

ZD-937

Temperature Controlled Soldering Station

Operation Instructions

cause is that welding time is too long or too short. The welding point cannot be heated for too much time. And the electric iron also cannot be moved away from the welding point too early. Only when welding tin melts to bright silvery white can the electric iron be moved away.

2. After welding, please melt a little solder on the welding mouth before putting the iron back to the frame and turning off the machine. Clean away excrescent solder on the fiery welding mouth with wet sponge before starting welding next time.

Technology specification:

Power supply voltage: 230volt (220volt-240volt) /50HZ

Electric iron power: 50watt

Equipment power supply fuse: T1 A/250volt (50X20mm glass pipe)

Regulating scope of temperature: 150°C----450°C

Temperature display: 2 * 3 1/2 grades LCD display ,
display scope:150°C----450°C

Display precision: 5%

Circumstance humidity: +5°C----+40°C, relative humidity < 85% (not in humidification)

Atmospheric pressure: 600 hPa---1000 hPa

Shell size: 210X125X135mm width/height/depth (without electric iron)

Weight: about 1800 gram

- This weld machine is an ideal welding tool for an amateur fancier, school, car of electronics ,and for maintaining the service , producing with laboratory.
- The weld machine is installed with electric soldering iron frame and the sponge for tidying up glue
- It is equipped with LCD digital temperature display which can display set temperature and factual temperature simultaneously.
- outer shell construction is tightly and firmly packed, and it has a good function to insulate the aegis.
- electronic sensor —controlling the temperature
- due to the usage of highly electrified components, the heat time supposes to be short.
- It is installed with 50tile electric soldering irons, and the suitable usage scope is extensive.
- the electric soldering irons is supposed to work under safe and low electric voltage.
- It has the precise function of regulating temperature,1 degree or 10 degrees per grade can be regulated through the temperature regulating button, also can control the temperature through 200°C, 300°C, 400°C button. There is °C,°Fconvert button.
- the regulating scope of temperature is 150°C—450°C.
- It is installed with the compensating electric outlet which can protect the intelligent components.
- when operation breakdown takes place, warnings will appear through screen display and sound.
- when using the weld machine for the first time, you are required to read the operation instructions completely and carefully; and in all the welding work, you

are supposed to obey the safety rules and relating regulations.

•**Diagram explanation** (Relate it to the original diagram)

- 1) LCD digital temperature display ₁
- 2) With the temperature regulating button, regulating the welding temperature to what it requires(up+/down- 200°C, 300°C, 400°C)
- 3) °C °F convert button..
- 4) Turn on and turn off the power switch of the welding.
- 5) The diode plug(180°C)with 5 conjunctions is used to combine the hot irons and the welding machine which are under the control of the sensor.
- 6) The electric soldering irons frame, installed with protective equipment through toughing and sponge trays which can be drew out.

Application

The operation is a little bit easy, and the heating time is somewhat short too, so when using the welding machine , probably you won't be so careful. But here we have to warn you seriously. In order to guarantee the user's safety and prevent the welding machine from being damaged, please obey the safety hints and the warning signs in this operation instructions, and obey the relating regulations.

Safety regulations

- the welding machine is only allowed to weld and unsolder the electrics and the electrons in the printing electrical circuit and the models; tin the circuitry and the lead; connects the lead
- The welding machine is absolutely prohibited to be used to heat the liquid(water, electrolyte and ?) or heat the plastics parts(it will form poisonous air and cause fires).
- components.

Tin the new soldering mouth when using the machine at first time. To do this, switch on the welding machine, then thaw a little soldering tin into a thin film which can be affixed on the welding mouth when temperature reaches about200°C.

The key to ensure the quality of welding point is the proper welding temperature. The welding temperature of electric components is from 300°C to 380°C. Too low temperature will lead to cold welding point while too high temperature will result in drop of the welding preparation and rupture of the jointing slot. Moreover too high temperature will also possibly lead to damage of circuitry (the plating layer of the lead) and components. Before welding, clean the soldering mouth directly with the sponge so as to clean away the welding preparation hangover which has not completely boiled away, the oxides and other impurities and this can prevent them from dropping to the welding point. After welding, the welding mouth has to be cleaned again and has to be filmed a little tin before the electric iron is put again on the frame. It is very important to film the welding mouth with solder, otherwise the welding mouth will be passivated after a period of time and cannot absorb the welding preparation any more.

1. Heat to working temperature (the welding temperature regulated on the weld machine), then put the welding mouth which is cleaned and equably filmed with tin and the welding rod together on the welding point. The welding preparation will melt first to clean the surface of the metal which needs welding. Then the welding tin melts so as to create relating conductive connections. The welding of electric components costs not more than 2 minutes.

The well-welded jointing point looks slick and lustrous after cooling. While the welding point with bad quality and many mistakes looks lusterless, uneven and easy to crack. The causes leading to such result are as following: the improper solder is used or the welding temperature is regulated too high. Another familiar used last time and the higher line will display current temperature of the electric iron.

2. The welding temperature can be regulated from 150°C to 450°C in steps by means of two regulating switches (up+/down-). The temperature will increase by 10°C every grade till the demanded temperature is displayed.

3 It is also can push(200°C, 300°C, 400°C) button to set the value directly.

4 When the welding temperature is regulated to a wanted number, the factual working temperature will approach the set temperature gradually.

Instructions:

. When the weld machine is turned off, the regulated temperature will be kept automatically. And when you turn on the machine next time, this set temperature will be displayed automatically.

. Once any malfunction happens for example the temperature sensor is damaged, or the connecting lead between the electric iron and the weld machine is disconnected, the display will show malfunction. Further, the piezoelectricity sensor inside will give out sound of alarm. In that situation, shut down the machine immediately, switch off the power supply and look up possible cause resulting in malfunction.

Operation:

To make welding work perfect, you have to use the proper welding rod and operate the weld machine accurately. Electric welding rod with colophony is advised to use. Any welding preparation with halogen is forbidden. The welding preparation on the rod can clear away the impurities and oxides on the welding point that will do harm to welding and prevent new oxides from being created in the course of welding. In practice, alloy solder L-SN60PbCu2 (German Industry Standard 8516) with 60% tin (60/40 solder) is mostly used. This solder has many welding rod standards and 1mm welding rod is advised to use in electric

•only the operation safety of the weld machine is guaranteed, can we use the weld machine. In the following circumstances, the operation safety may not available:

-If there are damages which can be seen with our eyes, (for example, insulation has

problems, the crust crazes);

-the weld machine can not operate

-the weld machine is usually left under poor circumstances

-with inappropriate transportation 6

-the damaged weld machine is not allowed to be used again, and the power supply must be cut off, in case that some one who don't know that will use it. If it needs maintenance and repair, only the professionals with strict training can open the weld machine to maintain and repair it. Self-disassembly may result in the danger of electric shock, and in the risk of losing the right of the counterclaim based on the quality guarantee.

•Only the voltage and frequency marked on the data plate can be used by the weld machine.

•the weld machine can only be installed in the dry workshops to operate.

•the weld machine in operation must be looked after by workers.

•the weld machine can not operate or be put aside within the reach of the children.

•the weld machine can not be used under the wet circumstances or near the easily flaming or the explosive materials or air.

•during the welding , it will produce welding evaporation, so welding can only be allowed in the draught workshops.

•welding can only be carried out on the components with no electricity.

•You have to obey the corresponding regulation of safety protection, if the weld is used in the industry.

•if the weld machine is moved from the cold room to the warm room, the temperature will be changed, which will cause the congealed water which will affect or damage the components of the machine, please wait to weld until the temperature of the weld machine is the same with that in the room.

•the temperature of the electric soldering irons can reach more than 160°C, if the animal or man touch the metal heated by the electric soldering irons, we will suffer

seriously bum.

- It supposes that the weld machine should not be operated under high temperature all along.
- It is totally prohibited to put the electric soldering irons into the water in order to cold it.
- the electric soldering irons and the weld machine can not carry too much man's weight.
- the weld machine will become very hot, so it can only be installed on the steady ;Fastened and no easily burned shelf. The groove for blowing wind on the weld machine's crust mustn't be covered.
- when welding the lead and touching points, please pay attention: Take appropriate measures to protect and cover up the metals, in case that they will touch each other.
- If it needs maintenance, we must get through the power or turn on the crust; Now the electrified metal, touching points and the capacitors are uncovered, in such cases, only the professionals are allowed to weld in case of the danger of life loss.
- when maintaining , please choose the producer's recommend product, such as solder, soldering fluid est.
- please clean up the outer components of the crust after turning off the weld machine and cut off the power, but you have to use the ash hair brush and the softened and wet brush(disallow the strong cleaning usage, spray or melting agent)`. Notice: when cleaning, the fluid can not be flowed along aside into the weld machine from the opening point of the crust.
- the fuse may burn out due to over carry, so please use the same model number for preparation(TIA\250fu, 5*20 millimeter). It is prohibited to connect the damaged fuse or use some other characterized fuse. When substitute the fuse, you must turn off the weld machine and cut off the power. And then apply the screw to open the fuse on the back of the weld machine; disassembly the burned fuse; and substitute

the good fuse and then cover the fuse box.

•Preparation

3

Please conserve the weld machine's packing box. In case that we use it for future transportation or put the weld machine into it when we don't need it ,so as to avoid pollution of ash and the eroding of the wet.

1. put the metal helix of screw frame into the corresponding open crust of the electric soldering irons frame. And use the screw to fasten it and so does the bottom of the frame.
2. Please let the sponge for tidying up glue absorb enough clean water and drop to dry, and then put it on the salver.
3. Fix the frame on the right side of the weld machine (connecting in gap)

Instruction: Don't use the electric soldering iron without soldering mouth because it will damage the heating component and temperature sensor.

Electric connect

1. Please connect the electric soldering iron with the weld machine by means of insetting the plug of the electric iron lead (a diode plug with 5 conjunctions and 180 degrees lead trough) into the electrical outlet on the face of the weld machine.
2. Turn off the switch of the power supply (0 location), and inset the power supply plug of the weld machine lead into the electrical jack whose voltage conforms with what is marked on the data plate. At that time, the weld machine is ready for work.

Temperature regulating

1. Put the power supply switch to location 1 and the weld machine is being connected. At that time the lower line on the screen will display a set temperature
2. (up+ switch) or decrease (down- switch) by 1⁰C every time you press the switch momentarily. If you press the switch without move, regulating will go on