TAWA_PCB

User Manual

Specifications:

Tawa_PCB (**Thermal Automated Workstation for Assembling PCB**) is Reflow hotplate for soldering SMD components on small PCBs. It can reach 320 °C and has a max ramp rate of 3.5 deg/sec(pre-heat and soak zones) and 2 deg/sec(reflow zone). Users can choose from 3 pre-defined profiles (lead, lead-free and desoldering) or create their own heating profiles. Users can also use the website to connect and control this device remotely.

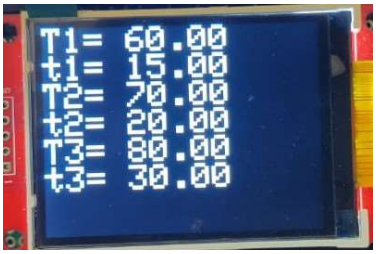
Refrain from touching the top copper-plate directly when in use.

How to Use:

1. Plug in the SMPS and switch on the power supply followed by the current plate temperature on the screen.

2. Choose the **mode** in which you want to use the hot plate by clicking on corresponding button.

3. **Online Mode:** Device waits for the input data from the website, and begins process 5 seconds after data is received.
   The phase is represented by color in graph as well.



4. **Offline Mode:** Choose the required profile by clicking on the corresponding button.
   a. Profile 1: Lead solder Paste
   b. Profile 2: Lead-free solder Paste
   c. Desolder
   d. Custom: create your own profile by giving inputs temperature(T_i) followed by time(t_i) three times, use Enter each time-
      i. T1, t1= Pre-heat
      ii. T2, t2= Soak
      iii. T3, t3= Reflow

5. In offline mode, once you select the profile, final data is shown for confirmation, if correct, **press Enter** button.
   You will observe the required graph and after 5 sec of warm-up period the real-time data start plotting.

6. Once Process is finished, the fans cool down the plate to 40 °C followed by **Finished** written in Green.

7. To start the next reflow process, click on **OK** and follow from step 2 again.