

ZD-987 Soldering & Desoldering Station

1. Description

Soldering & Desoldering Station is a high-performance and multi-function station that developed and manufactured by ZhongDi for electronic product research , production and rework. This tool is used in the fields of electronic research, teaching and production, especially in the repairing and reworking on the electronic appliances and communication equipments.

1.1 Control Unit

The soldering iron and the desoldering gun tool are controlled automatically by two micro-processors. The digital control electronics and high-quality sensor and heat exchange system guarantee precise temperature control at the soldering tip. The highest degree of temperature precision and optimal dynamic thermal behavior under load conditions is obtained by the quick and accurate recording of the measured values in a closed control circuit, and this design is especially for the lead-free production technics.

1.2 Soldering Iron

soldering iron with a power of 60W (Heat up rating 130W) and a wide spectrum of soldering tips (N4 series) can be used anywhere in the electronics field.

The high power and slim design makes this iron suitable for fine soldering work. The heating element is made of PTC and the sensor on the soldering tip can control the soldering temperature quickly and accurately.

1.3 Desoldering gun

Desoldering iron gun with a power of 80W (Heat up rating 130W) and a wide spectrum of soldering tips (N5 series) can be used anywhere in the electronics field.

The high power and gun type design makes this iron gun suitable for fine desoldering work. The heating element is made of PTC and the sensor on the desoldering tip can control the desoldering temperature quickly and accurately.

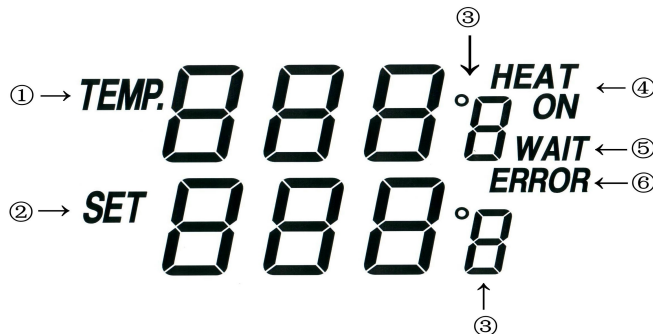
2. Technical Specification

Rated voltage range AC220-240V; 50Hz.rated power input 200W.

3. Operating Instruction

3.1 Place the desoldering iron gun in the holder separately. Then connect the plug to the receptacle on the station and turn clockwise to tighten the plug nut. Check that the power supply is corresponding to the specification on the type plate and the power switch is on the "OFF" position. Connect the control unit to the power supply and switch on the power. Then a self-test is carried out in which all display elements are switched on briefly. The electronic system then switches on automatically to the set temperature and displays this value.

3.2 The display and temperature setting



The digital display:

① shows the actual temperature of the desoldering tip .

② shows the setting temperature. Pressing the “UP” or “DOWN” button can switch the digital display to the set point display. The set-point can be changed for $\pm 1^{\circ}\text{C}$ by tapping the “UP” or “DOWN” button. Pressing the button will change the set-point quickly. The digital display will return automatically to the actual value and the iron will reach to the setting temperature quickly.

③ $^{\circ}\text{C}/^{\circ}\text{F}$ display: Switching the temperature display from $^{\circ}\text{C}$ to $^{\circ}\text{F}$ by pressing the “ $^{\circ}\text{C}/^{\circ}\text{F}$ ” button and then the electronic system will display the actual temperature① and setting temperature② in $^{\circ}\text{F}$, and vice versa.

④ When the actual temperature on the soldering tip is less than the set-point, “HEAT ON” will display and make the desoldering tip heating up.

⑤ When the absolute offset is more than $\pm 10^{\circ}\text{C}$ between the actual temperature and the set-point on the soldering tip or the nozzle, “WAIT” will display. It means that the temperature electronic control system is not in the stable situation, we should wait a moment to let the “WAIT” disappear.

⑥ When “ERROR” display, there may be a trouble on the system, or the soldering iron is not connected to the control system correctly.

3.3 Suspend Mode

The soldering station integrates automatic suspend function. The station will go into suspend status if the soldering iron is not operated in 15 minutes. The temperature of the soldering tip will cool down to 200°C and keep it during the suspend mode until the station is restarted. And the station will be back to the previous working condition after restarted.

You can use the below methods to restart the soldering station:

- Power off the power switch, then power on it again.
- Push any key (If you do not pick up the soldering iron in two minutes after pushing any key, the station will go into suspend status again).
- Pick up the soldering iron.

4. Safety Instruction

- The manufacturer assumes no liability for uses other than those described in the operating instructions or for unauthorized alterations.
- The operating instructions and cautions should be read carefully and kept in an easily visible location in the vicinity of the control system. Non-observance of the cautions will result in accidents, injury or risks to health.

5. Caution !

5.1 The power cord only can be inserted in approved power sockets or adapters.

5.2 High Temperature

The temperature of the soldering tip or the nozzle will reach as high as around 400°C (752°F) when the power switch is on. Since mishandling may lead to burn and fire, be sure to comply with the following precautions:

- Do not touch metallic parts near the soldering tip/ nozzle.
- Do not use this system near the flammable items.
- Advise other people in the work area that the unit can reach a very high temperature and should be considered potentially dangerous.
- Turn off the power switch while taking breaks and when finishing using.
- Before replacing parts or storing the system, turn off the power and let it cool down to the room temperature.
- Warning: this tool must be placed on its stand when not in use.
- A fire may result if the appliance is not used with care, therefore
----be careful when using the appliance in places where there are combustible material;
----do not apply to the same place for a long time;
----do not use in presence of an explosive atmosphere;
----be aware heat may be conducted to combustible materials that out of sight;
----place the appliance on its stand after use and allow it to cool down before storage;
----do not leave the appliance unattended when it is switched on.

5.3 take care of your tools

Do not use the tools for any applications other than soldering or desoldering.

Do not rap the iron/gun against the work bench or otherwise subject the iron to severe shocks.

Do not file the soldering tip to remove the oxide, please wipe the tip on the cleaning sponge.

Use only accessories or attachments which are listed in the operation manual. Use of other tools and other accessories can lead to a danger of injury.

Please turn off the power before connecting or disconnecting the soldering iron.

5.4 Maintenance

Before further use, safety devices or slightly damaged parts must be carefully

checked for error-free and intended operation. Inspect moving parts for error-free operation and that they don't bind, or whether any parts are damaged. Damaged safety devices and parts must be repaired or replaced by a qualified technician, so long as nothing else is indicated in the operation manual. Use only accessories or attachments which are listed in the operation manual. Use of other tools and other accessories can lead to a danger of injury.

5.5 Keep children at a distance

Warning: this appliance is not intended for use by young children and infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the appliance safely.

Warning: Young children should be supervised to ensure that they do not play with the appliance.

Unused soldering tools should be stored in a dry location which is out of the reach of children. Switch off all unused soldering tools.

5.6 Protect yourself against electrical shocks

Avoid touching grounded parts with your body, e.g. pipes, heating radiators and so on. The grip of antistatic designed soldering tool is conductive.

5.7 Work environment

Do not use the soldering tool in a moist or wet environment. The soldering iron and the hot air gun should be placed on the holder after finished using.

5.8 Observe the valid safety regulations at your work place.