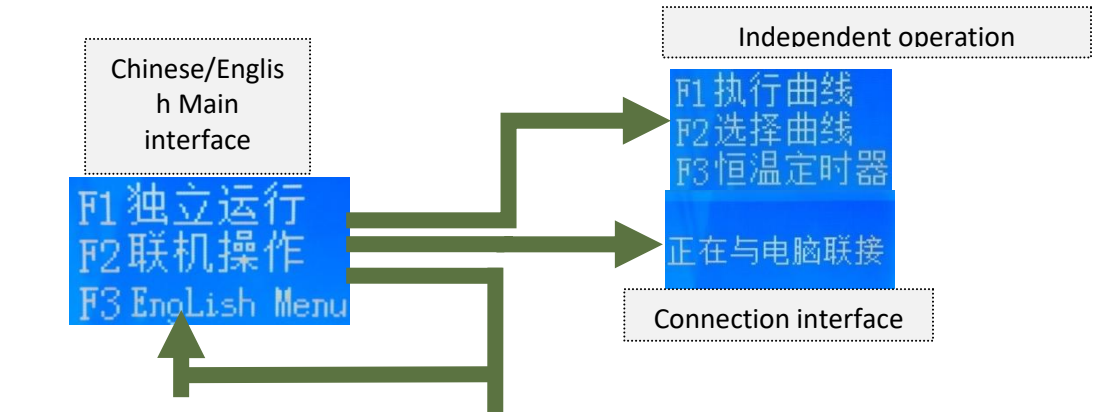
6) Run the wave in machine

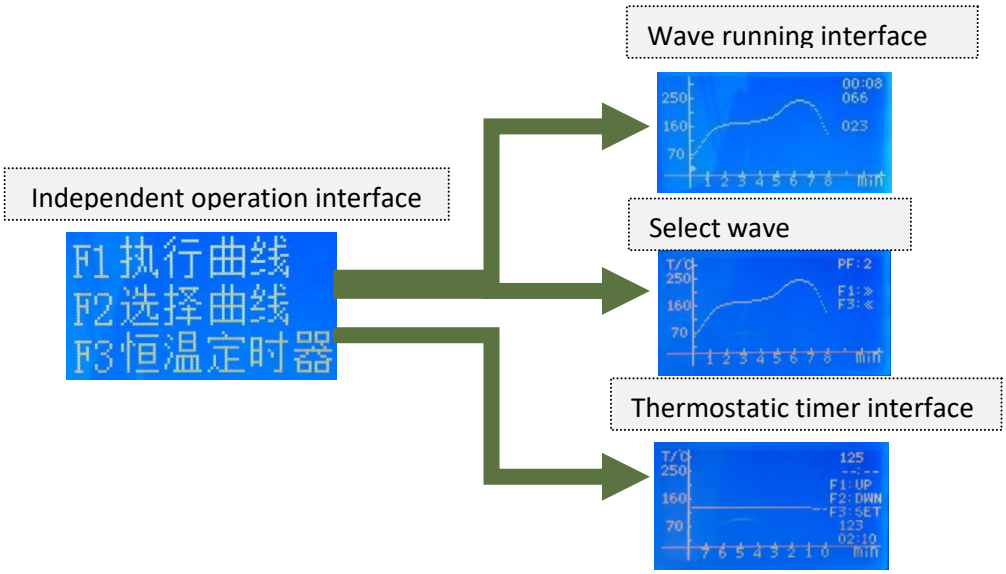
Click the “run” in the shortcut bar, select the profile No, it will show wave running window, start soldering.

iv. Independent Operation

Panel

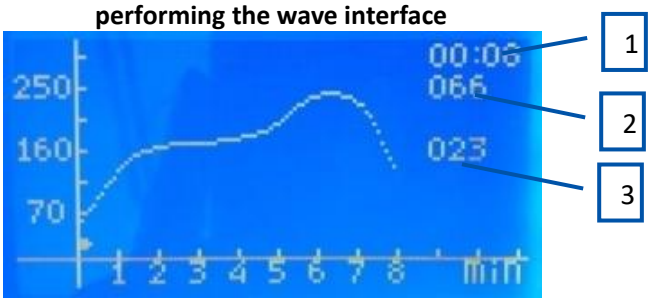
Interface





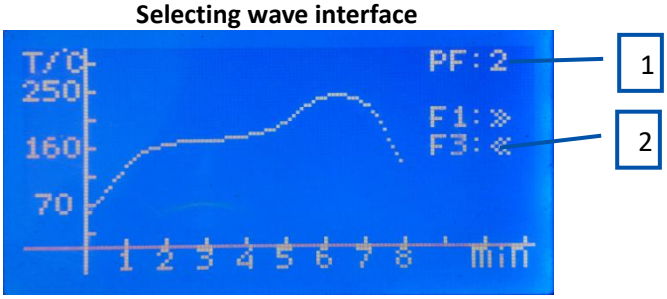
The main interface

performing the wave interface



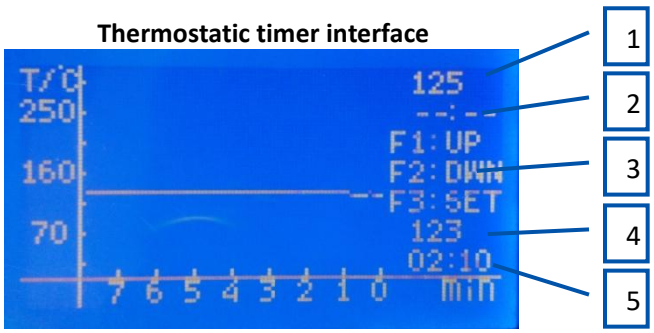
1、running time 2、set temp 3、current temp

Selecting wave interface



1、wave number 2、operation tips(F1/select next wave ; F3/select last wave; F2:switch last/next 8 mins wave

Thermostatic timer interface



1、Set temp 2、set time（--:-- is untimed model） 3、operation tips（F1/ up，F2/ down，F3/switch set temp or set time 4、current temp 5、current running time

Operation

1）Enter the software interface

Press F1, will come to the independent operation interface

2）Select the wave

Under the independent operation interface, press F2 to select wave, press F1 and F3 to select the wave you need, then press “return key” to independent operation interface.

3）Run the wave

Under the independent operation interface, press F1, it will run the wave you selected.

4）Thermostatic timer function

Under the independent operation interface, press F3, start the thermostatic timer function.

Thermostatic timer function means the machine can keep thermostatic temp if you set time, once time over, the machine stop heating.

Press F3 change “set temp”/”set time”, press F1/F2 to adjust the numerical value, the time is--:-- is untimed model, means the machine is keeping thermostatic heating, not stop automatically.

5）Change language

Under the main interface, press F3 to change the language.

7. Attention

i. If not use this machine for long time, please unplug the power line plug.

ii. The machine should be connected to the exhaust passage within the outdoor ventilation or exhaust recovery, prevent solder paste volatiles poisoning.

iii. This machine is with strict protective insulation materials, please don’t open the machine casually.

8. Warranty

The warranty for mainbody is one year, for parts is three months, provide lifetime technical guide.

Declaration

If there is inconsistency between this user manual and the actual product, the actual product shall govern.