

## TOOLTOP TT-YIHUA938BD-III

# TOOLTOP 938BD-III 2-in-1 Hot Air Rework Desoldering Station User Manual

Model: TT-YIHUA938BD-III

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## 1. INTRODUCTION

The TOOLTOP 938BD-III is a versatile 2-in-1 hot air rework and soldering station designed for precision electronic repair, including mobile phone components. This unit integrates a powerful hot air gun and a T12 heating core soldering iron, offering rapid heating and precise temperature control for various soldering and desoldering tasks. This manual provides essential information for safe and efficient operation, setup, maintenance, and troubleshooting of your device.

## 2. SAFETY INSTRUCTIONS

Please read and understand all safety warnings and operating instructions before using this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Ensure the power supply matches the voltage requirements (220V~240V AC, 50Hz). Do not operate the unit with a damaged power cord or plug. Always disconnect power before cleaning or servicing.
- **Heat Hazard:** The soldering iron tip and hot air nozzle reach very high temperatures. Avoid direct contact with skin or flammable materials. Use heat-resistant surfaces and tools.
- **Fumes:** Soldering and desoldering produce fumes. Always work in a well-ventilated area or use a fume extractor to prevent inhalation of harmful vapors.
- **Work Area:** Keep your work area clean, dry, and well-lit. Do not operate in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- **Children and Bystanders:** Keep children and bystanders away while operating the station.
- **Proper Use:** Use the tool only for its intended purpose. Do not modify the unit or use non-approved accessories.
- **Cool Down:** Allow the hot air gun and soldering iron to cool completely before storing.

## 3. PRODUCT FEATURES

The TOOLTOP 938BD-III station is equipped with advanced features for efficient and reliable performance:

- **2-in-1 Design:** Combines a hot air rework station and a soldering iron in a single compact unit, saving space and

enhancing versatility.

- **T12 Heating Core Soldering Iron:** Features a high-power T12 heating core for rapid heating (5 seconds to operating temperature) and quick tinning (6 seconds), suitable for various solder joint sizes.
- **Brushless Fan Hot Air Gun:** Utilizes a gentle wind brushless fan with an air volume of up to 120L/min, ensuring a long service life and consistent heat output.
- **Intelligent Dormancy (Auto Sleep):** The soldering iron automatically enters sleep mode after 10 minutes of inactivity, conserving energy and extending tip life.
- **Digital Display:** Clear digital tube display for precise temperature monitoring of both the hot air gun and soldering iron.
- **Rapid Heating:** Both the hot air gun and soldering iron offer quick temperature attainment for efficient work.



**Rapid Heating:** The soldering iron heats up quickly, allowing for efficient and smooth tinning, crucial for various soldering applications.



**Long Service Life Brushless Fan:** The hot air gun features a brushless fan for quiet operation, stable airflow, and extended durability, with an air volume of up to 120L/min.

## 4. SETUP

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Follow these steps to set up your 938BD-III station:

1. **Unpacking:** Carefully remove all components from the packaging. Verify that all items listed in the 'What's in the Box' section are present.
2. **Placement:** Place the main unit on a stable, heat-resistant, and non-flammable surface. Ensure adequate ventilation around the unit.
3. **Connect Soldering Iron:** Plug the soldering iron cable into the designated port on the front panel of the main unit. Secure it if a locking mechanism is present.
4. **Connect Hot Air Gun:** Plug the hot air gun cable into its designated port on the front panel.
5. **Install Hot Air Nozzle:** Select the appropriate nozzle for your task and securely attach it to the hot air gun.
6. **Power Connection:** Connect the power cord to the main unit and then to a grounded electrical outlet.
7. **Accessories:** Place the soldering iron stand, cleaning sponge, and metal cleaning ball in their respective positions for easy access during operation.

## 5. OPERATING INSTRUCTIONS

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### 5.1 General Operation

- Turn on the main power switch located on the front or side of the unit. The digital display will illuminate.
- Use the dedicated control knobs or buttons for the hot air gun and soldering iron to adjust temperature and airflow (for hot air).
- Allow the tools to reach the set temperature before beginning work.

### 5.2 Temperature Calibration

Both the hot air gun and soldering iron can be calibrated for accurate temperature readings, improving work efficiency.

# DIGITAL TEMP. CALIBRATION

Both hot air gun and soldering iron can use this function, can improve work efficiency



**Digital Temperature Calibration:** This image demonstrates the process of calibrating the temperature. First, simultaneously press the '+' and '-' buttons (1). Then, measure the current actual temperature using an external thermometer (2). Finally, adjust the displayed temperature to match the measured temperature (3).

## 5.3 Auto Sleep Function

The soldering iron features an intelligent dormancy function to save energy and prolong tip life.



# AUTO SLEEP

## 10-Minute

When the station detects no usage and movement for longer than 10 minutes, the soldering iron will enter sleep mode.

To start-up the soldering iron from sleep mode

**10-Minute Auto Sleep:** If the soldering station detects no usage or movement for more than 10 minutes, the soldering iron will automatically enter sleep mode (indicated by 'SLP' on the display). To reactivate, simply pick up the soldering iron from its stand.

## 6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your soldering station.

- **Soldering Tip Cleaning:** Always clean the soldering iron tip before and after use. Use the provided metal cleaning ball or a damp cleaning sponge.
- **Sponge Usage:** Dampen the cleaning sponge with distilled water before use. Wring out excess water to prevent thermal shock to the tip.
- **Tip Tinning:** After cleaning, re-tin the soldering iron tip with a small amount of solder to prevent oxidation.
- **Nozzle Cleaning:** Periodically clean the hot air gun nozzles to remove flux residue and ensure unobstructed airflow.
- **General Cleaning:** Keep the main unit and tools free from dust and debris. Use a soft, dry cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Storage:** Store the unit in a dry, dust-free environment when not in use. Ensure all components are cool before storage.





**Soldering Iron Stand and Cleaning Accessories:** The stand provides a safe place for the soldering iron and includes compartments for storing various soldering iron tips. It also features a metal cleaning ball for dry tip cleaning and a cleaning sponge for wet cleaning, both essential for maintaining tip longevity and performance.

## 7. TROUBLESHOOTING

If you encounter issues with your 938BD-III station, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
Unit does not power on	No power supply; Power cord loose; Blown fuse	Check power outlet; Ensure power cord is securely connected; Check and replace fuse if necessary.
Soldering iron not heating	Tip not properly installed; Heating element failure; Cable connection issue	Ensure tip is fully inserted; Contact support if heating element is faulty; Check cable connection.
Hot air gun no airflow or weak airflow	Nozzle blocked; Fan malfunction; Air pump issue	Clean nozzle; Contact support if fan or pump is faulty.



Problem	Possible Cause	Solution
Inaccurate temperature reading	Sensor issue; Needs calibration	Perform temperature calibration as described in section 5.2; Contact support if sensor is faulty.
Soldering iron enters sleep mode too quickly	Incorrect setting; Sensor issue	Ensure the iron is properly seated in its stand; Contact support if sensor is faulty.

If the problem persists after attempting these solutions, please contact customer support.

## 8. SPECIFICATIONS

Technical specifications for the TOOLTOP 938BD-III 2-in-1 Hot Air Rework Desoldering Station:

Feature	938BD-III
Rated Voltage Range	220V~240V AC, 50Hz
Rated Power	775W
Electric Iron Power	75W (T12 heating core)
Operating Ambient Temperature	0~40°C
Display Form	Digital Tube
Hot Air Gun Temperature Range	200~480°C
Air Flow Type	Brushless Fan Gentle Wind
Fan Air Flow Rate	≤120L/min
Soldering Station Temperature Range	100~480°C
Sleep Function	Yes (10 minutes)
Dimensions (L*W*H)	143mm * 125mm * 96mm
Certifications	CE, RoHS

Models	938BD III	938BD II
The actual auction of the product		
Rated voltage range	220V~240V/AC,50Hz	
Rated power	775w	740w
Electric iron power	75w(T12 heating core)	45w(Internal heat type)
Operating temperature	0~40°C	
Display form	Digital tube	
Air gun temperature range	200~480°C	
Air flow type	Brushless fan gentle wind	
Fan air flow rate	≤120L/min	
Temperature range of welding station	100~480°C	
Sleep for 10 minutes	yes	
Size	L143*W125*H96mm	

**Product Specifications Table:** This table provides a detailed comparison of key technical specifications for the 938BD-III model, including power, temperature ranges, and dimensions.

## 9. WARRANTY & SUPPORT

This TOOLTOP 938BD-III product comes with a **1-year EU Spare Part Availability Duration** from the date of purchase. This covers the availability of spare parts for repairs within the European Union.

For technical support, warranty claims, or service inquiries, please contact your retailer or the manufacturer directly. Please have your model number (TT-YIHUA938BD-III) and purchase date available when contacting support.