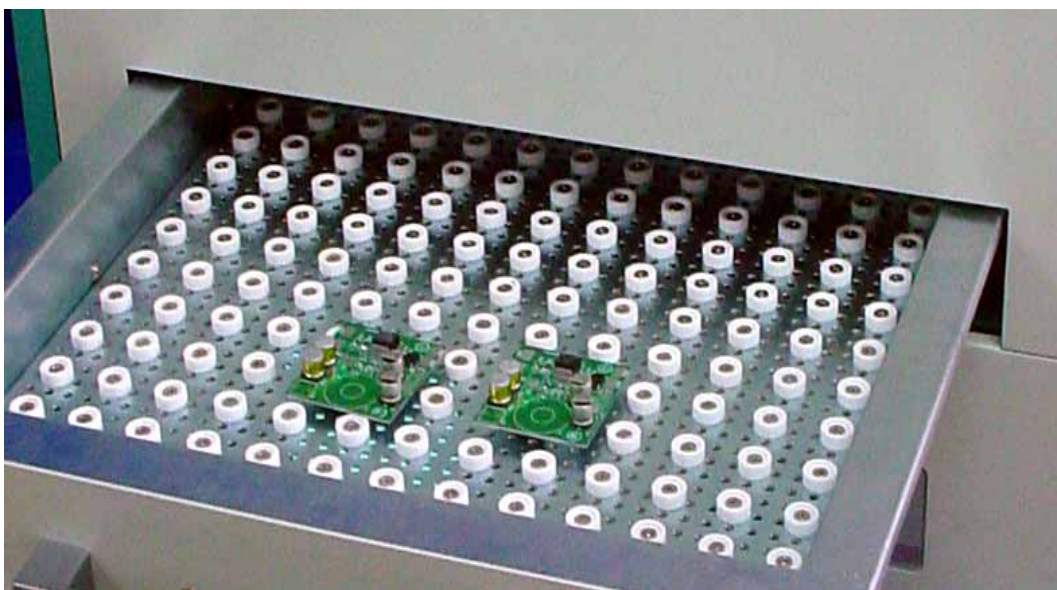


SMD—2000A TABLE TOP REFLOW OVEN Operational Manual



More and more surface mount devices (SMD) are used on electronic circuit boards. Large floor model reflow ovens are expensive and heavy, not suitable for prototype development and small production. SMD-2000A is specially developed to suit this market.

- Full automatic fuzzy logic temperature control.
- Back light LCD display.
- Can be used for any surface mount components.
- Can also be used for two sides PCB boards.
- Lead-free reflow ready.
- Great for repair preheating.
- Meets IPC standard.
- Temperature to 260°C.
- Working area: 400mmx350mmX30mm.
- External measurement: 600mm(w) x450mm (d) x500mm (h).
- Working cycle 5 minutes per board.
- Manual draw.
- Built in automatic air cool.
- One profile stored in EPROM.
- looking reflow soldering from windows
- 3.5KW power, 220VAC.
- Weight: 32Kg without the packing material.

Operation

1. Profile setting

The preheat and reflow temperatures and durations can be changed.
The reflow oven goes into profile setting mode after the .SET. key is pressed.

LCD		Display
165	(A)	150S(B)
220	(C)	40S(D)
220	(E)	10S(F)

Press the or the key to increment or decrement the highlighted number. Press the .SET. key again to switch to the next temperature or time. Press the .ENTER. key to finish the profiling process and to save the profile.

Default settings:

Regular double side boards: 165 ---150S, 220 --040S, 220 -10S.

Multi-layer boards : 175 ---160S, 230 --040S, 230 --15S.

Aluminum, porcelain boards: 185 -150S, 240 -040S, 240 -30S.

It may be necessary to adjust the temperatures and durations 2--4 , 5.10S for different paste.

Temperature and time ranges:

Preheat temperature (A): 150-190 .

Preheat time (B): 100-160S.

Reflow 1 temperature (C): 215-250 .

Reflow 1 time (D): 30-60S.

Reflow 2 temperature (E): C (215-250).

Reflow 2 time (F): 10-50S.

Note:

1. Preheat temperature should be lower than reflow temperature.

2. Preheat time should be greater than preheat temperature-90 and less than 200S.

2. Temperature Sensor Handling

It is very important for the temperature sensor to have accurate reading to make perfect circuit boards. The sensor is supposed to touch the circuit board in the new SMD-2000A models. A convenient way to achieve this is to tape the sensor on to a heat sampling circuit board with the supplied heat resistant tape. This sampling board can be an unused circuit board which has the same layers and made with the same material as the board to be assembled. It reflects the same or very similar heat characteristics. The sensor can be taped on the working board directly if it is a one board only, or if the board is very big.

3. Reflow

It is necessary to run the reflow oven one or two cycles to warm it up before every working shift. Open the draw and gently place the circuit board on it. The circuit board should be placed in the center of the working area, leaving some distance from the front door. Push the draw into the heating area. Press the .Soldering. key. The LCD displays the board temperature as the heating progresses. The board is done when the reflow oven rings. Wait till the ring stops before taking out the board and starting another one.

4. Preheat

This process is the same as the reflow process except that the board needs to be taken out as soon as the temperature reaches 220°C, before the normal reflow process is finished. The SMT parts can be removed from the board at this time.

5. Recommended Solder Paste

The reflow oven does not come with solder paste.
The following paste has been tested and recommended.

6. Notice:

1. It is necessary to tape the sensor on the circuit board for every reflow process, either on the same board, or another similar board.
2. Let the reflow oven cool down for 30 minutes after four hours of continues working.
3. Check the reflow oven heater tubes at least once a year.
4. Most solder paste should be stored in the refrigerator set at 2-8°C. Let it warm for 30 minutes at room temperature and stir thoroughly before use.

SMD—2000A TABLE TOP REFLOW OVEN price: USD \$1650.00

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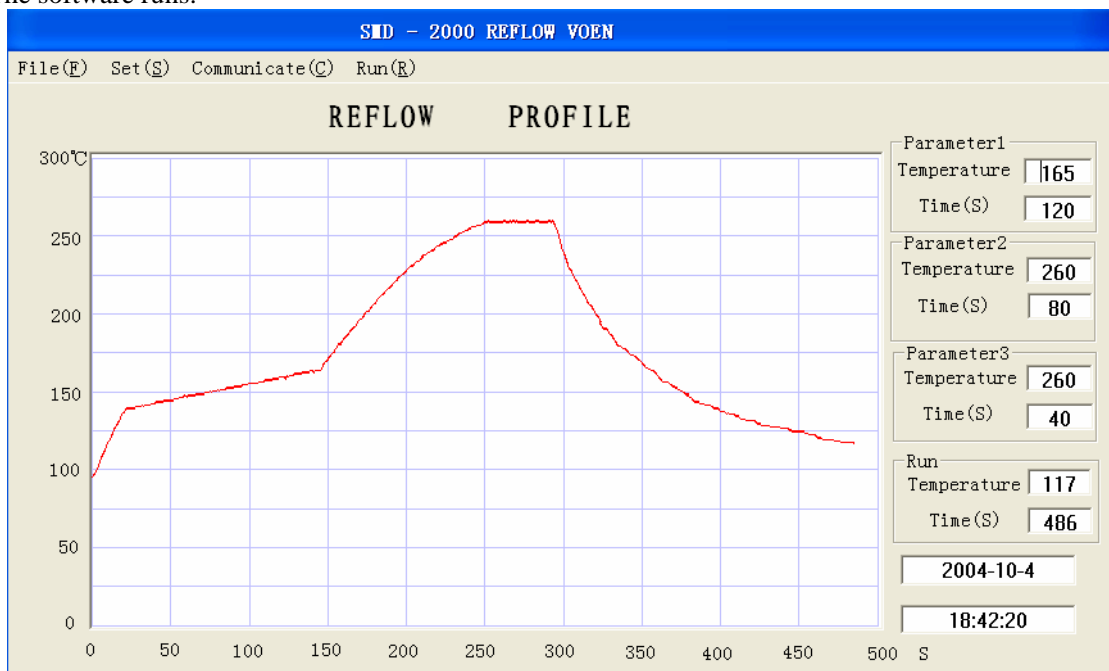
Communicating software specification for SMD-2000A AUTOMATIC REFLOWING MACHINES

Main function :operate SMD-2000A'S reflowing machines by the PC:

1. parameter setting.
- 2.reflowing temperature curve display, storage and print.
3. heating operation to MD-2000A'S reflowing machines.

Set up of communicating software of upper machine

1. The Communicating software for SMD-2000A automatic reflowing machine runs under win95, win98, win2000XP.
2. May use RS232 serial port line connect with SMD-2000A automatic reflowing machine reliably when the software was installed.
3. Setup method: May put CD into CD-ROM, double click the symbol of SETUP to finish soft installation under the file of CHINESE\SETUP according the prompt symbol.
4. The software runs:



- 1.File:
 1. OPEN: open the saved temperature reflowing history curve.
 2. SAVE: save the temperature flowing curve after finish heating.
 3. PRINT: print the temperature reflowing curve.
 4. EXIT: exit the software.
2. Setting:
 1. PORT SELECT: select commucating serial port COM1 or COM2 .
Use default :COM1.
 2. PARAMETER TRANSFER: may input parameter value of the table to SMD-2000 reflowing machine, and the reflowing machine runs by the new parameter.
- 3.Commucation:
 - 1.PARAMETER LOAD: click to load the SMD-2000 reflowing machine's parameter to the software parameter table of PC.
 2. STOP COMMUNICTE: click to stop the communication after the parameter load was finished.
- 4.Run:
 - 1.RUN:may run SMD-2000 reflowing machine into heating state after click.
 - 2.STOP: may stop SMD-2000 reflowing machine from heating state after click.

operating parameters meaning of SMD-2000 reflowing machine:



Parameter 1-----Temperature value(W1) , time value (T1) second.

Parameter 2----- Temperature value (W2) , time value (T2) second.

Parameter 3----- Temperature value (W2) , time value (T3) second.

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