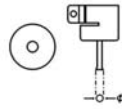


# AIR NOZZLES

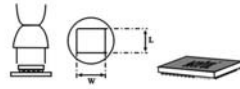
Sold Separately

### Straight Single



Nozzle Model	Nozzle Size, (mm)
1124	2.5
1130	4.4
1194	6
1195	8
1196	7
1197	9
1198	12

### Ball Grid Array



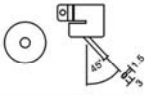
Nozzle Model	IC Package Size (mm)	Nozzle Size (mm)	
		W	L
1010	BGA 9x9	10	10
1313	BGA 12x12	13	13
1616	BGA 15x15	16	16
1919	BGA 18x18	19	19
2828	BGA 27x27	28	28
3636	BGA 35x35	36	36
3939	BGA 38x38	39	39
4141	BGA 40x40	41	41

### Small-Outline Package



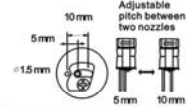
Nozzle Model	IC Package Size (mm)	Nozzle Size (mm)	
		L	W
1131	SOP 4.4x10	10	4.8
1132	SOP 5.0x13	15	5.7
1133	SOP 7.5x15	16	7.2
1134	SOP 7.5x18	19	7.2
1257	SOP 11x21	21	11.7
1258	SOP 7.6x12.7	11.7	8.2
1259	SOP 1.3x28	29	13.5
1260	SOP 8.6x18	19	8.7

### Bent Single



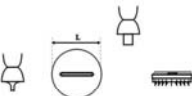
Nozzle Model	1142
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### Dual Single Adjustable



Nozzle Model	1325
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### Single In Line Package



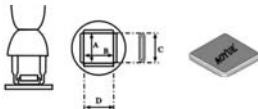
Nozzle Model	IC Package Size	Nozzle Length (mm)
1192	SIP 50L	52.5

### Small Outline J-Lead



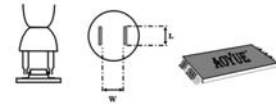
Nozzle Model	IC Package Size (mm)	Nozzle Size (mm)	
		L	W
1183	SOJ 15x8	16	8
1184	SOJ 18x8	19	10
1214	SOJ 10x26	25.9	12

### Plastic Leaded Chip Carrier



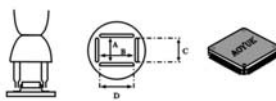
Nozzle Model	IC Package Size (mm)	Nozzle Size (mm)			
		A	B	C	D
1135	PLCC 17.5x17.5 (44pins)	18.5	18.5	15	15
1136	PLCC 20x20 (52pins)	21	21	19	19
1137	PLCC 25x25 (68pins)	26	26	24	24
1138	PLCC 30x30 (84pins)	31	31	29	29
1139	PLCC 73x12.5 (18pins)	9	14	69	69
1140	PLCC 11.5x11.5 (28pins)	13	13	15	10
1141	PLCC 11.5x14 (32pins)	15	13	15	10
1188	PLCC 9x9 (20pins)	11	11	10	10
1189	PLCC 34x34 (100pins)	36.5	36.5	33.5	33.5

### Thin Small-Outline



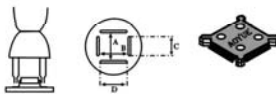
Nozzle Model	IC Package Size (mm)	Nozzle Size (mm)	
		L	W
1185	TSOL 13x10	10	11.9
1187	TSOL 18.5x8	10	18.5
1188	TSOL 18x10	11.7	18.2

### Quad Flat Pack



Nozzle Model	IC Package Size (mm)	Nozzle Size (mm)			
		A	B	C	D
1125	QFP 10x10	10.2	10.2	10	10
1126	QFP 14x14	15.2	15.2	15	15
1127	QFP 17.5x17.5	19.2	19.2	19	19
1128	QFP 14x20	15.2	21.2	15	21
1229	QFP 28x28	29.5	29.7	29	29
1215	QFP 42.5x42.5	42.5	42.5	40	40
1261	QFP 20x20	20.2	20.2	21	21
1262	QFP 12x12	12.2	12.2	12	12
1263	QFP 28x40	27.7	39.7	29	39
1264	QFP 40x40	40.2	40.2	39	39
1265	QFP 32x32	32.2	32.2	31	31

### Bumpered Quad Flat Pack



Nozzle Model	IC Package Size (mm)	Nozzle Size (mm)			
		A	B	C	D
1180	BQFP 17x17	18.2	18.2	13.6	13.6
1181	BQFP 19x19	19.2	19.2	16	16
1203	BQFP 35x35	35.2	35.2	30.6	30.6
1182	BQFP 24x24	24.2	24.2	21	21

# AOYUE<sup>®</sup> Int 768

## Professional Repairing System

## INSTRUCTION MANUAL

Thank you for purchasing model Int768 Repairing System.  
Please read manual before using the unit.  
Keep manual in an accessible place for future reference.

Manufacturer:  
**AOYUE TONGYI INTERNATIONAL LIMITED**  
Jishui Industrial Zone, Nantou, Zhongshan City,  
Guangdong Province, P.R.China  
<http://www.aoyue.com>

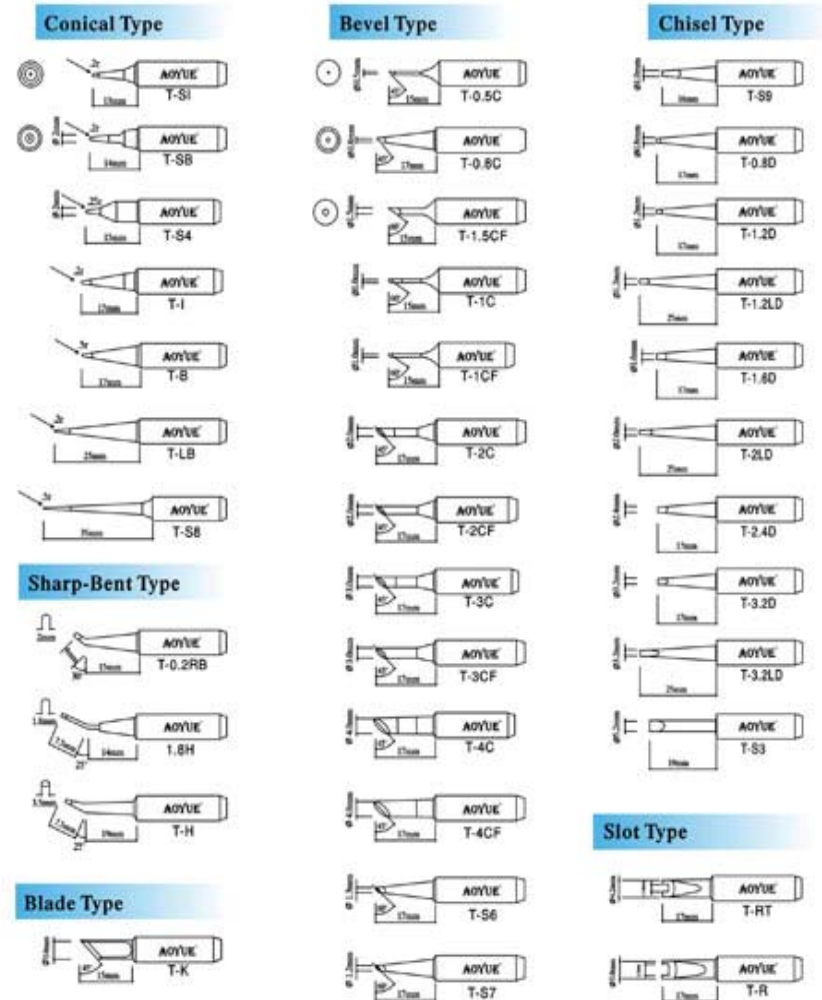


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## REPLACEMENT TIPS

Sold Separately



## OPERATING PROCEDURE

### IV. DC POWER SUPPLY

1. Turn on the power switch. Make sure that the connectors are properly attached.
2. Press the **VOLTAGE SUPPLY** function button. It will then display the voltage and current supply.
3. Adjust DC voltage regulator knob for desired output voltage. DC voltage output ranges from 1-15 V.

**WARNING: The display will indicate the following when short circuit occurs.**



- ⚠ This warns the operator that the power switch should be immediately turned off and discontinue operation. Repeat the process again making sure that all connection are properly connected. The system will incur permanent damage when short circuit for more than 20 seconds occur.**

## MAINTENANCE

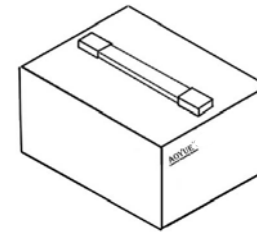
### A. Replacing the Hot Air Gun heating element

1. Remove the screws which secure the handle and slide the cord tube.
2. Open the handle. Disconnect the ground wire and remove the pipe.
3. Remove the heating element by disconnecting the terminal.
4. Insert a new heating element and reconnect the terminal. Handle the heating element with care. Never rub its wire. Reconnect the ground wire after replacing the element.
5. Assemble the handle in the reverse order of disassembly.

### B. Care for the Soldering Iron tip.

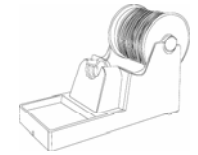
Always keep the solder-plated section of the tip coated with a small amount of solder. If the tip is coated with oxide, the tip's heat conductivity will be lowered. Coating the tip with a small amount of fresh solder ensures maximum heat conductivity.

## PACKAGE INCLUSION



Int 768 Main Station

Hot Air Gun and  
Hot Air Gun Holder



2630 Soldering Iron Holder  
with Solder Wire Stand



Air Nozzles  
(1124, 1130, 1197, 1010, 1313, 1919)



Soldering Iron with Tip



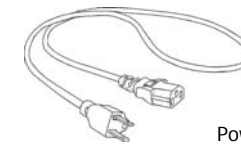
10013 DC Connecting Wires



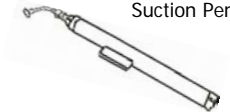
Soldering Iron  
Spare Heating Element



G001 IC Popper



Power Cord



939 Vacuum  
Suction Pen

## SPARE PARTS LIST

Part No.	Description
10094	Hot air gun heating element
30106S	Plastic handle of hot air gun
S012	Hot air gun complete handle
20962	Hot air gun metal pipe
P004	Diaphragm Pump
B004	Soldering Iron complete handle
C001	Soldering Iron heating element
20170-1	Soldering Iron Tip enclosure

## SPECIFICATIONS



<b>MAIN STATION</b>	
Power Input :	available in 110V / 220V
Station Dimensions:	188(w) x 126(h) x 250(d) mm
Weight:	5.6Kg
<b>SOLDERING IRON</b>	
Power Consumption:	45W
Temperature Range:	200°C - 480°C
Heating Element:	Ceramic Heater
Output Voltage:	24V
<b>HOT AIR GUN</b>	
Power Consumption:	550W
Temperature Range:	100°C - 480°C
Heating Element	Metal Heating Core
Pump/Motor Type:	Diaphragm Pump
Air Capacity:	23 l /min (max)
<b>POWER SUPPLY</b>	
Total Current:	1.5A
DC Output Voltage:	0-15V

## OPERATING PROCEDURE

### II. AUTOMATE HOT AIR REWORKING

This is an optional setting. You can set reworking time from 0-9999 seconds then it automatically turns off.

To activate this function:

1. Set the time by using the   button. It is preset at 300 seconds.
2. After preferred automate rework time has been set. Press the **AUTOMATE** function button to start the countdown.

*The set temperature will display the letter "A" indicating that automation is turned on.*





3. Upon starting the countdown, you can still adjust the hot air gun temperature but you would not be able to re-adjust the time. Pressing the **AUTOMATE** button again would pause the countdown of the automate reworking.
4. Hot air gun will start decreasing temperature once automate rework time is finished.
5. To reset or restart the automation time, Un press **AUTOMATE** function button, then repeat steps 1-2.
6. To resume manual hot air reworking just press the **RESET** button.

### III. SOLDERING IRON

1. Check if the Soldering Iron is attached properly to the 6-pin receptacle and the vacuum tube is securely connected.
2. Be sure that all function buttons are not pressed.
3. Turn on the Power Switch.
4. Press the **SOLDER IRON** function switch to turn on soldering iron function.

*When soldering temperature displays "OFF", press the RESET button once to reset the system, if it still displays "OFF" then it means that the soldering iron is not connected properly to the unit.*








5. Solder iron is set to automatically increase temperature to 200°C upon turning on. It will show the set temperature when you are adjusting the temperature, then it will automatically switch to display the actual temperature when you have finished setting the temperature.
6. Set the temperature using the   button.
7. Start using when real temperature reaches the set temperature.


## OPERATING PROCEDURE

---

### I. HOT AIR GUN

1. Be sure that all function buttons are not pressed.
2. Turn on the Power Switch.
3. Press the **HOT AIR GUN** function switch to turn on hot air reworking function.
4. Set the airflow level. You can adjust to your desired airflow by using the   buttons. Airflow range is from 15 – 100. When the airflow is not being adjusted, the display shows the hot air gun real temperature.
5. Set the temperature. Adjust to your preferred hot air temperature, using the   buttons.
6. When airflow and temperature has been set, wait until the *real temperature* reaches the *set temperature* before using the Hot Air Gun.
7. After using the Hot Air Gun, do not immediately turn off the power switch, instead turn off the hot air gun function switch to activate the *auto-cool off function* of the unit. This is for safety and proper maintenance of the unit.

 **IMPORTANT:** Remember to set airflow level first before setting the temperature so that it would not damage the heating element, causing it to be burnt out prematurely. This would help lengthen the usage life span of the main unit and the heating element.

 **IMPORTANT:** Airflow level should be set accordingly, working with low airflow and high temperature often causes heating element to get easily burnt.

**Note:** Auto-cool off function — after turning off the hot air gun function switch, unit starts to blow cool air to decrease temperature of the hot air gun, hot air gun function will automatically be turned off when the hot air gun temperature reached a safe level of 90°C. (Auto-cool off will not function when main power switch is turned off)

**Note:** Auto-sleep mode — unit is also programmed to have an auto-sleep mode, this is activated when hot air gun is turned on but is placed on the hot air gun holder and not put to use for fifteen minutes, temperature automatically decreases and eventually turns to sleep mode. When the handle is held up again the unit will go back to its previous setting.

## FEATURES

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- ◆ Microprocessor controlled ESD safe unit. All digital display of hot air temperature, soldering iron temperature and air pressure with touch type panel controls.
- ◆ Three in one repairing system that combines the function of a Hot Air Gun, a Soldering Iron and Power Supply. Sufficient system to perform various reworking tasks.
- ◆ Provides stable power supply of 1.5A / 0-15V. With knob type controls to regulate desired output voltage.
- ◆ Programmable auto reworking time from 20 to 9999 seconds.
- ◆ Unique 15-minute stand-by auto sleep mode. Returns to previous setting when the handle is held up again.
- ◆ Designed with an auto-cool off process. Upon turning the unit off, it starts to blow cold air until it reaches a safe temperature of 85 degrees, this is to ensure safety and to prolong usage life of the heating element.
- ◆ Compatible with various type of air nozzles.

## SAFETY PRECAUTION

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**CAUTION: Misuse may cause extensive damage to the unit.**  
For your own safety, be sure to comply with the following precautions.

- ◆ Check every component after opening the package whether everything is in good working condition. If there are any damages suspected, don't use the item and contact your dealer.
- ◆ When moving the unit to another location, be sure to turn off the power switch and remove the plug.
- ◆ Do not strike or subject to physical shock the main unit, hot air gun, soldering iron or any parts of the system. Use carefully and lightly so as not to damage any parts.
- ◆ Be sure the unit is grounded. Always connect power to a grounded receptacle.

## ASSEMBLY AND PREPARATION

### A. Soldering Iron

1. Install solder wire to the solder iron holder. (Figure 1)

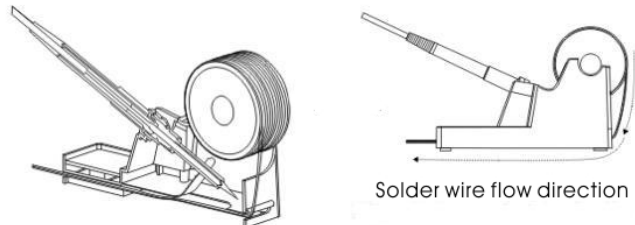


Figure 1. Soldering Iron stand with solder wire holder

2. Attach the soldering iron cord assembly to the 6-pin output at the lower center area of the main unit.
3. Place soldering iron to the soldering iron stand as shown in Figure 1.

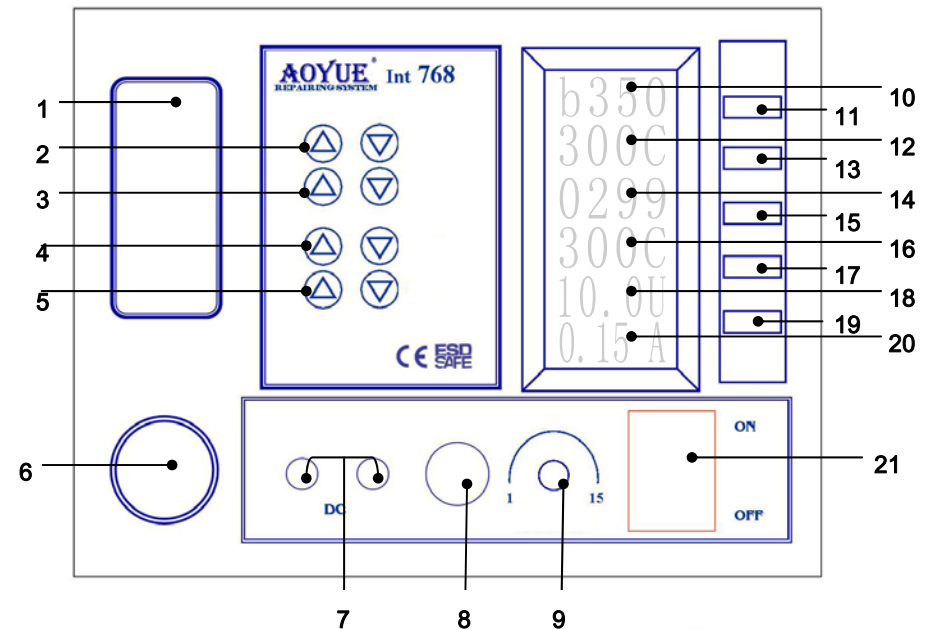
### B. Hot Air Gun

The Hot Air gun holder was installed on the station upside down for packaging purpose. To set up the Hot Air Gun holder, loosen the screw that holds it on the left side of the station. After loosening both screws, turn the holder side side up, then tighten the screws back. Place the hot air gun in the sensor controlled holder to prepare for usage.

### C. DC Power Supply

Connect the mobile phone power supply connecting wires to the DC output correctly. Follow positive and negative positioning.

## PANEL GUIDE



- |    |   |   |          |                      |
|----|---|---|----------|----------------------|
| 1  | — | Airflow gauge   | <b>R</b> | - actual temperature |
| 2  | — | Hot air gun temperature adjustment button                   | <b>b</b> | - set temperature    |
| 3  | — | Hot air gun airflow adjustment button                       | <b>E</b> | - cooling down       |
| 4  | — | Automation time adjustment button                           | -        | - sleep and off mode |
| 5  | — | Soldering iron temperature adjustment button                | <b>F</b> | - actual airflow     |
| 6  | — | Hot air gun connecting outlet                               | <b>C</b> | - airflow being set  |
| 7  | — | DC output   |          |                      |
| 8  | — | Soldering iron 5-pin receptacle                             |          |                      |
| 9  | — | DC voltage supply control knob                              |          |                      |
| 10 | — | Digital display of hot air gun set temperature              |          |                      |
| 11 | — | Hot air gun function switch                                 |          |                      |
| 12 | — | Digital display of airflow / actual hot air gun temperature |          |                      |
| 13 | — | Automate hot air reworking                                  |          |                      |
| 14 | — | Automation time left (countdown)                            |          |                      |
| 15 | — | Soldering iron function switch                              |          |                      |
| 16 | — | Soldering iron temperature (actual and set)                 |          |                      |
| 17 | — | Voltage supply function button                              |          |                      |
| 18 | — | DC voltage supply display                                   |          |                      |
| 19 | — | Reset button for all settings                               |          |                      |
| 20 | — | Current supply display                                      |          |                      |
| 21 | — | Main power switch   |          |                      |