Makerspace Tool Manual Mastercard Makerspace

YIHUA 862BD+ Soldering and Rework Station

Generated: October 15, 2025

This document is part of the Mastercard Makerspace Equipment Library.

All devices and tools listed herein are maintained according to internal safety and operational standards.

For support, contact the Makerspace coordinator.

Mastercard Makerspace Technical Manual

Generated: October 15, 2025

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YIHUA 862BD+ Soldering and Rework Station User Manual

Overview

Model: 862BD+

Manufacturer: YIHUA Category: Electronics

The YIHUA 862BD+ is a dual-function soldering and hot-air rework station with digital temperature control, ESD-safe design, and automatic cooling. Suitable for PCB repair, SMD soldering, and prototyping tasks.

1\. Setup

- 1. Connect the station to power.
- 2. Attach soldering iron and hot-air gun.
- 3. Set temperature (C or F) using digital controls.
- 4. Wait until ready indicators light up.

2\. Operation

Use the soldering iron for through-hole components and the hot-air gun for SMD parts. Adjust airspeed and temperature as required.

3\. Safety

Do not touch heated tips. Turn off power after use. Ensure ventilation makers paring Tool Manual

4\. Maintenance

Replace tips when oxidized. Clean soldering stand and filter monthly.

5\. Troubleshooting

If heat is low, check element connections. If air gun fails, replace heater coil.

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Overview and Specifications

The YIHUA 862BD+ Soldering and Rework Station is a versatile, dual-function device designed for precision electronics work, including PCB repair, SMD soldering, and prototyping tasks. It features digital temperature control, an ESD-safe design, and automatic cooling.

Specifications

Model: 862BD+

Manufacturer: YIHUA

Dimensions: 188mm x 126mm x 250mm (L x W x H)

Weight: 3.8 kg

Power Supply: 220V AC, 50Hz Power Consumption: 720W

Temperature Range:

Soldering Iron: 200 C - 480 C (392 F - 896 F) Hot-Air Gun: 100 C - 480 C (212 F - 896 F)

Airflow: 120L/min (maximum)

Display: Digital LED

Safety and Compliance Information

ESD Safety: The YIHUA 862BD+ is designed to prevent electrostatic discharge, protecting sensitive components.

Compliance: This device complies with CE and RoHS standards. **Makerspace Tool Manual** Safety Precautions:

Do not touch heated tips or nozzles.

Ensure proper ventilation during operation.

Turn off the power and unplug the device when not in use.

Keep away from flammable materials.

Installation and Setup

Follow these steps to set up your YIHUA 862BD+ Soldering and Rework Station:

1. Connect to Power:

Plug the station into a suitable power outlet (220V AC, 50Hz).

2. Attach Components:

Securely attach the soldering iron and hot-air gun to their respective ports.

3. Set Temperature:

Use the digital controls to select the desired temperature in either Celsius or Fahrenheit.

4. Ready Indicators:

Wait for the ready indicators to light up, signaling that the station is ready for use.

Operating Modes and Usage Examples

Soldering Iron:

Ideal for through-hole components.

Adjust temperature based on solder type and component sensitivity.

Hot-Air Gun:

Suitable for SMD parts and rework.

Adjust airspeed and temperature for component size and solder paste.

Usage Example

PCB Repair:

Use the soldering iron to remove and replace through-hole components.

Utilize the hot-air gun for SMD component reflow and desoldering.

Maintenance Schedule

Task | Frequency

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Replace soldering iron tips | As needed

Clean soldering stand | Monthly

Replace hot-air gun filter | Monthly

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Troubleshooting Guide

Problem | Cause | Solution

---|---|

Low heat output | Poor element connections | Check and secure connections

Hot-air gun not functioning | Faulty heater coil | Replace heater coil

Display not working | Power supply issue | Verify power connection

Inconsistent temperature | Sensor malfunction | Replace temperature sensor

Accessories and Compatible Components

Replacement Tips: Available in various sizes and shapes for different soldering tasks.

Nozzles: Interchangeable nozzles for the hot-air gun to accommodate different component sizes.

Soldering Stand: Compatible with most YIHUA soldering stands.

Warranty and Support

The YIHUA 862BD+ comes with a one-year limited warranty covering parts and labor for manufacturing defects. For support, please contact YIHUA customer service at support@yihua.com or visit our website at www.yihua.com.

Note: Warranty does not cover damage due to misuse, unauthorized modifications, or accidental damage.

End of Manual

Resources:

End of Manual - For updates, please check the latest version at:

https://mpandey-mastercard.github.io/makerspace-manuals/manuals/tool 003 manual.pdf

- Manual Pdf Local: /manuals/tool 003 manual.pdf
- Manual Pdf Public: https://mpandey-mastercard.github.io/makerspace-

manuals/manuals/tool_003_manual.pdf

- Tutorial Video: https://www.youtube.com/watch?v=6aJOkF6gK6Q
- Qr Code: https://mpandey-mastercard.github.io/makerspace-manuals/qrcodes/tool_003_qr.png