



Figure 1. The Photo of main machine



Figure 2. Photo of ATAS80



Figure 3. Photo of Handle Holder



Figure 4. Photo of the packaging

**MAIN FEATURES**

- Large LCD screen display, convenient for adjusting
- Anti-static function to protect precise chip soldering
- Quick temperature rise
- Unit automatically adjusts the temperature
- Compact soldering handle
- Contact reaction for sleep, power saving and safe modes
- Coded lock to fix the temperature

**APPLICATIONS**

This soldering iron is widely used in many different fields from common electronic and home appliance maintenance, to electronic integrated circuits and chip design. This unit is used more commonly in soldering PCB circuit boards in electronics factories or laboratory settings. This unit is especially suitable for soldering operations where precision soldering is required.

**DESCRIPTION**

This soldering iron ATAS80 is a hand-operated tool used for electronic soldering. As with all soldering units, the ATAS80 supplies heat to the solder for melting. But we just do it more precisely for a higher quality finished product for you.

ATAS80 consists of a main power unit, a soldering handle, easily changeable soldering tips, a handle holder, a soldering handle connecting wire, a power cord, and a grounding wire.



Solder handle wire



Power cord



Grounding wire



Soldering tip

**SPECIFICATION**

Table 1. Parameters

<b>Power Consumption</b>	80W	<b>Power Supply Voltage</b>	AC110V/AC220V
<b>Temperature Stability</b>	$\pm 1^{\circ}\text{C}$ (no load)	<b>Output Voltage</b>	AC 24V
<b>Impedance between soldering tips and grounding</b>	below $2\Omega$	<b>Potential between soldering tips and grounding</b>	below 2mV
<b>Password setting range</b>	001~999 (000 no password)	<b>Temperature setting range</b>	$150^{\circ}\text{C} \sim 450^{\circ}\text{C}$
<b>Sleeping temperature range</b>	$50^{\circ}\text{C}$ (the lowest)	<b>Sleeping time setting range</b>	1~60mins (0 = no sleep)

**SOLDERING TEMPERATURE REFERENCE**

A proper temperature plays an important role in hand-soldering. The most common defect when hand-soldering results from not reaching the correct temperature for the solder to flow correctly, resulting in a 'cold solder' joint.

Proper soldering temperature and time for different components are recommended in the Table 2.

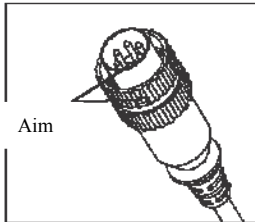
Table 2. Soldering Temperature Reference Table

<b>Component Name</b>	<b>Soldering Temperature</b>	<b>Soldering Time</b>
High-pin-density IC (Pin pitch <2mm)	$350 \pm 10^{\circ}\text{C}$	$\leq 3\text{s}$
Low-pin-density IC (Pin pitch $\geq 2\text{mm}$ )	$300 \pm 10^{\circ}\text{C}$	$\leq 3\text{s}$
Optical coupler	$350 \pm 10^{\circ}\text{C}$	$\leq 3\text{s}$
MOSFET	$300 \pm 10^{\circ}\text{C}$	$\leq 3\text{s}$
Transistor	$300 \pm 10^{\circ}\text{C}$	$\leq 3\text{s}$
Infrared light tube	$300 \pm 10^{\circ}\text{C}$	$\leq 3\text{s}$
LED	$300 \pm 10^{\circ}\text{C}$	$\leq 3\text{s}$
Crystal oscillator	$300 \pm 10^{\circ}\text{C}$	$\leq 3\text{s}$
Resistor	$300 \pm 10^{\circ}\text{C}$	$\leq 5\text{s}$
Capacitor	$300 \pm 10^{\circ}\text{C}$	$\leq 5\text{s}$
Inductor	$300 \pm 10^{\circ}\text{C}$	$\leq 5\text{s}$

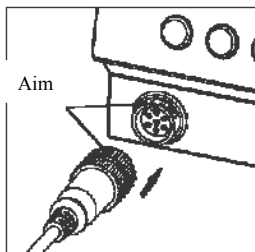
Note: The data in table 1 is for reference only. Your particular needs might vary.

**OPERATION INSTRUCTION****1. Connection between the soldering handle and the main body**

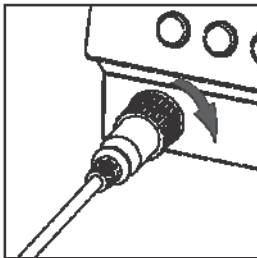
A. Position the indication point of the soldering handle knob towards the corresponding point of the plug. See Figure 5.

**Figure 5**

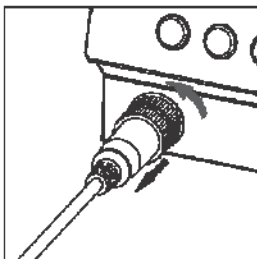
B. Position the salient point of the plug of the soldering handle with the indent point of the main body socket, then insert and tighten. See Figure 6.

**Figure 6**

C. Turn the plug knob of the soldering handle clockwise again. See Figure 7.

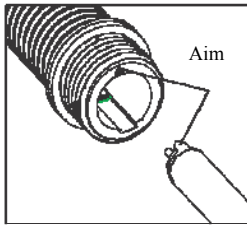
**Figure 7****2. Disassembly of the soldering handle from the main body. (removal)**

Reverse the procedure from above, and then remove. See Figure 8.

**Figure 8**

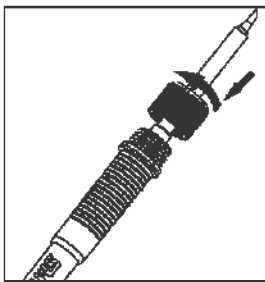
### 3. Assembly of the heating core with the soldering handle

A. Position the salient point of the heating core with the sign ‘▲’ on the handle, then insert into the bottom. See Figure 9.



**Figure 9**

B. Place the nut on the heating core above the screw thread of the handle, and lightly tighten clockwise. See Figure 10.



**Figure 10**

### 4. Connection between the iron holder, the main body and the grounding wire. See Figure 11.



**Figure 11**

## **INSTRUCTION FOR THE FUNCTION SETTING**

A. Password setting:

1. press ‘\*’ button to enter into ‘password setting’ mode
2. press ‘#’ to confirm
3. press ‘▲’ ‘▼’ to set the password
4. Press ‘#’ to confirm and enter the unit into locked status.

B. Release locked status:

1. press ‘\*’ to enter into ‘password setting’
2. press ‘\*’ ‘▼’, meantime press ‘#’ for one second
3. release the button ‘#’ and the password will be released

C. Temperature setting:

1. press ‘\*’ button twice to enter into ‘temperature setting’
2. press ‘#’ to confirm
3. press ‘▲’ ‘▼’ to set the temperature
4. press the ‘#’ to confirm

**D. Sleep temperature setting**

1. press '\*' button three times to enter into 'sleep temperature setting'
2. press '#' to confirm
3. press '▲' '▼' to set sleep temperature

**E. Sleep time setting**

1. press '\*' button four times to enter into 'sleep time setting'
2. press '#' to confirm
3. press '▲' '▼' to set the required value
4. press '#' to confirm

**Note:** If you will not be using your soldering unit for a while, remember to put the soldering handle into the handle holder. When the unit reaches the pre-set sleep time, the tip-temperature will fall automatically to the "sleep temperature" you had chosen. When you are again ready to work, just pick up the soldering handle from the iron holder. The main power unit will wake up and enter into your working status mode, once again heating the tip.

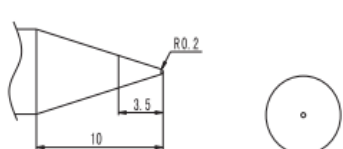

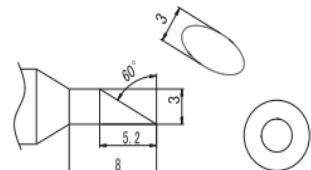

**TROUBLE SHOOTING**

Table 3.

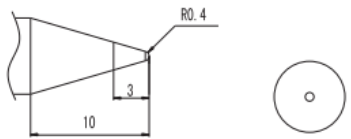
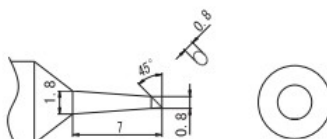
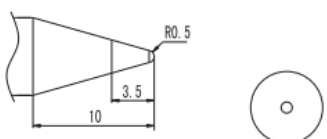
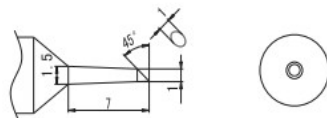
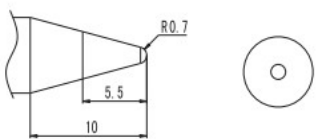
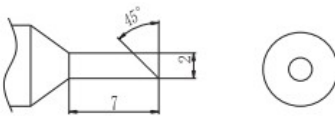
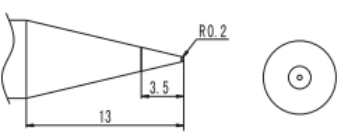
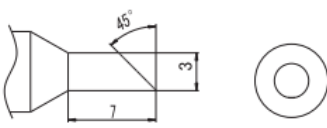
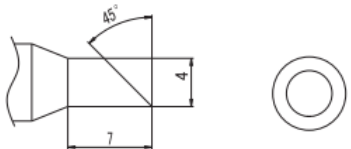
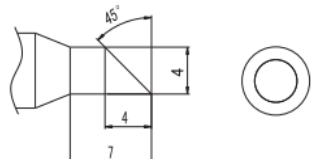
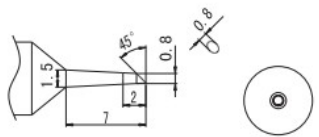
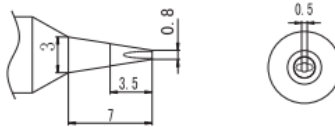
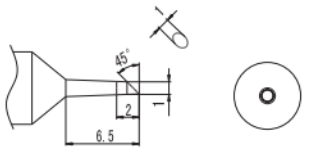
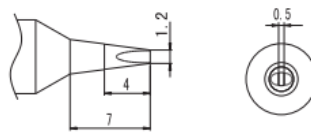
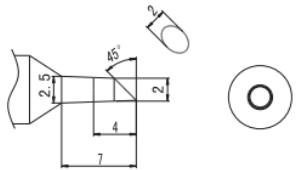
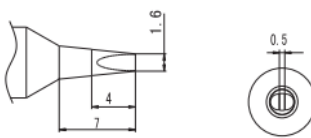
PHENOMENA	TROUBLE CAUSES	SOLUTIONS
Display 'E01'	Heating core short circuited	Replace a new heating core
	Connector of soldering handle short circuited	Replace a new soldering handle
Display 'E02'	Heating core loose from handle	Re-Insert heating core into handle
	Handle loose from main machine	Re-Insert handle into main machine
	Sensor of heating core open circuited	Replace a new heating core
Display 'E03'	Sensor of heating core short circuited	Replace a new heating core
	Connector of handle wire short circuited	Replace a new handle

**SOLDERING TIP SPECIFICATION CHART**

Table 4. Soldering Tips

Product model	Reference diagram	Front view	Product model	Reference diagram	Front view
ATAS80-B			ATAS80-3CC		



<p>ATAS80-B2</p> 	<p>ATAS80-0.8CF</p> 
<p>ATAS80-B3</p> 	<p>ATAS80-1CF</p> 
<p>ATAS80-B4</p> 	<p>ATAS80-2CF</p> 
<p>ATAS80-BL</p> 	<p>ATAS80-3CF</p> 
<p>ATAS80-4CF</p> 	<p>ATAS80-4C</p> 
<p>ATAS80-0.8C</p> 	<p>ATAS80-0.8D</p> 
<p>ATAS80-1C</p> 	<p>ATAS80-1.2D</p> 
<p>ATAS80-2C</p> 	<p>ATAS80-1.6D</p> 



<p>ATAS80-3C</p>	<p>ATAS80-2.4D</p>
<p>ATAS80-3.2D</p>	<p>ATAS80—K</p>
<p>ATAS80-4D</p>	<p>ATAS80-KS</p>
<p>ATAS8-5.2D</p>	<p>ATAS80-I</p>

**COMPLETE SOLDERING UNIT ORDERING INFORMATION (COMES WITH ONLY ONE TIP INCLUDED)**

Table 5. Unit Price

Quantity (pcs)	1 – 4	5 – 19	20 – 99	≥100
Unit Price	\$159	\$149	\$139	\$129

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