

# AT90DH ESD Free Soldering Station



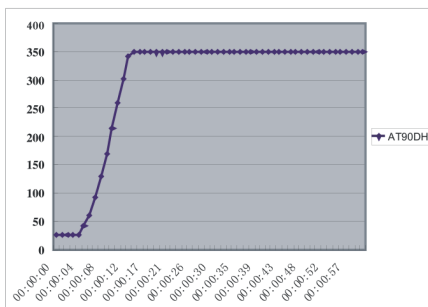
## Features

- Only 10 seconds is needed from room temperature to 350°C
- Silver alloy conductive materials ensures a minimum heat loss.
- Fresh new appearance, big LCD backlight display, easy readout.
- Visual operating control, analog bar indicates temperature change.
- Multi-power switching mode control, suitable for different occasions.
- Three temperature hot key substantially make soldering a easy job.
- Temperature lock with personalized code.
- Automatic sleeping mode realizes the double longevity of heater and iron tip.
- Lower expenses on accessories due to the iron tip of smaller size, split design of heater and iron.

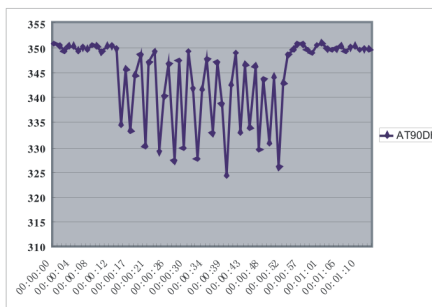
## Technical Specifications:

Power consumption	: 90W
Input voltage	: 220V AC $\pm 10\%$ 50Hz (110V Optional)
Output voltage	: 24V AC
Temperature Range	: 100-500°C (212-932°F)
Temperature Calibration Range	: -50~+50°C (-58~+122°F)
Password Range	: 001-999 (000 means unlocked 001)
Sleep Temperature	: 200°C
Sleep Time	: 0-99 mins (0 minutes doesn't sleep)
Temperature Accuracy	: $\pm 10^\circ\text{C}$
Temperature Stability	: $\pm 2^\circ\text{C}$ (still air)
Tip to Ground Impedance	: $\leq 2$
Tip to Ground Voltage	: $\leq 2\text{mV}$
Dimension	: 168(L) $\times$ 110(W) $\times$ 95(H)
Weight	: 2.0kg

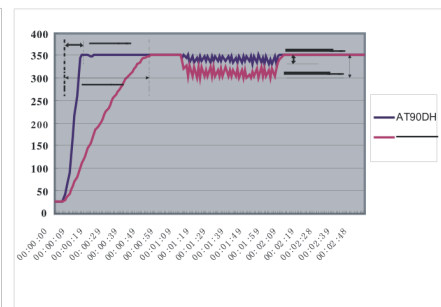
## Test Chart



Heating Curve



Back to temperature test



Warming and back to temperature recovery contrast test



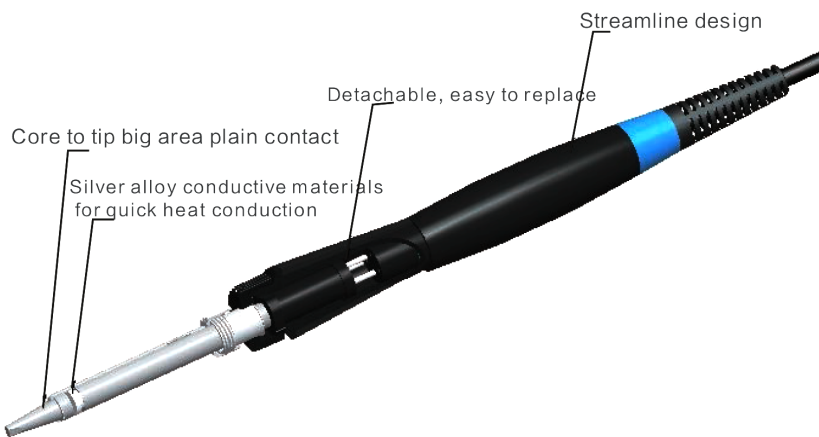
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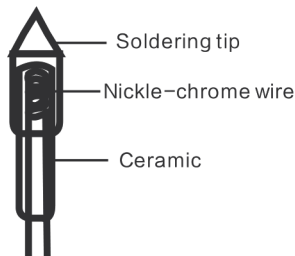
## Test Condition:

Test method : Install thermocouple in the place of iron tip, put welding wire of 10mm diameter on PCB (epoxy resin copper clad).weld one point at each second, and test the temperature of iron tip.  
Thermocouple : K type  
Setting temperature : 350°C  
The standard iron tip : AT800-2.5D

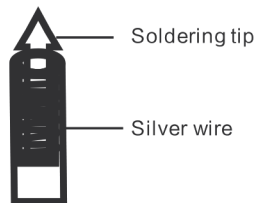
## Soldering Iron



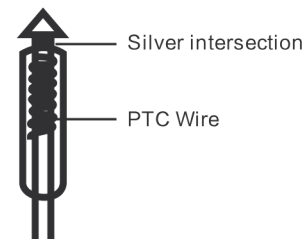
## Heater's Revolution



<1> Ordinary heater  
Output AC:24V 50Hz



<2> Electro-Magnetic high Frequency heater  
output AC:28V 200K



<3> 3rd generation of heater  
output AC:24V 50Hz

## Why chose 3rd generation of heater?

Because it absorbs the merits of above two kinds of heaters and filtering their defects. Technically, the heating theory is same as the first kind. But heat conduction material is replaced by silver, as a result, heat loss is controlled in a minimum extent. Meanwhile, comparing with Electro-magnetic heater, the latter has no electro-magnetic interference.

The iron tip the comes with the new heater has smaller size, resulting of a lower cost for replacement.

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