

# **CSI 950+**

## **SMD HOT TWEEZR**

### **INSTRUCTION MANUAL**

Tank you for purchasing out products-SMD Hot Tweezers CSI 950+. Please read this manual before operating the 950+. Store the manual in a safe, easily accessible place for future reference.

#### **! CAUTION**

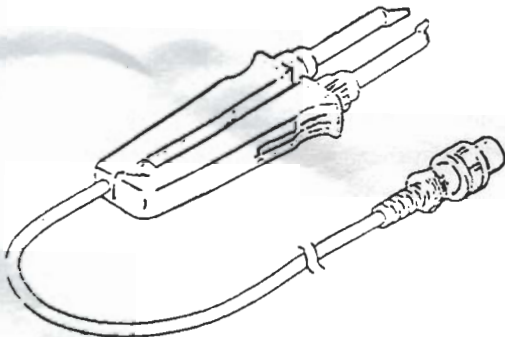
The Hot Tweezers can't function by itself. It must connected to a soldering station specific information can be found in the instruction manual for your particular soldering station. Before operating the CSI 950+ for the first times, be sure to calibrate the station

Don' t set the tip temperature to over 450°C

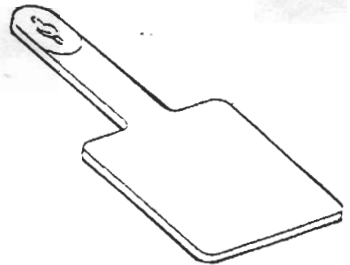
### Packing list

Please check the contents of the 950 package and confirm that all the items Listed below are included

Tweezers	1
Heat Resistance Pad	1
Instruction Manual	1



Tweezer



Heat Resistance Pad

### Specifications

Name	950
Power Consumption	52W
Temperature Range	300°C-450°C
Tip To Potential	Under 2mv
Tip To Ground Resistance	Under 2Ω
Heating Element	Ceramic Heater
Cord Assembly	1.2m (4ft)
Total length (w/o Cord)	86mm (7.3in)
Weight(w/o cord)	93g(0.2 lbs)

Pecification and design subject to change without notice

## **Precautions**

In this instruction manual “warning” and “caution” are defined as follows.

### **!WARNING**

**!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, be sure to comply with these precaution.

### **! CAUTION**

When the power is on , the tip temperature is between 300°C-450°C.

Since mishandling may lead to burns or 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 reach a very high temperature.

And should be consider potentially dangerous.

Turn off the power while taking breaks and when finished using the unit

Before replacing parts or storing the unit, off the power and allow the unit to cool to Room temperature.

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

\*Do not use the unit for applications other than those specifically described in the Instruction manual.

\*Before using the 950 for the first time, calibrate the tip temperature.

\*Do not rap the 950 for the first time, calibrate the tip temperature.

\*Do not set the tip temperature to over 450°C .

\*Do not rap the 950 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 replacement parts.

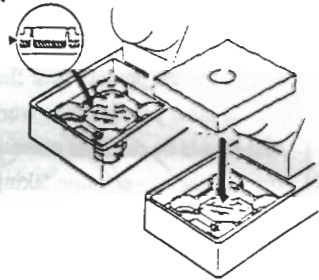
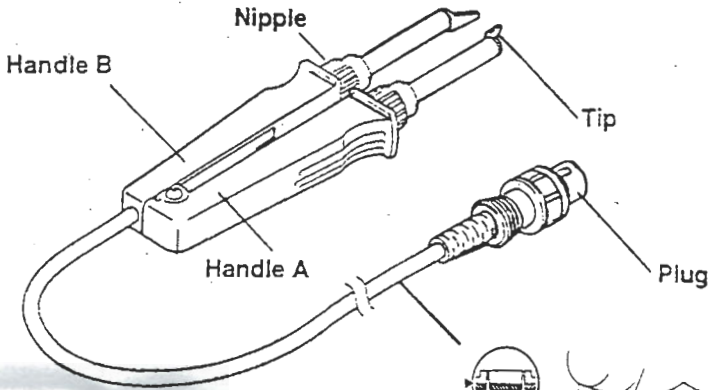
\*Do not wet the unit or use the unit when your hands are wet.

\*The operating process will produce smoke, Make sure the area is well ventilated..

\*Pull on the plug to disconnect the 950 from the station outlet. Do not pull the cord.

\*While using the unit, don't do anything which may cause bodily harm or physical Damage.

## Names Of Parts

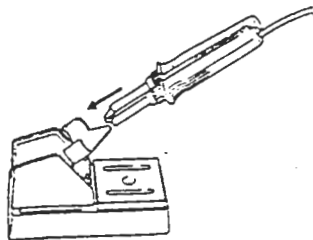


1. Dampen the small cleaning sponge with water and squeeze it dry. Place it in one of the 4 openings in the iron holder base.
  2. Add water to approximately the level shown in illustration. The small sponge will absorb water to keep the larger sponge above it wet at all times. Note: the large sponge may be used separately (without the small sponge and water)
  3. Dampen the large cleaning sponge and place it on the iron holder base.
- Connections

1. connect the plug to receptacle.
2. Place the 950 in the iron holder.
3. Plug the power cord into the power supply. Be sure to ground the unit.

### CAUTION!

The sponge is compressed, it will swell when moistened with water. Before using the unit, dampen the sponge with water and squeeze it dry. always use a damp sponge to clean the tip. Never wipe the tip clean on a dry sponge as this can damage the tip.



## Replacing the Tip /Tip Selection

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### **Replacing the Tip**

#### **!CAUTION**

Be sure to turn off the power switch before replacing the tip.

1. Loosen the nipple by turning it counterclockwise.

It is not necessary to pull it out completely.

2. When the tip is heated, grasp the pipe part using the heat resistance pad of the tip and pull.

3. Insert the new tip as far as it will go, and align it so that it is parallel to the other tip.

4. Tighten nipple to fix the tip in place.

**CAUTION:** the tip is very hot. If handled improperly it can cause serious burns.

Do not hold onto the heat resistance pad for a long period.

## Operating instructions

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### **1. Set the Temperature**

#### **!CAUTION**

Never set the temperature to any value over 450°C. Doing so may damage the station.

Set the temperature according to the type of work to be done.

### **2. Apply solder or flux.**

If there is insufficient solder on the PWB, or the soldered area is too small, apply solder or flux to the PWB. Solder may also be applied to the tip.

#### **!CAUTION**

Very high tip temperatures may damage the painted circuit board, possibly causing the printed pattern to become detached. Recommends setting the tip temperature to 300°C-450°C for all normal work and raising it only when a specific job requires a higher temperature. Using the lowest possible effective temperature not only helps protect parts that are sensitive to heat, it also helps protect parts that are sensitive to heat, it also helps protect the tip from degeneration caused by heat.

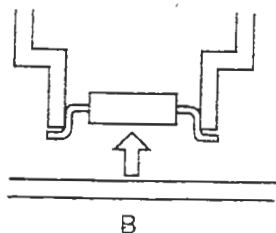
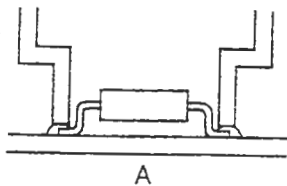
### 3. Melt the solder

Place the tip on the soldered part and melt the solder. Confirm that the solder is fully melted. See sketch 'A'

### 4. Remove the component

After confirming that the solder is fully Melted, lightly squeeze the tweezers to grasp the component and lift to remove the component. See sketch 'B'

The 950 contains a sensor attached to the Heating element in handle B-to detect The tip temperature the soldering station's Heater error function will not operate if The heating element in handle A is broken.



## Troubleshooting Guide

**!WARNING:** Disconnect the power plug before servicing failure to do so may Result in electric shock.

More information can be found in your station's instruction manual.

#### Problem 1

The tip does not heat up.

Check 1. Is the cord assembly broken?

Refer to checking for breakage in the Cord assembly'

Check 2. Is the heating element broken

Refer to checking for breakage in the Heating element.

#### Problem 2.

The tip heats up intermittently

Check 1

**Problem 3**  
The tip is not wet

Check 3 is the tip temperature too high?  
Set an appropriate temperature.  
Check 4. Is the tip clean?  
Refer to tip care and use.

**Problem 4**  
The tip temperature is  
Too low

Check 5. Is the tip coated with oxide?  
Refer to 'Inspect and clean the tip'  
Check 6. Is the iron calibrated correctly.

**Problem 5**  
The tip can not be  
Puled off.

Check 7. Is the tip seized?  
Is the tip swollen because of deterioration?  
Replace the tip and the heating element.

**Problem 6**  
The tip doesn't hold the  
desired temperature

Check 6 above

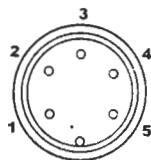
**Checking for breakage of the heating element, cord assembly, and tip to ground resistance.**

Disconnect the plug and measure the resistance between the connecting plug pins as follows.

If the values of 'a' and 'b' are outside the ranges shown

In the chart, replace the heating Element (sensor) and /or cord assembly.

a	Between pins 4&5 (Heating element)	12 $\Omega$
b	between pins 1&2	2 $\Omega$ -2.3 $\Omega$
c	between pin 3 & tip	under 2 $\Omega$



## Broken heating element

### CAUTION:

Be sure to measure the resistance of  
The heating element in both handles A  
And B. If one of the heating elements  
Is found to be broken, replace both heating  
Elements.

1. loosen the nipple by turning it counter  
Clockwise.
2. pull out the tip
3. remove the screw
4. remove the strut pin, and detach handles  
A AND B.

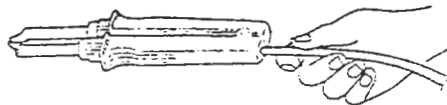
### CAUTION:

- Don not lose the tension spring
5. remove the self-tapping screw and the  
Handle cover.
  6. pull out the PWB and the heating element.

### \*Broken Cord

There are two methods of testing the cord

Turn the unit ON and set the temperature to 400°C. Then wiggle and kink the iron  
cord at various locations along its length including the strain relief area.  
If the LED heater lamp flickers then the cord needs to be replaced.



## Heating Element(Red)

## Sensor(Blue)



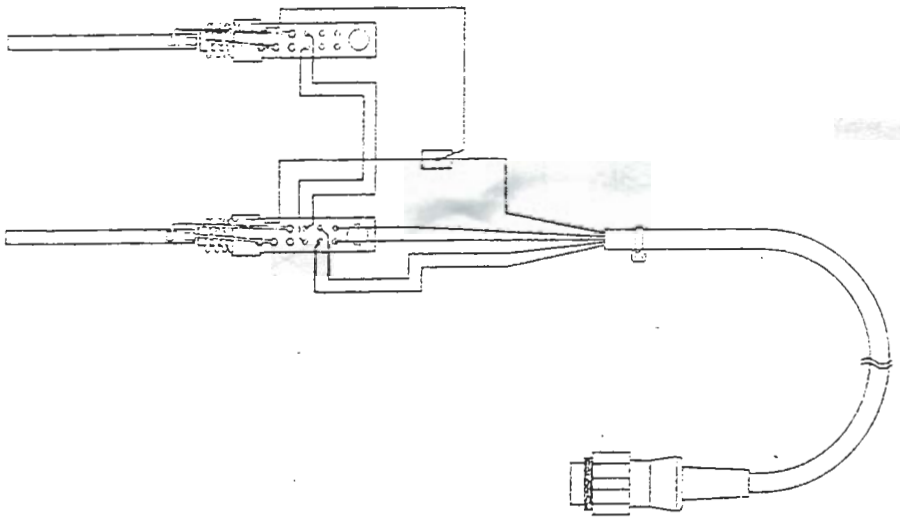
Measure when the heating  
Element is at room temperature

1. Resistance value of heating  
element (red)  $12 \Omega$
2. Resistance value of sensor  
(blue)  $2 \Omega - 2.3 \Omega$  if the  
resistance value is not normal,  
replace the heating element  
(refer to the instruction  
Included with the replay  
cement part



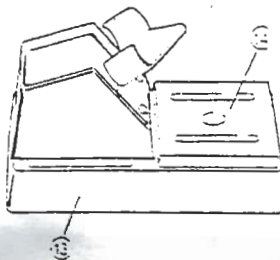
# Wiring Diagram

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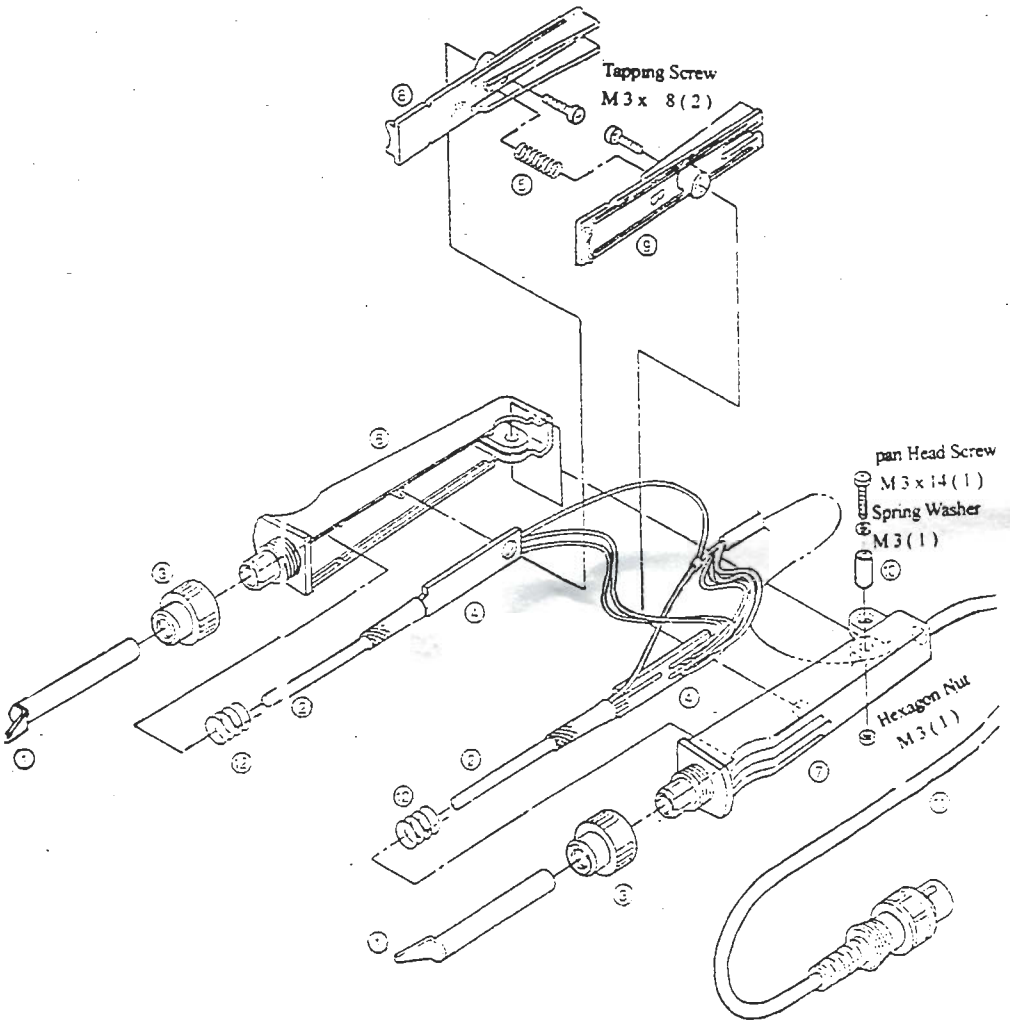


## Parts list (Tweezers/Iron Holder)

Note: spare or repair do include mounting screws must be ordered separately.



Item No.1	Part No.	Part name	Description
1		Tip	See p10
2		Heating Element	24V-50W
3	B2289	Nipple	
4	B2290	Terminal	
5	B2295	Tension Spring	
6	B2292	Handle A	
7	B2294	Handle B	
8	B2291	Hander Cover A	
9	B3393	Hander Cover B	
10	B2296	Strut Pin	
11	B2297	Cord Assembly	
12	B2032	Grounding Spring	
13		Iron Holder/with Cleaning Sponge	
14	A1386	Cleaning Sponge	
15	B2300	Heating Resistance Pad	



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