AOYUE®

937+

Soldering Station

INSTRUCTION MANUAL

Thank you for purchasing the 937+ soldering station . Please read this manual before operating the 937+ Store the manual in a safe, easily accessible place for Future reference.

- **Controlled by CPU.**
- **Knob type control switch, fully digital the output and setup temperature.**

Packing List

Please check the contents of the unit products package and confirm
That all the items listed Below are included

Soldering station_____1
Soldering Iron_____1
Iron Holder (With cleaning sponge)_____1
Instruction manual_____1
Heating Element_____1

Precautions

In the instruction manual, "warning" and "caution" are defined as follows.

! **Warning:** Misuse may potentially cause death of, or serious injury to, the user.

! **CAUTION:** Misuse may potentially cause injury to the user or physical damage to the objects involved.

For your own safety with these precautions

When the power is on, the tip temperature is between 200 and 480
Since mishandling may lead to burn of fire, be sure to comply with the following Precautions.

- Do not touch the metallic parts near the Tip.
- Do not use the product near flammable items.
- Advise other people in the work area that the unit can trench a very high Temperature and should be considered potentially dangerous.
- Turn the power off while taking breaks and when finished using the unit.
- Before replacing parts or storing the unit, turn the power off and allow the unit To cool to room temperature.

To prevent damage to the unit and ensure a safe wicking environment, be sure to Comply with the following precautions.

- Do not use the unit for applications other than soldering
- Do not rap the soldering iron against the work bench to shake off residual Solder, or otherwise subject the iron to severe shocks.
- Do not modify the unit.
- Use only genuine our own replacement parts.
- Do not wet the unit or use the unit when your hands are wet.
- The soldering process will produce smoke, so make sure the area is well ventilated.
- While using the unit, don's so anything which may cause bodily harm or physical damage.

Setting up & Operating the 937

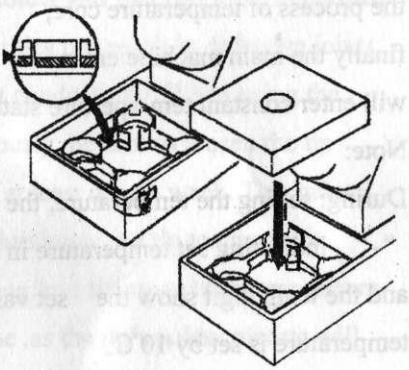
! CAUTION: The sponge is compressed, It will swell when moistened With water Before using the until, dampen the sponge with the water and squeezed it dry, Failure to do so may result in damage to the soldering tip.

Iron Holder

1.Small cleaning Sponge;
Dampen the small cleaning sponge with water and then squeeze it dry.

2.Add water to approximately the level as shown, the small sponge will absorb water to keep the larger sponge above it wet at all times.

*The large sponge may be used alone(w/o small sponge & water)

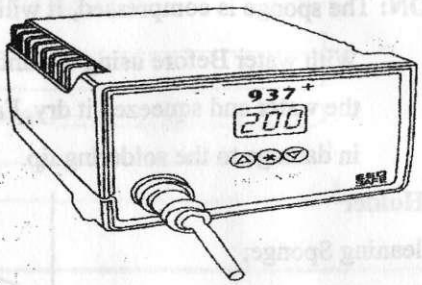


3. Dampen the large cleaning sponge and place it on the iron holder base.

! CAUTION: Be sure to turn off the power switch before connecting or disconnecting the soldering iron. Failure to do so may damage the P.W.B.

Set the Temperature:

Press temperature up/down button to select the wanted. In 2 seconds, the display will automatically shift to CPU-controlled self detecting status, and show the process of temperature core, finally the main machine enter will enter constant tem-aperture status.



Note:

During: setting the temperature, the final digit position displays "-" , indicating set temperature in progress; the hundredth digit and the tenth digit show the set value, because this temperature is set by 10℃.

Reset button:

When to stop using this iron, press the reset button . Here you can see That the CPU-controlled self detecting system shows the temperature drop Of the heating core to the lowest. This can avoid derange to the heating core By sudden temperature drop.

Tip Care and Use

*** Tip**	High soldering temperatures can degrade the tip .
Temperature	Use the lowest possible soldering temperature. The Excellent thermal recovery characteristics ensure Efficient and effective soldering even at low temperature.
*** Cleaning**	Clean the tip regularly with a cleaning sponge, as oxides And carbides from the solder and flux can form impurities On the tip. These impurities can result in defective joints Or reduce the tip's heat conductivity. When using the Soldering iron continuously, be sure to loosen the tip And remove all oxides at least once a week. This helps Prevent seizure and reduction of the tip temperature.
*** When Not in Use**	Never leave the soldering iron sitting at high temperature For long periods of time ,as the tip's solder plating will Become covered with oxide, which can greatly reduce The tip's heat conductivity
*** After Use**	Wipe the tip clean and coat the tip with fresh solder This helps prevent tip oxidation

Maintenance

Inspect and Clean The tip	1. Set the temperature to 250℃(482℉) 2. When the temperature stabilizes, clean the tip with The cleaning sponge and check the condition of the tip.
CAUTION: never file Iron The tip to remove	3. If there is black oxide on the solder-plated portion of the tip Apply new solder (containing flux) and wipe the tip. on the cleaning sponge. Repeat until the oxide is completely removed. Coat with new oxide solder. 4.If the tip is deformed or heavily eroded, replace it wit a new one.

Troubleshooting Guide

! WARNING: * Disconnect the power plug before servicing. Failure To do so may result in electric shock.

* If the power cord is damaged, it must be replaced By the manufacturer, its service agent or similarity Qualified person in order to avoid personal injury or Damage to the unit

Problem 1. Check 1. Is the power cord and /or connecting plug
The heater lamp Disconnected?
Does not light up * Connect it.

Check 2.s the fuse blown?
Determine why the fuse blew and eliminate the cause,
Then replace the fuse.

A. Is the inside of the iron short-circuited?
B. Is the grounding spring touching the heating element?
C. Is the heating element lead twisted and short-circuited?

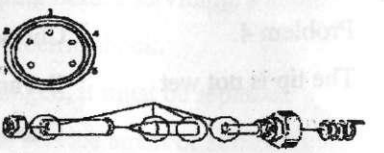
Problem 2.
The heater lamp * Refer to checking for breakage in the cord assembly.
Lights up but the Check 4. Is the Heating Element broken?
Tip does not heat up * Refer to Checking for breakage in the heating clement.

Problem 3
The tip heats up Check 3
Intermittently

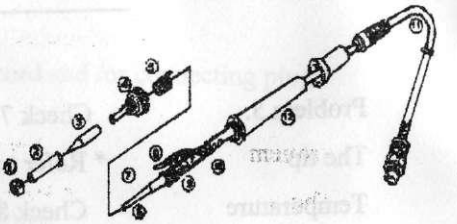
Problem 4. The tip is not wet	Check 5. Is the tip temperature too high? * Set an appropriate temperature. Check 6. Is the tip clean? * Refer to Tip Care and Use.
Problem 5. The tip Temperature Is too low	Check 7. Is the tip coated with oxide? * Refer to Inspect and clean the tip. Check 8. Is the iron calibrated correctly? * Recalibrate.
Problem 6. The tip can not Be pulled off	Check 9. Is the tip seized? Is the tip swollen because of deterioration? * Replace the tip and the healing element.
Problem 7. The tip don't Hold the desired Temperature.	Check 8.

Checking for breakage of the heating element and cord assembly

a	Between pins 4 & 5	1.7-1.9 (Normal)
b	Between pins 1 & 2(Healing Element)	18-20 (Normal)
c	Between pins 3& Tip	Under 2



Disconnect the plug and measure the resistance value between the connecting plug pins as follows, If the values of 'a'and 'b'are outside the above value, replace the heating element (sensor) and / or cord assembly. Refer to Procedures 1and 2.



A. Broken Heating Element

1.Turn the nut (1) counterclockwise and remove the tip enclosure (2) the tip (3).
2.Turn the nipple (4) counterclockwise and remove it from the iron.
3.Pull both the heating element (6) and the cord assembly (11) out of the handle (12) (Toward the tip of the iron)
4.Pull the grounding spring (5) out of the D-sleeve.

Measure when the heating element is at room temperature.

1.Resistance value of heating element(red) 2.5-3.5Ω.
2.Resistance value of sensor (Blue) 43-58Ω
If the resistance value is not normal, replace the heating element.
(refer to the instructions included with the replacement part

After replacing the heating element

1. Measure the resistance value between 1 pins 4& 1or 22

Pins 5& 1or 2. If it not ∞. The heating element and sensor

Are touchline , this will damage the P.W.B.

2. Measure the resistance value 'a' , 'b' and 'c' to confirm that the

Leads are not twisted and that the grounding spring is properly connected.

B. Broken Soldering iron Cord

There are two methods of testing the soldering iron cord.

1. Turn the unit ON and set the temperature control knob to 480℃

Then wiggle and kink the iron cord at various locations along its

Length, including in the strain relief area. . If the LED heater

Lamp flickers, then the cord needs to be replaced.

CAUTION: The LED heater lamp will flicker even with a normal

Iron cord if the temperature reaches 480 ℃

2. Check the resistance between the pin of the plug and the wire on

The terminal

Pin 1: Red Pin 2:Blue 3:Green Pin 4.While Pin 5:Black

The value should be 2 Ω If it is greater than 0 Ω ∞or is ,

The cord should be replaced

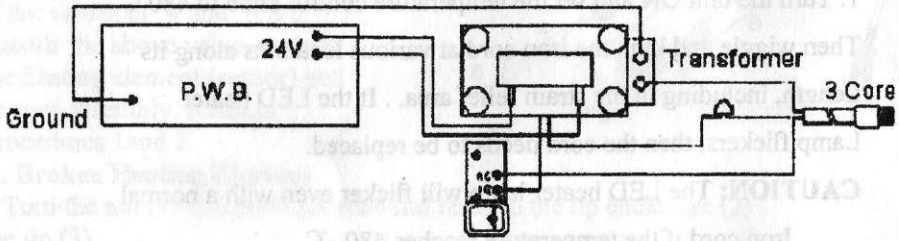
C. Replacing the Fuse

Refer to the drawing in the replacement parts section of this

Manual. Decoder the blown fuse and remove it. Solder on a new one.

Specifications

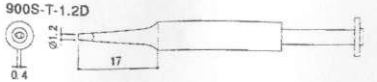
Power Consumption: 24V-40W
Output Voltage: 24VAC
Temperature range: 200℃-480 ℃
Tip to Ground Potential: Under 2Mv (TYP0.6Mv)
Heating Element: Ceramic heater



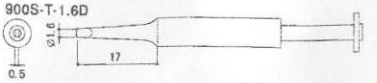
Unit : mm

Small
For 900S, 900S-ESD

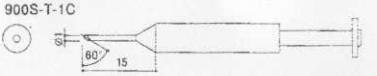
900S-T-1.2D



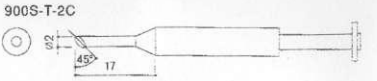
900S-T-1.6D



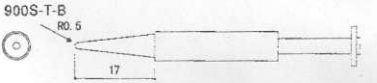
900S-T-1C



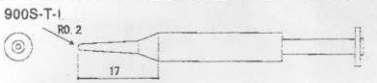
900S-T-2C



900S-T-B



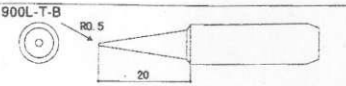
900S-T-I



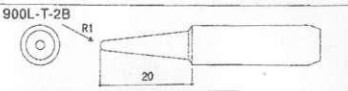
Tip Out Dia.ø5.8 mm

Large
For 900L, 900L-ESD, 908, 908-ESD

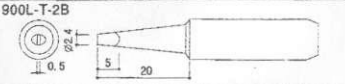
900L-T-B



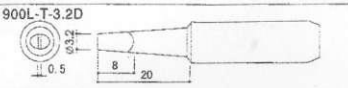
900L-T-2B



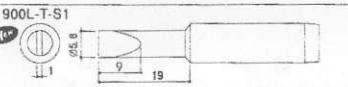
900L-T-2B



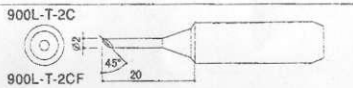
900L-T-3.2D



900L-T-S1

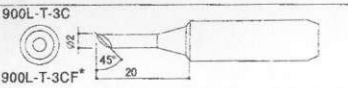


900L-T-2C



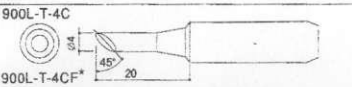
900L-T-2CF

900L-T-3C



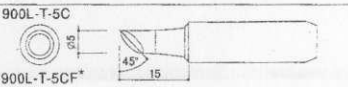
900L-T-3CF*

900L-T-4C



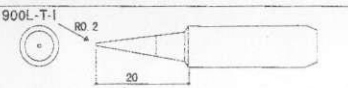
900L-T-4CF*

900L-T-5C

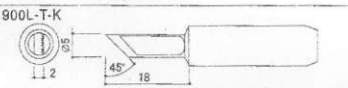


900L-T-5CF*

900L-T-I



900L-T-K



Tip Out Dia.ø8.5mm

Thèse tips are tinned on the soldering surface only.

Manufacturer:
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