CXG[®] 942T MANUAL

Intelligent lead-free soldering station

(1) Packing List and Parts name



2) Warning, attention Remarks and examples

▲ attention

When the power is turned on, the soldering iron tip temperature will reach 200°C to 450°C Celsius.

In view of the wrong operation, it may cause burns and fires. Please strictly observe the following:

- 1. Do not touch the soldering iron tip or the metal parts around it.
- 2. Do not use a soldering iron tip near flammable objects.
- 3. Notify the people around you that the soldering iron tip is extremely hot and should not be touched.
- 4. Use the pause, end or turn off the power when leave.
- 5. When replacing parts or device soldering iron tips, turn off the power and allow the soldering iron head to cool to room temperature.

🗥 note

The soldering iron tip will be very hot. Use a heat resistant gasket to remove it and place it on the stand. Do not take the soldering iron tip with a heat resistant gasket for too long.

(3) specification

942T console

| Power consumption | 75watts total |
|-----------------------|--|
| Temperature range | 200 degrees Celsius ~ 450 degrees Celsius |
| Temperature stability | \pm 1 degree Celsius soil in non-use state |

Console section

| Output | 33 volts |
|----------------|-------------------|
| Overall volume | 188 X 100 X 106mm |
| Weight | 2.500 kg |

Soldering iron part

| Soldering iron head to grounding resistance | 2 ohms or less |
|---|--------------------|
| Soldering iron head to ground potential | below 2 millivolts |
| Length (without electricity) | 190 mm |
| Weight (no electricity) | 44 grams |
| Electric money component | 1.2m |

🗥 note

The above temperature is measured with a 191 thermometer. This product has anti-static treatment. Specifications and appearance are subject to change without prior notice.

(4) Instructions

Console display

control

The front panel of the 942T soldering iron control unit has the following controls: Power switch

four control buttons

- (#) Start the value input mode.
- End a series of inputs (the numerical input mode paragraph pause); When you press less than one second, the saved settings are displayed.
- Increase the value shown in the display.
- (up) Reduces the value shown on the display.



display

The 942T has a three-digit display. According to the selected mode, it will display:

- Normal mode Sensor temperature (soldering head temperature)
- Input value The selected value (for details, refer to [Numerical Input Program])
- Temperature display according to Celsius
- Error flag Please refer to the [Error Flag] section.

In addition, when the control reaches the desired temperature, the heater indicator will flash to indicate that it is ready for use.

- 1. Press the power switch.
- When reach to the set temperature. Moreover, the heater power-on indicator on the lower right of the <u>350</u> display section is turned on.

A note

Place the soldering iron on the soldering iron bracket when not in use.

\land note

The factory setting is at 350 degrees Celsius. To confirm the set temperature, press the button. The set temperature will be displayed for 2 seconds.

How to input the soldering iron head correction value to 942T

This method requires the use of a soldering iron thermometer to measure the temperature of the soldering iron tip and the most correct process control:

- 1. Insert the card into the card hole.
- 2. Press and hold the button (#) for one second.
- 3. Use a soldering iron thermometer to measure the soldering iron tip temperature.
- When entering the correction value input mode, the soldering iron tip temperature is controlled with a correction value of 0 regardless of the value of the correction value.
- 4. Enter the correction value
- Detect 400 ° and soldering iron measuring temperature, record this value. Refer to the above example to determine the correction value of the input required for the soldering iron tip.
- When entering the third digit, use the "UP" or "down" button to determine a
 positive or negative number. Select 1 for positive numbers and 0 for negative
 numbers.

If the measured temperature is 395 degrees Celsius, the temperature difference is +5 degrees Celsius and the soldering iron head is slightly colder than five degrees, so the correction is +5 degrees Celsius.

If the measured temperature is 405 degrees Celsius, the temperature difference is -5 degrees Celsius, the soldering iron head is slightly hot five degrees, so the correction value is -5 degrees Celsius.

example:

If the measured temperature is 395 degrees Celsius, the temperature difference is +5 degrees Celsius and the soldering iron head is slightly colder than five degrees, so the correction is +5 degrees Celsius

If the measured temperature is 405 degrees Celsius, the temperature difference is -5 degrees Celsius, the soldering iron head is slightly hot five degrees, so the correction value is -5 degrees Celsius.



Replace the soldering iron head

- A. Always turn off the power every time you remove or insert the soldering iron. B. Place the soldering iron tip on the soldering iron head bracket.
- C. Insert the new soldering iron head into the end.
- If not fully inserted, a sensor error S-E will be displayed when the power is turned on.

Change set temperature

Example:

When changing from 350 degrees Celsius to 400 degrees Celsius.

1. Insert the card into the card hole.

The leftmost digit (the third digit) will flash. Electric soldering

The station temperature is in the setting mode and the third digit can be adjusted.

2. The third digit of input

Select the number you want to replace the third digit. Use the "up" "down" button to change the display number to 2, 3, 4.(4, 5, 6, 7, 8 in Fahrenheit mode)

3. Input of the number of digits

Use the up or down buttons to determine the number of second digits. The number that can be entered is from o to 9 whole. After the desired number is displayed, press the * button. The rightmost number (first digit) starts to flash.

4. The first digit of the input

Use the up or down button to set the desired number. After the desired number is displayed, press the * button. This will exist in the internal memory, and after the new set temperature is displayed, the heating element control will be started.

🗥 note

Make sure that the card is inserted into the card hole in the correct orientation. When the temperature is set, the heating element is powered off.

/ note

If the power switch is turned off while the temperature is set, the set number will not be stored in the memory. The entire program must come from one.



When the console is ON and the card is inserted in the control, the numerical input procedure is as follows:

- a. Press the head button for at least one second.
- I b. Display the current temperature set value, then the hundred digits start to flash I indicating that the console has entered the temperature setting mode.
- c. Continue the procedures 1 to 4 above. I

🕗 note

Т

1

The set temperature will be displayed if the pressed button is pressed for less than 1 second.

Parameter setting

(1.) When the 942T is shipped from the factory, it has the preset values as follows:

| Temperature unit | Celsius |
|---|---------------------|
| Automatic power off | none |
| Lowest limit setting temperature | 150 degrees Celsius |
| Supervisor or operator correction limit | 40 |
| Factory Setting temperature | 350 degrees Celsius |

(2.) Supervisor or operator correction limit setting

- When the console enters the low temperature alarm limit setting mode, the hundreds of digits starts to flash. Enter and store the set value in the same way as described in "Changing the Temperature Settings".
- If the input value exceeds the limit shown on the left, the system will jump back to the input of the hundred digits. You must re-enter the correct value at this time.
- Once the value is saved, the system will automatically proceed with the supervisor or operator correction limit setting

To change the supervisor or operator correction limit settings, the procedure is as follows:

- When you enter this mode, the display will show (40) or (41).
- $\overline{(40)}$ If the card is not inserted, the soldering iron head correction value cannot be input. (41) If the card is not inserted, you can enter the soldering iron head correction value.

Press the (UP) or (down) button to select the area and press the (*) button. The system leaves the parameter setting mode and begins to control the heater to be energized. Normal operation is now possible.

Soldering iron head maintenance:

(1.) Soldering iron head temperature

Excessive temperatures can shorten the life of the soldering iron tip and can cause enthusiasm for the components. Always use as low a temperature as possible during soldering. The 942T has excellent temperature recovery characteristics to ensure effective low temperature soldering.

(2.) Clean up

Wipe the soldering iron oxide or old tin scraps before soldering. Use a clean, damp cleaning sponge (provided by the 942T) or a 599B soldering iron cleaner. After soldering, oxides and carbides derived from the residual flux of the soldering iron tip can damage the soldering iron tip, causing soldering iron errors or reducing the thermal conductivity of the soldering iron tip. When the soldering iron is used continuously for a long time, the soldering iron head from being damaged and the temperature to be lowered.

(3.) After use

After use, the soldering iron tip should be wiped and coated with new tin shavings to prevent oxidation of the soldering iron tip.

(4.) When not use

Do not set the soldering iron to a high temperature for a long time. The solder plating layer of the soldering iron tip is covered by the oxide to deteriorate the heat conduction. Please turn off the power. If it is not used for a few hours, it is best to unplug the power cord.

(5.) Inspection and cleaning

If used daily, please check and clean up the life of the soldering iron.

- a. Set the temperature to 250 degrees Celsius.
- b. When the temperature is stable, wipe with a cleaning sponge (refer to 2. above) to check the condition of the soldering iron. If the soldering iron tip has been deformed or worn out, replace it.
- c. If the tinned portion of the soldering iron has black oxide, it can be plated with new tin shavings and then wipe the soldering iron tip with a cleaning sponge. The cleaning is repeated in this way until the oxide is removed at the bottom, and then new tin shavings are applied.
- d. Turn off the power and remove the soldering iron tip with a heat-resistant gasket. Place it to cool it.
- e. If the color of the flux residus attaching to the soldering tips turns yellow, it can be wiped with alcohol or the like.

🗥 note

Do not use a file to set off the oxide.

(6) Error flag

• sensor error

If any part of the sensor/heating element (including the sensor circuit) fails, the error mark 4 is displayed and the current delivered to the soldering iron is stopped.



∠!\ note

Sensor errors can also occur when the soldering iron tip is not fully inserted. Insert the soldering iron head again and start again.

The lower limit sets the temperature error

example:



temperature warning limit is 50 degrees Celsius. Although the heating element has been energized, the temperature continues to drop. The display will flash, indicating that the soldering iron tip temperature has dropped.

Set the temperature to 400 degrees Celsius. The low

soldering iron connection error



If the 907 or 908 to 942T soldering iron tomb is connected, the soldering iron connection error will be displayed.

(7) Malfunction guide

Be sure to unplug the power cord before checking the inside of the I 942T or replacing parts, otherwise it may cause electric shock.



(Check) : Is the power supply and/or the connector plug not plugged in?

Check) : Is the fuse burned?

Action : Check why the fuse is burned and replace the fuse.

If you cannot determine the cause, replace the fuse. If the fuse burns out again, have the machine serviced.

• The soldering iron head cannot be heated.

Display sensor error S-E

Check : Is the power supply and / or the connector plug not plugged in?

| Action | : | Please | plug | it | in. |
|--------|---|--------|------|----|-----|
|--------|---|--------|------|----|-----|

- Check : Is the soldering iron inserted correctly?
- Action : Please insert it completely.
- (Check) : Is the power supply and / or heating element / sensor broken?
- Action : Refer to the appropriate section of this manual for instructions on how to check the power supply and / or heater / sensor damage.

The solder cannot be soldered to the soldering iron tip.

- Check: Is the soldering iron temperature too high?
- Action: Adjust the proper temperature.
- Check: Is the soldering iron tip contaminated with oxide?
- Action : Remove oxide, see "soldering iron head maintenance"

• The soldering iron tip temperature is too high.

(Check): The power cord is broken?

Action: Please refer to "Assembling Wire Breakage Inspection Method"

- (Check): Is the input correction correct?
- Action : Enter the correct one.

The soldering iron tip temperature is too low.

Check): Is the soldering head contaminated with oxide? (Action): Remove oxide (see "soldering iron head maintenance"

- Check): Is the input correction correct?
- Action : Enter the correct one.
- Show soldering iron connection error L-E

The machine cannot be operated after the power switch is turned on